CALIFORNIA
Water Boards

STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

2018 accomplishments

CALIFORNIA STATE AND REGIONAL WATER BOARDS

The California Water Boards are dedicated to preserving, enhancing and restoring the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations. Under the federal Clean Water Act and the state's pioneering Porter-Cologne Water Quality Control Act, the Water Boards have regulatory responsibility for protecting the water quality of nearly 1.6 million acres of lakes, 1.3 million acres of bays and estuaries, 211,000 miles of rivers and streams, and about 1,100 miles of exquisite California coastline.

This report summarizes significant accomplishments achieved by the California Water Boards from January through December 2018.

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The State Water Board consists of five full-time Board members, each filling a position defined by statute. Each Regional Water Board is governed by seven Board members who represent categories related to the control of water quality and must reside, or have a place of business, within their region. All Water Board members are appointed by the Governor and confirmed by the Senate.

California Water Board Map Locations

1 = Region 1 (North Coast)
2 = Region 2 (San Francisco Bay)
3 = Region 3 (Central Coast)
4 = Region 4 (Los Angeles)
5 = Region 5 (Central Valley)
6 = Region 6 (Lahontan)
7 = Region 7 (Colorado River Basin)
8 = Region 8 (Santa Ana)
9 = Region 9 (San Diego)
★ = State Water Board Offices

Map of the State Water Board Division of Drinking Water District Offices

ABOUT THE WATER BOARDS

The California Water Boards are composed of the State Water Resources Control Board (State Water Board), located in Sacramento, and the nine semi-autonomous Regional Water Quality Control Boards (Regional Water Boards), located in specific watersheds throughout California. The Water Boards are part of the California Environmental Protection Agency (CalEPA).

The State and Regional Water Boards monitor and report on the quality of surface water and groundwater, develop and implement plans to restore impaired waters, and fund restoration and capital improvement projects aimed at protecting public health and the environment. The complexity of California's statewide and regional water issues is reflected in the diverse and numerous Water Board programs and activities throughout the state.

The State Water Board develops statewide policies and regulations to protect water quality, regulates drinking water, administers California's water rights system, and supports Regional Water Board efforts. In addition, the State Water Board provides financial assistance (in the form of grants and loans) for projects that clean up and protect drinking water supplies, water quality, and for the overall protection of the state's water resources. The nine Regional Water Boards implement policies and regulations, develop long-range plans, issue permits, evaluate permit compliance, and take enforcement actions. Together with the Regional Water Boards, the State Water Board is authorized to implement the federal Clean Water Act and the state and federal Safe Drinking Water Acts in California.

FISCAL YEAR 2017/2018 FAST FACTS

Almost 40,000 facilities permitted

Over 8,000 inspections conducted

More Than 4,400 enforcement actions taken

Over 5,500 general permit enrollments

More Than $7 million in Clean Water State Revolving Funds allocated

Over $300 million in Drinking Water State Revolving Funds allocated

Over 34,000 active water rights holders

Source: Water Board's Performance Report

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Water Boards Respond to Devastating Emergencies Statewide

Fire Damage in the East Bay Hills,
Courtesy of the CA Department of Water Resources

Unprecedented wildfires tore across California in 2018, causing devastation to human lives, personal property, and the environment. Emergency incidents can spread quickly and involve many areas, necessitating the involvement and coordination of many entities, including the Water Boards, the U.S. Environmental Protection Agency, the Federal Emergency Management Agency (FEMA), the U.S. Department of Homeland Security, the California Office of Emergency Services (Cal OES), and the California Department of Forestry and Fire Protection (CAL FIRE). Wildfire response is broad and multifaceted—impacting water quality, human health, the environment, and Water Board operations.

Statewide Improvements

To improve post-emergency outcomes and resiliency, while protecting water quality, human health and the environment, the Water Boards established an emergency response team composed of State and Regional Water Board staff. The team is tasked with assessing Water Board emergency response efforts with the goal of improving post-fire outcomes by providing better access to and enhancing emergency resources. The team adapted efforts based on lessons learned from the 2018 California wildfires.

2017 Tubbs, Nuns, & Redwood Complex Wildfires (Napa, Sonoma & Mendocino Counties)

The North Coast Regional Water Board oversaw two post-fire recovery grants totaling $344,841 to prevent erosion and polluted storm water runoff from areas burned by the October 2017 Tubbs, Nuns, and Redwood Complex Wildfires. Many of the burned areas were in watersheds already impaired by various pollutants, including sediment and temperature, and that drain to waterways that are home to threatened and endangered species, including coho salmon. Restoration activities included replacing burned plastic culverts with metal culverts, replanting riparian and hillslope vegetation, installing erosion control materials on burned hillslopes, assessing 19 miles of severely burned roads and hillslopes to inform future erosion prevention, and conducting public outreach workshops on erosion control. In the fall, the Regional Water Board worked with local partners to assess instream and riparian conditions of specific streams affected by the wildfires and will reassess them in the future to characterize response to post-fire restoration activities.

Wattles Being Placed for Erosion Control,
Courtesy of the Water Boards

2018 Mendocino Complex Wildfires (Colusa, Glenn, Lake & Mendocino Counties)

The Mendocino Complex Wildfires (consisting of the Ranch and River fires) began in early January, burned 410,203 acres, and destroyed 280 homes and structures. The State Water Board was in constant communication with more than 50 public water systems whose service areas were evacuated. Daily contact ensured that operators were able to assess their facilities for damage and keep water flowing for fire response. Fortunately, only one water system was damaged. The primary drinking water concern is contaminated storm water runoff from the extensive burned vegetative areas into lakes and streams used as drinking water sources. The State Water Board and Central Valley Regional Water Board are coordinating water quality monitoring efforts to help limit contaminant loading into surface waters.

Water Boards Respond to Devastating Emergencies Statewide

Interview Regarding the Carr Fire with Ross Perry, Western Shasta Resource Conservation District,
Courtesy of the Central Valley Regional Water Board

The 2018 Montecito Debris Flow (Santa Barbara County)

Following deadly debris flows (also known as mudslides) on January 9 in the community of Montecito, the Central Coast Regional Water Board worked closely with the Santa Barbara County Public Works Department to expeditiously permit community and creek debris cleanout and disposal and facilitate emergency response and disposal activities. Debris and material from water bodies was removed and clean, non-hazardous material was disposed of at Goleta and Carpinteria beaches. The Board took a phased approach, increasing regulatory oversight as the emergency abated and shifted from an emergency response phase to a recovery phase. Initial visual monitoring evolved into substantial sediment sampling and analysis once the immediate emergency was resolved and recovery efforts began. The Board also worked closely with the Montecito Sanitary District and other water and gas utilities to restore services. The District's wastewater collection system was damaged and required extensive cleaning and repair. Other utilities also required expedited permits to implement emergency repairs.

The 2018 Carr Fire (Shasta & Trinity Counties)

Following the massive Carr Fire that burned from July 23 through August 30 and scorched 229,651 acres, claimed lives, and destroyed numerous residences and commercial buildings, the Central Valley Regional Water Board immediately acted. To mitigate impacts, the Board conducted landscape surveys, surface water monitoring, and erosion control strategies in sensitive watersheds impacted by the fire. The Board secured $2.3 million match funds to apply for a Hazard Mitigation Grant through Cal OES and FEMA, with the goal of making available $8.4 million in federal funds to fast-track erosion control efforts in five key creeks near Keswick Dam on the Sacramento River near Redding. By early December, a grant agreement was in place with Western Shasta Resource Conservation District and work on erosion control measures and culvert repair and replacements had begun. The State Water Board worked closely with six community water systems that sustained fire damage and six non-community water systems in the Whiskeytown National Recreation Area, some of which were severely damaged. As needed, the Board prepared and issued Boil Water Advisories to water systems and worked with local media to relay this important information to the public.

Montecito Debris Flow Damage to San Ysidro Creek (above) and a Low Water Crossing (left), Courtesy of the State Water Board

Water Boards Respond to Devastating Emergencies Statewide

Smoke From the Holy Fire, Stock Photo

The 2018 Holy Fire (Orange County)

The Holy Fire began on August 6 in the Santa Ana Mountains and burned 23,136 acres. To address potential water quality impacts resulting from the fire, the Santa Ana Regional Water Board coordinated with the Riverside County Flood Control and Water Conservation District and the U.S. Army Corps of Engineers (USACOE) to assist with issuing emergency permits for work related to the fire.

The 2018 BNSF Railway Freight Train Derailment (San Bernardino County)

On August 21, BNSF Railway Company experienced a freight train derailment along the Railway's Cajon Subdivision in San Bernardino. Sixteen rail cars, including 11 tank cars, derailed. Two of the tank cars were damaged, resulting in the release of material to the ground. One tanker released approximately 500 gallons of dearomatized hydrocarbon petroleum distillates, a colorless liquid with a gasoline-like odor. The other tanker released about 2,000 gallons of linear alkylbenzene, a colorless and odorless biodegradable synthetic detergent. The Santa Ana Regional Water Board coordinated with partners during the emergency phase of the incident and continued to oversee cleanup as the discharger implemented voluntary cleanup of the spilled material.

The 2018 BNSF Railway Freight Train Derailment, Courtesy of the Santa Ana Regional Water Board

The 2018 Camp Fire (Butte County)

The deadly Camp Fire started on November 8 near Paradise, causing extreme devastation to human life and personal property, and burning 153,336 acres. The State Water Board worked closely with Cal OES to assist Paradise Irrigation District and other public water systems to recover from the impacts of the fire. Four water systems in the affected area were partially or completely destroyed. Public water systems in the affected area continue to conduct extensive water sampling as part of their recovery effort to restore, clean, and verify their distribution system can serve potable water. The Central Valley Water Board coordinated and led a surface water monitoring program with local and state agencies to assess impacts to receiving waters in and around the Camp Fire area.

Water Boards Respond to Devastating Emergencies Statewide

Smoke From the Woolsey Fire, Stock Photo

The 2018 Woolsey Fire (Ventura & Los Angeles Counties)

The Woolsey fire began on November 8 and burned almost 97,000 acres until it was contained on November 21. The fire affected areas of the Calleguas Creek, Upper Los Angeles River, Ventura Coastal, and the Santa Monica Bay watersheds. Three water systems were either sustained damaged or could not maintain pressure in their distribution system, resulting in the issuance of Boil Water Notices. Approximately 80 percent of the Santa Susana Field Laboratory's (SSFL) 2,850-acre site was burned and the Calabasas Landfill sustained about 10 miles of pipe damage.

The Los Angeles Regional Water Board coordinated with partners, including local county flood control management districts and the USACOE to issue emergency permits for debris removal, debris basin clean-outs, gas pipeline replacements, and road repairs. The Board also worked aggressively to ensure that The Boeing Company replaced damaged storm water treatment infrastructure at SSFL. The Board is working with local resource conservation districts to provide financial assistance to offset erosion control costs in affected critical watersheds, including those that support threatened and endangered species, such as steelhead trout. The Board worked with entities responsible for beach maintenance to prevent the illegal dumping of fire-related waste, and continues to participate on the Malibu Creek Technical Advisory Committee to discuss the extent of burn areas and coordinate post-fire monitoring. Regional Water Board staff also participated in a multi-agency Watershed Emergency Response Team led by CAL FIRE to assess environmental and property damage from the fire.

The 2018 Hill Fire (Ventura County)

The Hill fire began on November 8, the same day as the Woolsey Fire, consuming 4,531 acres of primarily uninhabited land within the Calleguas Creek Watershed, until it was contained on November 16. Three wastewater treatment plants were near the fire's perimeter—the Hill Canyon Wastewater Treatment Plant, the Camarillo Wastewater Treatment Plant, and the Camrosa Water Reclamation Facility. The Los Angeles Regional Water Board maintained contact with all three facilities during and after the fire. Fortunately, none of the facilities sustained major damage and remained operational. The Board continues to work with storm water permittees to determine the short- and long-term effects of the fire.

Developing Resiliency

In addition, during the year, the Water Boards met with partners and permittees and provided trainings and presentations on topics including: increasing drinking water resiliency; increasing water system awareness on how to prevent, respond to, and recover from an emergency event; post-wildfire water quality impacts that may affect water utilities; how to prepare for a spill incident to a river that supplies drinking water; and developing emergency plans.

Fire Damage to Piping at The Calabasas Landfill, Courtesy of the Los Angeles Regional Water Board

Climate Change
2018 Accomplishments

Climate Change Resolutions Adopted for the Los Angeles and San Diego Regions

To protect water resources in the Los Angeles and San Diego regions, the San Diego Regional Water Board adopted a resolution in June and the Los Angeles Regional Water Board adopted a resolution in May to protect water quality from the effects of climate change. Climate change will trigger a wide range of increasingly severe physical, chemical and biological effects to water resources throughout the state. The Los Angeles Regional Water Board's resolution is supported by a detailed Framework for Climate Change Adaptation and Mitigation. Consistent with the San Diego Regional Water Board's Practical Vision, the resolution directs the San Diego Regional Water Board to implement actions to counter the effects of climate change and protect water resources for beneficial uses in the region.

Permit for Camp Pendleton Treatment Plant Will Address Climate Change Impacts

To protect drinking water supplies and address the impacts of climate change, the San Diego Regional Water Board issued a permit to the U.S. Marine Corps Southern Regional Tertiary Treatment Plant allowing for the implementation of a seawater intrusion barrier project. The project will inject highly treated recycled wastewater into the Lower Ysidora groundwater basin, creating a hydrologic barrier to prevent seawater intrusion from impacting the nearby drinking water aquifer and to improve groundwater quality in the Lower Ysidora Basin. The seawater intrusion barrier is being implemented at the recommendation of the Salt and Nutrient Management Plan for the Lower Santa Margarita River Watershed at Camp Pendleton.

Folsom Lake During the 2014 Drought,
Courtesy of the CA Department of Water Resources

Policy & Planning
2018 Accomplishments

Bay-Delta Plan Updated for Southern Delta and Lower San Joaquin River Watershed

In one of the most extensive public outreach efforts in its history, the State Water Board is updating the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan) to address prolonged and precipitous declines of native aquatic species in the Bay-Delta and the ecosystem they depend on. In December, the State Water Board adopted new flow objectives for the Lower San Joaquin River and its three salmon-bearing tributaries–the Stanislaus, Tuolumne, and Merced rivers to protect fish and wildlife. It also revised the southern Delta salinity water quality objective to protect southern Delta agriculture. The effort to update salinity and flow objectives in the southern Delta and lower San Joaquin River Watershed began a decade ago and involved extensive public and stakeholder outreach. Additionally, the State Water Board continues to work with its partner agencies and stakeholders in the watershed to evaluate potential voluntary agreements that could achieve reasonable protection of fish and wildlife while reducing water supply costs through a combination of flow and non-flow actions.

