

# State Estuaries

such as aquatic resources, pollutants, dredging, land use, wetlands, wildlife and estuary management. Two recently released reports "Regulatory Analysis for the San Francisco Estuary" and "State of the Estuary" contain information about the Project itself, the state of the estuary and the statutes and regulations related to the process.

## Morro Bay

In May 1991, an NEP nomination package for Morro Bay was prepared by the Friends of the Estuary at Morro Bay, Central Coast Regional Board, State Board and Cal/EPA and submitted by Governor Wilson to USEPA. Although Morro Bay was not among those U.S. estuaries eventually given federal recognition, Friends of the Estuary at Morro Bay, and others continue their efforts to preserve and restore the valuable water and land resources of Morro Bay and its watershed.

The Morro Bay Task Force, an organization of over 60 member entities, is dedicated to producing a comprehensive watershed management plan and achieving designation of Morro Bay as both a State and national estuary. This organization has been in existence for seven years and has raised

approximately \$3 million to further the cause of protecting Morro Bay.

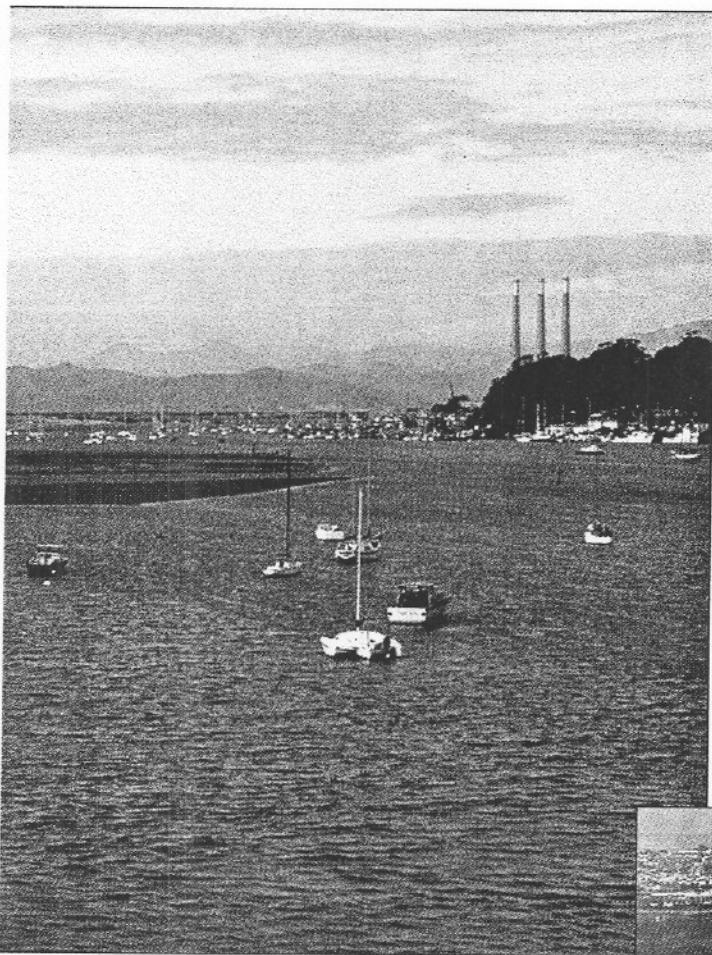
## San Diego

The San Diego Interagency Water Quality Panel (Panel) was created by the California Legislature in 1987 to provide technical and advisory input regarding the water quality problems in San Diego Bay.

The Panel has been assisting the San Diego Regional Board in developing a framework for rapid identification of potential water quality problems in order to recommend changes to State laws to improve water quality.

In 1993, Assemblymember Seastrand introduced AB 640 to designate both Morro Bay and San Diego Bay as State estuaries. Although the bill did not provide any funding for the preparation of management plans, it encourages State, federal and local agencies to allocate the necessary funds.

In 1994, Governor Wilson signed AB 640 which will hopefully increase the likelihood that Congress will allocate federal funds for Morro Bay management planning and that Morro Bay would be accepted into the NEP. Similarly, designation of San Diego Bay as a State estuary will give this important area priority for federal funding to continue the work of the Panel and for acceptance into the NEP.



*San Diego Bay*

# North Coast Regional Board

## Region 1

The North Coast Region encompasses over 20,000 square miles of California's northwest corner. Although this Region contains only

ten percent of the State's total land area, it produces 40 percent of its surface water runoff.

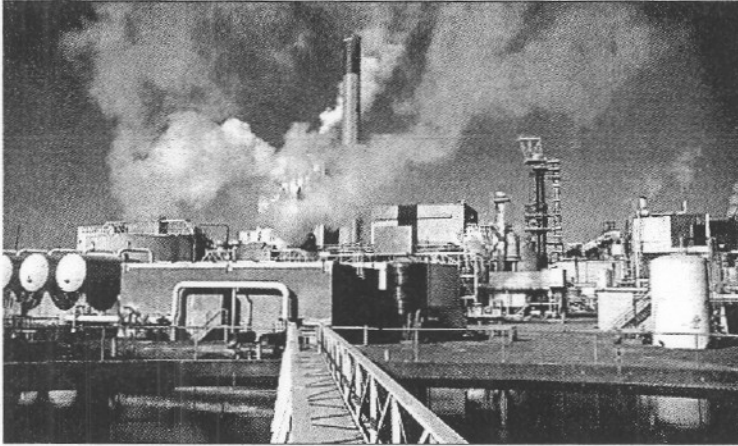
The North Coast Region is home to many wood-product manufacturing facilities, including pulp mills owned by Louisiana Pacific

Corporation and Simpson Paper Company. Caustic, chlorine-containing chemicals used in pulping and bleaching processes result in difficult-to-treat residual compounds in the wastewater. Because of the discoloration, odor and toxicity in the mills' discharges to the ocean, both mills were placed under enforcement actions by the Board and USEPA. Both mills prepared to extend their outfall pipes to improve wastewater treatment. Louisiana-Pacific converted its mill to "totally chlorine free" pulp production. Simpson proposed secondary treatment facilities and other improvements by the same date. However, due to adverse market conditions and high costs of raw materials, Simpson was

forced to permanently close its facility in 1993.

