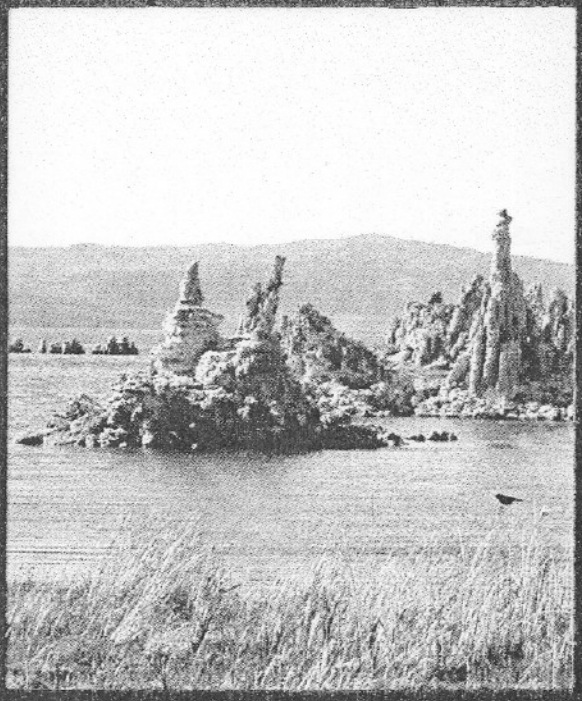


1990-1994

# State Water Resources Control Board

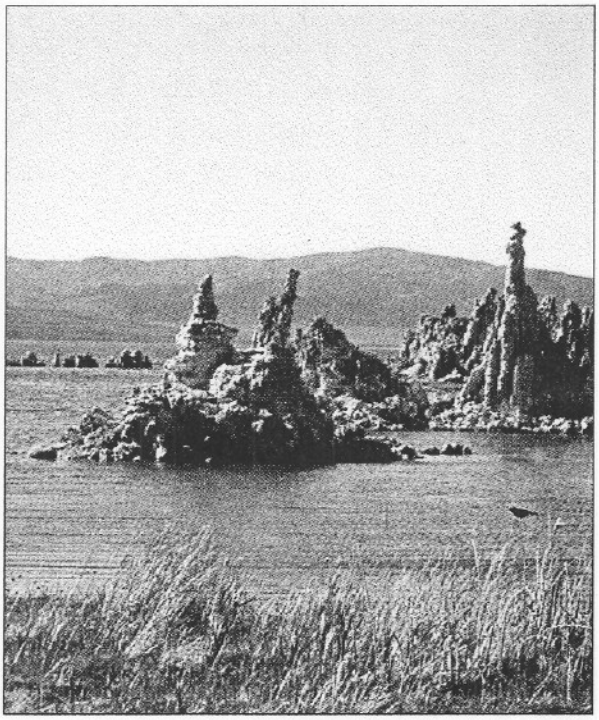
California Environmental Protection Agency

The California Water Code requires the State Water Resources Control Board (State Board) to publish progress reports on the activities of the State and Regional Water Quality Control Boards (Regional Boards). This report covers the years 1990-1994.

The five-member State Board was created by the State Legislature in 1967 to protect water quality and allocate rights to surface water use.

The day-to-day effort in regulating water quality is carried out by the nine Regional Boards, located in each of the major watersheds of the State.

Water right permits, specifying amounts, terms and timetables for diversion and storage, are issued by the State Board.



*Mono Lake*

The State and Regional Boards are members of the California Environmental Protection Agency (Cal/EPA) created in 1991 by Governor Wilson to more effectively coordinate the State's efforts regarding air, water, solid waste, pesticide and toxic issues. (For an overview of Cal/EPA, see page 15.)

In all their decisions, the State and Regional Boards attempt to protect all beneficial uses of water. The authority for their water quality efforts is the Porter-Cologne Water Quality Control Act (Porter-Cologne Act).

Authority for the State Board's water right activities comes from the 1913 Water Commission Act, amendments to the Water Code, the constitutional provisions to prevent waste and unreasonable use of water, and court decisions.

# Basin Plans

The Porter-Cologne Act and the federal Clean Water Act require the preparation of Water Quality Control Plans (Basin Plans) to direct water quality programs in the nine Regional Boards. Basin Plans identify water bodies, designate beneficial uses, establish water quality objectives needed to protect beneficial uses and specify mechanisms for implementation by the Regional Boards. Basin Plans provide the regulatory framework for controlling the activities and factors which affect water quality in the State. In addition, Basin Plans consolidate water quality standards and other federally required planning and management elements.

*Timber harvesting*

Amendments to the Basin Plans are adopted as new water quality standards and control measures are developed. Adoption of Basin Plans and their amendments follows a comprehensive public participation process including compliance with the California Environmental Quality Act and Administrative Procedures Act. The State Board must approve the amendments before they become operative. The first Basin Plans were adopted in 1975, and about 250 amendments have been adopted subsequently.

State and Regional Boards are currently completing a four-year program to update the Basin Plans for publication in 1995. The plans will incorporate provisions to recognize existing and new water quality management activities, including measures addressing nonpoint source problems. In addition, the format of the Basin Plans will be modified to facilitate their timely update in the future.

Examples of changes to the Basin Plans include:

- revised and expanded listings of water bodies and their designated beneficial uses;
- addition of new water quality objectives for surface and ground waters;
- inclusion of new ground water basin maps;
- updated descriptions of each Region's water control programs; and
- addition of new implementation and action plans.

# Monitoring

Ongoing monitoring of surface and coastal waters in California is conducted by the State and Regional Boards. Through the collection of fish and other aquatic organisms from fresh, estuarine and coastal waters, the monitoring programs can determine concentrations of specific toxic metals and organic chemicals. Under the Inland Surface Water Toxicity Testing Program (ISWTTP) the State and Regional Boards are looking at aquatic toxicity in several major agricultural areas - the Sacramento, San Joaquin and Imperial Valleys. Sacramento Valley studies have successfully identified rice field pesticides as causing toxicity in the Sacramento River and Delta. Through cooperation with rice growers and the Department of Pesticide Regulation, rice cultivation practices were altered, resulting in less toxicity and lower pesticide concentrations in the River and Delta.

Since then, other agricultural pesticides have been linked to periodic toxicity in both the Sacramento-San Joaquin Delta and the Alamo River, a tributary to the Salton Sea. The ISWTTP continues to monitor these areas.

The Toxic Substances Monitoring (TSM) and State Mussel Watch (SMW) Programs evaluate the occurrence of toxic substances in fresh, estuarine and marine waters of the State through the analysis of fish, mussels and clams. The Programs primarily target water bodies with known or suspected impaired water quality.

In the 1992 TSM Program, of the 41 fish species analyzed, only three samples exceeded federal action levels for the protection of human health. Largemouth bass from Lake Pillsbury in Lake County and Sherwood Lake in Ventura County contained high levels of mercury.

During 1993, the federal action level was exceeded in six samples from the 34 fish species collected. Lake Pillsbury again contained high levels of mercury in largemouth bass and Sacramento squawfish. Bluegill from Klau Mine Pond in San Luis Obispo County also contained high levels of mercury. Goldfish from Oxnard Drainage Ditch 2 in Ventura County and carp from Harbor Park Lake in Los Angeles County contained high levels of chlordane. The same sample from Oxnard Drainage Ditch 2 and carp from the Alamo River near Calipatria in Imperial County contained high levels of DDT. A health advisory was issued for Harbor Park Lake warning against fish consumption due to elevated levels of chlordane.