Program Will Address Salt and Nitrates in Central Valley Water Supplies

Portions of California's immense Central Valley have salt or nitrate accumulations in surface water and groundwater that threaten drinking water supplies and agricultural and industrial productivity. After over a decade of stakeholder engagement, the Central Valley Salinity Alternatives for Long-Term Solutions (CV-SALTS) initiative proposed a Central Valley-wide Salt and Nitrate Management Plan (SNMP) to the Central Valley Water Board, which it accepted in 2017. In May, the Board adopted the Central Valley Salt and Nitrate Control Program that would enable the Board to implement the SNMP. The goals of the SNMP are to ensure safe drinking water and plan and implement a long-term groundwater restoration program. As the Board works to bring the Salt and Nitrate Control Program to the State Water Board for consideration, focused stakeholder meetings continue through the CV-SALTS Public Education and Outreach Committee. Work also continues to initiate pilot studies with local dischargers and agencies to identify users with elevated nitrate in groundwater supplies and provide them with safe drinking water.

The Sacramento San-Joaquin Bay-Delta,
Courtesy of the CA Department of Water Resources

Freshwater Harmful Algae Blooms Addressed Statewide

Children Swimming at Lake Del Valle,
Courtesy of the CA Department of Water Resources

Cyanobacteria are essential components of healthy freshwater ecosystems. However, under certain conditions, cyanobacteria can multiply rapidly and create nuisance algal blooms. Blooms that are dominated by toxin-producing cyanobacteria (called harmful algal blooms, or HABs) can have severe impacts to drinking water quality and recreation in lakes and rivers and pose health risks to humans, pets and wildlife.

Together, the State and Regional Water Boards implement the Freshwater Harmful Algal Blooms (FHAB) Program, which responded to approximately 190 reports of HABs and identified 39 cases of human illnesses and ailing or deceased animals. The collaborative undertaking–featuring state and federal agencies, local public health and environmental health departments, lake and water managers, cities, counties, tribes, non-profits and private stakeholders–included posting health advisory signs alerting the public about the potential risks associated with HABs and providing data on the California HABS online portal. Further, the FHAB team completed a study in collaboration with the Office of Environmental Health Hazard and Assessment and Department of Public Health to conduct comprehensive HAB-related illness investigations to meet the requirements of the Center for Disease Control's One Health Harmful Algal Bloom System.

The combined State and Regional Water Board efforts included: coordinating assessments at popular recreational waters prior to summer holiday weekends; providing ongoing notification, guidance, training and tools to local partners to facilitate timely responses to HABs in their region; posting health advisory signs at recreational waters and beaches when harmful toxic levels were detected; conducting public workshops; and developing and utilizing innovative tools, including a web-based satellite imagery tool and notification system to detect potentially harmful blooms, which is being used by members of the California Cyanobacteria and Harmful Algal Bloom (CCHAB) Network, a multi-agency collaborative effort that is part of the California Water Quality Monitoring Council.

While much is known about floating, cyanobacteria HABs and the toxins they produce, few studies have been conducted to understand benthic (bottom-dwelling) cyanobacteria HABs, which are found in rivers throughout the North Coast Region. The North Coast Regional Water Board continues the benthic HAB monitoring program established in 2015, one of the few benthic HAB programs in the United States. This program coordinates with county public health departments to monitor recreational areas along California rivers to protect human and animal health from exposure to HAB toxins, including the potent neurotoxins called anatoxins. The North Coast Region continues to lead the effort to provide a better understanding of the health risks of benthic HABs through ongoing collaborative research with international and academic partners into cyanotoxin production and associated environmental effects. In addition, the Board assists in developing protocols and guidance and promotes information sharing through the establishment of the International Benthic HABs Workgroup.

Several notable efforts to respond to lake-wide, long-term blooms occurred at numerous lakes and reservoirs in the Central Valley Region including Clear Lake (Lake County), San Luis Reservoir (Merced County), Lake Isabella (Kern County), Pine Flat Lake (Fresno County), and H.V. Eastman and Hensley lakes (Madera County). The Central Valley Regional Water Board continues to investigate HABs in Discovery Bay (Contra Costa County) and other locations within the Sacramento-San Joaquin Bay-Delta. These studies will inform future management and control actions being developed under the Board's Delta Nutrient Research Plan. Also, the Southern California Coastal Water Research Project, under contract with the Santa Ana Regional Water Board, completed a technical report detailing the results of HAB-toxin monitoring in Lake Elsinore and Canyon Lake from 2015-2017, as both lakes experience recurrent and long-term toxic HABs. The report provides an assessment of cyanobacteria and cyanotoxins present in both lakes.

A Dog Swimming In a Lake With an Algal Bloom
Stock Photo

Surface Water Quality
2018 Accomplishments

Final Water Quality Certification Issued for South Feather River Water and Power Project

To support water supply reliability as well as power generation, the State Water Board in November issued a water quality certification to South Feather Water and Power Agency for its South Feather Power Project. The water supply and hydroelectric power project is on the South Fork of the Feather River, and Lost, Sly and Slate creeks in Butte, Yuba and Plumas counties. The project can store approximately 172,000 acre-feet of water and annually generate 514.1 gigawatt-hours of power on average. The certification establishes conditions for the continued operation of the project under a 40-year Federal Energy Regulatory Commission license. Conditions include requirements for minimum instream flows, whitewater boating flows, flow release rates, management of sediment and large woody material, and monitoring of water quality for the protection of amphibians and fish.

Draft Environmental Impact Report and Water Quality Certification Issued for Klamath River Dam Removal

The State Water Board is responsible for acting on the Klamath River Renewal Corporation's water quality certification application for the Lower Klamath Project. The project implements the Klamath Hydroelectric Settlement Agreement and involves the removal of four dams on the Klamath River in Oregon and California to restore fish passage and improve the flow in the Klamath River. As the lead agency for the project under the California Environmental Quality Act (CEQA), the State Water Board in December released a draft environmental impact report (EIR) for the project. In February, October and December, the Board concluded tribal consultations related to potential project impacts and mitigation measures, as detailed in the draft EIR, with the Shasta Nation, Shasta Indian Nation, and Yurok Tribe. In addition, in June, the Board issued a draft water quality certification to protect water quality and the beneficial uses of the Klamath River.

Standards Adopted to Protect Public from Bacteria in California Waters

To continue to protect recreational users from the harmful effects of exposure to pathogens in California's waters, the State Water Board in August adopted new statewide bacteria water quality objectives and methods of implementation. The objectives are based on state and national epidemiological studies and U.S. Environmental Protection Agency federal water quality criteria for protecting water recreation across the nation, including California's rivers, streams, estuaries, and coastal beaches. With the new objectives, the state has a consistent set of fecal bacteria and levels to determine whether it is safe to swim in waters used for recreation.

Revised Trash Reduction Plans Will Alleviate Requirements in Los Angeles

Trash is a significant pollutant of California's waters that adversely impacts aquatic life, wildlife, and public health. Types of trash that commonly pollute waterways include cigarette butts, paper products, fast food containers, plastic grocery bags, cans and bottles, used diapers, construction site debris, industrial pre-production plastic pellets, and appliances. Trash discarded on land frequently makes its way into waterways and eventually the ocean. In June, the Los Angeles Regional Water Board revised two strategies to restore water quality to reduce trash pollution in the Calleguas Creek and Malibu Creek watersheds. The revisions make the strategies consistent with the statewide water quality control plans for trash control by allowing municipalities to focus on areas that generate large amounts of trash while still preventing trash from impacting and polluting California waters.

Trash In a Stream, Courtesy of the CA Department of Water Resources

Surface Water Quality
2018 Accomplishments

Families Recreating on Middle Fork Feather River, Courtesy of the CA Department of Water Resources

Water Boards Link Sediment Quality to Risks to Human Health

California is establishing a framework to assess the impact that exposure to contaminated sediments in enclosed bays and estuaries has on human health and aquatic ecosystems. Sediments in bays and estuaries are often contaminated with pollutants and exposure can have a significant effect on the health, diversity and abundance of invertebrates, such as clams and worms. Foraging fish may be exposed by ingesting contaminated invertebrates or sediments. In turn, those consuming contaminated fish may be exposed to toxic pollutants. In June, the State Water Board amended the Water Quality Control Plan for Enclosed Bays and Estuaries of California to include sediment quality objectives, which incorporates improvements to the scientific basis that link sediment quality and the risk to fish tissue consumers for toxic chlorinated pesticides and polychlorinated biphenyls (PCBs).

Successful Cleanup of Former San Diego Naval Training Channel

After a 20-year negotiation and investigation process, the U.S. Navy, under the oversight of the San Diego Regional Water Board, completed the removal of contaminated sediment from the former Naval Training Center Boat Channel in San Diego Bay. Sediment in the Boat Channel was contaminated with toxic amounts of copper, lead, zinc, chlordane, and dichlorodiphenyl-trichloroethane (DDT) that impacted water quality and sensitive benthic and aquatic ecosystems. It was determined that historical activities conducted at the Naval Training Center contaminated storm water discharged to the Boat Channel.

Statewide Industrial Storm Water Permit Amended

Storm water runoff from industrial facilities carries pollutants that degrade water quality and impact the uses of the state's waters. To address these discharges, the State Water Board in November amended the statewide Industrial General Storm Water Permit. The permit regulates over 10,000 industries with storm water runoff from industrial activity and requires industrial storm water dischargers to reduce pollutants in their storm water discharges. The permit amendment includes: the implementation of strategies to restore water quality; updated monitoring requirements to ensure compliance with the new federal Sufficiently Sensitive Methods Rule; and the inclusion of new statewide compliance options to incentivize storm water capture, regional collaboration and multiple-benefit storm water projects, such as the installation of infiltration basins to capture storm water runoff, improve water quality, prevent flooding and recharge groundwater basins.

Scrap Metal Recycling Storm Water Permit Renewed in Santa Ana Region

Scrap metal recycling facilities are a significant source of pollutants in storm water runoff. Pollutants associated with scrap metal recycling include dissolved metals, oil and grease, sediment, and ethylene glycol. To protect water quality, the Santa Ana Regional Water Board in October renewed the sector-specific general storm water permit for scrap metal recycling facilities. This permit regulates storm water discharges from 50 scrap metal recycling facilities within the region and was the first-of-its-kind when adopted in 2012.

Surface Water Quality
2018 Accomplishments

Framework Addresses Pollution in the Laguna de Santa Rosa Watershed

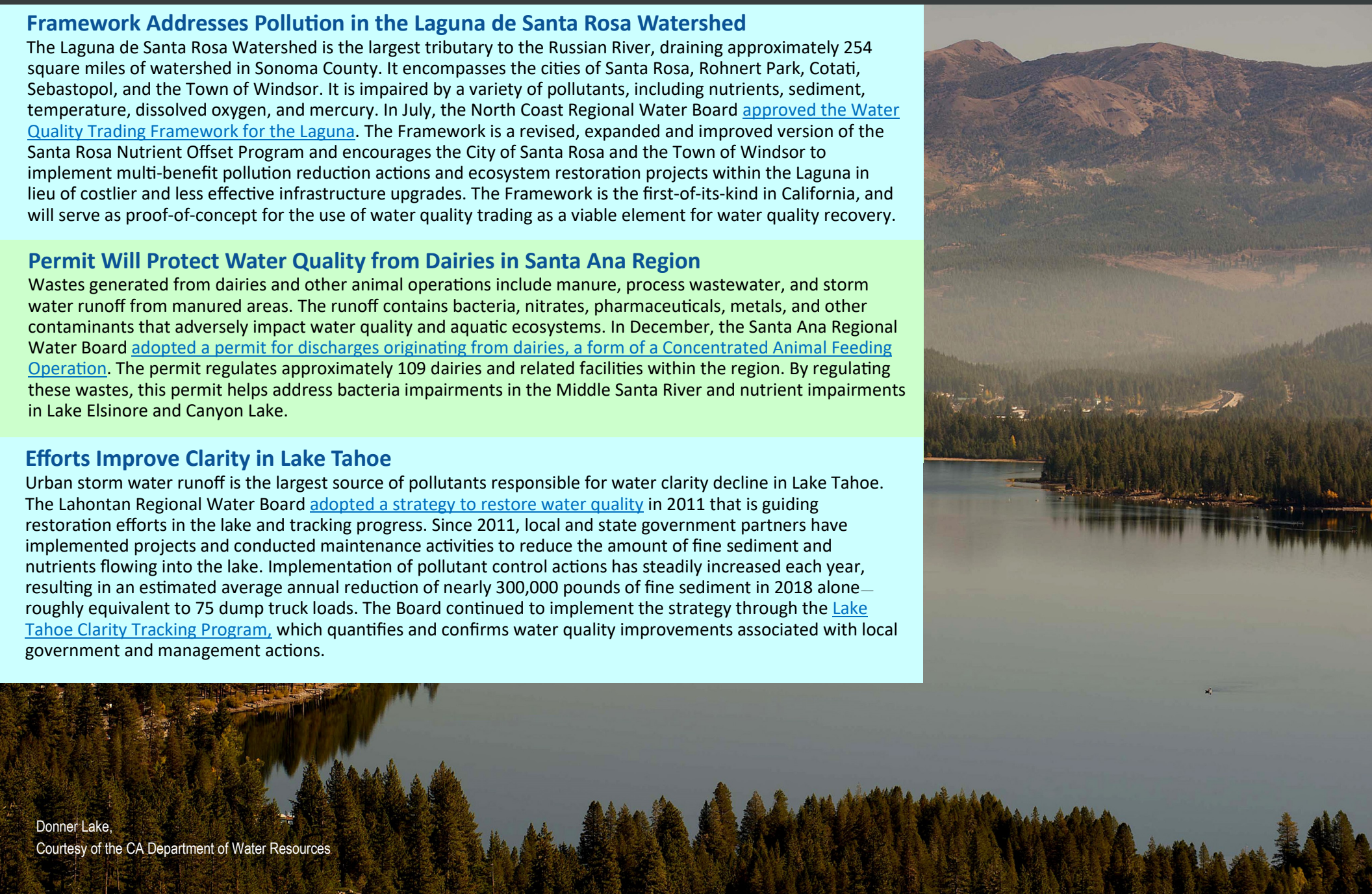
The Laguna de Santa Rosa Watershed is the largest tributary to the Russian River, draining approximately 254 square miles of watershed in Sonoma County. It encompasses the cities of Santa Rosa, Rohnert Park, Cotati, Sebastopol, and the Town of Windsor. It is impaired by a variety of pollutants, including nutrients, sediment, temperature, dissolved oxygen, and mercury. In July, the North Coast Regional Water Board approved the Water Quality Trading Framework for the Laguna. The Framework is a revised, expanded and improved version of the Santa Rosa Nutrient Offset Program and encourages the City of Santa Rosa and the Town of Windsor to implement multi-benefit pollution reduction actions and ecosystem restoration projects within the Laguna in lieu of costlier and less effective infrastructure upgrades. The Framework is the first-of-its-kind in California, and will serve as proof-of-concept for the use of water quality trading as a viable element for water quality recovery.