Since the mid 1970's Santa Rosa, Rohnert Park, Cotati, Windsor and certain unincorporated areas of Sonoma County have implemented an ambitious program of wastewater reclamation to comply with the Regional Board's summertime prohibition against discharge to the Russian River. Originally, secondary effluent was used to irrigate agricultural feed and fodder crops and two golf courses. Now, with the upgrade of these publicly owned treatment facilities to tertiary treatment levels, additional uses of reclaimed water have become available including parks and playgrounds, highway median strips, subdivision and commercial landscaping, decorative lakes, commercial turf farms and vineyards.

During the 1992 irrigation season, almost 6,000 acres of land were irrigated with approximately 3.75 billion gallons of reclaimed water.



*Louisiana-Pacific Corporation*

# San Francisco Bay Regional Board

San Francisco Bay is the major natural feature in this highly urbanized region, which is home to six million people. The Bay and Delta have historically supported major sport fisheries, but today all major estuarine species are in decline, due to some combination of water diversions, pollution, and habitat loss.

To protect the Bay from pollution, the Regional Board has implemented a pioneering program of toxicity control using fish, algae, and other aquatic organisms as test species. Today, waste dischargers in the Bay area must meet the most rigorous standards in the country for effluent toxicity.

The Board has continued its emphasis on urban runoff pollution control, consistent with its commitment to a watershed management approach. The Board adopted urban runoff permits for Contra Costa and San Mateo programs in 1993, and a general permit for all Caltrans activities in the Region in 1994. The Board had previously adopted urban runoff permits for Santa Clara and Alameda Counties.

Ground water is an important source of drinking water in the Region, especially in Santa Clara County. The Regional Board is overseeing about 200 major cleanups

in the Region, and together with local agencies is involved in cleanup of over 6,000 fuel leak sites.

In recognition of the fact that complete cleanup of ground water is usually impossible, the Regional Board has approved amendments to its Basin Plan that define environmentally protective and cost effective criteria when pollutants may be allowed to remain in place. 1993 marked the first year of work for the Regional Monitoring Program, being done as part of the Bay Protection and Toxic Cleanup Program. Investigators working under contract to the Board performed tests involving water, sediments, and living organisms, in the most comprehensive Bay monitoring performed to date.

## Region 2

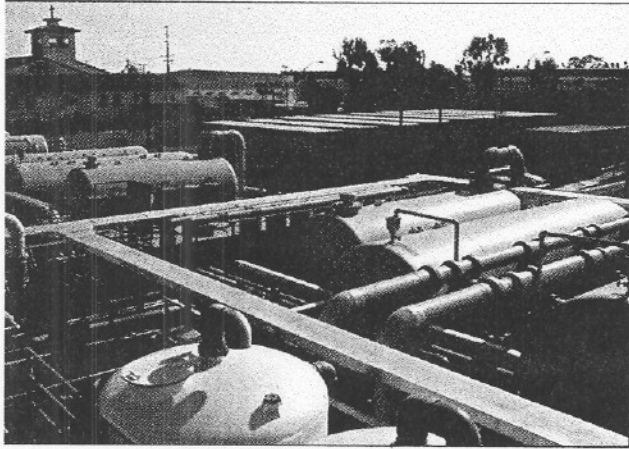


*Regional Monitoring Program Staff collect samples for test involving water, sediments and living organisms.*

# Central Coast Regional Board

## Region 3

The Central Coast Region extends from Santa Clara County south to northern Ventura County. Its 300-miles include urban Santa Cruz and the Monterey Peninsula, agricultural Salinas and Santa Maria Valley, and the Santa Barbara coastal plain. Agriculture and related food-processing activities are the major industries.



*Santa Barbara desalination plant*

California's lengthy drought severely affected this region, causing the Cities of Morro Bay and Santa Barbara to build multi-million dollar seawater desalination plants to supplement scarce freshwater sources. Although first activated in late 1991 and early 1992, heavy rainfalls allowed the cities to reduce use of the plants. When developing waste discharge requirements for the plants' discharges of waste brine to the Pacific Ocean, Board staff requested the cities to determine if the brine degraded marine life.

Land application of biosolids (i.e., treated sludge and septage) continues to generate controversy. Although farmers have expressed positive experiences with biosolids land application, their neighbors have not

been as enthusiastic. Advanced treatment technologies may improve public acceptance. Until cost effective alternatives are developed, landfill disposal will continue to be the most common biosolids management method in this Region.

The Board oversees soil and ground water contamination characterization and remediation at 11 active and inactive military installations. Each installation has numerous contamination sites. The two most notable bases in the Region are Fort Ord in Monterey County (undergoing closure) and Vandenberg Air Force Base in Santa Barbara County.

The Board is involved in planning efforts throughout the Region. A four-year study evaluating bacterial contributions to nearshore Santa Barbara Channel has been completed by Board staff. A management program is being developed, along with the Santa Barbara County Health Services staff, to reduce nonpoint source pollution in the Santa Barbara Channel area. Action plans are also being created to clean up abandoned mines which contribute to water quality degradation in northern San Luis Obispo County. Additionally, the Board is developing a watershed management plan as a result of Morro Bay being named as a State Estuary in April 1994.

# Los Angeles Regional Board

The Los Angeles Region is the most densely populated in the State. Development is intensive in the coastal plain, San Fernando and San Gabriel Valleys and adjoining foothills. Industrial developments center around Los Angeles-Long Beach Harbors and the Burbank-Glendale areas.

Over 225 drinking water production wells within the Superfund basins of San Fernando and San Gabriel Valleys have been adversely affected by chemical pollution. Contamination sources are being sought by Board staff. Over 9,000 potential sources have been contacted thus far, over 4,400 have been inspected, over 950 companies have conducted investigations and 600 more are conducting or have conducted further investigations and cleanups to date.

Approximately one-fourth of all underground storage tanks in California are located in the Region. About 5,000 unauthorized releases from these tanks have been reported. Board staff is overseeing cleanup of more than 1,600 of these cases; local agencies oversee the remainder. More than 550 soil and ground water cases have been cleaned up.