In the 1991-92 SMW Program, 125 mussel and clam samples were analyzed from 108 stations along the California coast. No samples exceeded federal action levels for the protection of human health. Transplanted fresh water clams from the Salinas River Lag 2 station in Monterey County contained levels of DDT exceeding predator protection criteria.

During the 1992-93 SMW Program, 86 mussel and clam samples from 84 stations were analyzed. No federal action levels for the protection of human health were exceeded. Transplanted fresh water clams again exceeded predator protection criteria for DDT at the Watsonville Slough Bridge station in Santa Cruz County.

While DDT has been banned in the United States for over 20 years, it is a long-lived pesticide still found in most TSM and SMW samples.

Recently a new criterion was developed called Maximum Tissue Residue Levels (MTRLs), based on human health water quality objectives. MTRLs are used as alert levels indicating water bodies with potential human health concerns. TSM and SMW Program data can now be used directly to determine whether water bodies meet water quality objectives.

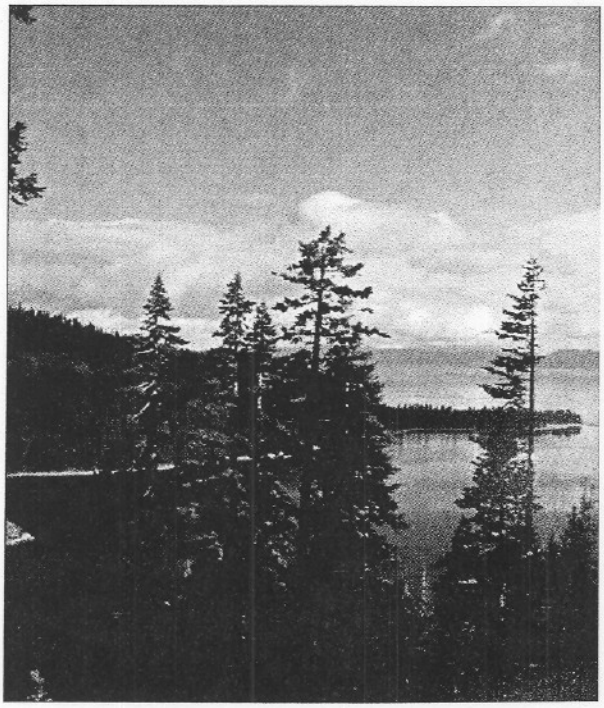
# Water Quality Assessment

Evaluating California's water quality is no small task, given the 2,800 surface, ground and marine water bodies in the State. But this major undertaking, conducted biannually by the State and Regional Boards, is imperative in deciding where the State's water quality efforts, both in money and staffing, should be directed.

To meet Clean Water Act requirements, Regional Boards gather information on regional water segments, identify beneficial uses and establish water quality ratings. Water body segments are classified as a wetland, estuary, bay, river, stream or lake and their water quality categorized as good, intermediate, impaired or unknown. Assessments also include size and the nature and source of any impairment problem.

Regional Water Quality Assessments are compiled into a statewide listing by region and water body type for State Board adoption and then submitted to the U.S. Environmental Protection Agency (USEPA) for approval. USEPA and the State Board use this information as a basis for allocating funds for various water programs. The quality of a particular water body also has a significant impact on how each region imposes controls on the various point and nonpoint pollution sources discharging into a particular water body.

According to the latest Regional Water Quality Assessments, toxics still affect a greater proportion of the State's water bodies than do conventional pollutants, such as suspended solids, grease and oil. Additionally, nonpoint source pollution, such as urban runoff and agricultural drainage, continues to be the greatest threat to water quality.



*Emerald Bay (Lake Tahoe)*

**Lakes**

| | |
|---|---|
| Total Acres Assessed: | 912,837 |
| Good | 18% |
| Intermediate | 37% |
| Impaired | 25% |
| Unknown | 20% |

## Rivers and Streams

| | |
|---|---|
| Total Miles Assessed: | 18,846 |
| Good | 22% |
| Intermediate | 36% |
| Impaired | 21% |
| Unknown | 21% |

*Trinity River*

*Santa Monica Harbor*

Good: Waters support and enhance their uses
Intermediate: Good quality, with occasional degradation
Impaired: Water cannot meet water quality standards
Unknown: Data insufficient to classify water body

## Bays and Harbors

| | |
|---|---|
| Total Acres Assessed: | 465,172 |
| Good | 6% |
| Intermediate | 8% |
| Impaired | 75% |
| Unknown | 11% |

## Ocean Shoreline

| | |
|---|---|
| Total Miles Assessed: | 834 |
| Good | 89% |
| Intermediate | 8% |
| Impaired | 3% |
| Unknown | 0% |

*Coastline at Trinidad (Humboldt County)*

# Watershed Approach

Historically, water quality problems have been addressed through a variety of separate programs, each with different objectives and priorities.

Consensus is now building among those public agencies and private organizations concerned with water resources, that a comprehensive evaluation of water and other resources on a landscape scale is the only way to assess cumulative impacts and come up with a workable strategy to protect the resources. This is called "the watershed approach."

Three main principles guide this approach:

- Land and water resources should be prioritized in terms of development for human uses and their ecological values as a basis for management preservation.
- Those who own or manage land, or who live, work or recreate in a watershed can participate in deciding what the resource problems are and how to protect their watershed.
- Actions to address watershed resource problems should integrate the efforts of local, State and federal programs to provide a single, coordinated solution to resource protection.

A watershed approach considers both point sources, such as wastewater discharges from a sanitary treatment facility or an industrial plant, and nonpoint pollution sources such as runoff from farmland, rangeland, timber harvests and animal confinement areas.

Nonpoint pollution also occurs when rain washes pollutants from parking lots, city streets and our own backyards. Nonpoint pollution is difficult to manage using traditional approaches such as permits for each pollution source.

The watershed approach offers a nontraditional approach to reducing pollution by evaluating the way we use the land and how such uses could be changed.

Using this approach, the State and Regional Boards are providing technical and financial support to 33 California watersheds. Collaboration with other State, federal and local agencies has resulted in more effective use of Clean Water Grant dollars, as multiple agencies contribute funds and expertise. With this assistance, land owners and communities are working to prevent and solve land management problems that result in nonpoint pollution.

Education and public involvement are key components of the watershed approach. The goal is to create local dedication to land management stewardship as the cornerstone of water quality protection.

# Protecting the Delta

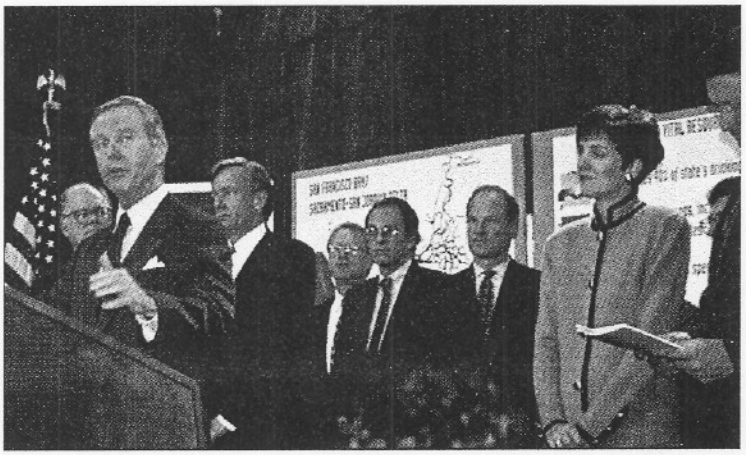
The San Francisco Bay-Sacramento/San Joaquin Delta Estuary watershed is a critical source of water supply for much of California. It drains 40 percent of California's land area and supports over 100 fish species. It also provides irrigation water for 45 percent of the nation's fruits and vegetables and drinking water for 20 million Californians.