Permit Will Protect Water Quality from Dairies in Santa Ana Region

Wastes generated from dairies and other animal operations include manure, process wastewater, and storm water runoff from manured areas. The runoff contains bacteria, nitrates, pharmaceuticals, metals, and other contaminants that adversely impact water quality and aquatic ecosystems. In December, the Santa Ana Regional Water Board adopted a permit for discharges originating from dairies, a form of a Concentrated Animal Feeding Operation. The permit regulates approximately 109 dairies and related facilities within the region. By regulating these wastes, this permit helps address bacteria impairments in the Middle Santa River and nutrient impairments in Lake Elsinore and Canyon Lake.

Efforts Improve Clarity in Lake Tahoe

Urban storm water runoff is the largest source of pollutants responsible for water clarity decline in Lake Tahoe. The Lahontan Regional Water Board adopted a strategy to restore water quality in 2011 that is guiding restoration efforts in the lake and tracking progress. Since 2011, local and state government partners have implemented projects and conducted maintenance activities to reduce the amount of fine sediment and nutrients flowing into the lake. Implementation of pollutant control actions has steadily increased each year, resulting in an estimated average annual reduction of nearly 300,000 pounds of fine sediment in 2018 alone—roughly equivalent to 75 dump truck loads. The Board continued to implement the strategy through the Lake Tahoe Clarity Tracking Program, which quantifies and confirms water quality improvements associated with local government and management actions.



Donner Lake,
Courtesy of the CA Department of Water Resources

Surface Water Quality
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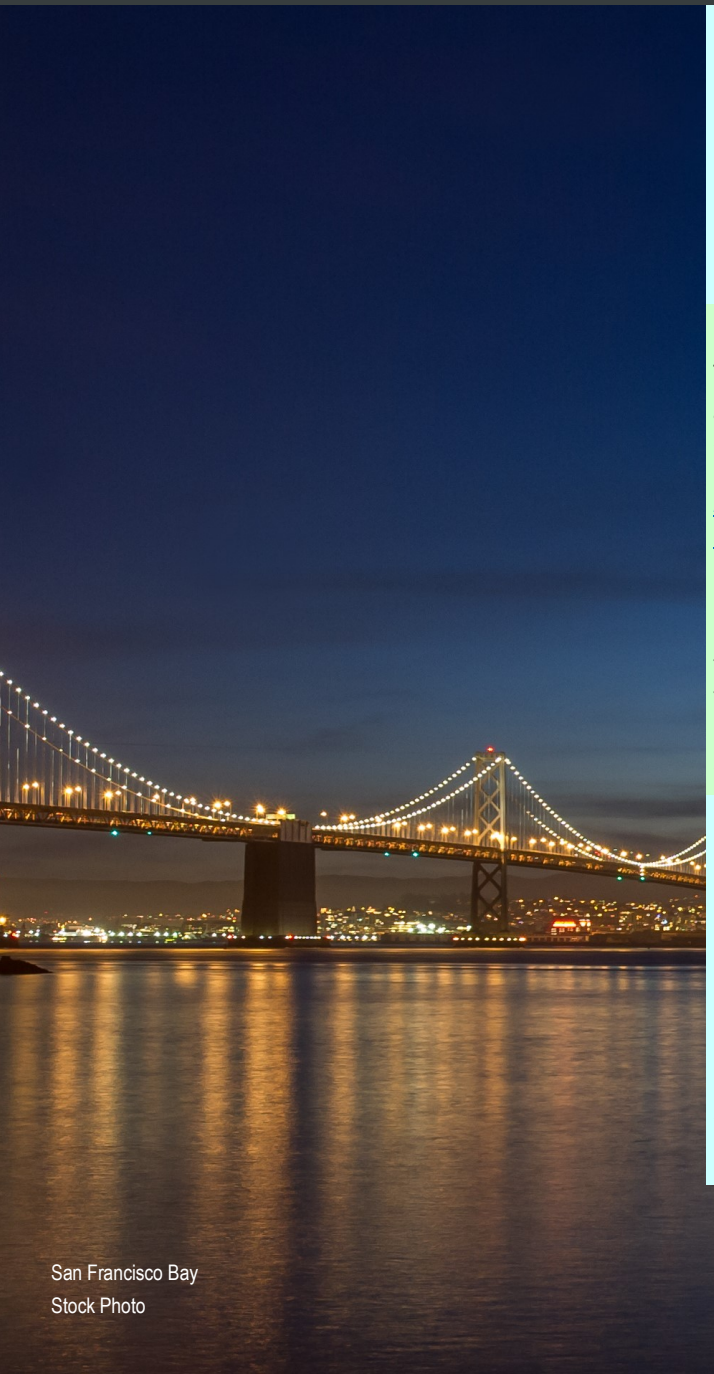


San Francisco Bay
Stock Photo

Restoration Plan Improves Water Quality in Suisun Marsh

Suisun Marsh is the largest contiguous brackish marsh remaining on the West Coast, supporting resident and migratory shorebirds and waterfowl and providing habitat for threatened and endangered species. In April, the San Francisco Bay Regional Water Board adopted a plan to restore water quality to address low dissolved oxygen in Suisun Marsh to protect sensitive aquatic life. Low dissolved oxygen conditions have resulted in fish kills in the Marsh in the past. The Suisun Resource Conservation District and landowners have been implementing the restoration plan since it was adopted and have reduced the magnitude and length of low dissolved oxygen events in the Marsh, contributing to improved water quality.

Guidance Supports Recovery of Endangered North Coast Salmon and Trout

The removal of large woody material from riparian areas, streams, and rivers in the North Coast Region has greatly reduced the habitat necessary to support sustainable populations of threatened and endangered native salmon and trout species. As co-lead for the multi-stakeholder Wood for Salmon Working Group, the North Coast Regional Water Board collaborated with state and federal agencies to publish guidance in September: Accelerated Wood Recruitment and Timber Operations: Process Guidance from the California Timber Harvest Review Team Agencies and National Marine Fisheries Service. The guidance is available to landowners and registered professional foresters and will increase the pace and scale of large wood restoration projects conducted through the California Department of Forestry and Fire Protection's (CAL FIRE) timber harvest permitting process, which the Regional Water Boards review. Permitting large wood restoration projects through CAL FIRE is an important and underutilized restoration permitting pathway and should increase capacity for these projects throughout the North Coast Region. Fifteen large wood restoration projects were authorized in 2018, leading to the installation of over 1,100 pieces of large wood along 2,700 feet of streams and rivers in six counties.

Study Explores Options to Reduce Nutrients to San Francisco Bay

In June, thirty-seven municipal wastewater dischargers in the San Francisco Bay Region explored options to reduce nutrient discharges to San Francisco Bay. The Bay has long been recognized as a nutrient-enriched estuary resilient to the effects of nutrients. The study was needed because recent discoveries suggest it may be losing its resiliency. Since 2000, phytoplankton biomass has increased, increasing the potential for harmful algal blooms and lower dissolved oxygen. Municipal wastewater accounts for almost two-thirds of the Bay's nutrient loads. The study provides insights into how and where nutrients can be removed most cost effectively. The San Francisco Bay Regional Water Board will use the study to inform future nutrient management decisions in the Bay. In addition to evaluating traditional engineering solutions, the Board is considering the feasibility of using wetlands, water recycling, and other strategies to manage nutrient discharges. Such options may offer multiple benefits, including removing contaminants of concern and increasing shoreline resiliency against sea level rise.

Surface Water Quality
2018 Accomplishments

Infrastructure Will Protect Public from Severely Polluted New River

The New River flows from Mexicali, Mexico, into the city of Calexico, Imperial County, and is a tributary to the Salton Sea. It is severely polluted, primarily from discharges of domestic waste and agricultural and industrial sources originating in Mexico. The pollution threatens public health and water quality, impacts wildlife ecosystems, and remains a chronic threat to the water quality of the Salton Sea. The Colorado River Basin Regional Water Board has primary responsibility for addressing water quality in the New River as a source of inflow to the Salton Sea. The New River Improvement Project is the first of five phases in a strategic plan adopted in 2011. In March, the Board awarded a $1.4 million contract for the development of environmental documents and the implementation of water quality infrastructure. The infrastructure consists of: an automated trash screen at the border to remove solid waste to reduce pathogens and other pollutants that threaten public health; a pipe that encases the dirty water as it bypasses Calexico, preventing human contact with the severely-polluted river water; and rerouting wastewater discharged from the city's treatment facility to restore some of the flow in the river channel through the city.

Restoration at Cucamonga Basins in The City of Upland Completed

Environmental mitigation at the Cucamonga Basins in Upland was deemed complete by the Santa Ana Regional Water Board in December. The Basins provide numerous benefits to the community, among them the containment of watershed flooding and the capture of storm flows for drinking water, recreational pathways and aesthetic enjoyment, groundwater recharge, and wetland, riparian, and coastal sage scrub community habitats. In 2007, the San Bernardino County Flood Control District purchased the Basins and maintained habitat mitigation since 2010 until mitigation was completed in 2018. The Basins enhance both surface water quality by slowing down and de-silting flood flows and groundwater quality by recharging through sand and gravel.

Restoration Plan Addresses Sediment Impairment in Pescadero-Butano Watershed

Pescadero and Butano creeks drain a large watershed in coastal San Mateo County. The simplification of creek bed channels, impairments due to fine sediment, and the elimination of floodplains for sediment storage have resulted in steelhead and salmon population declines in the watershed. Both creeks provide important habitat for steelhead trout and coho salmon. In June, the San Francisco Bay Regional Water Board adopted a plan to restore water quality to control sediment discharges to both creeks. The restoration plan calls for actions to address sources of sediment in the watershed and restore fish habitat in the creek channels by increasing channel complexity and reconnecting channels to floodplains where appropriate.

Pescadero Creek
Stock Photo

Statewide Efforts Increase Cannabis Enrollment and Awareness

Illegal Cannabis Cultivation Site
Courtesy of the Central Valley Regional Water Board

Trash at An Illegal Cannabis Site
Courtesy of the State Water Board

Illegal activities associated with cannabis cultivation pose serious threats to water quality, the environment, fish, and wildlife. Threats can be caused by illicit diversion of water that harms the beneficial uses of a water body or senior water rights holders; unpermitted grading and deforestation; accumulation of trash, chemical containers, and other hazardous waste, including human waste; and the improper storage and discharge of toxic amounts of fertilizers, pesticides and sediments into waterways.

In 2018, the State and Regional Water Boards focused on outreach to raise awareness of the dangers posed by illegal cannabis cultivation and to bring existing and prospective cannabis cultivation operations into the state's new regulatory framework. The Boards worked cooperatively with cannabis cultivators and partner agencies to protect the environment and water resources by conducting inspections, enforcement, and outreach and coordinating with Tribes and wastewater treatment plant operators.

The Water Boards conducted many cannabis permitting workshops statewide. Water Board staff appeared on popular local radio shows and used social media to communicate directly with cannabis cultivators. These efforts increased awareness of the need to obtain a water right when diverting surface water and how to apply for coverage under the statewide cannabis cultivation permit. Staff provided direct technical assistance to small cannabis growers by helping them register for permit coverage at community events held in coordination with partner agencies.

New online systems were launched to streamline registration and protect instream flows and water quality. The State Water Board introduced a statewide online registration system for cannabis cultivators. This innovative application portal allows for automated data verification and online payment, significantly reducing processing time. Cultivators can obtain a water right and receive permit coverage in one place, faster than the traditional process. In addition, data gathered through the online portal is seamlessly integrated into geographic information systems and analyzed in coordination with partner agencies.

At the end of 2018, 2,145 cultivators have received coverage under the statewide cannabis cultivation permit and 398 have been issued water rights. This number will increase as cultivators enrolled under the North Coast and Central Valley regional cannabis permits transition over to the statewide permit when the two regional permits expire on July 1, 2019. At the end of 2018, a total of 3,380 cultivators were still enrolled in the two regional permits and will be undergoing either transition to the statewide permit or termination of their coverage. In addition, in 2018, the Water Boards conducted 517 site inspections and issued 968 notices of violation.

Statewide Efforts Increase Cannabis Enrollment and Awareness

In coordination with the California Department of Fish and Wildlife (CDFW), the Water Boards identified "Cannabis Priority Watersheds" throughout the state that are at increased risk of environmental impacts due to cannabis cultivation activities. Priority watersheds can contain critical water supply, habitat, sensitive species, water bodies with low flow conditions, impaired water bodies, and water bodies designated as a "Wild and Scenic River", coupled with a dense concentration of cannabis cultivation sites. Prioritizing watersheds allows resources to be directed to address the most critical impacts. The Water Boards are taking steps to ensure water quality is protected and that instream flows are maintained to support habitat. Efforts in 2018 included launching the priority watershed website, mailing 2,826 letters to landowners in five priority watersheds notifying them of the Boards' new cannabis cultivation regulatory framework and the need to enroll, conducting inspections in Redwood and Salmon Creek priority watersheds, and taking enforcement action against violators.

To protect critical habitat and species, the Water Board's Cannabis Cultivation Policy requires cannabis cultivators divert and store water during certain times of the year. Diversion of water from a lake, river, or stream for cannabis cultivation is not allowed during dry periods or when water is needed to protect ecosystems. The policy establishes instream flow requirements and requires cultivators who are diverting surface water to check the new Online Cannabis Compliance Gage Mapping Tool daily before diverting water to ensure instream flow requirements are met. Two supporting websites were also released—a Cannabis Compliance Gage website that displays the gages that support the mapping tool and the associated flow requirements for each compliance gage, and an interactive map that provides a comprehensive list of existing instream flow requirements.