Board directed oil refinery and tank farm cleanups have resulted in the removal of millions of gallons of gasoline and other petroleum products

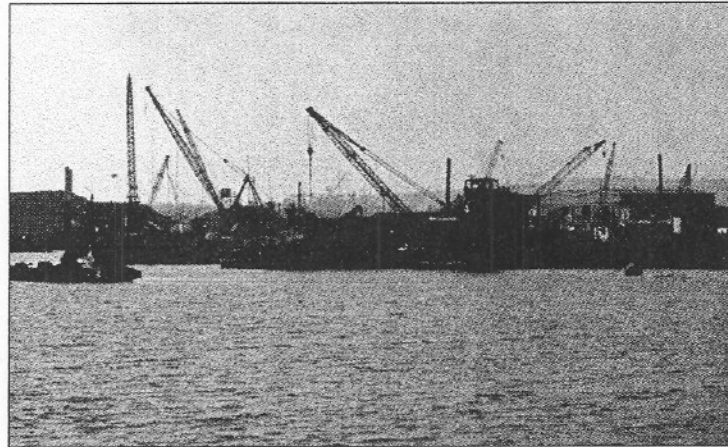
from ground water basins throughout the Region. Cleanups have led to the reuse of over two million cubic yards of soil.

The Board has been actively promoting the construction of full secondary (waste water) treatment facilities. Their efforts have ensured that all publicly-owned treatment works in the Los Angeles Region are either at or constructing full secondary treatment facilities or have advanced tertiary treatment.

In compliance with a 1987 consent decree, the City of Los Angeles has ceased discharging sludge into the ocean and has been beneficially reusing 100 percent of its sludge for almost five years.

The Stormwater Unit formed in 1993 to address urban runoff issues, oversees two municipal programs: one covering Los Angeles County and the other covering urban areas of Ventura County. Nearly 3,000 industries are participating in the program under the General Industrial Activities Storm Water Permit. In addition, some 350 construction activities are covered under the General Construction Activity Storm Water Permit.

## Region 4



*Long Beach Harbor*

# Central Valley Regional Board

## Region 5

The Central Valley Region is the largest of the nine Regional Boards, covering 40 percent of the State. It stretches almost two-thirds the length

of California from the Oregon border south to the northern tip of Los Angeles County and includes all or part of 38 of the State's 58 counties. Its diversity is exemplified by extensive timber lands, active and abandoned mines,

world renowned agricultural productivity from the Sacramento and San Joaquin Valleys and rapidly growing metropolitan/ industrial areas.

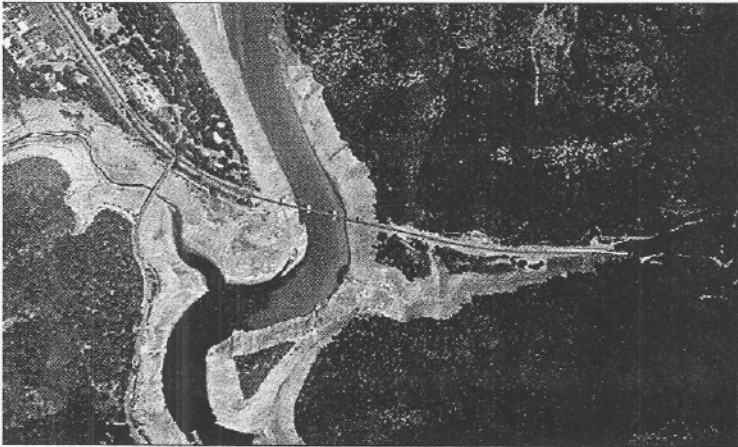
The Region's headquarters is in Sacramento, with offices in Fresno and Redding to more readily serve outlying areas along the Region's 500 mile length.

The Board's greatest water quality challenge in over a decade came in July 1991 when a railroad tanker derailed, spilling in excess of 13,000 gallons of the soil fumigant, metam sodium, into the Sacramento River near Dunsmuir. Board staff were assigned primary responsibility of monitoring the river and, as the chemical plume moved south, Lake Shasta water quality. In addition, the

Executive Officer issued a Cleanup and Abatement Order requiring the Southern Pacific Railroad to aerate lake waters to assist in the breakdown of the soil fumigant. Staff, often working 16-hour days, took samples for a month following the disastrous spill, monitoring the river and lake until no detectable levels of the chemical remained.

Fifty miles south of Dunsmuir, Simpson Paper Company, under a Board order, has reduced the amount of dioxins and furans discharged to the Sacramento River by 98 and 99 percent, respectively. This reduction is reflected in the resident fish population where dioxins have decreased 90 percent and furans 98 percent in fish tissue.

A Sacramento River water quality success story, nine years in the making, was announced in early 1992: rice pesticide levels in the Sacramento River at the City of Sacramento had decreased over 99.5 percent as a result of improved pesticide management practices implemented by rice growers under the direction of the Board. Pesticide loads in the river were reduced from 40,000 pounds in 1982 to less than 218 pounds in 1991. Pesticide levels are well below health criteria and any threat to aquatic life should be eliminated by 1995.



*Color tainted pesticide spill flowing down Sacramento River from Dunsmuir to Shasta Lake*

# Lahontan Regional Board

## Region 6

The Lahontan Region covers about 20 percent of the State from the Oregon border south along the eastern Sierra Nevada through the northern Mojave Desert. It includes nationally recognized waters such as Mono Lake, Lake Tahoe, and the Owens River system, which provides drinking water to 10 million Southern Californians.

Lake Tahoe, in the North Lahontan Basin is one of two water bodies designated "Outstanding National Resource Water" in California. Mono Lake also received that designation in 1994. Due to the long-term drought, Lake Tahoe's level has dropped drastically, resulting in increased request for marina dredging. Staff must regulate dredging and dredged material disposal carefully to prevent releasing sediment-associated nutrients and contaminants to the lake. Another emerging challenge is related to the death of thousands of trees in the watershed from drought-related stresses. Close oversight of potentially large-scale logging is necessary to protect surface waters against erosion.