The Delta's preservation and proper management has been an ongoing balancing act as urban and agricultural needs compete with the fisheries, wildlife and public trust needs of the fragile ecosystem.

Standards to protect the Delta were adopted by the State Board in 1978 with the 1978 Delta Water Quality Plan and Water Right Decision 1485. In 1991, the Board adopted the Water Quality Plan for Salinity which set new objectives for the Delta. Despite these efforts, however, the Delta has continued to decline.

In April 1994, the Board opened a series of workshops to discuss innovative ideas to better address the needs of the Delta. This was a new process in which the State Board asked California's major water interests to work together to formulate mutually agreeable proposals that would both aid the Delta and ensure a reliable water source for those dependent on Delta water.

At the conclusion of the workshops, separate proposals were melded into one as the parties sought consensus. The resulting draft Water Quality Control Plan for the Delta was released December 15, 1994, the same day that federal and State officials, together with California's major urban, agricultural and environmental representatives signed an historic agreement marking the first step in providing certainty in water supplies for cities and farmers and environmental protection for the Delta.

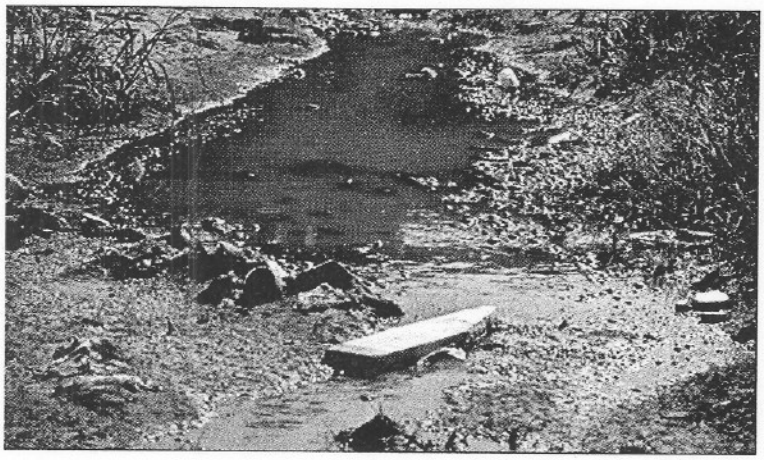


*Participating in historic Delta agreement are left to right: Douglas Wheeler, Secretary, Resources Agency; Governor Wilson; Bruce Babbit, Secretary of the Interior; Roger Patterson, Regional Director, U.S. Bureau of Reclamation; David Schuster, Kern County Water Agency; Stephen Hall, Association of California Water Agencies; Carol Browner, Administrator, USEPA; James Strock, Secretary, California Environmental Protection Agency.*

Many elements of this agreement were also contained in the Board's draft Plan. Together the agreement and the Plan are a major milestone in accomplishing one of Governor Wilson's primary 1992 Water Policy goals: achieving a balance in the competing water needs of cities, agriculture and the environment.

Following release of the draft Plan, a public hearing was held, further refinements were made and in May, 1995, it was adopted by the Board. With the Plan approved, the process to allocate the water needed to meet the requirements of the Plan is slated to open in August, 1995.

# International Border Pollution



*Tijuana River*

For over 50 years there has been an ongoing border sanitation problem in the South Bay area of San Diego due to sewage overflows from the Cities of Tijuana and Tecate, Mexico and in the Imperial Valley due to sewage discharges from Mexicali, Mexico.

By late 1993, sewage flows from Tijuana exceeded the 13 million gallons per day (MGD) capacity of an emergency sewer connection to the City of San Diego. As a result, several million gallons of sewage flowed into the Tijuana River Valley in California each day. In November 1993, Governor Wilson issued a Proclamation of a State of Emergency.

Since the Proclamation was issued, Mexico has reduced cross-border sewage flows to 2-3 MGD and these are safely conveyed to San Diego for treatment. Also, since the Proclamation, design of a 25 MGD International Treatment Plant was accelerated. Environmental work was completed in May 1994 and ground breaking for the treatment plant was held in July 1994. This project, plus an ocean outfall which will be shared with the City of San Diego is projected to cost $400 million. Construction of the treatment plant is now expected to be completed in late 1996. Construction of the ocean outfall will be completed in mid-1998.

A joint State and federal tour of the California/Mexico border in 1991 led to the discovery that the City of Tecate, Mexico had no functional wastewater treatment plant. In mid-1993, the International Boundary and Water Commission (IBWC) announced that Mexico had agreed to build treatment facilities for the City and for the Tecate Brewery, to be completed in 1995.

Mexicali, Mexico is a major polluter of the New River which flows through the Imperial Valley before discharging into the Salton Sea. The Colorado River Basin Regional Board and State Board staff have worked closely with the IBWC on this problem since 1989. In November 1992, the United States and Mexico agreed to a conceptual plan to abate New River pollution. The plan is very similar to the plan recommended to the IBWC by the State Board in 1989. Unfortunately, little progress has occurred since then and construction of elements of the conceptual plan have stopped because funding is not available from Mexico or the United States.

# Water Quality Plans

## NEW PLANS TO PROTECT SURFACE WATERS

To better protect California's lakes, rivers, streams, bays and estuaries, the State Board in April 1991 adopted two new Water Quality Control Plans in compliance with the requirements of the federal Clean Water Act: Inland Surface Waters Plan and Enclosed Bays and Estuaries Plan. These Plans included numeric chemical-specific water quality objectives for 69 pollutants considered to be the most serious threat to these water bodies, as well as narrative and toxicity objectives. Pollutants targeted in the 1991 Plan include inorganic compounds such as copper and zinc, pesticides such as DDT and endosulfan and organic compounds such as benzene and halomethanes.

These Plans also spelled out time frames for incorporating the numbers into permits for all types of Board-regulated point source discharges, such as industrial, publicly owned treatment works and reclaimed water. Actions to be taken by nonpoint source discharges, such as agricultural drainage, were consistent with the State Board's Nonpoint Source Management Plan.

In November 1992, the State Board amended the Plans by adopting objectives for the remaining priority pollutants and language clarifying the mechanism by which "performance goals" are implemented.

The Plans were challenged in court soon after their adoption. Sacramento County Superior Court entered a judgment in favor of the petitioners and directed the State Board to rescind the Resolution by which it adopted the plans, thereby leaving California without water quality objectives for toxic pollutants required by the federal Clean Water Act.

The State Board is anticipating that it will readopt water quality objectives required by the Clean Water Act as quickly as possible in a manner that is consistent with the directives in the Superior Court decision.