Regional approaches to implementing the statewide Cannabis Cultivation Policy and statewide cannabis cultivation permit varied, largely due to regional differences in cultivation methods caused by climate, availability of water, and city and county requirements for commercial cultivation. For example, cannabis cultivation in the desert areas of the state is primarily indoors. Wastewater from these indoor cultivations is high in nutrients and total dissolved solids, which adversely impacts groundwater. The Colorado River Basin Regional Water Board drafted a treatment and disposal permit for non-domestic wastewater, including cannabis cultivation wastewater, that is anticipated to be adopted in 2019. Also, unlike traditional cultivations in the North Coast, much of the cannabis in the Central Coast Region is grown in greenhouses and hoop houses, displacing traditional agricultural commodities.

Human Waste at An Illegal Cannabis Cultivation Site Adjacent To a Stream, Courtesy of the State Water Board

Waste Left Adjacent To a Stream at An Illegal Cannabis Cultivation Site, Courtesy of the State Water Board

Community Outreach & Engagement
2018 Accomplishments

State Water Board Staff Holding Drinking Water Well Testing Outreach Posters, Courtesy of the State Water Board

Neglected Contaminated Groundwater Site Cleaned Up in Commerce

Certified Coating Products Company, a paint manufacturer located in the city of Commerce, used 19 underground storage tanks from 1954 to 1992 to store chemicals that contained various pollutants, including alcohols and volatile organic compounds. The property owner was unable to remove and clean up the tanks due to financial hardship. With assistance from the Los Angeles Regional Water Board, the owner received Site Cleanup Subaccount Program (SCAP) funding to remove all 19 tanks, which were successfully removed in 2018. Assessment is ongoing to define the full extent of groundwater contamination. SCAP funding supports the cleanup of neglected contaminated groundwater sites and projects where cleanup has stalled due to the lack of funds. Projects include former dry-cleaning businesses, small metal plating facilities, and industrial facilities. Most sites are located in small or disadvantaged communities. The projects remove toxic contaminants from groundwater across the state, reducing threats to human health and the environment.

Free Drinking Water Well Testing for Central Coast Communities

Nitrate groundwater contamination has affected the drinking water quality of hundreds of households in the predominately Spanish-speaking agricultural communities of the Central Coast Region. The Central Coast Regional Water Board is sponsoring free, voluntary drinking water sampling for residents who get their water from a groundwater well. In 2018, the State Water Board developed a strategic outreach plan tailored to rural residents in economically disadvantaged communities to create public awareness of nitrate contamination and encourage participation in the sampling project. The Board's bilingual staff participated in community outreach events, partnered with local community leaders, organizations, and bilingual media outlets to reach more than 5,000 people. Through this effort, it is anticipated that up to 1,000 drinking water wells not associated with public water systems will be tested. The Regional Water Board also collaborated with the Community Water Center (CWC) to open a new CWC office in Watsonville to increase environmental justice capacity in the region. The CWC will engage disadvantaged communities and provide assistance to implement safe drinking water and wastewater solutions.

Environmental Justice Efforts Benefit Severely Disadvantaged Communities

The Water Boards continued to participate in the California Environmental Protection Agency's (CalEPA) Environmental Justice Task Force, which is dedicated to improving compliance and enforcement of environmental laws in communities that are disproportionately burdened by multiple sources of pollution and particularly vulnerable to its effects. The Task Force conducts targeted environmental justice (EJ) initiatives to address pollution and safety concerns in areas of California with the highest pollution burdens. It is composed of enforcement staff from CalEPA and each of its five regulatory agencies, including the Water Boards, as well as federal and local partners. The Task Force works closely with local communities to establish priorities. In 2018, the Task Force completed its EJ initiative in Pomona and focused efforts in Imperial Valley and Stockton. The Water Boards targeted industrial and publicly owned facilities for inspections, and participated in multiple community outreach events and drinking water purveyor discussions. Also, the Water Boards worked with other agencies to improve water quality data collection in irrigation canals in the Imperial Valley being used by disadvantaged communities for non-potable residential uses, such as bathing and cooking.

Drinking Water Quality
2018 Accomplishments

Perchlorate Groundwater Plume in Barstow Being Monitored

Perchlorate was discovered in groundwater in the city of Barstow in 2010. Perchlorate is a water quality concern because it is readily dissolvable and easily leached to the groundwater, and in low doses interferes with thyroid function and can cause birth defects. The illegal disposal of perchlorate salts was identified at the residence of the owner of a former pyrotechnics company that had ceased operating in the mid-1980s. The illegal disposal resulted in the contamination of public and private water supply wells along the Mojave River. It was found near water supply wells used by Golden State Water Company. Within days of the discovery, Golden State Water Company flushed the city's water distribution system and eliminated the perchlorate. In 2018, the Lahontan Regional Water Board approved plans designed to determine the most effective means of cleaning up the contamination. In addition, the Board continued collecting groundwater and domestic well samples to monitor the movement of the contaminated groundwater to the southeast of the city and evaluated private residential wells that have been impacted or potentially could be impacted by perchlorate.

Willowbrook and Compton Receive Clean Drinking Water after Sativa Water District Ordered to Relinquish Control to Los Angeles County

Residents in the communities of Willowbrook and Compton were not receiving adequate clean drinking water from their supplier, Sativa Los Angeles County Water District. Residents had complained of discolored water and particulate matter in their drinking water. To address this, in October, the State Water Board ordered Sativa to relinquish full management and control to the Los Angeles County Department of Public Works. Sativa had consistently failed to provide their customers–approximately 6,870 residents in the communities of Willowbrook and Compton with a reliable and safe water supply. Los Angeles County's Department of Public Works will serve as temporary administrator for Sativa pending the outcome of proceedings before the Los Angeles County Local Agency Formation Commission to dissolve Sativa and transition its operations to a successor entity.

Nitrate-Impacted Communities Receive Replacement Drinking Water

Providing replacement drinking water to communities impacted by nitrate groundwater contamination advances California's Human Right to Water. In December, the State Water Board reached a replacement water settlement with three Central Valley agriculture coalitions–the Tule Basin, Kaweah, and Kings River coalitions, near the city of Tulare. Replacement drinking water will be provided at no cost to nitrate-impacted communities through kiosks paid for by the coalitions. In addition, the State Water Board, the Central Coast Regional Water Board, and the Salinas Basin Agricultural Stewardship Group agreed to extend the Salinas Valley Interim Replacement Drinking Water Program for a second year. In its first year, the program provided replacement water to small water systems affected by nitrate contamination. For the second year, the program is extended to include any domestic well owner or small water system with nitrate-impacted drinking water supplies, regardless of income. These settlements may serve as a model for providing safe water to other disadvantaged communities and domestic well owners in the state impacted by nitrate contamination in their groundwater.

Water Supply Well Being Purged in Barstow, Courtesy of the Lahontan Regional Water Board

Groundwater Quality
2018 Accomplishments

The Colorado River Near Needles
Stock Photo

Hexavalent Chromium Contamination at PG&E Facility Near Needles Being Addressed

Hexavalent chromium is a known carcinogen and reproductive toxicant. Hexavalent chromium contamination in soil and groundwater has been identified at and around Pacific Gas and Electric's (PG&E) Topock Compressor Station facility near Needles, which is adjacent to the Colorado River, an important drinking water source for millions of people in Southern California. This contamination is being addressed under oversight of the California Department of Toxic Substances Control (DTSC) and the U.S. Department of the Interior (DOI). An interim mitigation measure installed in 2004 is currently controlling the movement of contaminated groundwater toward the Colorado River. To clean up the contamination, DTSC and DOI approved an action that includes the construction and operation of a groundwater remediation facility that will stimulate microbial activity in the groundwater to reduce chromium from the more toxic and mobile hexavalent form to a less toxic, immobile trivalent form. This is the most complex remediation action in the history of the Colorado River Basin Regional Water Board. In September, the Board adopted a revised permit for the Topock Compressor Station facility, a natural gas compressor station used for the transmission of natural gas by pipeline. The updated permit incorporated design modifications at the compressor station and allowed the discharge of non-hazardous construction, maintenance and operation wastewater to surface impoundments. Remediation will occur in a timely and cost-effective manner, saving PG&E and its customers millions of dollars over the course of the groundwater cleanup effort.

Discharges Allowed to Clean Up Groundwater in Santa Ana Region

To streamline groundwater contamination cleanup, in October the Santa Ana Regional Water Board adopted a revised permit to support groundwater remediation projects in the region. The permit allows chemical and biological amendments to be discharged into the ground subsurface, with the goal of cleaning up contaminated groundwater and soil. The chemical amendment reacts with contaminants in groundwater to break down their molecules into non-toxic or inert (inactive) compounds. The biological amendments are designed to consume contaminants as their source of energy. Stringent monitoring requirements will ensure that injected amendments are effectively cleaning up contamination and not impacting groundwater in areas outside of a contaminated groundwater plume. This permit streamlines authorizing the discharges of waste for the main purpose of groundwater and soil remediation within the region.

Groundwater Quality
2018 Accomplishments

Permit Adopted for Brawley Beef Processing Plant

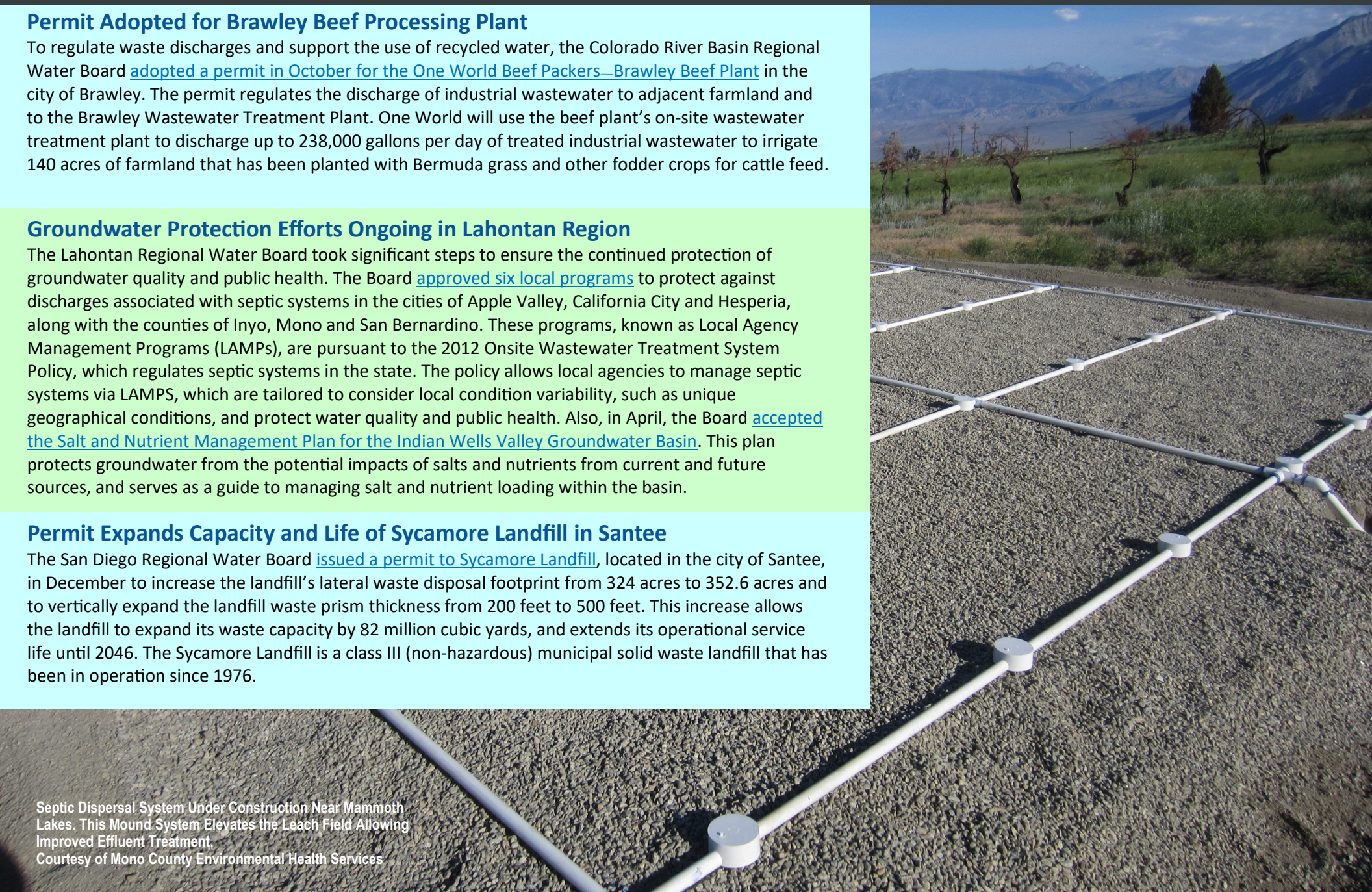
To regulate waste discharges and support the use of recycled water, the Colorado River Basin Regional Water Board adopted a permit in October for the One World Beef Packers—Brawley Beef Plant in the city of Brawley. The permit regulates the discharge of industrial wastewater to adjacent farmland and to the Brawley Wastewater Treatment Plant. One World will use the beef plant's on-site wastewater treatment plant to discharge up to 238,000 gallons per day of treated industrial wastewater to irrigate 140 acres of farmland that has been planted with Bermuda grass and other fodder crops for cattle feed.

Groundwater Protection Efforts Ongoing in Lahontan Region

The Lahontan Regional Water Board took significant steps to ensure the continued protection of groundwater quality and public health. The Board approved six local programs to protect against discharges associated with septic systems in the cities of Apple Valley, California City and Hesperia, along with the counties of Inyo, Mono and San Bernardino. These programs, known as Local Agency Management Programs (LAMPs), are pursuant to the 2012 Onsite Wastewater Treatment System Policy, which regulates septic systems in the state. The policy allows local agencies to manage septic systems via LAMPS, which are tailored to consider local condition variability, such as unique geographical conditions, and protect water quality and public health. Also, in April, the Board accepted the Salt and Nutrient Management Plan for the Indian Wells Valley Groundwater Basin. This plan protects groundwater from the potential impacts of salts and nutrients from current and future sources, and serves as a guide to managing salt and nutrient loading within the basin.

Permit Expands Capacity and Life of Sycamore Landfill in Santee

The San Diego Regional Water Board issued a permit to Sycamore Landfill, located in the city of Santee, in December to increase the landfill's lateral waste disposal footprint from 324 acres to 352.6 acres and to vertically expand the landfill waste prism thickness from 200 feet to 500 feet. This increase allows the landfill to expand its waste capacity by 82 million cubic yards, and extends its operational service life until 2046. The Sycamore Landfill is a class III (non-hazardous) municipal solid waste landfill that has been in operation since 1976.



