













### **ACCOMPLISHMENTS REPORT**

Published March 2010

REGIONAL WATER QUALITY CONTROL BOARDS



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State of California

### Linda S. Adams, Secretary

California Environmental Protection Agency

### The California Water Boards

www.waterboards.ca.gov

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> > March 2010

# Foreword

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Cover photos from top to bottom right: Pescadero Marsh Natural Preserve, Fannette Island in Emerald Bay at Lake Tahoe, North Fork Stanislaus River, Flood Furrow Irrigation in Yuba County, Presidio of San Francisco Shoreline. (Photos by Dale Oliver) The State Water Resources Control Board and its nine Regional Water Quality Control Boards have broad responsibilities for protecting California's surface and ground water quality, and for balancing competing demands on our water resources. Recognizing that California's water pollution problems are influenced by environmental and social factors that vary regionally, the nine Regional Water Boards are based on watersheds, or hydrologic areas.

The Regional Water Boards serve as the frontline for State and federal water pollution control efforts. These efforts include developing water quality control plans (basin plans) for their watersheds that establish water quality standards and strategies, issuing waste discharge requirements (permits) based on the basin plans and State Water Board plans and policies, monitoring water quality, determining compliance with requirements, and taking enforcement actions. Where water quality issues cross Regional Water Board boundaries or have significant statewide application, the State Water Board may develop water quality control plans and policies, including standards, and general permits. The State Water Board also approves regional basin plans, reviews petitions of Regional Water Board actions, administers financial assistance programs (such as for water pollution control or cleanup), addresses enforcement, and provides administrative and other functions that support the Water Boards. Finally, the State Water Board is responsible for allocating water rights and adjudicating water right disputes. This joint authority of water allocation and water quality protection enables the Water Boards to comprehensively address protection of California's waters.

This report summarizes some of the important accomplishments of the Water Boards during 2009. While many of these accomplishments will have broad impact across the state in the years to come, many more are focused on the specific challenges faced in particular watersheds around the state.

For more information about programs in this report, see our Web site **www.** waterboards.ca.gov

To view the Water Boards' Annual Performance Report for fiscal year 2008/2009, go to: http://www.waterboards.ca.gov/about\_us/performance\_report/

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## North Coast Regional Water Board



### North Coast Regional Water Quality Control Board

www.waterboards.ca.gov/northcoast 5550 Skylane Boulevard, Suite A Santa Rosa, California 95403 Phone: (707) 576-2220

= Regional Board Office

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. Timber harvesting, agriculture, recreation and tourism are mainstays of the local economy.

- Adopt a Total Maximum Daily Load for the Klamath River by March 2010.
- Adopt a regulatory framework for permitting all US Forest Service activities and adopt a model permit/waiver for the Klamath National Forest that incorporates TMDL requirements with the USFS.
- Initiate nonpoint source permits for irrigated agriculture, grazing, county roads, and dairies.

# North Coast Regional Water Quality Control Board

### Stormwater Permit for the Santa Rosa Area

The North Coast Regional Water Board adopted an improved stormwater permit for the Santa Rosa area. The permit contains new provisions to decrease runoff from new development using low-impact development practices and new protections for Laguna de Santa Rosa, a wildlife area. For more on the permit, see:

http://www.waterboards.ca.gov/northcoast/board\_decisions/adopted\_orders/pdf/2009/091014\_09\_0050\_PERMIT\_MS4\_SRSonCoSCWA.pdf



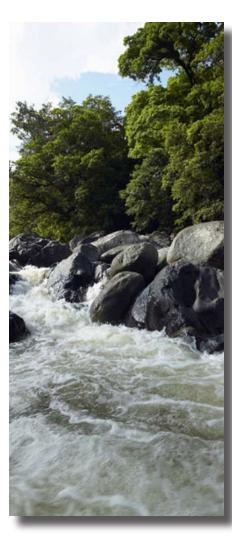
The North Coast Regional Water Board adopted a conditional waiver for non-industrial timberlands to achieve water quality goals and carry out requirements for 18 TMDLs on the north coast. Key provisions require landowners to develop and implement management plans for roads and strategies for other discharges that can be controlled. A draft waiver covering discharges from nonpoint sources on US Forest Service land is circulating. For more information on the waiver, see:

http://www.waterboards.ca.gov/northcoast/board\_decisions/adopted\_orders/pdf/2009/090610\_0038\_Waiver\_NonFedTimber.pdf

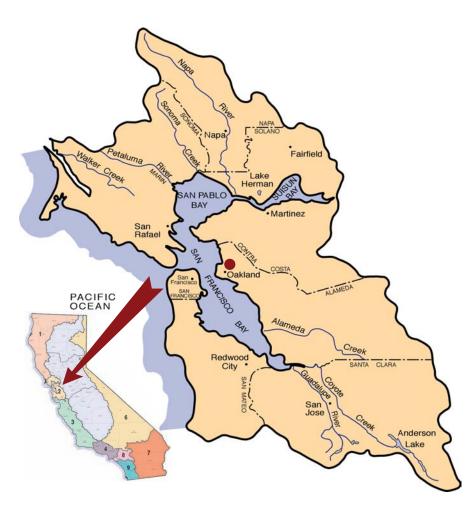
### Klamath TMDL

The Klamath TMDL team, including representatives from US EPA, the Oregon Department of Environmental Quality and the North Coast Regional Water Board, agreed to restore water quality and implement the bistate TMDLs within the Klamath River watershed. With the assistance of US EPA's contractor, TetraTech, the team released its water quality modeling results for the river. Both states plan to adopt TMDLs in 2010. For more information, see:

http://www.waterboards.ca.gov/northcoast/water\_issues/programs/tmdls/klamath\_river/



# 2 San Francisco Bay Regional Water Board



### San Francisco Bay Regional Water Quality Control Board

www.waterboards.ca.gov/sanfranciscobay 1515 Clay Street, Suite 1400 Oakland, CA 94612 Phone: (510) 622-2300

= Regional Board Office

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 watersheds are home to diverse populations of fish and migratory birds.