## "HOW BEST TO MEET OUR MANDATES"

*In response to Governor Wilson's request "to identify how best the State and Regional Boards can meet their mandates to protect the water resources of the State...", the State Board in 1993 initiated an External Program Review.*

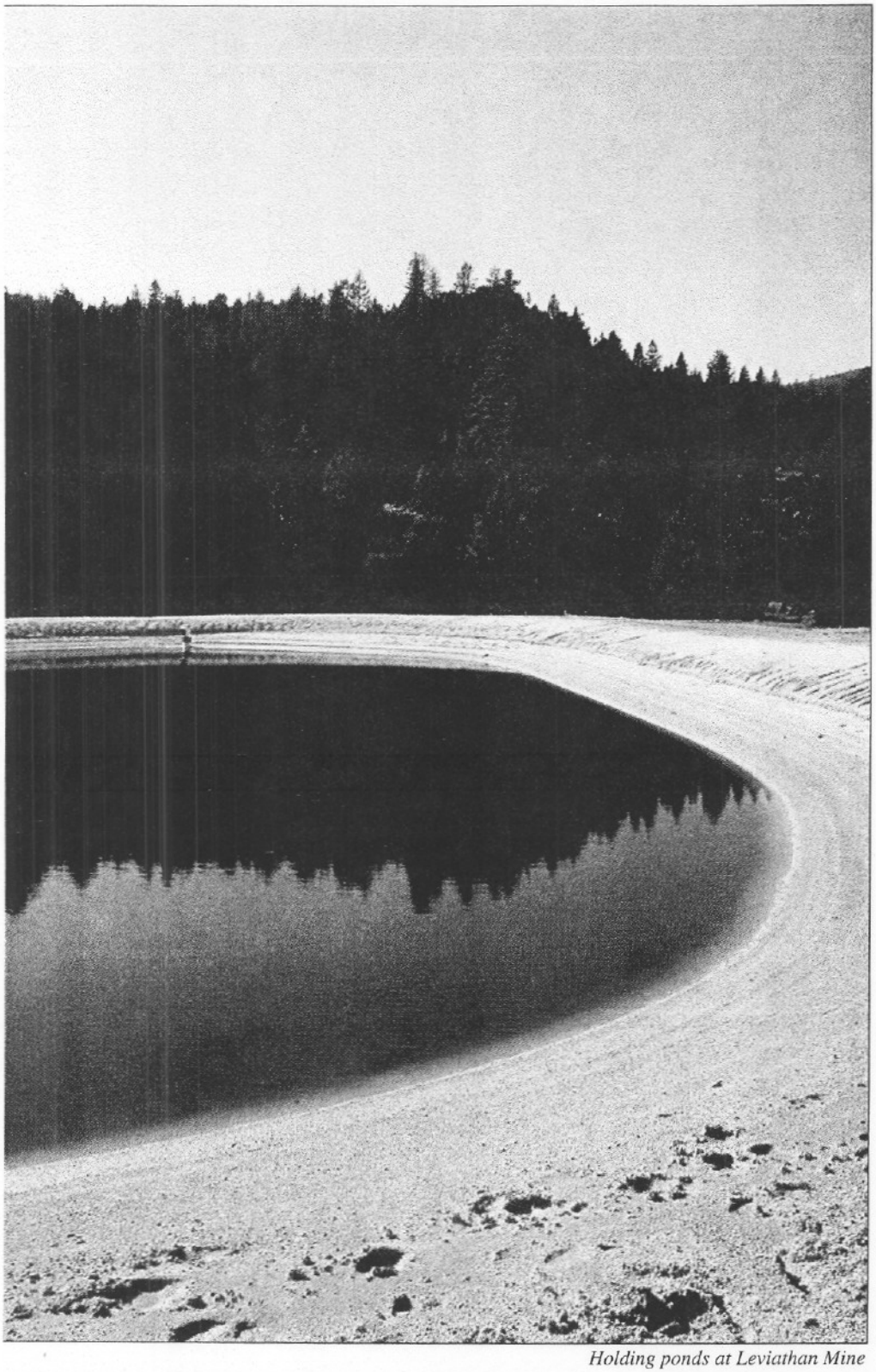
*Participants in the review process included water experts, environmental representatives, the regulated community and members of the general public.*

*The review was divided into four topical areas and coordinated by a review committee. The four areas are:*

- *Regional Consistency*
- *Ground Water Protection*
- *Permit Reform*
- *Water Resources*

*Following this intensive analysis, a final report was submitted to the State Board which reviewed the findings and submitted its own comments to accompany the report as it went forward to the Governor's Office.*

*Implementing recommendations from the External Program Review will be done through a Strategic Plan for the State and Regional Boards. This Plan will set final priorities and spell out their implementation. Responsibility for developing the Plan rests with a steering committee of State and Regional Board representatives together with general staff consultation and involvement. The Strategic Plan is scheduled for completion by mid-1995.*



*Holding ponds at Leviathan Mine*

## MINING WASTES

Acid mine drainage (AMD) from abandoned hardrock mines, such as Penn Mine in Calaveras County, Leviathan Mine in Alpine County and Iron Mountain Mine in Shasta County, is potentially the single largest cause of adverse environmental impact resulting from mining activities. Once started, the formation of AMD becomes self-perpetuating and very difficult to control. With immense reserves of unoxidized sulfide minerals still available at these large abandoned mine waste piles for future AMD formation, the State's struggle with this environmental scourge has only begun. In addition, there is the unknown effects of AMD from many small abandoned mines.

Despite the fact that the damaging effects of AMD have been long recognized, there are no State or federal programs that specifically address AMD control or the remediation of abandoned mine sites. The Regional Boards have achieved marginal success in controlling pollution from abandoned mines, primarily by sealing mine portals with concrete plugs or by constructing surface impoundments. To remain effective, however, abatement measures implemented at these sites must be maintained for a very long time.

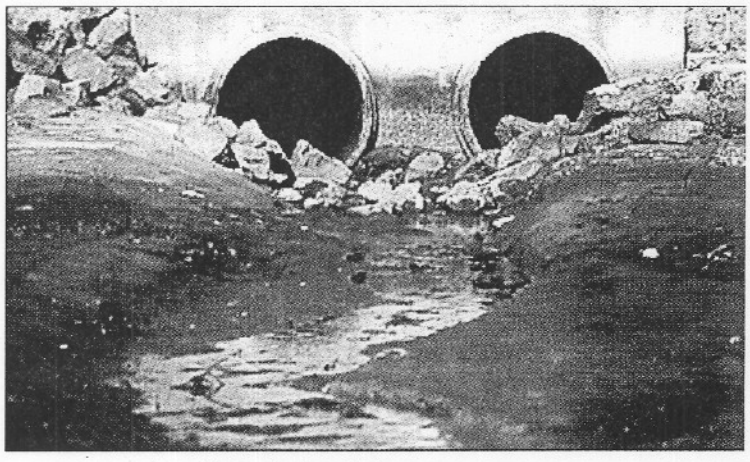
Looking towards the future, the State Board is developing new mining regulations to directly address AMD. Their primary aim will be to prevent new mines from becoming acid generators.

## STORM WATER DISCHARGES

During and following heavy rains, material discharged into a storm drain is carried directly to surface and ocean water. Because of the adverse effect of these discharges, the Clean Water Act now requires that communities and industries obtain National Pollutant Discharge Elimination System (NPDES) permits to discharge storm water to urban storm sewer systems.

The first phase of the federal storm water program requires communities with a separate storm sewer system serving over 100,000 people to be permitted. So far, the Regional Boards have permitted 11 urban areas with populations over 100,000. By fall 1994, an additional 19 urban areas had been permitted.