Septic Dispersal System Under Construction Near Mammoth Lakes. This Mound System Elevates the Leach Field Allowing Improved Effluent Treatment.
Courtesy of Mono County Environmental Health Services

Recycled Water & Wastewater
2018 Accomplishments

San Diego Pure Water Project Permitted to Develop Sustainable Water Supplies

To reduce the amount of wastewater discharged to the Pacific Ocean and curb local reliance on imported water for potable needs, In December, the San Diego Regional Water Board issued a permit allowing the city of San Diego to proceed with construction of its North City Pure Water Project and recycled water infrastructure. The permit allows for the placement of new recycled water infrastructure within streams, vernal pools, and lake bottoms. The project includes the diversion, treatment and purification of wastewater prior to being discharged into the Miramar Reservoir, which is the primary source of drinking water for the northern part of the city. The treated wastewater will be blended with imported water and local runoff within the reservoir.

Permit Supports Pure Water Monterey Water Recycling Project

To support the use of recycled water to augment drinking water supplies in the Central Coast Region, the Central Coast Regional Water Board in December adopted a permit for ocean waste discharges associated with Monterey One Water's Pure Water Monterey project. The project is an advanced water recycling project involving the injection of highly treated recycled wastewater into a drinking water aquifer for withdrawal in the future. The project will also supply recycled water for agricultural irrigation in coastal portions of the Salinas valley, lessening seawater intrusion effects due to past groundwater over pumping. To increase the amount of recycled water available for use, the project will treat wastewater from non-traditional sources, including storm water, produce wash water, and agricultural drainage wastewater.

Water Recycling Advances in Los Angeles Region

To recharge Southern California groundwater supplies, the Los Angeles Regional Water Board adopted a permit in September allowing the Water Replenishment District of Southern California to recharge groundwater with highly treated recycled water in the Montebello Forebay Spreading Grounds—a critical groundwater recharge area where the soil's composition allows for deep water percolation—and by injecting the treated recycled water into recharge wells adjacent to its Albert Robles Center for Water Recycling and Environmental Learning. The facility will produce 21,000 acre-feet of recycled water annually from local sources, eliminating the demand to use imported water for groundwater recharge. A key component of GRIP is its Advanced Water Treatment Facility (AWTF) that has a production capacity of 14.8 million gallons per day (MGD) and ultimate production capacity of 29.6 MGD. Additionally, the Board worked with the Metropolitan Water District (MWD) and Sanitation Districts of Los Angeles County to assess the viability of a facility that will produce up to 150 million gallons of potable water daily—enough to supply more than 335,000 homes, and provided input to MWD on the Advanced Purification Center Testing and Monitoring Plan.

Agricultural Workers in Monterey County,
Courtesy of the CA Department of Water Resources

Recycled Water & Wastewater
2018 Accomplishments

Regulations Support Augmenting Reservoirs with Recycled Water to Increase Drinking Water Supplies

In October, the State Water Board's Surface Water Augmentation regulations became effective. The regulations provide local water suppliers with a new tool to improve their drought resilience by ensuring the safe use of highly treated recycled water to augment surface water supplies. Surface water augmentation involves the placement of highly treated recycled water into reservoirs, followed by treatment through a water treatment plant, and then distribution to the public as drinking water. The regulations protect public health and provide water agencies the assurance they need to proceed with indirect potable reuse surface water augmentation projects. The regulations are part of an ongoing effort by the Board to develop uniform statewide rules allowing for the expanded use of recycled water to indirectly supplement existing drinking water supplies.

Report on Recycled Water Use for Direct Potable Reuse Released

California needs to ensure water sustainability and security in a drying and variable climate. Recycled water can provide a reliable, climate-resilient source and is an important component of a diverse water portfolio. The State Water Board continues to lay the foundation for the development of uniform water recycling criteria for direct potable reuse that is protective of public health. In 2018, the Board released A Proposed Framework for Regulating Direct Potable Reuse in California, a guide to communicate the Board's current thinking on regulating direct potable reuse in California. Direct potable reuse involves introducing highly treated recycled water into a potable water supply distribution system or into the raw water supply just upstream of a water treatment plant with little or no environmental buffer—an important distinction between direct potable reuse and surface water augmentation, mentioned above.

Policy Update Promotes Production and Use of Recycled Water Statewide

Recycled water is a resource that mitigates the effects of drought, climate change, and water supply uncertainty. To ensure consistency in permitting water recycling projects statewide, the State Water Board in December amended the Policy for Water Quality Control for Recycled Water. The update promotes the production and use of recycled water statewide while protecting human health and the environment. It includes monitoring for constituents of emerging concern in potable recycled water and updating permits to ensure they meet current regulations. In addition, goals were set for increasing recycled water use statewide in areas where groundwater supplies are threatened and expanding the reuse of wastewater that would otherwise be discharged to the ocean, enclosed bays, estuaries, and coastal lagoons. The Policy sets the stage for creating a statewide system to annually track recycled water use and wastewater that is available for potential reuse. The Policy also continues to encourage stakeholder-driven groundwater basin salt and nutrient management plans to sustainably manage groundwater supplies for salts and nutrients.

Tag Indicating Recycled Water in Use,
Courtesy of the CA Department of Water Resources

Recycled Water & Wastewater
2018 Accomplishments

City of Ukiah Recycled Water Program Expanded

To support the city of Ukiah's recycled water efforts by beneficially reusing wastewater that has historically been discharged to the Russian River, in September, the North Coast Regional Water Board adopted a permit for the city's wastewater treatment plant and in October enrolled the city's new recycled water project in the statewide recycled water permit. The city received $34 million in funds from the State Water Board to construct the first three phases of the recycled water project in the Ukiah Valley that will include a 66-million-gallon lined recycled water storage pond and a recycled water fill station at its wastewater treatment plant. After completion in 2019, the city will supply 1,400 acre-feet per year of treated recycled water for irrigating approximately 650 acres of agricultural land, including vineyards, pear orchards, and pastures. The recycled water fill station will allow the city to provide recycled water for commercial, industrial and residential landscape and agricultural irrigation, and construction uses. The city plans to construct the fourth phase of its project to supply an additional 200-300 acre-feet per year of recycled water to urban areas of the city including parks, schools, and a golf course.

Septic Systems Eliminated in Malibu Thanks To A New Treatment Facility

The city of Malibu hosted a ribbon-cutting ceremony in October to celebrate the opening of their Civic Center Water Treatment Facility. This was the culmination of a nearly decade-long effort that began in 2009, when the Los Angeles Regional Water Board amended its Basin Plan to prohibit new septic systems (also known as onsite wastewater disposal systems) and require commercial and residential properties to cease discharges from septics by September 30, 2018, and November 5, 2024, respectively (discharges from septics may contain nutrients and bacteria that impact groundwater quality and adjacent beach water quality). The facility will eliminate the use of septic systems in the Civic Center area and improve water quality in the Malibu Valley Groundwater Basin, Malibu Creek, Malibu Lagoon and Santa Monica Bay. The facility will also provide highly treated non-potable recycled water to the community to offset potable water needs. The Board worked with the city to ensure all commercial properties were connected to the facility. All wastewater generated at these properties is now discharged to the facility for treatment and their existing septic systems are no longer in use. The Board will work with the city to ensure all residential properties are connected to the facility by November 5, 2024.

The California Coast,
Courtesy of the CA Department of Water Resources

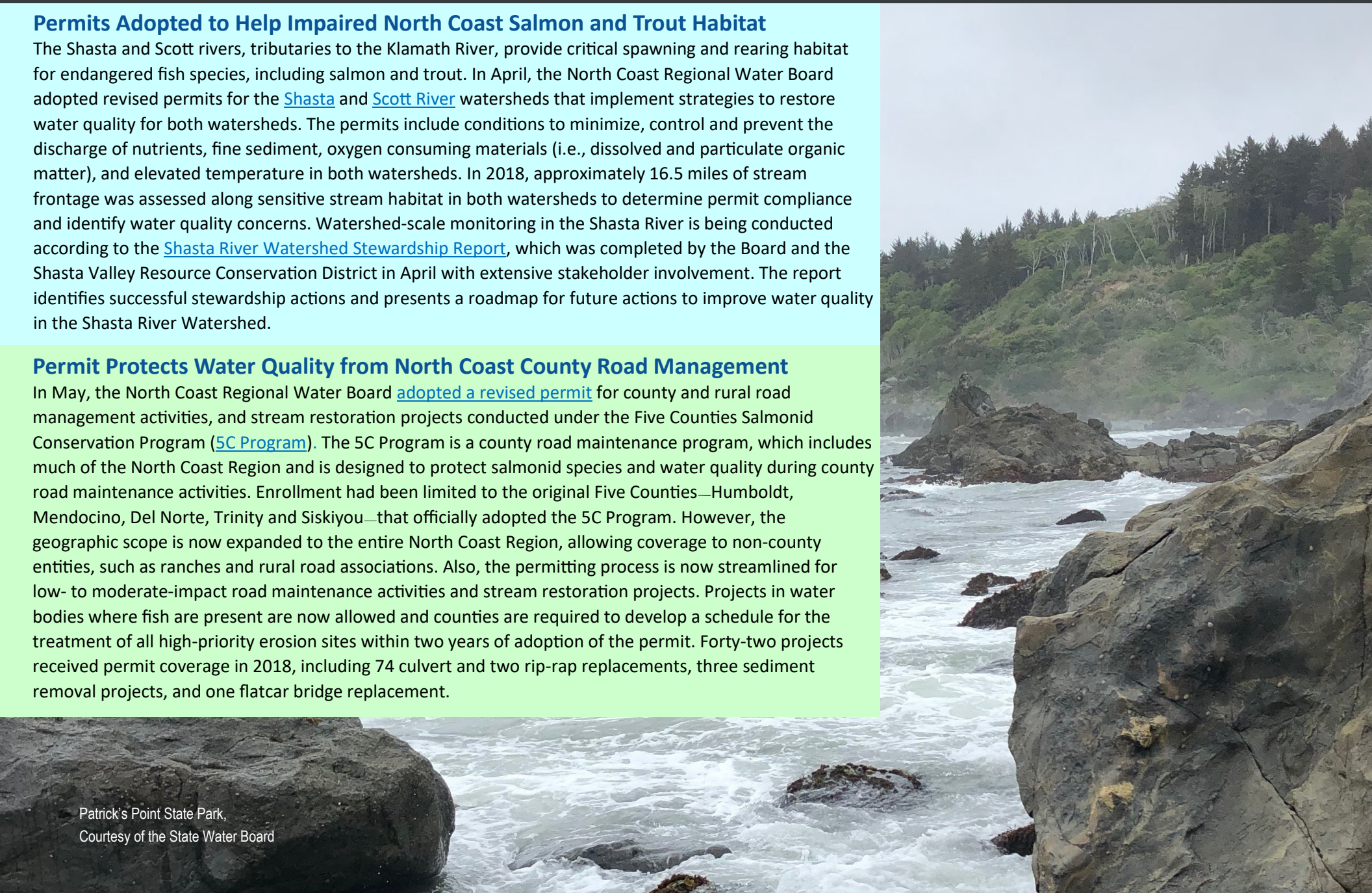
Diffuse Source Pollution Control
2018 Accomplishments

Permits Adopted to Help Impaired North Coast Salmon and Trout Habitat

The Shasta and Scott rivers, tributaries to the Klamath River, provide critical spawning and rearing habitat for endangered fish species, including salmon and trout. In April, the North Coast Regional Water Board adopted revised permits for the Shasta and Scott River watersheds that implement strategies to restore water quality for both watersheds. The permits include conditions to minimize, control and prevent the discharge of nutrients, fine sediment, oxygen consuming materials (i.e., dissolved and particulate organic matter), and elevated temperature in both watersheds. In 2018, approximately 16.5 miles of stream frontage was assessed along sensitive stream habitat in both watersheds to determine permit compliance and identify water quality concerns. Watershed-scale monitoring in the Shasta River is being conducted according to the Shasta River Watershed Stewardship Report, which was completed by the Board and the Shasta Valley Resource Conservation District in April with extensive stakeholder involvement. The report identifies successful stewardship actions and presents a roadmap for future actions to improve water quality in the Shasta River Watershed.

Permit Protects Water Quality from North Coast County Road Management

In May, the North Coast Regional Water Board adopted a revised permit for county and rural road management activities, and stream restoration projects conducted under the Five Counties Salmonid Conservation Program (5C Program). The 5C Program is a county road maintenance program, which includes much of the North Coast Region and is designed to protect salmonid species and water quality during county road maintenance activities. Enrollment had been limited to the original Five Counties—Humboldt, Mendocino, Del Norte, Trinity and Siskiyou—that officially adopted the 5C Program. However, the geographic scope is now expanded to the entire North Coast Region, allowing coverage to non-county entities, such as ranches and rural road associations. Also, the permitting process is now streamlined for low- to moderate-impact road maintenance activities and stream restoration projects. Projects in water bodies where fish are present are now allowed and counties are required to develop a schedule for the treatment of all high-priority erosion sites within two years of adoption of the permit. Forty-two projects received permit coverage in 2018, including 74 culvert and two rip-rap replacements, three sediment removal projects, and one flatcar bridge replacement.



Patrick's Point State Park,
Courtesy of the State Water Board

Enforcement
2018 Accomplishments

American White Pelicans at The Salton Sea,
Courtesy of the CA Department of Water Resources

Water Districts Pay $605,110 Due to Major Spill to Salton Sea

Two water districts were fined a combined $605,110 due to a large illegal sewage and recycled water spill that impacted the water quality of the Salton Sea. A settlement was reached between the Colorado River Basin Regional Water Board, the Desert Recreation District, and Coachella Valley Water District in September for the spill of almost four million gallons to the Whitewater River Storm Water Channel in June 2017. The Channel flows to the Salton Sea and the large volume of the illegal spill impacted surface and groundwater quality, wildlife, and aquatic habitat. The Desert Recreation District was assessed $571,302 and the Coachella Valley Water District was assessed $33,808. Both paid their full amounts to the State Water Board's Cleanup and Abatement Account.

$2.2 Million Settlement Reached for Large Sewage Spill to Santa Monica Bay

Partially treated wastewater containing sewage, plastics, feminine hygiene products, lancets, and other waste was discharged from the Hyperion Water Reclamation Plant's underground storm drain system into Santa Monica Bay in September 2015, leading to beach closures and widespread public health concerns. In April, the Los Angeles Regional Water Board reached a $2.262 million settlement with the city of Los Angeles, including $1.131 million that will be deposited in the State Water Board's Cleanup and Abatement Account. The remaining amount will fund two projects intended to reduce and prevent pollution from entering inland streams that connect to Santa Monica Bay and to increase public awareness of the risks of water-borne pollution. To improve the quality of storm water discharges, the projects will include inland river and coastal cleanups, outreach, and water literacy education.