- Implement TMDLs for pathogens, sediments, pesticides, mercury and PCBs by using waivers for grazing activities and vineyards, implementing the regional urban stormwater permit, and directing grants toward TMDL actions.
- Pursue aggressive enforcement with emphasis on sewage spills and polluted stormwater discharges.
- Close 90 low-risk contaminated sites following investigation and cleanup actions necessary to protect water quality, human health, and the environment.

# San Francisco Bay Regional Water Quality Control Board



### Municipal Regional Stormwater NPDES Permit

The San Francisco Regional Water Board issued one municipal stormwater NPDES permit in October 2009 to 76 municipal entities in Alameda, Contra Costa, San Mateo, Santa Clara, and Solano counties. This permit requires consistent and accountable controls to reduce the discharge of pollutants throughout urban areas, including requirements to reduce discharges of trash, pesticides, PCBs (polychlorinated biphenyls) and mercury. The permit includes requirements to begin low-impact development measures at new and redeveloped projects. New requirements will improve water quality in the San Francisco Bay and in urban waterways, but since they will require an increase in stormwater management resources, they will be phased in over several years. The permit is on the Web site at:

www.waterboards.ca.gov/sanfranciscobay/water\_issues/programs/ stormwater/mrp.shtml



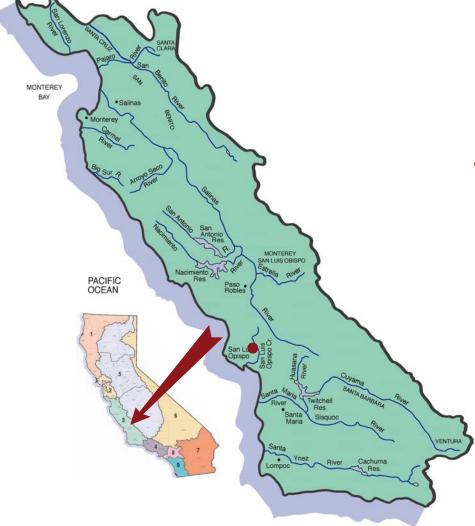
### **Reducing Sewage Spills While Enhancing Habitat**

The San Francisco Bay Regional Water Board took actions to restore sewage infrastructure and reduce sewage spills. Through enforcement with US EPA, the State Water Board, and local environmental organizations, aggressive requirements were put in place for the poorest performing sewage collection agencies. Requirements include funding incentive programs for homeowners to replace or repair failing sewer pipes, which are major contributors to sewage spills.

This project included assessing fines and ordering supplemental environmental projects. Supplemental environmental projects valued at more than \$1 million were ordered, including restoration of Aramburu Island in Richardson Bay, an area of special biological significance. For information about municipal stormwater issues see:

 $http://www.waterboards.ca.gov/sanfranciscobay/water\_issues/programs/stormwater/municipal\_programs.shtml$ 

# 3 Central Coast Regional Water Board



### Central Coast Regional Water Quality Control Board

www.waterboards.ca.gov/centralcoast 895 Aerovista Place, Suite 101 San Luis Obispo, CA 93401 Phone: (805) 549-3147

= Regional Board Office

The Central Coast Region extends from Santa Clara County south to northern Ventura County. The region has 378 miles of coastline, including Santa Cruz and the Monterey Peninsula, the agricultural Salinas and Santa Maria valleys, and the Santa Barbara coastal plain. Tourism, power and oil production, agriculture and related food processing activities are the major industries.

- Improve urban stormwater runoff quality and quantity, and increase watershed sustainability through the development and approval of high-quality Stormwater Management Plans for 24 municipalities.
- Improve irrigated agricultural runoff and percolating water quality through the adoption of a more targeted and effective irrigated agriculture order by improving practices through the Central Coast Irrigation and Nutrient Management Grant.

# Central Coast Regional Water Quality Control Board

### **Stormwater Quality Improvement**

The Central Coast Regional Water Board approved Stormwater Management Plans for 20 of the remaining 24 municipalities leading to improved urban stormwater runoff quality and increased watershed sustainability. The municipalities were required to develop hydromodification controls within two years, support the Central Coast Low-Impact Development Center, and organize a team of stormwater and hydrology consultants to develop regionwide hydromodification control criteria.

http://www.waterboards.ca.gov/centralcoast/water\_issues/programs/stormwater/index.shtml



The Central Coast Regional Water Board evaluated its Agricultural Regulatory
Program and compliance with the existing Conditional Waiver of Waste Discharge
Requirements for Discharges from Irrigated Lands Order. The Central Coast Regional
Water Board determined that its regulatory actions should be changed to improve
irrigated agricultural runoff and percolating water quality.

Aggressive actions were taken to improve water quality including:

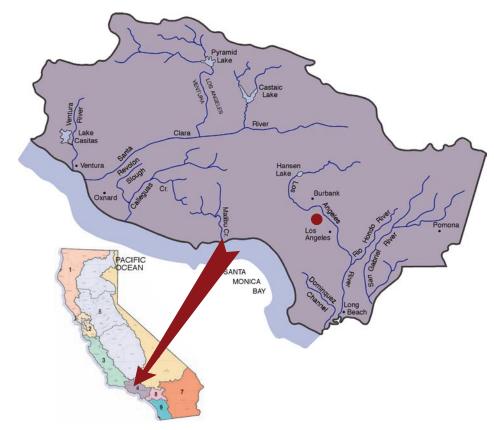
- using watershed-focused land use and water quality evaluations targeting areas with the most severe water quality problems, requiring agricultural operations to investigate where pollution is coming from;
- increasing inspections; and,
- initiating enforcement for individual operations where irrigated agricultural dischargers are violating terms of the existing Order.