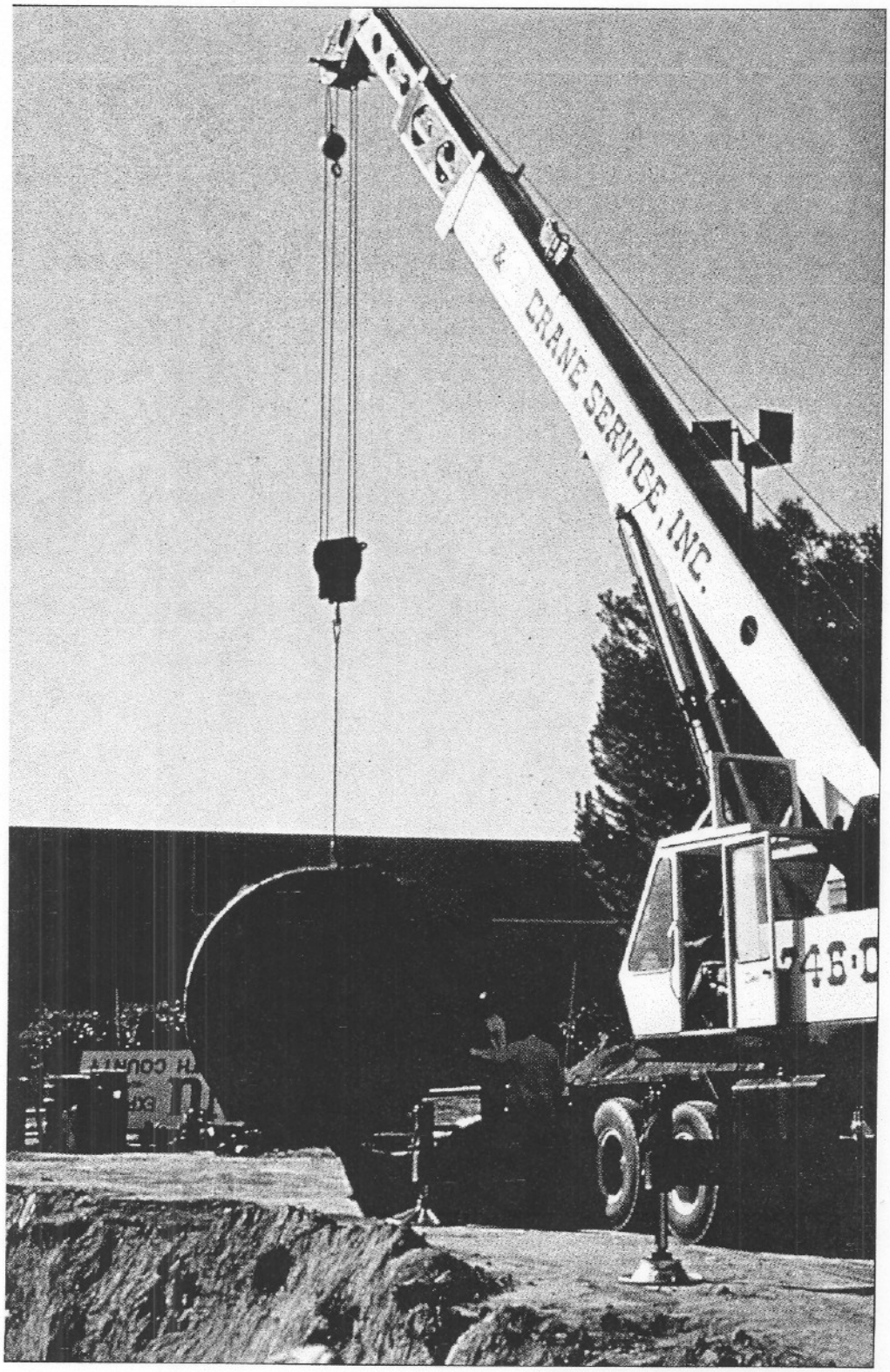
The USEPA program also requires storm water runoff from 11 broad and diverse categories of industrial activities to be permitted. These industrial activities include certain manufacturing facilities, large dairies, landfills, automobile storage yards, steam electric power generating facilities, transportation facilities, wastewater treatment plants, hazardous waste treatment, storage, and disposal facilities and construction activity where there is a land disturbance of five acres or more.



*Storm drain outlets*

Industrial storm water runoff can be regulated by individual or general NPDES permits. To reduce the administrative permitting burden, the State Board adopted two statewide general NPDES permits. The first adopted in November 1991, is the General Industrial Activities Storm Water Permit. It covers most of the federally defined industrial activities, except construction. In August 1992, the State Board adopted the General Construction Activity Storm Water Permit to regulate storm water runoff from construction sites.

Both general permits are pollution prevention oriented. The dischargers are required to develop a Storm Water Pollution Prevention Plan to identify and implement control measures to minimize pollutants in storm water runoff. Both permits require the discharger to perform regular site inspections and visual observations to ensure control practices are in place.




*Removal of leaking underground tank*

## STORAGE TANK PROGRAMS

Since enactment of the Underground Storage Tank (UST) laws in 1983, almost 25,700 leaking underground tanks, the majority of which contain petroleum, have threatened California's ground water resources. The State and Regional Boards and local agencies oversee compliance with tank laws and protect ground water quality through leak prevention and cleanup.

Local agencies administer the tank-permitting program, issuing operating and closure permits to tank owners. This program helps prevent future water quality problems by permitting and monitoring tanks. When a tank is no longer used, a closure permit must be secured and the tank removed or closed in place.

The State Board currently contracts with 21 local agencies to oversee their local tank-leak cleanup program. Oversight in those jurisdictions not included in the local oversight programs is generally administered by the Regional Boards. Once an underground tank problem is identified, the Regional Board or local agency determines the party responsible for the necessary investigation and subsequent cleanup activities, and oversee these activities until complete.

The State Board cost recovers from sites within the 21 local oversight programs. A portion of these funds is used to pay for program administration and ongoing oversight by the Regional Boards and local agencies.

In January 1990, aboveground tanks were also judged a potential threat to surface and ground water and the Aboveground Petroleum Storage Act was enacted by the Legislature. Basically, the Act applies to owners and operators of aboveground petroleum storage tank facilities with a single tank capacity greater than 660 gallons or with a cumulative storage capacity of greater than 1,320 gallons. Such facilities are required to file biennial storage statements accompanied by a fee. Spill prevention measures must be developed for each site. If Regional Boards determine that discharges from these facilities will affect either surface waters, sensitive ecosystems or ground water a detailed monitoring program also must be established.

As of January 1995, 2,601 aboveground tank facility storage statements had been filed. The biennial fees collected during 1994 were approximately $1.8 million. These fees are allocated to the Regional Boards who conduct inspections of aboveground tank facilities.

## SOUTHERN CALIFORNIA GROUND WATER CLEANUP

Areas within both the San Gabriel and San Fernando Valleys Ground Water Basins are on the national Superfund list because of the elevated levels of toxic chemicals found there. There are over 100 drinking water wells whose water cannot be used for domestic supply without blending or treatment. The State and Regional Boards are part of a multi-agency approach, including USEPA, to find solutions to ground water contamination in Southern California. Cleanup efforts in both San Gabriel and San Fernando Valleys have included the establishment of Operable Units (OU). In these cases, the term OU is used to describe a geographic area of contamination and includes various investigation and cleanup solutions.

San Gabriel Valley Ground Water Basin accomplishments:

- Los Angeles Regional Board has inspected over 2,600 sites, is overseeing the investigations at over 500 sites and is overseeing cleanup actions at more than 260 sites.
- Since 1990 a total of nine well-head ground water treatment systems have gone on line treating about 25,000 acre-feet of contaminated water. The construction of one of these well-head treatment systems (The Arrow Well) was financed by a $2 million grant from the State Board's Cleanup and Abatement Account in 1992. Construction for two additional well-head treatment systems is underway and is due for completion in July 1995, with a combined total volume of 5,000 acre-feet of treated ground water.
- About two dozen Potential Responsible Parties have received "No Further Action" letters from the Regional Board, thus facilitating sale or development of the properties.
- The San Gabriel Basin Water Quality Authority was formed to coordinate and facilitate the cleanup efforts in the basins.
- USEPA signed an Administrative Consent Order with 42 facilities to conduct a Remedial Investigation/Feasibility Study for the Puente Valley OU.
- USEPA signed a Record of Decision for design and construction of a 19,000 gallons-per-minute extraction from multiple sites that is pumped to a central treatment system for the Baldwin Park OU.