Streamlined Enforcement in San Diego Expeditiously Addresses Violations

In an effort to efficiently address storm water violations and allow for the prompt correction of these violations, the San Diego Regional Water Board in January adopted a settlement with the Colrich California Realty, Inc. and Campus of Life, LP, to address the unpermitted fill of riparian habitat at the construction site of a private educational campus development in the city of San Diego. The developers are required to fund over half an acre of riparian habitat restoration. By focusing on the restoration of lost habitat functions and water quality value, the Board was able to gain an expedient resolution through the Board's Executive Officer's authorities.

In April, the San Diego Regional Water Board fined Pardee Homes $291,286 for storm water violations at their 204-acre Castlerock Weston residential construction site near the city of Santee. The violations led to the discharge of more than 70,000 gallons of sediment-laden storm water directly to Sycamore Canyon Creek, an environmentally sensitive watershed of the San Diego River. The fine was levied through an expedited settlement process intended to more efficiently address violations of the statewide Construction General Storm Water Permit. This expedited process offers permittees an opportunity to correct violations and settle the liability at an earlier stage than the traditional complaint and hearing process.

Efforts Make Water Board Data Open, Transparent and Usable

To make Water Board information and data transparent, accessible, and usable to support water-related decisions in the state, the State Water Board in July adopted principles of open data as a core value, directing its programs and activities to foster innovation and implement strategic actions. Effective water resource management demands that California integrate existing water and ecological data into an authoritative, open-access platform that helps water managers operate the state's water system more efficiently and enables water users to make informed decisions.

The Board partnered with other agencies and the West Big Data Innovation Hub for the 2018 Safe Drinking Water Data Challenge. The Challenge consisted of a series of events and activities focused on identifying and implementing solutions to provide safe, reliable and affordable drinking water to all Californians. Successful outcomes included data insights about drinking water and the development of two partnerships. One partnership focused on developing data tools to better integrate "water rate" data and the second is a partnership with the Berkeley Institute for Data Science to move water data and science-related information and resources between the Water Boards and the University of California, Berkeley. Also, the Board hosted the 2018 California Water Board Data Fair, a bi-annual event that offers an opportunity for stakeholders to explore and discuss collected data and systems utilized by the State and Regional Water Boards.

In addition, the Board's Surface Water Ambient Monitoring Program hosted the third Annual Watershed Health Indictor and Data Science Symposium. The Symposium addressed the theme of Adapting in the Face of Disruptive Landscape Change. Presentations described how to collect, manage, and communicate monitoring information in anticipation of landscape change in response to climate change, population growth, and land use change, as well as more immediate threats such as wildfires, droughts, and floods. The program also released the 2018 California Water Quality Status Report, which is an interactive annual data-driven snapshot of the Board's water quality and ecosystem monitoring programs that highlight advancements made toward addressing statewide and regional management questions. This second edition of the report emphasizes the importance of monitoring our waters along the entirety of the connected system to better understand how disturbances move through our environment and create impacts long distances from their source.

In November, the first annual Trash Data Dive was held. This annual event allows data scientists to work alongside trash experts, municipalities, policy-writers, and others to inform how and where trash is generated, transported and deposited. The overarching goal was to construct an understandable, credible statewide picture of our current trash management situation. Out of this, the California Water Quality Monitoring Council, in which the Water Boards participate, created the Trash Monitoring Workgroup to promote and encourage the completion of suggested projects resulting from the inaugural data dive. In addition, in 2018, the Council created the California Environmental Flows Workgroup that focused on environmental flow needs and ecological flow criteria grounded in science, while balancing natural resource needs with consumptive water uses. The workgroup is a collaboration and technical exchange forum for government agencies, academic institutions, Tribes, and non-governmental organizations within the state, with over 30 current active participants. The workgroup strives to improve agency and public access to ecological and environmental flow data, information and tools related to ecological flow assessments, and provide a common vision for use of tools and science-based information to support sound decision-making. These concepts and tools are being piloted in a study of flow needs in the Los Angeles River.

California Water Boards
DATA CENTER

Financial Assistance
2018 Accomplishments

Over $136 Million Awarded to Address Groundwater Contamination Statewide

The State Water Board awarded over $120 million to prevent or clean up groundwater contamination in the state. During the first solicitation, 23 projects were funded statewide to prevent and clean up groundwater including contamination from nitrate, volatile organic compounds, and emerging contaminants (i.e., 1,4-dioxane). In addition, over $16 million was committed to augment the Drinking Water State Revolving Fund Program and the Clean Water State Revolving Fund Program for projects benefiting disadvantaged communities. In August, through the second solicitation, the program received nearly $500 million in funding requests for 37 projects to address groundwater contamination.

174 Disadvantaged Communities Receive Assistance to Develop Drinking Water and Wastewater Solutions

More than 175,000 people in 174 disadvantaged communities and over 120 small public water systems benefited from technical assistance provided by the State Water Board. The assistance promotes permanent and sustainable drinking water and wastewater treatment solutions primarily for small disadvantaged communities. The assistance included: helping small public water systems to improve their compliance and develop their technical, managerial, and financial capacity; aiding communities that do not currently have access to safe and adequate drinking water to be connected to sustainable water suppliers; assisting small disadvantaged communities develop, fund, and implement capital improvement projects; and meeting these communities' more general drinking water and wastewater capacity development needs outside the context of capital improvement projects (i.e., compliance audits, rate studies, and board and operator training).

Clean Water State Revolving Fund Loan Program Implements New Scoring System

After extensive stakeholder outreach, the State Water Board approved new project selection criteria (or scoring system) in November to help the Clean Water State Revolving Fund Program prioritize the unprecedented demand for financing requested through the program. The program has protected and promoted the health, safety, and welfare of Californians since 1989, when the first projects were financed. Many funding recipients use their financing to address water quality violations at their facilities and any associated Water Board enforcement actions. Every project financed by the program is directly related to improving water quality, public health, or both. The new scoring system will help the Board prioritize and finance the most critical projects.

A 1-4 Dioxane Treatment Facility Under Construction,
Courtesy of the State Water Board

Financial Assistance
2018 Accomplishments

Nearly $1 Million Awarded to Provide Safe Drinking Water at Disadvantaged Schools

The State Water Board is committed to improving access to and the quality of drinking water in California's public schools. The State Water Board is implementing the Drinking Water for Schools Grant Program, which will provide $9.5 million to disadvantaged public school districts to provide more access to safe drinking water. In 2018, nearly $1 million was awarded to 12 school districts, serving 24 disadvantaged public schools, to ensure safe drinking water at these campuses.

Over $2 Million Provided for Urgent Drinking Water Needs

To address urgent drinking water needs in disadvantaged communities and public schools, the State Water Board awarded $2.12 million to 36 projects through its Cleanup and Abatement. The demand for emergency drinking water was most likely caused by drought, drinking water contamination, or other emergencies. The funded projects provided bottled water, hauled water, point-of-use treatment, and temporary storage tanks.

Significant Efforts Pay Off for State's Underground Storage Tank Cleanup Fund

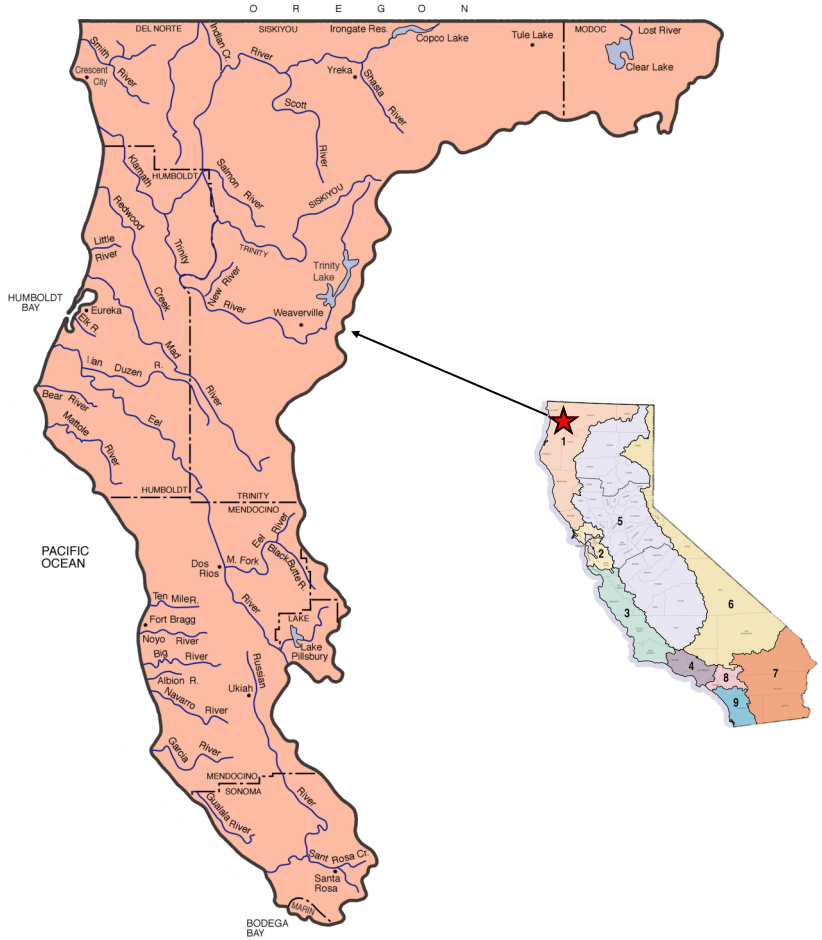
The Underground Storage Tank Cleanup Fund provides a means for petroleum underground storage tank owners and operators to pay for damages that arise from their tank operations. The Fund reimburses eligible expenses associated with the cleanup of contamination due to leaking tanks. A year-long process was completed that cleared the backlog of approximately 2,000 Fund reimbursement requests that had developed over a number of years. This is the first time in the Fund's history that the backlog has been eliminated. Since then, reimbursement requests have been processed within 30 days of receipt, a significant improvement. In addition, 207 of the 240 Fund claimant appeals of costs that had previously been determined to be ineligible for reimbursement were resolved. Due to this, corrective action resumed at over 15 stalled tank sites after these appeals were resolved. The Board exceeded its goal by producing 525 Review Summary Reports for the Fund. These reports are required for active underground storage tank cleanup claims that have been in the Fund for more than five years. They are used to determine tank sites that are candidates for closure, and whether corrective actions have been effective at addressing groundwater contamination.

Sacramento-Area High School Students Attending a Career Fair, Courtesy of the CA Department of Water Resources

North Coast Regional Water Board (Region 1)

Region Snapshot & Contact Information

Remote wilderness and towering redwoods characterize the North Coast Region, which stretches from the Oregon border to Marin County. A land of wet coastal mountains and drier inland valleys, it accounts for 12 percent of the state's land area, but 35 percent of its freshwater runoff. Its 340-mile-long coastline includes estuaries and environmentally sensitive areas protected by state law.



North Coast Region Snapshot

Approximately **20,000** square miles

340 miles of coastline

27,000 acres of lakes

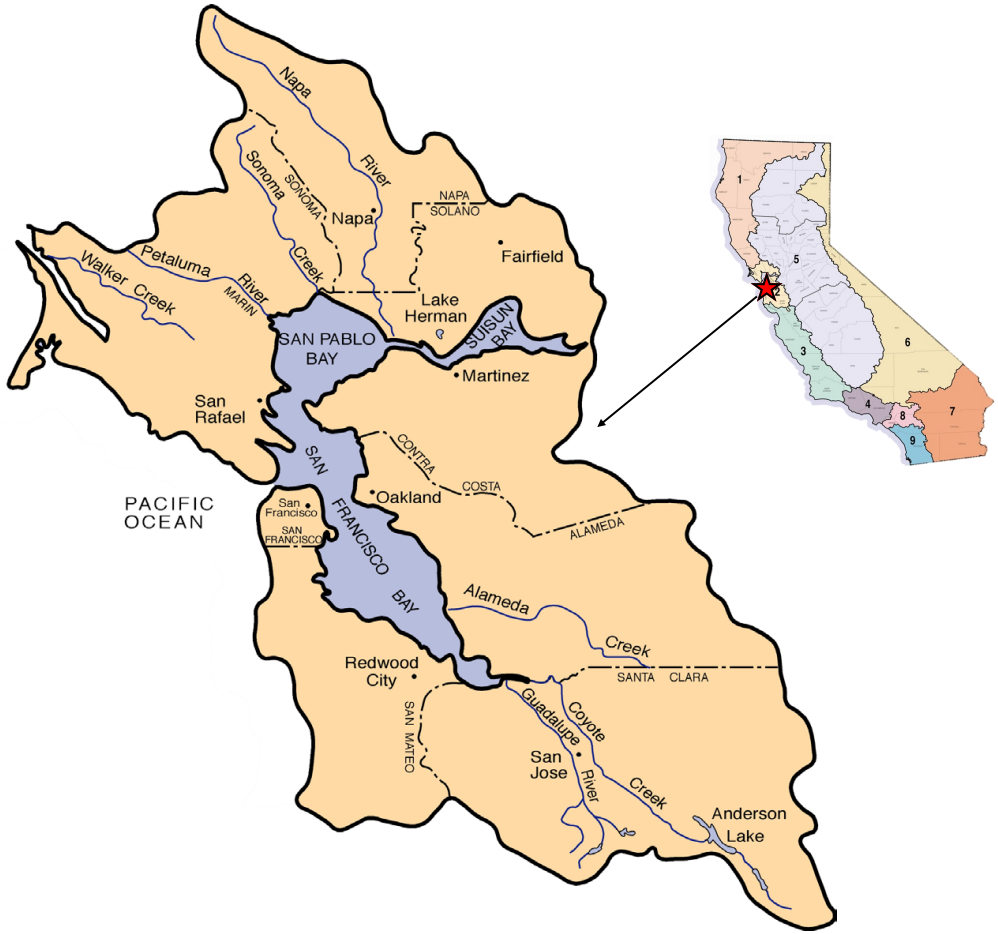
16 urban water suppliers

North Coast Regional Water Board
5550 Skylane Blvd., Suite A, Santa Rosa, CA 95403
707-576-2220
www.waterboards.ca.gov/northcoast

Region 1 Accomplishments in this Report:
Pages 4, 10, 13, 14, 17, 24 and 25

San Francisco Bay Regional Water Board (Region 2)

Region Snapshot & Contact Information



San Francisco Bay lies at the heart of this area, home to more than 7 million people. Industries range from high-tech computer manufacturers in the Silicon Valley to oil refineries in Contra Costa County. The northern part of the Region supports agriculture, such as the wine industry and dairies. Despite the Region's heavy urbanization, the Bay and its watershed are home to diverse populations of fish and migratory birds.