The Central Coast Regional Water Board will consider a revised Order in 2010. For information on the waiver program see:

http://www.waterboards.ca.gov/centralcoast/water\_issues/programs/ag\_waivers/index.shtml



# 4 Los Angeles Regional Water Board



### Los Angeles Regional Water Quality Control Board

www.waterboards.ca.gov/losangeles 320 West Fourth Street, Suite 200 Los Angeles, CA 90013 Phone: (213) 576-6600

= Regional Board Office

With 10 million residents, the Los Angeles area is the most densely populated in the state. It encompasses all the coastal watersheds of Los Angeles and Ventura counties, along with portions of Kern and Santa Barbara counties. Land use varies considerably. In Ventura County, agriculture and open space exist alongside urban, residential and commercial areas. In northern Los Angeles County, open space is steadily being transformed into residential communities. In southern Los Angeles County, land uses include urban, residential, commercial and industrial.

- Reissue the Conditional Waiver for Irrigated Lands, which regulates discharges from agricultural activities, and the Municipal Separate Storm Sewer System (MS4) Permits for municipalities within Los Angeles County and the unincorporated portions of Los Angeles County, which regulate urban runoff and stormwater discharges.
- Prioritize water quality standards, consistent with federal and state requirements, based on the best available science and stakeholder input.
- Increase the level of groundwater protection through permitting, monitoring, inspections and enforcement to ensure that groundwater resources remain available for use during droughts and for future generations.
- Optimize the use of recycled water by establishing nutrient and salt load estimates for critical groundwater reserves.
- Renew National Pollutant Discharge Elimination System (NPDES) permits by implementing Waste Load Allocations from TMDLs, incorporating basin plan and California Toxics Rule criteria, and requiring watershedwide monitoring.
- Prevent illegal disposal of materials in waterways, wetlands, and floodplains through permitting and enforcement.
- Restore and enhance water quality through rigorous and timely clean up of brownfields and other contaminated properties, especially in environmental justice communities.

# Los Angeles Regional Water Quality Control Board

### McGrath Lake PCBs, Organochlorine Pesticides and Sediment Toxicity TMDL

McGrath Lake is the last back-dune lake remaining in Southern California. This unique and valuable area supports habitat and recreation. McGrath Lake is polluted with polychlorinated biphenyls (PCBs), organochlorine (OC) pesticides and sediment toxicity, and was identified under the statewide Bay Protection and Toxic Cleanup Program as a high priority hot spot. To address these problems and restore McGrath Lake, the Los Angeles Regional Water Board adopted the McGrath Lake PCBs, OC Pesticides, and Sediment Toxicity TMDL. This TMDL addresses historical and current pollutants and establishes load allocations to attain the lake's ecological and recreational beneficial uses.

This TMDL was developed and will be carried out through a watershed-based stakeholder process, through which all landowners in the watershed are working to achieve the TMDL load allocations. The McGrath Lake TMDL is at:

http://www.waterboards.ca.gov/losangeles/water\_issues/programs/tmdl/tmdl\_list.shtml

### Septic Prohibition - Malibu Civic Center Area

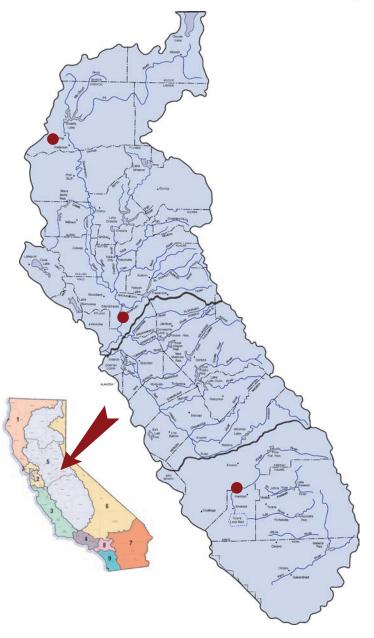
Without community sewers and wastewater treatment infrastructure, residents, businesses, and public facilities in the City of Malibu use thousands of septic systems to discharge sewage to the subsurface and underlying groundwater. In areas of the city, high flows of wastewater, coupled with unfavorable hydrogeologic conditions, have raised concerns about this disposal strategy. In the Malibu Civic Center area, land use activities by more than 400 dischargers release wastewaters to the subsurface at a rate estimated at 270,000 gallons a day.

In November, the Los Angeles Regional Water Board amended its basin plan to prohibit, by 2015 for commercial dischargers and 2019 for residential discharges, septic systems and other onsite wastewater disposal systems in a 1,400-acre area that lies near the City of Malibu and in the unincorporated areas of the County of Los Angeles.

The prohibition will correct pollution and restore beneficial uses harmed by releases from septic systems that pollute underlying groundwater and nearby surface waters, including Malibu Lagoon and nearby beaches. Information on the prohibition can be found at:

http://www.waterboards.ca.gov/losangeles/water\_issues/programs/basin\_plan/wqs\_list.shtml

# 5 Central Valley Regional Water Board



### Central Valley Regional Water Quality Control Board

www.waterboards.ca.gov/centralvalley

Sacramento Office 11020 Sun Center Drive, Suite 200 Rancho Cordova, CA 95670 Phone: (916) 464-3291

= Regional Board Office

The Central Valley Region is the State's largest, encompassing 60,000 square miles, or 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 Ranges 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. The southern third of the Central Valley contains the Tulare Lake Basin, a closed hydrographic unit, except during extremely wet years.

- Groundwater is the primary source of drinking and irrigation water for much of the region. The quality and quantity of groundwater in the Central Valley continues to worsen, leaving some communities without a viable source of drinking water. Staff will work collaboratively with stakeholders to develop a Groundwater Quality Protection Strategy that will establish the framework and road map for addressing and improving groundwater quality throughout the Central Valley.
- · Develop a long-term strategy for regulating discharges from agricultural lands to protect waters within the Central Valley.
- Adopt a Methyl Mercury TMDL for the Delta.

# Central Valley Regional Water Quality Control Board

### **Delta Mercury TMDL**

The draft Delta Mercury TMDL is undergoing public review with adoption set for Central Valley Regional Water Board consideration in 2010. The reviewers include wastewater and stormwater dischargers, the farming community, and wildlife and environmental justice interests.