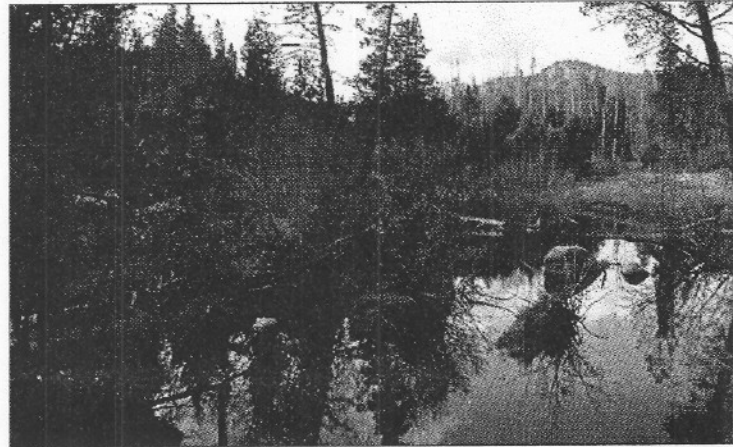
In the southern Region, toxic waste site investigation and cleanup at six military facilities is an ongoing concern. Another important task is regulating mining facilities from relatively small gold processing

operations to large chemical manufacturing plants.

Since water is scarce in much of the Region, water quality-quantity relationships are a special concern. Staff participated in the State Board's Mono Lake Basin decision (see page 31); work to prevent and cleanup contaminated ground water supplies; and encourage the use of reclaimed water for irrigation where feasible.

Waters affected by acid drainage from the abandoned Leviathan Mine in Alpine County have been placed on USEPA's list of the worst toxic waste problems in California. A special "Individual Control Strategy" is being developed to strengthen California's existing remedial controls at the mine site.

Livestock grazing occurs on rangeland and irrigated pasture throughout most of the Lahontan Region, often resulting in water quality problems due to livestock trampling of streambanks and destruction of riparian vegetation. Staff work with other agencies and landowners to decide on Best Management Practices to restore damaged watersheds.



*Dead timber resulting from drought*

# Colorado River Basin Regional Board

## Region 7

The Colorado River Basin Region covers the most arid area of California. Despite its dry climate, the Region contains two substantial

water bodies, the Colorado River and the Salton Sea. Many valleys in the Region are underlain by ground water aquifers that are often the only source of water for local areas. The most important ground water basin underlies

the Coachella Valley.

Primary challenges facing this Region include ongoing border pollution problems with Mexico, increasing salinity in the Salton Sea, selenium and pesticide buildup in agricultural drains in Imperial Valley, proposed mega-landfills, a proposed low-level radioactive waste disposal site and leaking underground petroleum tanks.

The Region is at an important crossroads regarding the fate of the Salton Sea - California's largest inland water body. While the Sea is an important stop in the Pacific flyway for migratory birds, it also has a current salinity level 25 percent saltier than ocean water and its salinity continues to increase. The Board is working to realize a

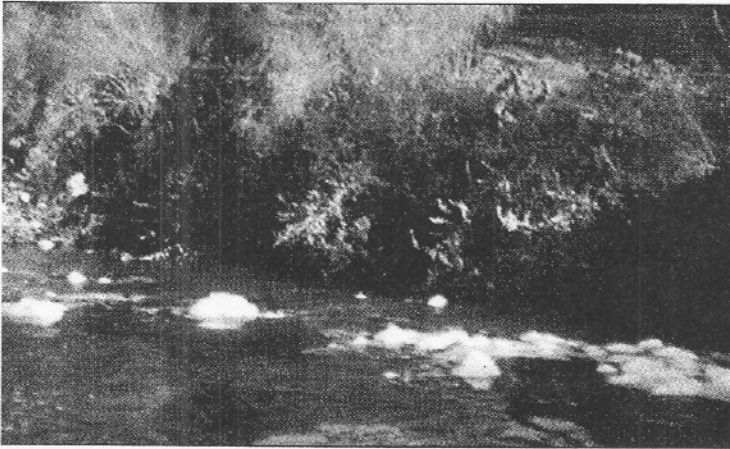
solution to the Sea's ongoing problems.

Nonpoint source pollution is an important priority in this Region with much of the problem caused by agricultural pollutants. The Board initiated a toxicity testing program in 1991 to characterize causes and effects of agricultural pollution on the Region's surface waters.

The program focuses on the Imperial Valley, the largest agricultural area in the Region. The Imperial Irrigation District and the Board work together to decide which management practices can best reduce agricultural pollution.

The megalandfills proposed for this Region would be among the largest in the nation if implemented. In reviewing the proposals and developing waste discharge requirements, the Board must ensure that the area's aquifers will be adequately protected.

The Water Quality Control Plan for the Colorado River Basin Region was updated in 1993. The updated Plan was redesigned to be consistent with the new statewide format and includes new implementation provisions for control of agricultural runoff and storm water. Also included are updated discussions of Salton sea pollution, pollution from Mexico, and municipal wastewater disposal.



*Pollution flowing in the New River by Mexicali/Calxico*



# Santa Ana Regional Board

The Santa Ana Region, though the smallest land-wise, is one of the most populous and highly diverse. It includes high mountain lakes and streams, ocean coastal waters, bays and estuaries and inland freshwater lakes and streams. The dominant water body is the Santa Ana River, whose dry-weather flows consist primarily of highly treated municipal waste-water discharges.

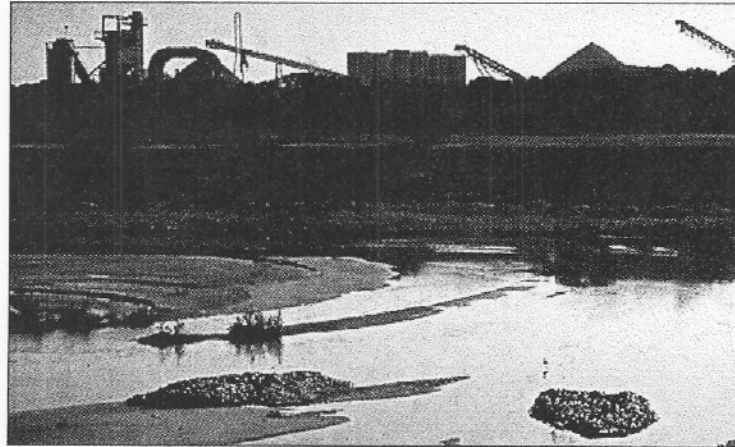
Protecting the Santa Ana River's water quality is a principal concern to this Board. The river is not only a significant recreational and wildlife resource, but also a major recharge source for ground water basins which supply San Bernardino, Riverside and Orange Counties.