*Ground water pumping*

The San Fernando Valley cleanup of contaminated ground water is moving ahead. This is largely due to the cooperation among the participating water agencies, particularly the Los Angeles Department of Water and Power which took a leadership role in cleanup activities. Although treatment efforts were hampered by the drought, the Los Angeles Regional Board has inspected over 1,800 facilities and oversees 450 soil and ground water investigations.

1990-1994 San Fernando Valley Ground Water Basin accomplishments:

- Two areas of Lockheed have been cleared and title transferred. A third is in the process of being cleared and title transferred to the Burbank Airport Authority.
- Burbank OU extraction and treatment plant is completed. Waiting on blending plant to begin ground water cleanup.
- Consent decree signed with responsible parties in North and South Glendale areas with design of treatment plant underway.
- Regional Board staff continues to participate in several San Fernando Valley Interagency coordinating committees which include Los Angeles Department of Water and Power, USEPA and cities of Glendale and Burbank.

## DEPARTMENT OF DEFENSE BASE CLOSURES

The 1988, 1990 and 1993 federal Base Closure Act amendments mandated that 22 major California military bases be closed by 1999. All of these bases have been identified as contaminated or potentially contaminated with hazardous substances and waste. Nine of these 22 contaminated bases are on the National Priority List (NPL), which is USEPA's Superfund list of the nation's worst hazardous waste sites.

The 22 closing bases are as follows:

- George Air Force Base**
- Hamilton Army Air Field
- Mather Air Force Base**
- Norton Air Force Base**
- Presidio Army Base
- Salton Sea Navy Base
- Castle Air Force Base**
- Fort Ord**
- Hunter's Point Annex**
- Long Beach Naval Station
- Marine Corps Air Station
- Naval Air Station, Moffett Field**
- Sacramento Army Depot**
- El Toro Marine Corps Air Station**
- March Air Force Base*
- Mare Island Naval Shipyard
- Naval Air Station
- Naval Aviation Depot
- Naval Hospital
- Naval Public Works Center
- Naval Training Center
- Treasure Island Naval Station

(*= Major Realignment;**=NPL base)

As State agencies responsible for protecting California's water quality, the State and Regional Boards have been involved in overseeing cleanups at the 22 contaminated closing or realigned bases. Because base closures will have a significant impact on California's economy, the State is pursuing the reuse of all or parts of each closing base. The greatest obstacle to bringing closing bases into productive public use is environmental restoration. With the largest base closures looming on the horizon, California's future depends on its ability to effect efficient environmental restoration.

To streamline and consolidate these efforts, James M. Strock, Secretary for Cal/EPA, designated the Department of Toxic Substances Control (DTSC) as the multimedia regulatory lead agency for military base cleanups in the State. DTSC will provide a single unified voice for Cal/EPA regulatory agencies. The State and Regional Boards in partnership with DTSC, USEPA, local government and the military are working to implement this "One Voice" concept and expedite cleanups.

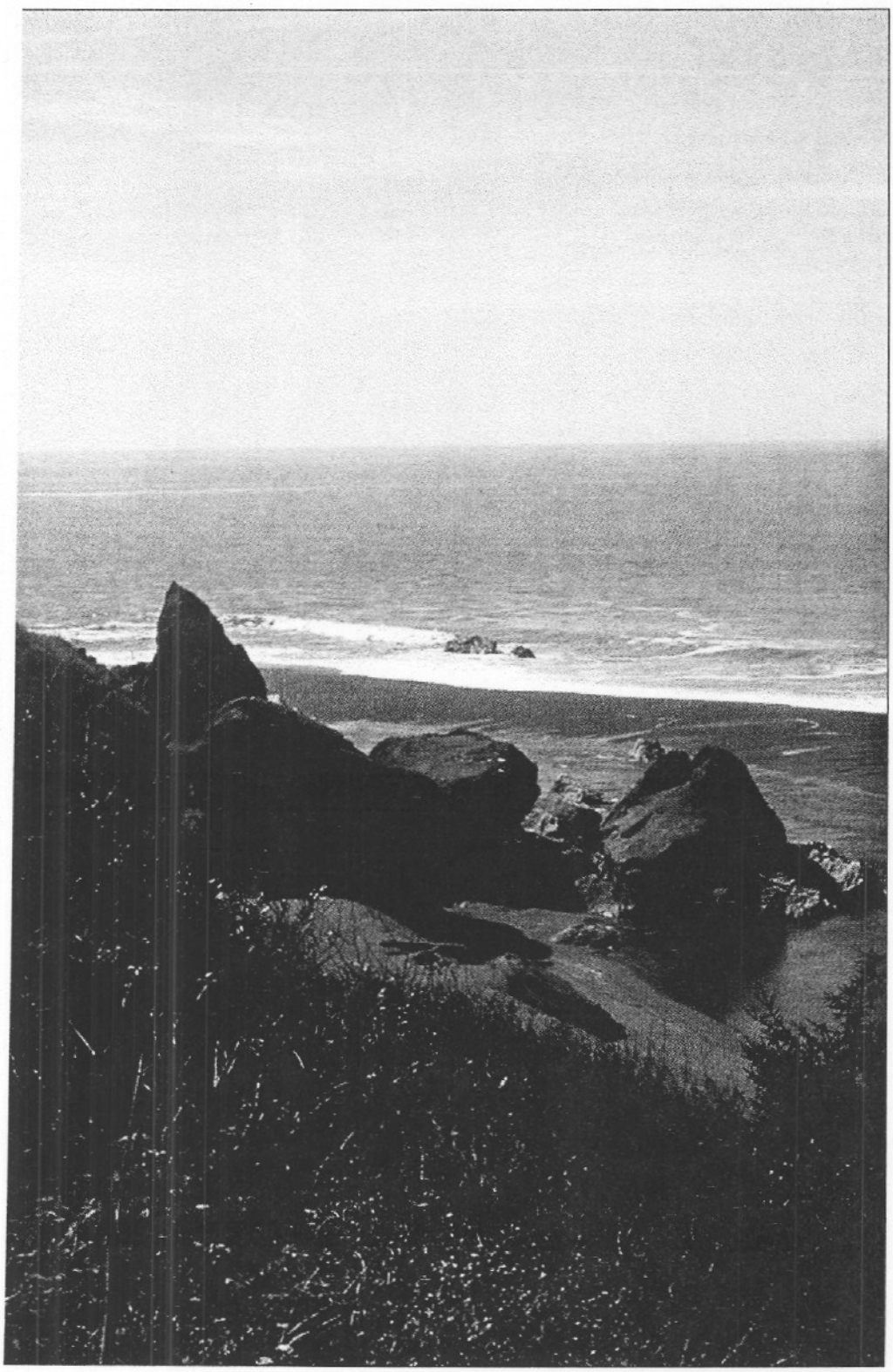
## THE CREATION OF CAL/EPA

*On July 17, 1991, Governor Wilson officially created the California Environmental Protection Agency (Cal/EPA) fulfilling a campaign promise he had made to unify and coordinate the State's environmental enforcement efforts.*