In 2009, implementation of TMDLs for tributary watersheds reduced mercury discharges into the Delta. Cleanup of the Abbot-Turkey Run Mine was completed, Cleanup and Abatement Orders were issued for the Elgin and Clyde mines, and hearings for the Wide Awake and Central mines further reduced mercury discharges. Investigative work is identifying sources of mercury contamination that are possible to clean up. Information on the mercury TMDLs is at:

http://www.waterboards.ca.gov/centralvalley/water\_issues/tmdl/central\_valley\_projects/delta\_hg/index.shtml



### **Dairy Regulation**

Dairies are key to the state's agricultural economy, but dairy wastes are also a threat to ground and surface waters. Most of the region's 1,600 dairies are under a 2007 General Waste Discharge Requirements. These requirements minimize the threat to surface and ground water quality by ordering best management practices for treating, storing and using dairy wastes in a manner that protects water quality.

Staff is working with dairy operators resulting in a high compliance rate for submitting information and increasing their awareness to protect water quality. Individual WDRs are being prepared and adopted for those dairies that cannot be regulated by the general order. Also, groundwater monitoring is being implemented at dairies to evaluate the effectiveness of management practices.

The primary discharge from dairies, manure wastes, can be used as a fertilizer, but manure can harm ground and surface water quality, creating nuisances, and releasing greenhouse gases.

A Programmatic Environmental Impact Report (EIR) to support General WDRs is being prepared for manure digestion and codigestion facilities that will convert dairy manure and other waste into a valuable, renewable green energy resource. Adoption of the EIR and order will expedite permitting of digester projects within the Central Valley.

See information on the dairy program at: http://www.waterboards.ca.gov/centralvalley/water\_issues/dairies/index.shtml



Some groundwater is naturally poor quality, but human activities also pollute groundwater quality. Staff worked with State and local agencies, stakeholder groups and the public to develop a groundwater strategy for the region. The strategy is designed to identify priority areas, current programs protecting beneficial uses and will serve as a road map for future program direction and coordination with other regulatory agencies. After public hearings, a draft strategy was released for public review and will be followed by four public workshops in 2010. The strategy will be presented to the Central Valley Regional Water Board for consideration in June 2010.

See the strategy at: http://www.waterboards.ca.gov/centralvalley/water\_issues/groundwater\_quality/index.shtml

### **Long-Term Irrigated Lands Program**

There are more than 7 million acres of irrigated lands in the Central Valley of which nearly 80 percent makes up the statewide total. The Central Valley Regional Water Board established a stakeholder Advisory Workgroup to assist the staff in putting together a long-term strategy for managing discharges from irrigated lands throughout the region.

This diverse group of 50 stakeholders agreed on five alternatives for the EIR, as well as goals and objectives for the program. The stakeholders represented the agricultural industry, environmental and environmental justice groups, and federal, state, and local government. See more information at: http://www.waterboards.ca.gov/centralvalley/water\_issues/irrigated\_lands/index.shtml

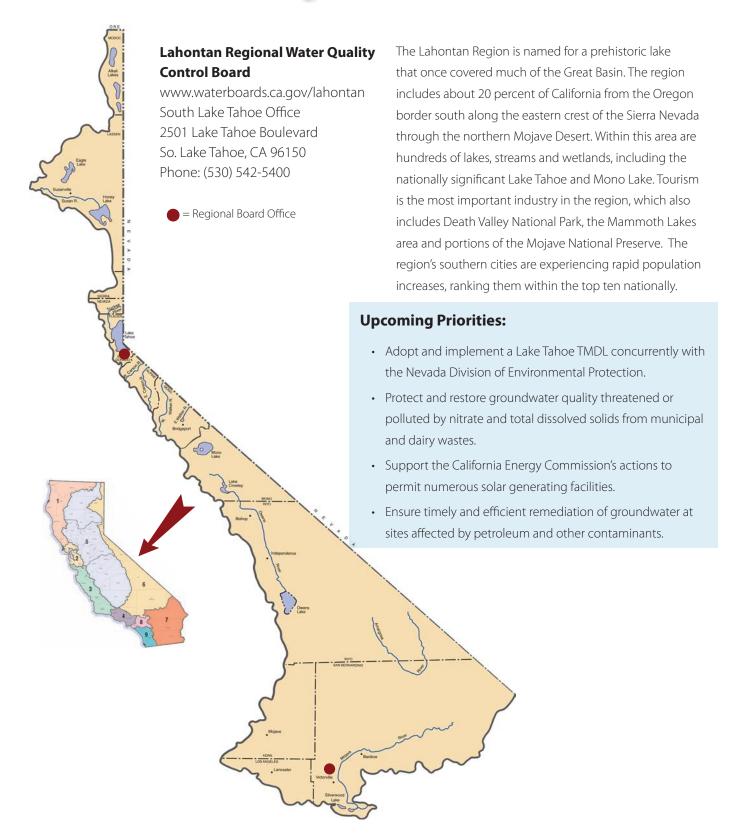
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## Lahontan Regional Water Board





### **Reduced Nitrogen in Groundwater**

The Lahontan Regional Water Board's closed hydrologic basins present a challenge for managing discharged waste. Without an ocean available for disposal, waste is discharged to and remains in groundwater. Efforts to reduce nitrogen discharges to groundwater have included preventing over-irrigation with recycled water in Susanville, Lancaster and Palmdale, lining sewage holding ponds, and requiring septic systems to be replaced with sewage collection and treatment systems in communities in the Eagle Lake basin.



Hundreds of properties were connected to the Spalding sewer system last year as a result of cease and desist orders. The Lahontan Regional Water Board is supporting the reuse of wastewater through master recycling requirements for landscape irrigation and construction and industrial uses, such as solar power plant cooling. Enforcement orders from the Lahontan Regional Water Board also resulted in wastewater treatment plant upgrades in Lancaster, Palmdale, and Victorville to reduce nitrate discharges.