San Francisco Bay Regional Water Board
1515 Clay Street, Suite 1400, Oakland, CA 94612
510-622-2300
www.waterboards.ca.gov/sanfranciscobay

Region 2 Accomplishments in this Report:
Pages 9, 14 and 15

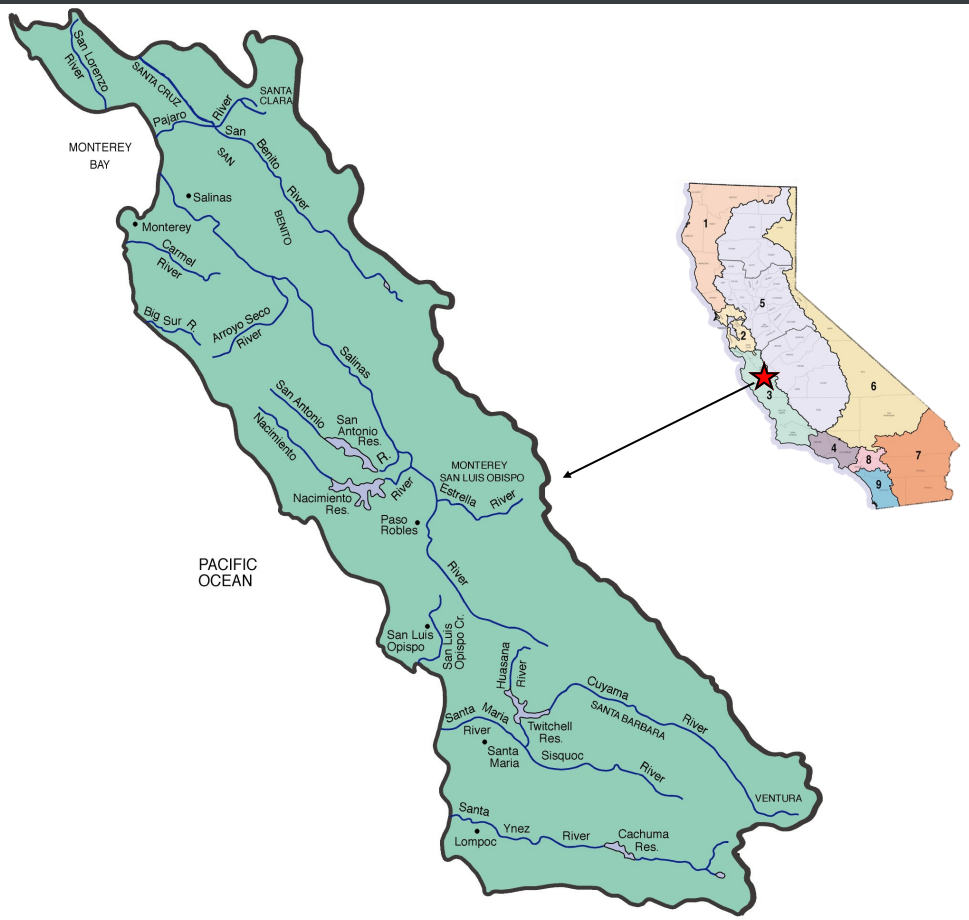
San Francisco Bay Region Snapshot

Approximately **1,100** square miles
110 miles of coastline
71 lakes
7,655 miles of streams
48 urban water suppliers

Central Coast Regional Water Board (Region 3)

Region Snapshot & Contact Information

The Central Coast Region extends from Santa Clara County south to northern Ventura County. The Region includes the urbanized Monterey Peninsula, the agricultural Salinas and Santa Maria valleys, and the Santa Barbara coastal plain. Tourism, power and oil production, and agriculture and related food processing activities are the major industries.



Central Coast Region Snapshot

Approximately **11,274** square miles

378 miles of coastline

Over **25,000** acres of lakes

2,360 miles of streams

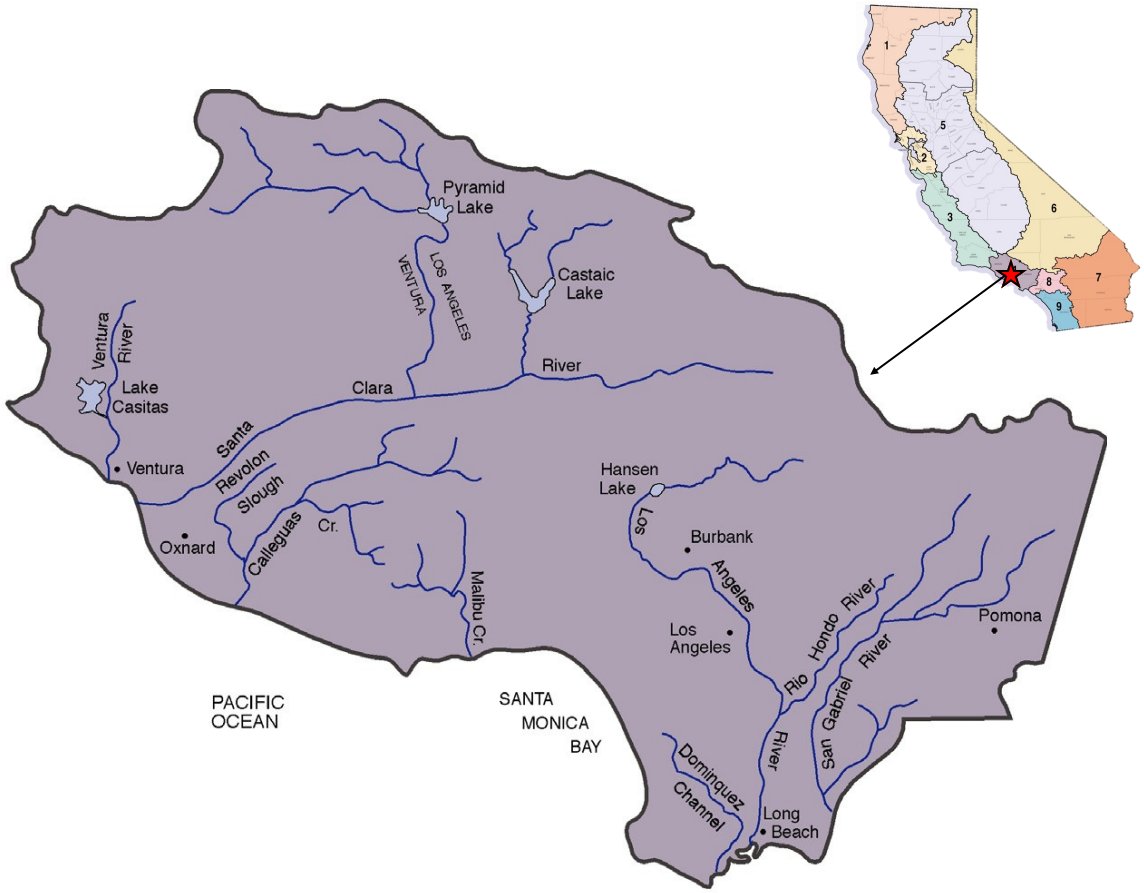
33 urban water suppliers

Central Coast Regional Water Board
895 Aerovista Place, Suite 101, San Luis Obispo, CA 93401
805-549-3147
www.waterboards.ca.gov/centralcoast/

Region 3 Accomplishments in this Report:
Pages 5, 17, 18, 19 and 22

Los Angeles Regional Water Board (Region 4)

Region Snapshot & Contact Information



Los Angeles Regional Water Board
320 West Fourth Street, Suite 200, Los Angeles, CA 90013
213-576-6600
www.waterboards.ca.gov/losangeles

Region 4 Accomplishments in this Report:
Pages 7, 8, 11, 18, 22, 24 and 26

The Los Angeles Region is the most populous with more than 10 million residents. It is one of dramatic diversity, including extensive agriculture with pockets of urban areas in Ventura County; iconic beaches along Santa Monica Bay; and heavily urbanized and industrial areas, including the ports of Los Angeles and Long Beach, the nation's largest seaport complex. Communities across the region also carry some of the highest cumulative pollution burdens in the state.

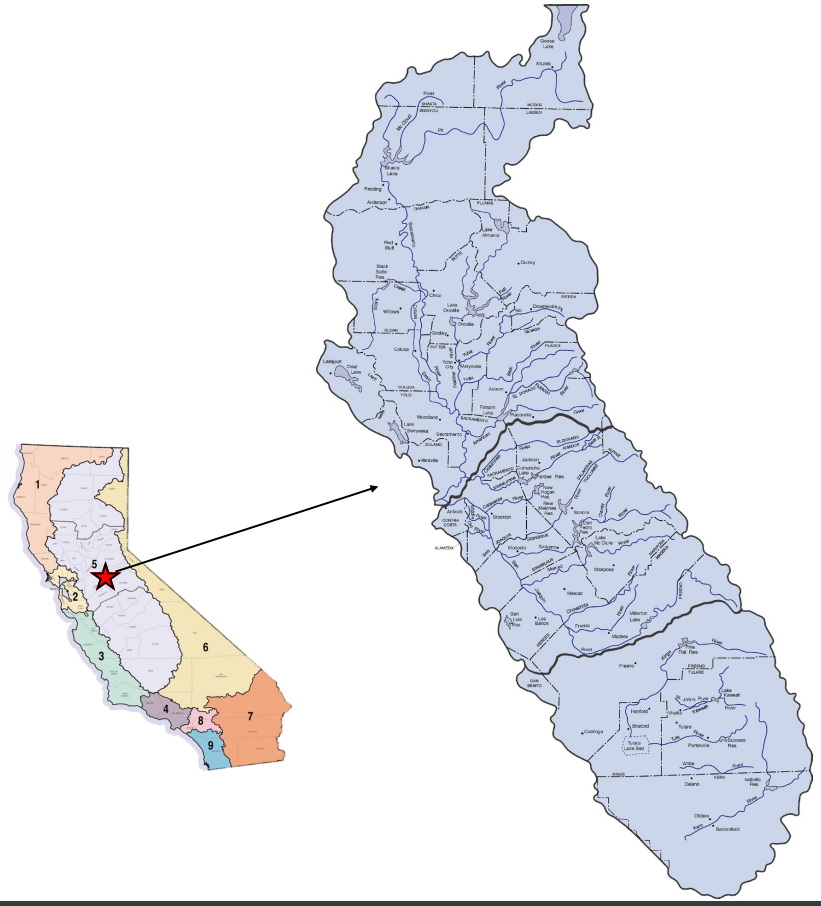
Los Angeles Region Snapshot

Approximately **4,447** square miles
120 miles of coastline
Over **12,000** acres of lakes
1,115 miles of streams
92 urban water suppliers

Central Valley Regional Water Board (Region 5)

Region Snapshot & Contact Information

The Central Valley Region is the state's largest, encompassing 60,000 square miles; about 40 percent of the state's total area. Thirty-eight of California's 58 counties are either completely or partially within the region's boundaries, formed by the crests of the Sierra Nevada on the east, the Coast Range and Klamath Mountains on the west, the Oregon border on the north, and the Tehachapi Mountains on the south. The Sacramento and San Joaquin rivers, along with their tributaries, drain the major part of this large area through an inland Delta, before emptying into San Francisco Bay. The Delta is the focal point of the state's two largest water conveyance projects, the State Water Project and the federal Central Valley Project. Together, the Sacramento and San Joaquin rivers and the Delta furnish over half of the state's water supply.



Central Valley Region Snapshot

Approximately **60,000** square miles

579,110 acres of lakes

83,624 miles of streams

101 urban water suppliers

Central Valley Regional Water Board

Sacramento: 11020 Sun Center Drive, Suite 200, Rancho Cordova, CA 95670, 916-464-3297

Fresno: 1685 E Street, Fresno, CA 93706, 559-445-5116

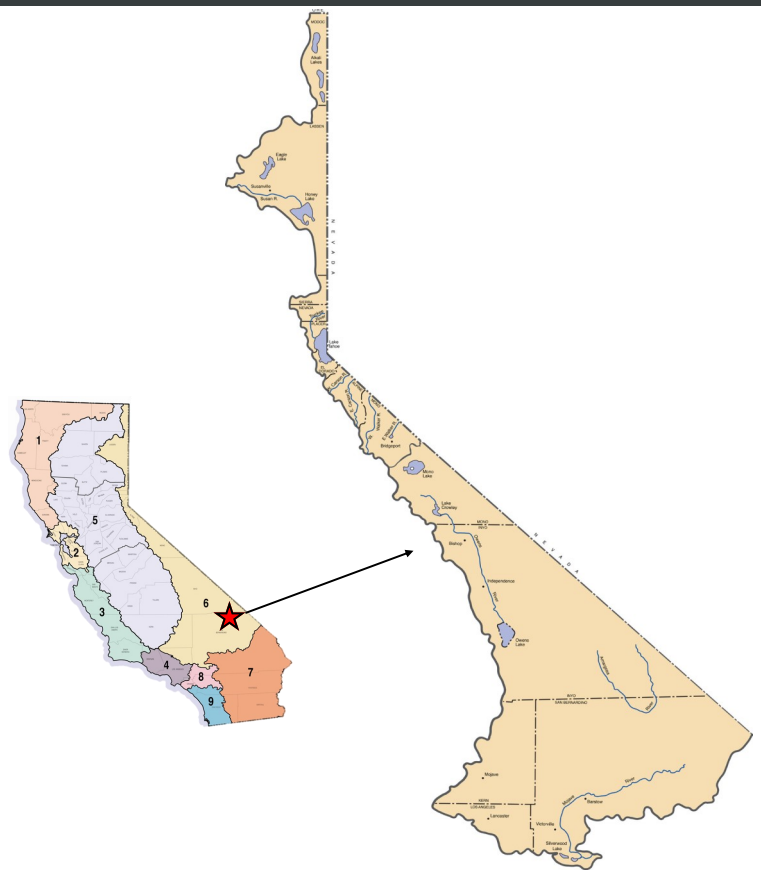
Redding: 364 Knollcrest Drive, Suite 205, Redding, CA 96002, 530-224-4845

www.waterboards.ca.gov/centralvalley/

Region 5 Accomplishments in this Report:
Pages 4, 5, 6, 9, 10, 16 and 19

Lahontan Regional Water Board (Region 6)

Region Snapshot & Contact Information



The Lahontan Region is named for a prehistoric lake that once covered much of the Great Basin. The Region includes approximately 20 percent of California from the Oregon border south along the eastern crest of the Sierra Nevada through the northern Mojave Desert. Within this area are hundreds of lakes, streams, and wetlands, including the nationally significant Lake Tahoe and Mono Lake. Tourism is the most important industry in the Region, which includes Death Valley National Park, the Mammoth Lakes area, and portions of the Mojave National Preserve.