To meet nitrogen objectives for the river, the Board in 1991 adopted an amendment to its Basin Plan incorporating a new nitrogen management strategy known as a "waste load allocation." This strategy is being put into place by revising waste discharge requirements for the 14 municipal sewage treatment plants which discharge to the river. The new requirements mean significant reductions in nitrogen discharges by the treatment plants at a cost estimated at between \$150 and \$200 million which translates into a \$3-\$4 per month increase in individual sewer rates.

Cooperative efforts of local water and wastewater agencies and the Board were undertaken in 1991 with a comprehensive study of the Santa Ana River, the first of its kind in California and one of only a few nationwide. The objective was to decide whether changes to the beneficial uses of water quality objectives of the river are appropriate given its unique physical and hydrological characteristics.

In June 1992, the Regional Board held the first in a series of workshops to discuss the findings and recommendations of the study. The work culminated in the adoption by the Regional Board in 1994 of site-specific water quality objectives for lead, copper and cadmium for the Santa Ana River. These objectives would ensure reasonable and cost-effective waste discharge regulation.

## Region 8



*Santa Ana River*

# San Diego Regional Board

## Region 9

Located in California's southwest corner, 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 burgeoning population enjoys many water related activities.

Much of the ongoing pollution problems caused by raw sewage flows from the City of Tijuana crossing the border and contaminating the South Bay area of the region will soon be past history. Through the combined efforts and cooperation from federal, State and local agencies in the U.S. and Mexico, a \$239 million binational sewage treatment facility and long ocean outfall is under construction and should be completed as early as 1997. This facility will greatly reduce the chronic contamination of American and Mexican waters.

The Board's San Diego Bay Cleanup project has continued to be instrumental in assessing areas of the bay affected by industrial waste discharges. Water quality data generated from the project is used by

the Board to set sediment cleanup standards in enforcement orders issued against bay-side firms. In 1994, the reauthorized San Diego Interagency Water Quality Panel, a panel of agencies and interested parties, began its important role in advising the Board of water quality problems and coordinating local resources in achieving and maintaining good water quality in San Diego Bay.

Board efforts to promote much-needed water reclamation for the Region have been successful during chronic drought years, resulting in a growing number of sewerage agencies moving forward with large scale water reuse projects. Three agencies plan to use natural water courses to convey high quality reclaimed water to down stream users and to maintain in-stream beneficial uses. The water courses will provide a disposal option for winter season flows when demand for reclaimed water is greatly reduced. Also, through cooperation between the Board and dischargers, a major effort to network the flows of existing reclamation facilities resulted in the historic creation of the South Orange County Reclamation Authority. The Authority provides maximum use of reclaimed water through greater flexibility in its use as well as a more streamlined approach to regulating reclaimed water.



*Vice-President Al Gore speaking at the ground breaking for the binational sewage treatment facility*

# Water Rights

A water right is a legal entitlement authorizing water diversion from a specific source for beneficial use.

In California, there are two major types of surface water rights: riparian and appropriative.

Riparian rights accompany ownership of property next to a water source. English common law says this water can be used on riparian land in any reasonable and beneficial use, but does not allow its storage. Riparian diverters must share the available water with other riparians.

These rights and all water rights are subject to the State Constitutional prohibitions against waste, unreasonable use, method of use and method of diversion.

Those wishing to divert (or appropriate) water far from its source must obtain a permit or license from the State Board to ensure that the State's waters are being put to the best possible use and that the public interest is served. These are known as appropriative rights and are subject to a priority system with "the first in line being the first in right."

## MONO LAKE DECISION

*Ending decades of controversy over a unique national environmental treasure, the State Board on September 28, 1994, voted unanimously to amend the water right licenses of the City of Los Angeles restricting diversions from four tributaries to Mono Lake.*



*Left to right: Member John Brown, then Vice Chair James Stubchaer, Chairman John Caffrey, Member Mary Jane Forster, Member Marc Del Piero*

*The State Board order included a long-term management plan designed to gradually raise the lake level to a target of 6,392 feet. This water level will protect nesting habitat for California gulls and other migratory birds, maintain the long-term productivity of the Mono Lake brine shrimp and brine fly populations, maintain public accessibility to the most widely visited tufa sites, enhance the scenic aspects of the Mono Basin and reduce blowing dust to better comply with federal and State air quality standards.*

*While it is projected to take some 20 years to bring the lake to this level, the City will be allowed to resume water diversions at a reduced rate once the lake level reaches 6,377 feet.*

*The order also requires the City to prepare stream restoration plans for the four tributaries and to restore a portion of the waterfowl habitat which was lost due to the decline of Mono Lake. The plans are to be developed in consultation with State, federal and local agencies as well as with public interest group.*

*To assist the City in compensating for the water it will not be able to divert from the Mono Basin in future years, Governor Wilson has signed legislation making \$9 million available to the City in FY 94-95 for water conservation and reclamation programs.*

## THE YUBA RIVER HEARING

The Yuba County Water Agency (YCWA) owns and operates New Bullards Bar Reservoir located

outside Marysville on the north Yuba River. The reservoir provides flood control and recreation. Water released from the reservoir is used for domestic, municipal and irrigation purposes, as well as power production.

The river supports several important anadromous fisheries including salmon, steelhead and shad.

In 1988, a coalition of fishery groups filed a complaint against the YCWA and other agencies that divert from the Yuba River alleging that the present minimum flow requirements specified in YCWA's water right permits are too low.

The State Board deferred action on the complaint pending completion of a comprehensive fishery study being prepared by the Department of Fish and Game (DFG).

In early 1991, DFG submitted its Lower Yuba River Fisheries Management Plan to the State Board for review. This plan included flow and temperature recommendations for fish protection.