For more information, see: http://www.waterboards.ca.gov/lahontan/water\_issues/available\_documents/monitoring.shtml

### Lake Tahoe TMDL

The Lake Tahoe TMDL, addressing transparency and clarity, was developed and received external scientific peer review. It is anticipated that the TMDL will be circulated for public review in summer 2010. Working collaboratively, staff and the Nevada Division of Environmental Protection completed the Lake Clarity Crediting Handbook, which tracks pollutant load reductions and related credits from pollutant controls.

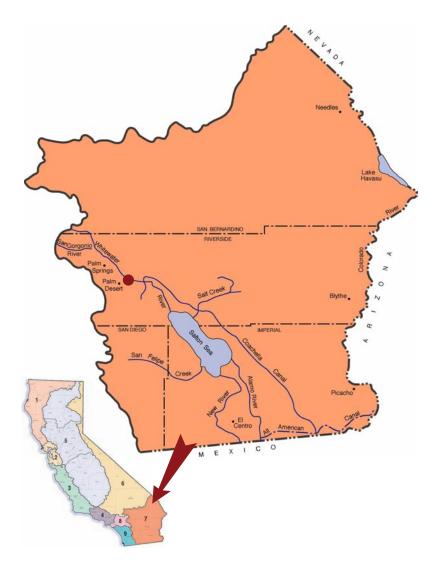
Public workshops were held to train and assist local and state agencies to estimate baseline pollutant loading from urban areas around Lake Tahoe and estimate reductions from various stormwater treatment, road maintenance and erosion control activities.

The Tahoe TMDL Web site is at: http://www.waterboards.ca.gov/lahontan/water\_issues/programs/tmdl/lake\_tahoe/index.shtml

The Lake Clarity Crediting Program can be found at: http://www.waterboards.ca.gov/lahontan/water\_issues/programs/tmdl/lake\_tahoe/docs/lccp\_handbook.pdf

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## Colorado River Regional Water Board



### Colorado River Basin Regional Water Quality Control Board

www.waterboards.ca.gov/coloradoriver 73-720 Fred Waring Drive, Suite 100 Palm Desert, CA 92260 Phone: (760) 346-7491

= Regional Board Office

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. Water
from the Colorado River irrigates more than
700,000 acres of productive farmland in the
Imperial, Coachella, Bard, and Palo Verde
valleys. The river also provides drinking
water to several million people in California's
southern coastal cities.

- Monitor, inspect, and assess water quality improvements in the New River at the international boundary with the Republic of Mexico.
- Eliminate septic tanks and promote the construction of wastewater treatment plants and sewer lines in dense residential and commercial areas.
- Prohibit agricultural discharges through basin plan amendments.

# Colorado River Basin Regional Water Quality Control Board

### County Sanitation Districts of Los Angeles County: Mesquite Regional Landfill, Revised Waste Discharge Requirements (WDRs)

The Mesquite Regional Landfill is a large landfill in Imperial County. The landfill has a capacity of 20,000 tons per day of municipal solid waste and a lifespan of about 100-plus years. This new solid waste landfill provides needed disposal capacity for Los Angeles County because of the required closures of its remaining active landfills. The Colorado River Regional Water Board adopted revised WDRs for this facility in June to reflect design, construction, and operational standards for the landfill. The landfill is receiving trash from Los Angeles by intermodal railroad containers. A copy of the revised WDRs is at: http://www.waterboards.ca.gov/coloradoriver/board\_decisions/adopted\_orders/orders/2009/0003mesquite\_wdr.pdf



Las Arenitas Wastewater Treatment Plant in Mexicali

### **New River Pollution from Mexico**

Throughout 2009, the Regional Water Board, International Boundary and Water Commission (IBWC) and US EPA, conducted sampling and inspections of the New River in the Mexicali watershed and at the international boundary. These inspections tracked overall water quality improvements from the new wastewater treatment plant serving Mexicali (Las Arenitas Wastewater Treatment Plant) and identified other sources of pollution. The Las Arenitas plant removes up to 20 million gallons a day of raw sewage that was previously discharged into the river. The raw sewage made the river infamous for its stench, low dissolved oxygen content, and high bacteria counts (in the millions). As a result of the Las Arenitas plant, the sampling data show that:

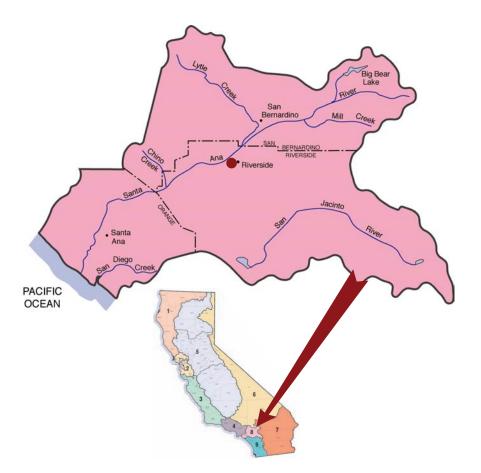
- the river's dissolved oxygen averages about 5 ppm, and bacteria levels have decreased significantly;
- the stench has been abated; and,
- about 7,600 tons per year of organic matter and 450 tons per year of nutrients have been eliminated.

But, the data and inspections also show that point and nonpoint sources of pollution in Mexicali continue to contribute to water quality problems.

For more information on New River pollution and sampling results see: http://www.waterboards.ca.gov/coloradoriver/water\_issues/programs/new\_river/

# 8

## Santa Ana Regional Water Board



### Santa Ana Regional Water Quality Control Board

www.waterboards.ca.gov/santaana 3737 Main Street, Suite 500 Riverside, CA 92501 Phone: (951) 782-4130

= Regional Board Office

The Santa Ana Region, which extends from the San Bernardino and San Gabriel mountains in the north and east to 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 boasts one of the largest populations with almost 5 million people. This semi-arid region is known for its temperate climate and relatively low rainfall – about 15 inches per year.