*Cal/EPA is comprised of the following Boards and Departments: the State and Regional Boards; the Air Resources Board, the Department of Pesticide Regulation, the Department of Toxic Substances Control, the Office of Environmental Health Hazard Assessment and the California Integrated Waste Management Board.*

*As Secretary for Environmental Protection, James M. Strock and Agency staff are responsible for coordinating the activities of its various Boards and Departments to assure an integrated, consistent and scientifically sound approach to environmental protection in California.*

# Ocean Water Protection



*Pacific coastline from Russian River*

## CALIFORNIA OCEAN PLAN

The California Ocean Plan sets standards to protect coastal waters. The Plan contains numerical standards for toxic chemicals, bacteria, physical waste characteristics and toxicity as well as narrative standards for protection of aquatic life. First adopted by the State Board in 1972, the Ocean Plan was most recently amended in 1990. In November 1991, as part of the triennial review process, the State Board held a public hearing to identify potential revisions to the Plan. Over 35 issues were identified at the hearing including revision of bacterial standards, revision of chronic toxicity testing protocols, reexamination of existing chemical objectives and the effects of discharges from desalination facilities.

State Board staff followed up on the hearing by preparing a document that describes the issues, summarizes comments received and outlines possible courses of action to resolve them. That document, California Ocean Plan, Triennial Review Workplan, November 1991-October 1994, was adopted by the State Board in October 1992.

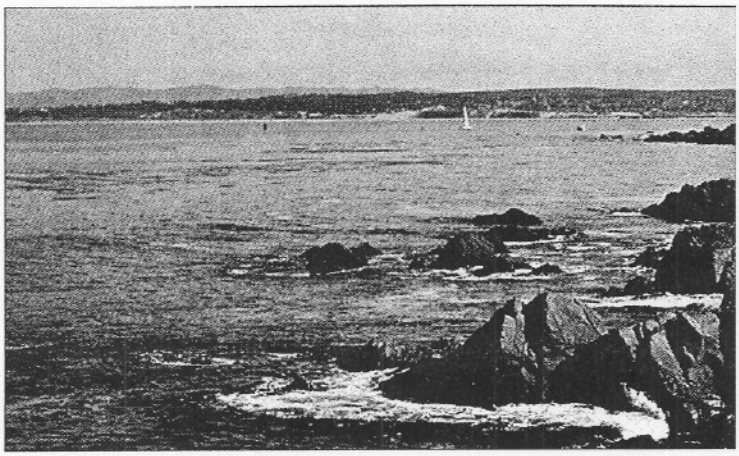
Since approval of the Triennial Review Workplan, studies have been initiated to investigate several issues in depth. Staff will bring proposed recommendations for Plan amendments for Board approval in 1995.

## MONTEREY BAY NATIONAL MARINE SANCTUARY

Visitors from all over the world come to California's central coast to marvel at its incredible beauty. Marine inhabitants include a wide array of threatened or endangered species - sea otters, a variety of whales, porpoises and sea birds - and some of the country's largest kelp forests, which provide shelter and nourishment to countless other marine creatures. It is also geologically distinct, containing North America's largest underwater canyon - a cleft in the ocean floor that plunges deeper than the Grand Canyon.

The Monterey Bay National Marine Sanctuary was officially designated in September 1992 as the Nation's 11th marine sanctuary. Management of the Sanctuary is the responsibility of the National Oceanic and Atmospheric Administration's (NOAA) National Ocean Service, which will regulate and oversee all activities which could affect the marine environment within the Sanctuary.

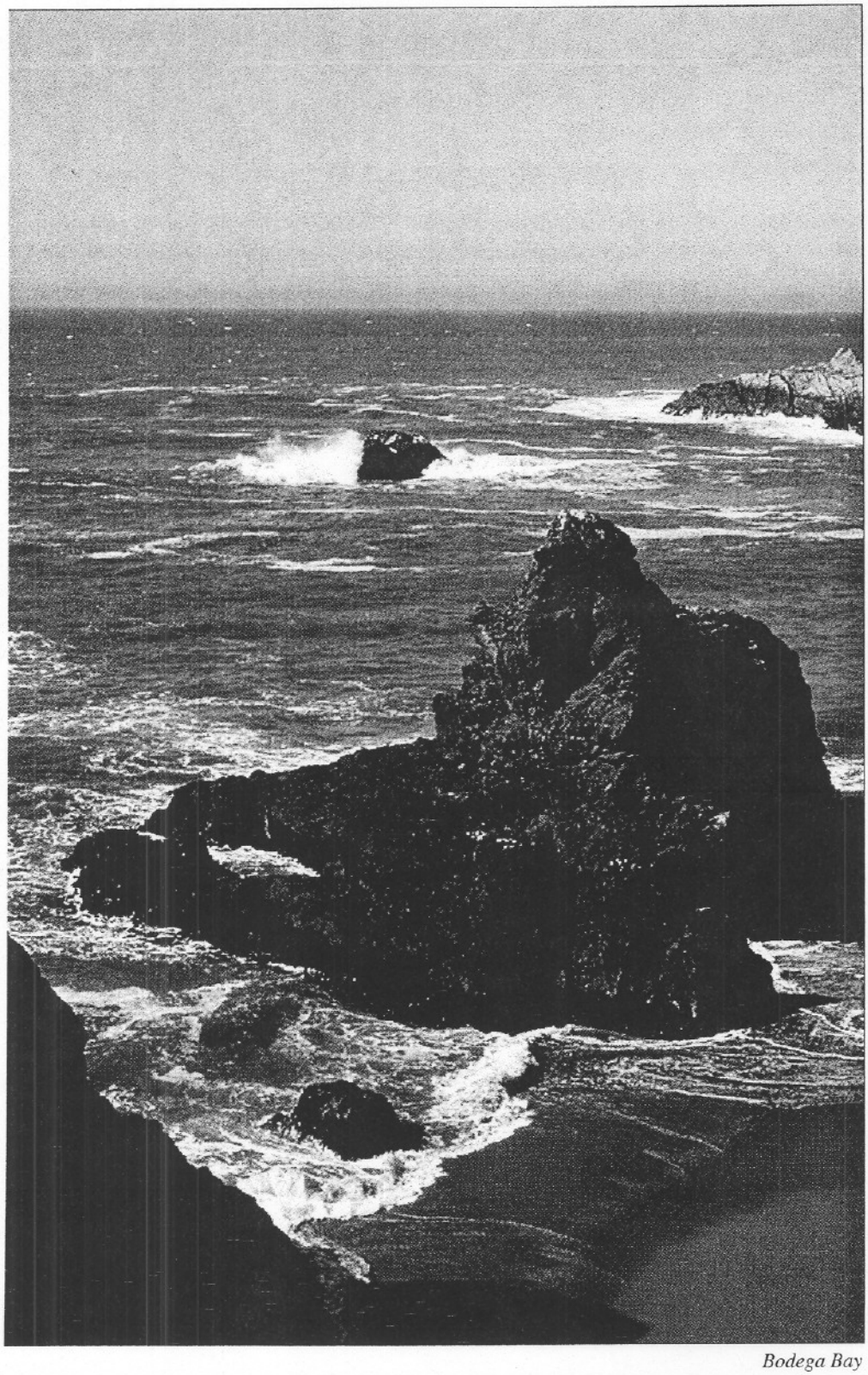
Representatives of the San Francisco Bay and Central Coast Regional Boards, the State Board, the Coastal Commission, Cal/EPA, USEPA and the Association of Monterey Bay Area Governments worked with NOAA for almost a year developing a Memorandum of Agreement to define permitting procedures for activities which could affect water quality in the Sanctuary. The agreement recognizes the effectiveness of California's water quality regulatory programs, provides for NOAA review of waste discharge applications and permits and coordinates all agencies' nonpoint source control activities.