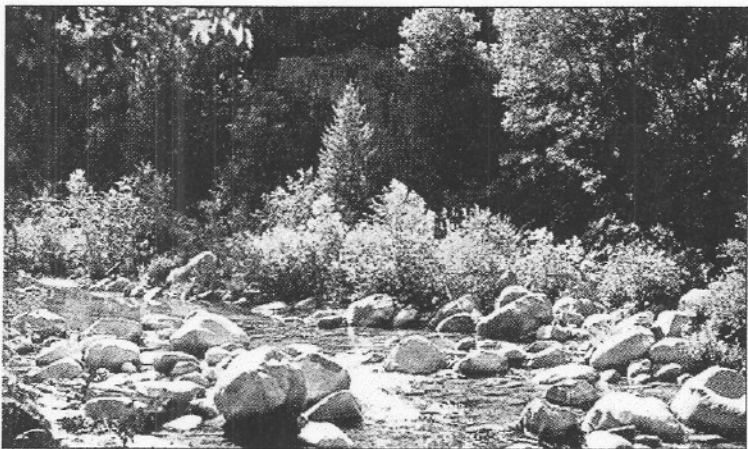
To address issues raised by the fisheries management plan and the 1988 complaint, the State Board scheduled a water right hearing for November 1991.

The YCWA then filed suit in federal district court seeking an injunction to prohibit the Board from conducting the hearing.

YCWA asserted that the Federal Power Act preempts the State's authority to set instream flow requirements for a federally licensed hydroelectric project which are higher than those required by the Federal Energy Regulatory Commission (FERC). The State Board's position is that FERC's preemptive authority does not apply to multiple use projects such as New Bullards Bar.

After a federal judge denied the request for a preliminary injunction, the State Board held its hearings in early 1992.

Sixteen agencies and more than 100 expert witnesses presented testimony and other evidence regarding water supply issues and measures for protection of fish and other public trust resources of the Yuba River.



*Yuba River*

## **LAGUNITAS CREEK HEARING**

Marin Municipal Water District owns and operates several water storage reservoirs in the Lagunitas Creek watershed, which provides water to Sausalito, Mill Valley and San Rafael. Despite water conservation efforts during the drought, the District has come close to running out of water.

In 1979, the District proposed to enlarge the storage capacity at one of its reservoirs, Kent Lake, but legal action taken by DFG challenged the project's environmental impact report and required maintenance of specific flows to protect the fishery.

A year later, the District applied to the State Board to store additional water in Kent Lake. The District also filed petitions for time extensions to complete the Kent Lake Enlargement Project. Numerous protests involving environmental impact reports were filed against the District.

In 1982, the State Board adopted an order approving the Project, but required the District to make specific water releases to protect fish and wildlife in Lagunitas Creek. The order also required the District to complete a study, released in 1989, identifying methods to reduce streamflow and sediment buildup in the streambed and mitigating the Project's potential effects on flow and temperature in the Creek.

Since 1989, District staff and DFG have worked to develop joint recommendations required by the State Board Order. Progress has been made but differences remain.

The District, DFG, and several interested parties requested and received a State Board hearing to resolve these differences and set final permit conditions for the Project. A water right decision is expected in mid-1995.

## **SALINAS VALLEY GROUNDWATER**

The Salinas Valley in Monterey County is one of the most productive agricultural areas in the world, producing revenues of over one billion dollars annually. Ground water is the primary source of supply in the Salinas Valley for both agricultural and municipal water needs.

The ground water resource, however, is threatened by seawater intrusion due to over pumping and nitrate contamination due to use of fertilizers. Besides destruction of a natural resource, the water quality problems in the Salinas Valley could lead to loss of agricultural jobs, curtailment of growth, reduction in land values, and a significant increase in the cost of water.

In workshops held by the State Board in 1993, the Monterey County Water Resources Agency (MCWRA) reported that both short-term measures to slow intrusion and control nitrates and long-term measures to develop alternate water supplies were being developed for the Salinas Valley. The MCWRA, however, could not assure the State Board that the water supply for the City of Salinas would be protected from contamination or that important parts of the aquifer system would not be lost to seawater contamination before corrective measures became effective.

In September 1993, the State Board indicated that it would restrict pumping or impose a physical solution to the Salinas Valley ground water problems if local efforts in 1994 were not successful in restoring hydrologic balance to the basin. The Monterey County Board of Supervisors then adopted six ordinances requiring registration of ground water extraction facilities and reporting of groundwater extractions, agricultural pumping limits, filing of agricultural water conservation plans, urban water allocation, ground water management charges, and flow meter installation on agricultural wells.

Litigation challenging the flow meter, pumping limits, and man-

agement charges ordinances was initiated in both State and federal courts by a coalition of Salinas Valley growers. Santa Clara County

Superior Court issued a preliminary injunction prohibiting enforcement of these ordinances during litigation.

The State Board considers the water quality problems of the Salinas Valley to be one of the most critical water

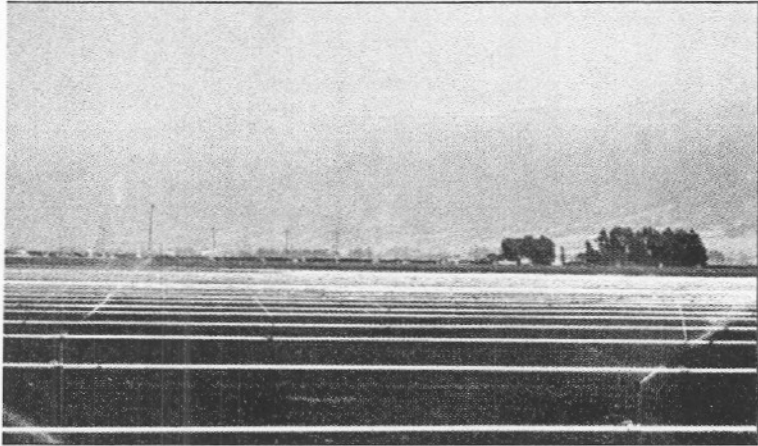
resources issues in the State. While effective local action is preferred over State intervention because of the closer linkage between local needs and resulting actions, the preliminary injunction against the management ordinances precludes immediate action by the local agency. Therefore, the State Board has initiated an investigation of the Valley's ground water problems as a first step in adjudicating the basin-an action which may be necessary to solve the water quality problems in the Salinas Valley.