- Continue work to implement a cleanup plan for perchlorate contamination in the Rialto-Colton groundwater basin.
- Adopt a Selenium TMDL and a selenium site-specific objective for the San Diego Creek/Newport Bay watershed.
- Administer the three recently adopted municipal separate storm sewer system (MS4) permits for parts of Orange, Riverside
  and San Bernardino counties with the increased low-impact development requirements for new development and
  redevelopment.
- Revise recreational water quality standards to reflect US EPA's national criteria, suspend standards during high-water flows, and modify the definition for water contact recreation. [REC1]
- Develop and adopt a program of conditional waivers of waste discharge requirements for agricultural dischargers to manage nonpoint source pollution from irrigated and dry-farmed operations.

# Santa Ana Regional Water Quality Control Board

### **Municipal Stormwater Permits**

The fourth-term municipal stormwater permits for the Orange, Riverside and San Bernardino county areas include requirements with quantifiable performance measures. The permits also incorporate wasteload allocations from all approved TMDL plans, and mandate low-impact development and best management practices, unless they are not practical. The performance measures cover percentages of construction/commercial/industrial inspections and a design capture volume for low-impact development and best management practices.

The Orange County permit was adopted in May. A similar effort is in progress for Riverside and San Bernardino counties, within the Upper Santa Ana River region.

The Orange County permit is in place even though several parties did file petitions. All those who filed the petitions have asked that those petitions be temporarily suspended while the permit progresses.

For more information on the stormwater issues, see: http://www.waterboards.ca.gov/santaana/water\_issues/programs/stormwater/index.shtml

# Groundwater Treatment System for Remediation of Perchlorate and Volatile Organic Compounds (VOCs) in Groundwater, City of Rialto Well No. 3, San Bernardino County

The existing Groundwater Treatment System for the City of Rialto intercepts, contains, and mitigates perchlorate and volatile organic compounds in groundwater that came from old industrial practices. This source of pollution is part of San Bernardino County's planned expansion at the Mid-Valley Sanitary Landfill, in the Rialto-Colton Groundwater Basin. Two more groundwater extraction wells have been installed by the county in addition to the wellhead treatment system at City of Rialto Municipal Well No. 3. The treated water is discharged to the local water purveyors' potable water distribution system. The start-up of the two new wells depends on a permit from the Department of Public Health. The maximum operational capacity for groundwater extraction and treatment by the three extraction wells is 1,800 gallons per minute (gpm), based on the available water rights and optimum containment.

Up to 2.6 million gallons a day of groundwater, enough to supply about 7,400 households, is being returned for beneficial use. For more information on perchlorate issues, see: http://www.waterboards.ca.gov/santaana/water\_issues/programs/perchlorate/index.shtml

## **Regional Monitoring Program for Emerging Contaminants**

After several years of monitoring and analysis, the Emerging Constituents Workgroup, representing water and wastewater agencies serving the Santa Ana region, developed a monitoring and reporting program for emerging constituents (pharmaceuticals, personal care products, hormones, etc.) in the Santa Ana region. In December, the Santa Ana Regional Water Board approved this program. The work will be detailed in annual reports. The workgroup will continue to consider if changes to the monitoring parameters are warranted and whether the effort should be expanded to include stormwater and groundwater samples in 2011.

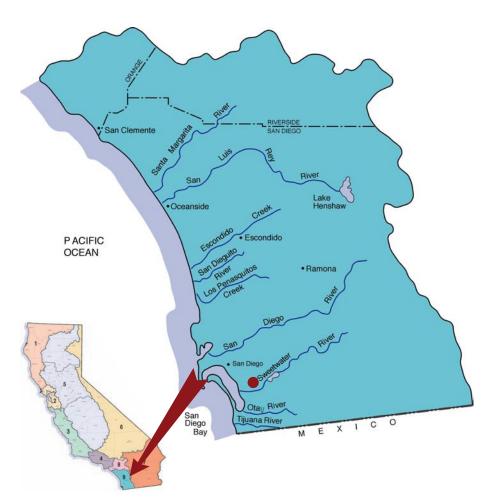
http://www.swrcb.ca.gov/santaana/board\_decisions/adopted\_orders/orders/2009/09\_071\_Emerging\_Constituents\_Program.pdf



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## San Diego Regional Water Board



### San Diego Regional Water Quality Control Board

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= Regional Board Office

The San Diego Region stretches along 85 miles of scenic coastline from Laguna Beach to the Mexican Border and extends 50 miles inland to the crest of the coastal mountain range. In a mild coastal climate, the region's growing population enjoys many water-related activities; however, little precipitation falls within this semiarid region. About 90 percent of the region's water supply is imported from northern California and the Colorado River.

- Continue effective municipal stormwater regulation with increased low-impact development, and lessen the effects of stream hydromodification.
- Restore water quality in many of the area's water bodies through TMDLs and other regulatory measures that manage trash and sediment.

# San Diego Regional Water Quality Control Board

### Reissuing the Orange County Municipal Stormwater Permit

Work was completed on reissuing the municipal stormwater permit for discharges of urban runoff from municipal separate storm sewer systems draining the watersheds of the County of Orange, the Orange County Flood Control District, and 11 incorporated cities within the County of San Diego. The December 2009 adoption of this permit marked the end of a two-year effort to update the permit with the recent water quality requirements. Major improvements to the permit include:

- Removing over-irrigation and associated discharges, which exceeded water quality standards from the list of discharges exempt from prohibition.
- Numeric action levels for dry weather, non-stormwater discharges.
- Using municipal action levels for wet weather, stormwater discharges.
- Modifying low-impact development criteria.
- Exploring retrofitting of existing development to address pollutant discharges in high priority areas.

### **Toxicity of San Diego Bay Waters**

The *Clean Water Act* establishes a national policy that the discharge of toxic pollutants in toxic amounts be eliminated. With this policy the San Diego Regional Water Board's basin plan contains a narrative water quality standard stipulating that all waters shall be maintained free of toxic substances in toxic amounts.