Lahontan Regional Water Board

South Lake Tahoe: 2501 Lake Tahoe Blvd., South Lake Tahoe, CA 96150, 530-542-5400
(Annex: 971 Silver Dollar Avenue)
Victorville: 15095 Amargosa Road, Bldg. 2, Suite 210, Victorville, CA 92394, 760-241-6583
www.waterboards.ca.gov/lahontan

Region 6 Accomplishments in this Report:
Pages 13, 19 and 21

Lahontan Region Snapshot

Approximately **33,131** square miles

Over **700** lakes

3,170 miles of streams

21 urban water suppliers

Colorado River Basin Regional Water Board (Region 7)

Region Snapshot & Contact Information

The Colorado River Basin Region covers California's most arid area. Despite its dry climate, the region contains two water bodies of state and national significance: the Colorado River and the Salton Sea. The Salton Sea is California's largest inland lake, covering approximately 343 square miles. Water from the Colorado River irrigates more than 700,000 acres of productive farmland in the Imperial, Coachella, Bard, and Palo Verde valleys. The Colorado River also provides drinking water to several million people in California's southern coastal cities.

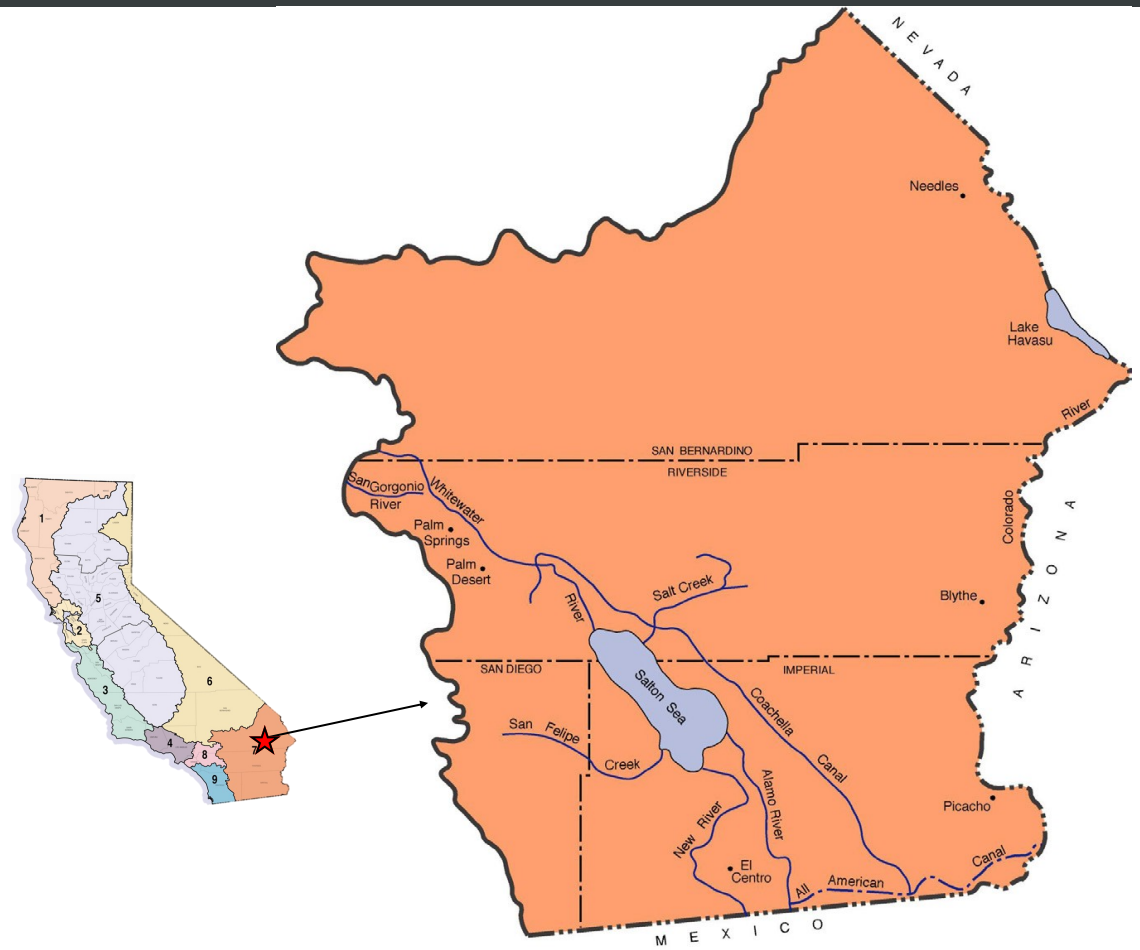
Colorado River Basin Region Snapshot

Approximately **20,000** square miles

250,000 acres of lakes

900 miles of streams

16 urban water suppliers

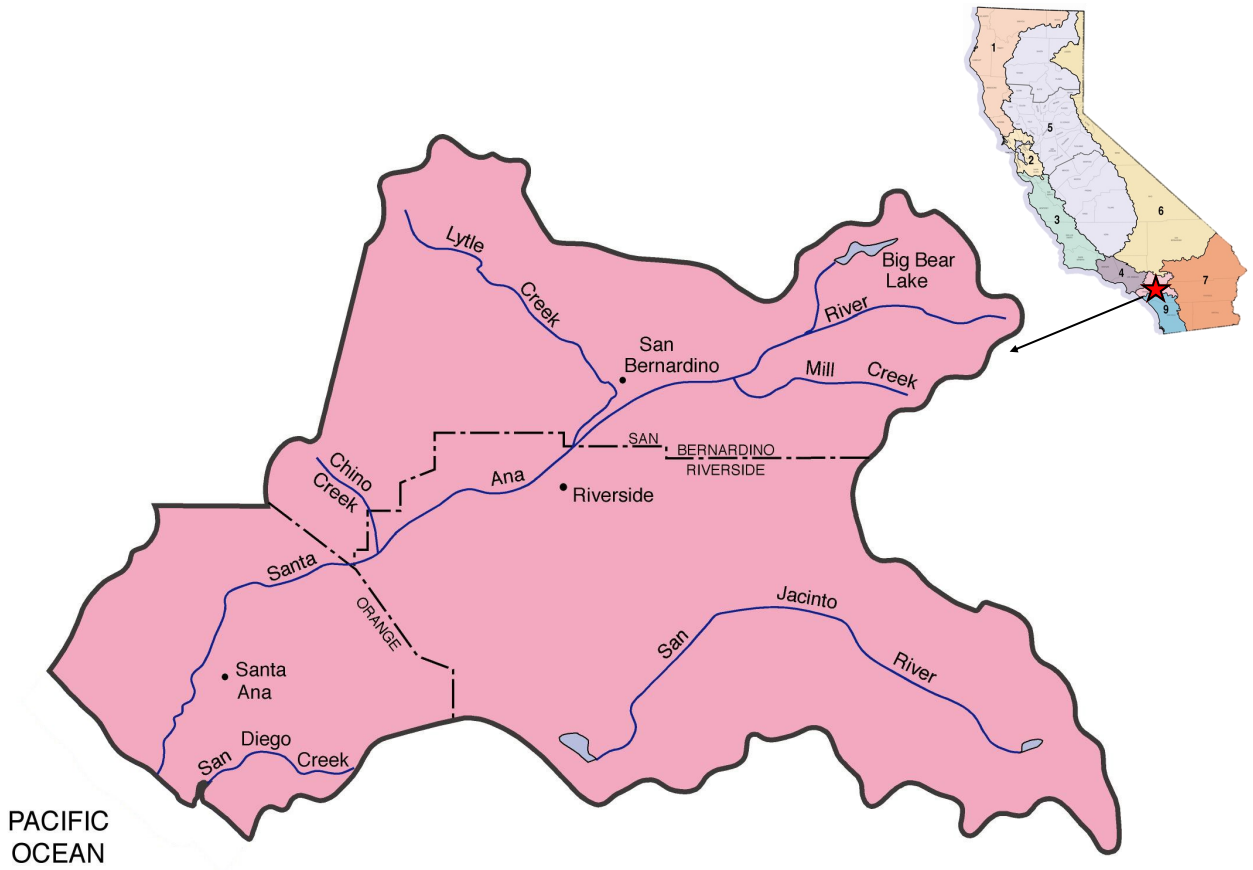


Colorado River Basin Regional Water Board
73-720 Fred Waring Drive, Suite 100,
Palm Desert, CA 92260 760-346-7491
www.waterboards.ca.gov/coloradoriver/

Region 7 Accomplishments in this Report:
Pages 15, 17, 20, 21 and 26

Santa Ana Regional Water Board (Region 8)

Region Snapshot & Contact Information



The Santa Ana Region, which extends from the San Bernardino and San Gabriel mountains in the north and Newport Bay along the coast, continues to be one of the most rapidly growing areas of the state. While the Region is geographically the smallest at 2,800 square miles, it has one of the largest populations with almost 5 million people. This semi-arid Region is known for its temperate climate and relatively low rainfall—approximately 15 inches per year.

Santa Ana Region Snapshot

Approximately **2,800** square miles

24 miles of coastline

17 lakes

460 miles of streams

53 urban water suppliers

Santa Ana Regional Water Board
3737 Main Street, Suite 500, Riverside, CA 92501
951-782-4130
www.waterboards.ca.gov/santaana

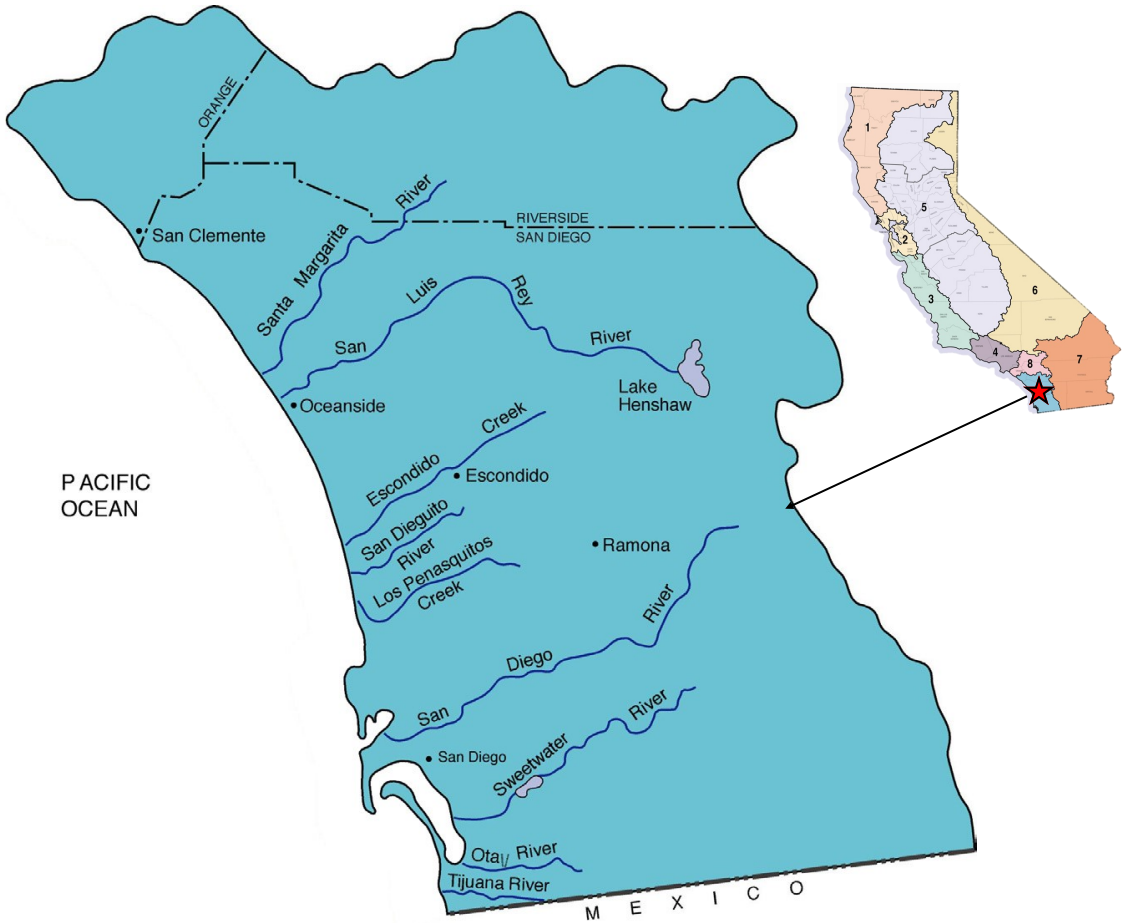
Region 8 Accomplishments in this Report:

Pages 6, 10, 12, 13, 15 and 20

San Diego Regional Water Board (Region 9)

Region Snapshot & Contact Information

The San Diego Region is divided into a coastal plain area, a central mountain-valley area, and an eastern mountain valley area. The region enjoys a climate and location that supports many agricultural and industrial uses of water. Having a mild coastal climate, the region's growing population enjoys many water-related activities; however, little precipitation falls within this semi-arid region. Approximately 90 percent of the region's water supply is imported from northern California and the Colorado River.



San Diego Region Snapshot

Approximately **3,900** square miles

85 miles of coastline

19,220 acres of lakes

910 miles of streams

29 urban water suppliers

San Diego Regional Water Board
2375 Northside Drive, Suite 100, San Diego, CA 92108
619-516-1990
www.waterboards.ca.gov/sandiego/

Region 9 Accomplishments in this Report:
Pages 8, 12, 21, 22 and 26

State Water Resources Control Board

Contact Information

The State Water Resources Control Board offices are located in the heart of downtown Sacramento, just a few blocks from the California State Capitol. We encourage all Californians to get involved in our decision-making process. From attending a Board meeting to providing public comments, there are many opportunities the public has to get involved in the decision-making processes used by the Water Boards to protect California's water resources. For more information on how to get involved, please visit our website and social media sites.

State Water Resources Control Board
1001 I Street, Sacramento CA 95814
916-341-5254
www.waterboards.ca.gov

The State Water Board's YouTube Channel.
The site is: https://www.youtube.com/user/BoardWebSupport

The State Water Board's Official Twitter Account: @CaWaterBoards

Chumash Tribal Leader Performing a Water Blessing, Courtesy of the CA Department of Water Resources

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Yuba River,
Courtesy of the CA Department of Water Resources