## LOS VAQUEROS PROJECT

On June 2, 1994, the State Board adopted Water Right Decision 1629 which approved the Los Vaqueros Project proposed by Contra Costa Water District (District) and the U.S. Bureau of Reclamation (Bureau). The Los Vaqueros Project includes construction of a new 100,000 acre-foot capacity reservoir located on Kellogg Creek in Contra Costa County.

It will be the first major dam built in California in a decade. The new reservoir will allow Contra Costa Water District which serves 400,000 customers to store water during periods when water is fresher in the Delta and to blend it for better quality water during dry years.

More than 18,000 acres of open space around the 1,400 acres dedicated for the reservoir will be available for recreational use and provide habitat for foxes and other wildlife.



*Salinas Valley agriculture*

## CARMEL RIVER

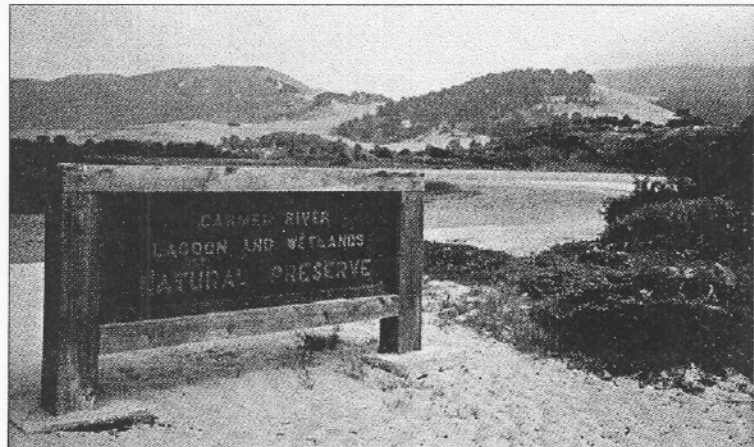
The Carmel River drains a 255 square-mile watershed that is tributary to the Pacific Ocean south of the Monterey Peninsula. The Carmel River and the ground water aquifer which it overlies are the water supply source for most water users in the Carmel Valley and the Monterey Peninsula. Well pumping in the valley lowers the ground water level in the aquifer and results in decreased flows in the Carmel River. During droughts, surface flow in the river may cease for several years.

The Carmel River has historically supported a significant wild steelhead run. 1991 surveys indicate that lowered ground water levels, reduced streamflow, and dams barring migration have caused the fishery to decline. Lowered ground water levels have also contributed to riparian habitat deterioration.

In response to complaints regarding the deterioration of the steelhead fishery and riparian corridor due to alleged illegal water diversions and use of the ground water aquifer by the Cal-Am Water Company (Cal-Am), State Board staff conducted an investigation. This resulted in staff finding that the ground water in the alluvium of the

Carmel River Valley is a subterranean stream and is subject to the statutory appropriation process contained in the Water Code. If the finding is upheld by the State Board, all appropriators of the subterranean stream who initiated their rights after 1914 will be required to obtain a permit or license from the State Board. Cal-Am pumps from the Carmel River subterranean stream as a primary water source for its customers.

Additional water supplies are needed to meet the demand for water in the Monterey Peninsula area. In response to this need, the Monterey Peninsula Water Management District proposes development of the New Los Padres Reservoir project. The State Board held a hearing on the Carmel River issue in 1992. A Board decision is expected in 1995.



*Carmel River*

# Water Reclamation

In unprecedented recognition of the importance of reclaimed water in California's future water management plans and policies, representatives of

federal, State and local government and water agencies gathered together on June 1, 1994, to sign an official proclamation affirming their support for water reclamation.

The proclamation stresses the need to overcome and reduce institutional and regulatory roadblocks and funding constraints that have limited past water reclamation efforts. It also speaks to the need to better educate the public on the value and safety of reclaimed water.

The Legislature set a goal in its 1991 Water Recycling Act of reusing one million acre-feet of water by the year 2010. The State Board provides funding assistance to water reclamation projects under its State Revolving Fund Loan Program and its Water Reclamation Loan Program. These programs, which represent two of the few low-cost funding sources available for reclamation projects, play a critical role in developing reclaimed water as an additional water supply for the State.

Since 1977, approximately \$216 million has been committed in grants and loans for reclamation projects. These projects have been planned to add 91,000 acre-feet per year to the State's water supply. In addition, applications for such projects currently in review total \$15 million in loans with the potential of adding another 5,000 acre-feet yearly.



Left to right: Daniel Beard, U.S. Bureau of Reclamation; Jim Kelly, California Water Reuse Association; Dr. Harvey Collins, State Department of Health Services; Marc Del Piero, State Board; Felicia Marcus, USEPA, Region 9; David Kennedy, State Department of Water Resources; and Justin Malan, California Conference of Environmental Health Directors.





# Funding

## BUDGET OVERVIEW

During the eighties, the State Board experienced a significant expansion in its role and responsibility for addressing sources of pollution to California's waters. Much of this expansion was financed through the establishment of new alternative funding sources.

Like others in the public and private sectors, the State Board is now having to address the harsh realities imposed by a national recession in the nineties. Already the State Board has experienced a 30 percent reduction in State General Funds due to the decline in the State's revenues.

The State Board projects that beginning in 1996/97 there will be a \$5 million gap in funding of critical work associated with setting water quality standards, monitoring and assessing the condition of the State's waters and basin planning efforts. In addition, the reduction in the availability of historical bond support places at risk the State's ability to continue to receive millions of dollars in federal funding, used to support local government efforts to construct wastewater treatment facilities.

These issues have been recognized by the External Program Review convened by the Governor and Cal/EPA to review and recommend improvements to the State Board's

water quality program. This review resulted in a recommendation that the Board give high priority to securing a stable, long-term funding base for its programs.