During 2009, the San Diego Regional Water Board concluded that a reasonable potential for acute toxicity in all industrial stormwater discharges existed at several major industrial facilities located on the San Diego Bay waterfront and that the NPDES permits for those facilities must contain an acute toxicity effluent limitation. The Regional Water Board included a new, more stringent limitation on "whole effluent toxicity" for these discharges to ensure that San Diego Bay waters are maintained free of toxic substances in toxic amounts. Whole Effluent Toxicity (WET) tests replicate the total effect and actual environmental exposure of aquatic life to toxic pollutants in an effluent without requiring the identification of the specific pollutants.

The new requirements to control toxicity require that the dischargers:

- Comply with an acute toxicity effluent limitation, and associated monitoring requirements for acute and chronic toxicity, to determine compliance and other conditions for the discharge of industrial stormwater; and,
- Conduct toxicity reduction/evaluation studies where monitoring data for stormwater discharges demonstrates that toxicity levels are in violation of the acute toxicity effluent limitation.



### **Coastal Lagoons TMDLs**

The San Diego Regional Water Board held many stakeholder meetings to develop numeric targets and model pollutant effects by sediments and eutrophication to the Los Penasquitos Lagoon. Work continues with stakeholders on numeric targets and computer modeling (with the City of San Diego) for the Famosa Slough. The San Diego Regional Water Board is seeking federal funds to complete this modeling and is also seeking state funding to support developing numeric targets for nutrients and modeling of other coastal lagoons (including the Loma Alta Slough) with stakeholders and the Southern California Coastal Water Research Project (SCCWRP).

## Developing a Mitigation Plan for the Poseidon Desalination Project

The Poseidon Carlsbad Desalination Plant is the first of several large-scale desalination facilities proposed to offset potable water shortages in Southern California. The plant is permitted to take in up to 304 million gallons per day (mgd) of source water from the Agua Hedionda Lagoon to produce 50 mgd of potable water, serving one-third of San Diego County. This plant is subject to *California Water Code* section 13142.5(b), which requires that it demonstrate "use [of] the best available site, design, technology, and mitigation measures feasible to minimize the intake and mortality of all forms of marine life."

The proposed discharge has served as a test case to evaluate compliance with section 13142.5(b), and ensure that there is no harm to the beneficial uses and objectives of the source water.

In the past, projects such as these have proposed to mitigate for intake losses with the creation of wetland habitat. So far, mitigation wetlands are not providing the functions required to offset the losses. With this proposed project, staff worked with Poseidon's scientific experts to analyze and quantify the habitat composition of the source water, and to create a set of mitigation conditions that would resemble the conditions being affected.

In May, the San Diego Regional Water Board adopted a Flow, Entrainment, and Impingement Minimization Plan, and required a revised Marine Life Mitigation Plan as a condition of the discharge permit for the Poseidon Plant. The San Diego Regional Water Board established an annual fish productivity requirement that would match the estimated intake loss, and required the discharger to monitor the productivity of source water and the mitigation area to measure whether the requirement is being met. If the monitoring demonstrates that there are changes to the source water, or in the productivity of the wetlands, the productivity requirement can be revised in future permit cycles.

# State Water Board Accomplishments



### **Water Recycling Policy**

In February, the State Water Board adopted a policy that will lead to increased availability and use of recycled water in the state. This policy addresses public and regulator concerns about the quality of water made available, and the potential effects associated with using this water for irrigation purposes. This policy is nationally recognized for mandating the use of recycled water and streamlining permitting criteria. It also launches a groundbreaking statewide scientific effort to address Constituents/Chemicals of Emerging Concern through monitoring and source control. The water recycling policy is at: http://www.waterboards.ca.gov/water\_issues/programs/water\_recycling\_policy/index.shtml

### **Enhanced Electronic Water Rights Information Management System**

The Web-based Electronic Water Rights Information Management System (eWRIMS) was developed by the State Water Board to track information on California's water rights. eWRIMS includes information on water rights permits and licenses issued by the State Water Board. eWRIMS provides the public and staff internet access to California's water rights information by combining a database with a geographic information system. Upgrades to this system are continuing and, this year, water right holders can submit all mandatory water diversion and use reports online, which provides instant information about reported annual water diversions and uses. This system is able to search for details about water right owners, type and status of water right, the watershed, county, and source of the water. The eWRIMS Web site is at:

http://www.waterboards.ca.gov/water\_issues/programs/ewrims/

### **Supplemental Environmental Policy (SEP)**

In February, the State Water Board adopted a policy on Supplemental Environmental Projects (SEP). SEPs are projects that enhance the beneficial use of water, provide a benefit to the public, and are not otherwise required of the discharger. The Water Boards may allow a discharger to satisfy part of an administrative civil liability by completing or funding a SEP. The SEP policy outlines the criteria under which a SEP may be used to offset penalties issued by a Water Board, establishes the general types of SEPs that are allowed, and provides for SEP tracking, oversight, auditing, and public reporting. The policy increases the accountability of the SEP proponents to complete the SEP. The policy also limits SEPs to no more than 50 percent of the total penalty amount, except in limited circumstances where there is compelling justification. This policy has been approved by the Office of Administrative Law. More information on the SEP Policy is at: http://www.waterboards.ca.gov/water\_issues/programs/enforcement/docs/rs2009\_0013\_sep\_finalpolicy.pdf

### **Water Quality Enforcement Policy**

In November, the State Water Board adopted a revised *Water Quality Enforcement Policy*. Overall, the policy will allow the Water Boards' staff to use its limited resources in ways that address the greatest needs, deter harmful conduct, protect the public, and achieve maximum water quality benefits. Specifically, the policy:

- Prioritizes new violations and targets limited enforcement resources to address the most serious violators;
- Includes a methodology to calculate penalties ensuring consistency in the determination of administrative liabilities imposed by the Water Boards statewide;
- Acknowledges the specific needs and limitations of wastewater treatment plants and sewage collection systems that serve small communities;
- Places limits on and clarifies the use of projects to offset penalty amounts;
- Requires timeframes for recording data on violations and enforcement actions, and for issuance of mandatory minimum penalties; and,
- Ensures that the public is informed of the Water Boards' enforcement activities.

The policy must be approved by the Office of Administrative Law before taking effect. More information on the Water Quality Enforcement Policy is at: http://www.waterboards.ca.gov/water\_issues/programs/enforcement/docs/enf\_policy\_final111709.pdf

### **Annual Performance Report**

In September, the Water Boards published its first *Performance Report*. The report arrives as the Water Boards reach an important milestone – the 40th anniversary of the enactment of landmark legislation to protect the State's waters: the *Porter Cologne Water Quality Control Act*. The Porter-Cologne Act was a cutting edge water quality law. Portions of it became the model for the 1972 amendments that invigorated the federal *Water Pollution Control Act*, now the *Clean Water Act*. This was a different time with different challenges for the State, but the fundamental elements of the Water Boards' work remain.

The first report overviews the Water Boards' efforts to protect and allocate the State's waters, and is part of the Water Boards' efforts toward becoming a performance-based organization. The report relies on data that is available through the primary databases used by the Water Boards, providing a level of transparency that most state agencies have yet to achieve. As with any first year effort, data availability limits the type of information that is reported. Over time, the information will better illustrate the work and effectiveness of the Water Boards and the quality of our State's waters. The Performance Report is at: http://www.waterboards.ca.gov/about\_us/performance report/

## Funding Water Quality Protection and Helping Economic Recovery

The State Water Board's Clean Water State Revolving Fund (SRF) Program made \$511 million available to finance water quality infrastructure projects in 2009. Of that amount, \$269 million was awarded using American Recovery and Reinvestment Act (ARRA) funding to stimulate economic growth, save and create jobs, and prevent or clean-up water pollution. The SRF finances wastewater (sewer) projects, stormwater/non-point source pollution projects, and green projects (wastewater recycling, energy efficiency, and low-impact development). The SRF typically finances about 30 projects for \$300 million a year. About \$180 million was provided as grants to disadvantaged communities for wastewater and urban stormwater/nonpoint source pollution projects. Another \$60 million was provided in 0-percent loans for green (wastewater recycling or energy efficiency) projects. The remaining funds were provided as 10 percent loans. The State Water Board exceeded the 20 percent goal for ARRA green projects. More information on funding is at: http://www.waterboards.ca.gov/water\_issues/programs/grants\_loans/#funding\_programs

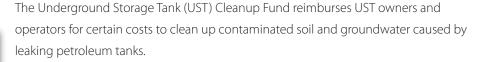




### **Disadvantaged Community Wastewater Projects**

The State Water Board committed \$4.5 million in settlement funds to five projects as part of the Small Community Wastewater Grant Program. The State Water Board's SRF Program granted extended-term financing (a 30-year financing term instead of a 20-year term) to six small, disadvantaged communities where wastewater rates exceeded levels typical for most communities. About \$89 million in principal forgiveness, from the \$180 million in grants for water quality projects, was committed to fund 25 disadvantaged community wastewater projects through the SRF Program's ARRA allotment. More information on the small community wastewater strategy and resources is at: http://www.waterboards.ca.gov/water\_issues/programs/grants\_loans/small\_community\_wastewater\_grant/strategy.shtml

### **Underground Storage Tank Cleanup Fund Program Review**



Since September 1992, the UST Cleanup Fund has reimbursed more than \$2.5 billion to assist UST owners and operators with cleaning up soil and groundwater contamination from leaking USTs.

Responding to questions about the health of the UST Cleanup Fund, a State Water Board review identified 14 actions to improve the program administration including:

- Directing state and local UST regulatory agencies to conduct a case review of all active sites;
- Identifying obstacles to site closure;
- Reducing nonessential monitoring; and,
- Increasing the availability of funding for other sites needing cleanup.

Two stakeholder taskforces were created to make more recommendations for program improvements:

- The Program Task Force is developing recommendations to improve the site cleanup process.
- The Fund Task Force is developing recommendations to improve the fund claim and reimbursement process.

For more information on the UST Cleanup Fund see: http://www.waterboards.ca.gov/water\_issues/programs/ustcf/index.shtml



### Assessment of Contaminants in Sport Fish from California Lakes

The State Water Board's Surface Water Ambient Monitoring Program (SWAMP) released findings from the largest survey conducted of contaminants in sport fish from California's lakes. More than 250 of California's 9,000 lakes were sampled to produce this statewide assessment. The results from the first year of the two-year survey show that mercury and polychlorinated biphenyls (PCBs) are the two greatest concerns. Twenty-six percent of the lakes surveyed had at least one fish species with an average mercury level high enough that no fish consumption could be recommended. PCBs were second to mercury as a potential health concern to consumers of fish caught from California lakes. Other pollutants were found, but at low levels.

More information will be required to determine the need for updated consumption guidelines or cleanup plans. Results from the second year of sampling will be available in Spring 2010. http://www.waterboards.ca.gov/mywaterquality/safe\_to\_eat/

## California Water Quality Monitoring Council - My Water Quality Web Portals

The California Water Quality Monitoring Council, a diverse group of water quality interests, partnered with the State Water Board's Surface Water Ambient Monitoring Program (SWAMP) to create two internet portals. The council has the challenging task of integrating water quality and related ecosystem monitoring, assessment, and reporting statewide. The "My Water Quality" portals present water quality data and information for specific topics in a question-driven format. The first two portals, released in 2009, include: "Is it Safe to Swim in Our Waters?" and "Is it Safe to Eat Fish?" These sites feature interactive maps and monitoring data that provide perspectives on swimming safety and levels of contaminants in sport fish. The goal is to make information available to decision-makers and the public in a timely and easy to understand format. http://www.waterboards.ca.gov/mywaterquality/



#### www.waterboards.ca.gov

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