This recommendation is being targeted as a high priority in the State Board's strategic planning process and will be the topic of future discussions with stakeholders.

## STATE REVOLVING FUND

For some 20 years, the State Board has administered USEPA's multi-billion dollar Clean Water Grants Program in California, financing the construction of municipal sewage treatment facilities.

When federal funding began to dwindle, the State Revolving Fund (SRF) Loan Program was created by Congress in 1987 to provide financial assistance to local agencies through low-interest loans.

These loans are available for the planning, design and construction of sewage treatment facilities, water reclamation facilities, stormwater pollution control, nonpoint source pollution control and estuary enhancement projects.

The State Board must provide a 17 percent match to the federal funding for these projects. Matching funds were generated by a 1984 bond. The

State Board exhausted its available bonds in matching the 1994 federal appropriation.

Federal funding authority expires in 1994. If federal funding is not reauthorized, the SRF program will become wholly dependent on repayments of previously issued loans.

## UNDERGROUND STORAGE TANK CLEANUP FUND

About 20,000 of California's more than 127,000 petroleum underground storage tanks leak. To address the problems and expense of cleanup, the Legislature created the UST Cleanup Fund in 1989. The State Board is responsible for administering this Fund.

The Fund pays for corrective action and third party liability costs up to \$1 million per occurrence. These costs must have resulted from the unauthorized releases of petroleum from a UST, which causes soil and/or water contamination.

Typical corrective action costs include preliminary site assessment, soil and water investigation and post-cleanup monitoring. Eligible third-party costs include medical expenses, loss of wages, property damages and compensation for the loss of property value.



*Eagle Lake*

The Cleanup Fund is maintained by a per-gallon storage fee paid by all UST owners/operators. Legislation passed in 1994 established a fee that

will grow from \$0.007 on January 1, 1995 to \$0.009 on January 1, 1996 to \$0.012 on January 1, 1997.

Additionally, the original \$10,000 deductible payments for all owners/operators was eliminated for homeowners and reduced to \$5,000 for small and medium sized businesses, nonprofits and local governments.

The 1994 legislation also requires the State Board to work with interested parties through a corrective action advisory committee and provide additional assistance to claimants, process smaller claims, review and approve workplans and assist claimants with contractors.

So far, the State Board has issued 2,253 Letters of Commitment for a total of \$206 million and satisfied 2,399 reimbursement requests, totaling \$89 million.

## **WATER QUALITY PLANNING**

In order to determine the nature, extent and causes of water quality problems, and identify feasible solutions, one per-cent of federal Clean Water Grant funds is allocated to water quality management planning, under Section 205 (j) of the Clean Water Act.

Since 1981, the State Board has disbursed these funds in the form of low interest loans for projects designed to mitigate a variety of surface and ground water problems. In 1992, about \$860,000 in federal funds were available under this program.

Currently the State Board has 42 active projects in the works. More than \$6 million was granted for the completion of these projects which include: nonpoint source investigations in several locations throughout California, studies to develop recommendations for the prevention, control and reduction of nitrates in ground water; and studies to determine how urban runoff contributes to water quality impairment.

The State Board also administers a program for diagnostic or feasibility studies for publicly owned freshwater lakes. The nine lakes currently involved are Big Bear Lake (San Bernardino County), Clear Lake

(Lake County), Camanche Reservoir (Calaveras County), Eagle Lake (Lassen County), Lake Elsinore (Riverside County), Guajome Lake (San Diego County), Lake Nacimiento (San Luis Obispo County), Keswick Reservoir (Shasta County) and Gull Lake (Mono County).

### **CLEAN WATER AND WATER RECLAMATION BOND LAW OF 1988**

The Clean Water and Water Reclamation Bond Law of 1988 established \$65 million for grants and loans.

Under this law, \$25 million was appropriated for grants to small communities. The State Board is authorized to administer these grants for the construction of publicly owned treatment works, up to \$2 million per project. Unlike the Clean Water Bond Law of 1984, State agencies are ineligible for these grants.

Another \$30 million was appropriated for low-interest loans to local public agencies for the construction of wastewater reclamation projects. The maximum amount available per project is \$5 million. Loan repayments go to the General Fund. The State Board has fully committed the funds available to it.

### **CLEAN WATER BOND LAW OF 1984**

The 1984 Clean Water Bond Law established financial assistance programs totalling \$325 million, as well as a source of revenue for the State Board.

It provided \$250 million in grants for the construction of wastewater treatment plants. Another \$40 million in grant funding was provided to supplement existing small community federal and State grants for the construction of wastewater treatment facilities. This grant is limited to \$2.5 per project.

A \$25 million loan program, providing low interest 25-year loans was also created. Municipalities, including State agencies whose water reclamation projects are ineligible for assistance under the federal grant program, may apply for a loan of up to \$10 million per project. These loans may finance up to 100 percent of the project, subject to the \$10 million limit.

The Department of Water Resources administers a \$10 million funding program for water conservation projects.

Unlike the State Board's other bond funds, the principal and interest repayments do not go to the State General Fund. Loan repayments can be used, under this bond law, to meet State matching fund requirements for

federal loan repayments, such as the SRF Loan Program.

In 1994 the State Board fully committed these available bond funds.

### **WATER CONSERVATION AND WATER QUALITY BOND LAW OF 1986**

The 1986 Water Conservation and Water Quality Bond Law established a \$75 million fund to provide low interest loans for construction of agricultural drainage management projects which treat, store or dispose of water.

The 20-year loans are available to local agencies, for up to 100 percent project funding, not to exceed \$20 million.

Low interest loans of up to \$100,000 are also available for the preparation of feasibility studies on construction projects which may be eligible for the loan program.

In 1991, all remaining loan funds were fully committed.

To date, seven projects have been completed, and more than \$20 million has been loaned for projects such as: selenium removal using iron filings (Panoche Drainage District); drainage improvement project (Reclamation District No. 999); drainage plan feasibility study (Buena Vista Water Storage District); and DBCP cleanup project (City of Fresno).



*From left to right: Member James M. Stubchaer, Member Marc Del Piero, Chairman John Caffrey, Member John W. Brown, Vice Chair Mary Jane Forster.*



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Recycled Paper