*Monterey Bay coastline*

NOAA began an 18-month process to develop a water quality protection program for the Sanctuary in January 1994. The kickoff event for the program convened a group of over 100 water quality experts to identify issues and develop strategies to protect Sanctuary water quality.

Sanctuary boundaries extend from the Gulf of the Farallones National Marine Sanctuary off San Francisco's peninsula to Cambria in San Luis Obispo County and extend seaward to the 12-mile limit. Encompassing about 25 percent of California's coastline, the Sanctuary is the largest protected marine zone in the nation and the fourth to be named in California.



*Bodega Bay*

## BAY PROTECTION AND TOXIC CLEANUP PROGRAM

Increasingly, California's enclosed bays, estuaries and coastal waters are faced with pollution problems. Specifically, agricultural and urban runoff, dredged materials, treated municipal and industrial discharges have caused California's nearshore pollution problems.

Through this new program, the State Board will identify toxic hot spots, make plans for the cleanup or pollution mitigation at the sites and incorporate pollution prevention strategies in Basin Plans.

Toxic hot spots, as defined by law, are areas in coastal waters, enclosed bays, estuaries or adjacent waters where pollution poses a threat to aquatic life, wildlife, fisheries or human health; may adversely affect the beneficial uses of the water or exceed the State's water or sediment quality objectives.

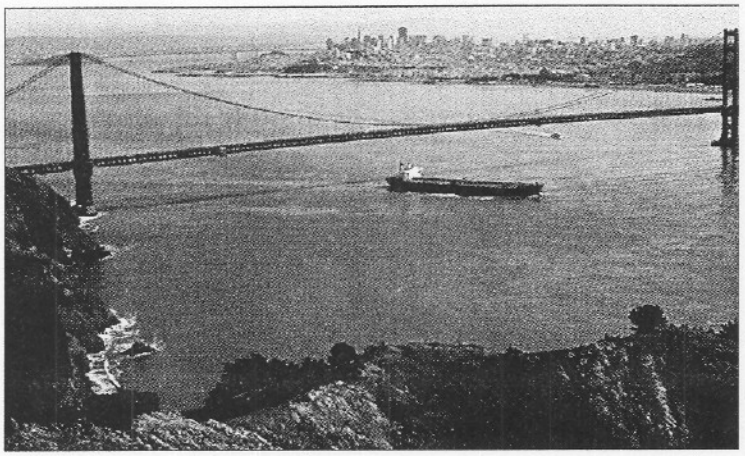
As part of this program, the State and Regional Boards (through a contract with the Department of Fish and Game) have begun the task of identifying toxic hot spots. Generally, the approach being implemented involves first screening candidate toxic hot spots and then going back and confirming the problems found. The program has sampled over 600 sites,

performed over 1500 toxicity tests and measured metals and organic chemistry in over 200 samples. Reports on these data are being prepared.

The program has initiated development of both regional and statewide toxic hot spot cleanup plans. Cleanup plans will contain, at a minimum, a priority ranking of all known toxic hot spots covered by the plan, a description of each hot spot including a characterization of the pollutants present at the site, an assessment of the most likely source or sources of pollutants and estimates of the total cost to implement the plan, estimates of the costs that can be recovered from responsible parties, an assessment of the actions required to remedy the hot spot and a two-year expenditure schedule identifying State funds needed to implement the plan. The program is currently developing and revising guidelines for the consistent implementation of the program statewide.

The program implementation is being assisted by an advisory committee with members representing trade associations whose members are businesses that use bay, estuary or coastal waters of the State; dischargers covered by the program and environmental, public interest, public health and wildlife conservation organizations.

The program is funded by fees collected from a variety of dischargers subject to NPDES permits or waste discharge requirements, operators of municipal storm drain systems, boat construction/repair facilities operators, boat marina operators, harbor/port authorities and dredging operators.



*San Francisco Bay*

Established by 1987 amendments of the Clean Water Act, the National Estuary Program (NEP) addresses two situations concerning the nation's estuarine habitats: improvement and maintenance of water quality. In California, two coastal estuaries have won nomination for the NEP: San Francisco Bay and Santa Monica Bay.

*Santa Monica Bay*

## Santa Monica Bay

The Santa Monica Bay Restoration Project was formed when, in 1988, USEPA named Santa Monica Bay to the NEP. As an NEP, the Project's primary goal was to develop a Comprehensive Conservation and Management Plan (CCMP) to serve as a blueprint for restoring and protecting Santa Monica Bay and its resources. The public review draft was completed in April 1994. Revised over the summer, it was approved by the Governor in December 1994 and submitted to USEPA.

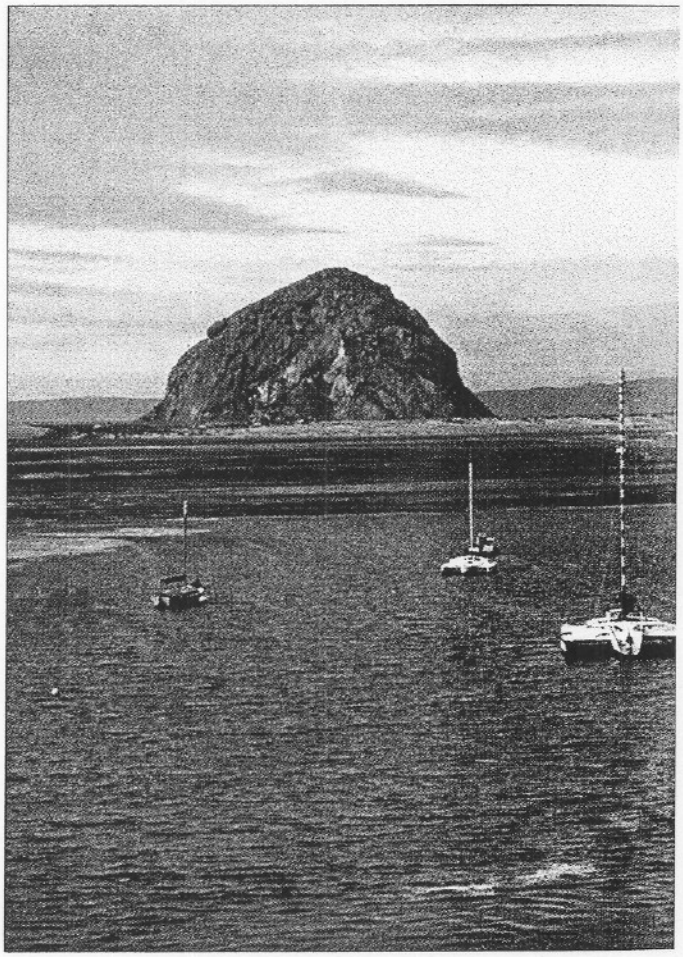
The Bay Restoration Plan is an ambitious effort that will be implemented over a five-year period and it includes approximately 250 actions to be carried out in the following areas:

- Pollution prevention.
- Management of stormwater and urban runoff.
- Protecting the public from potential health risks associated with swimming in Bay waters and consuming bay seafood.
- Restoring, protecting and managing bay habitats and resources (including wetlands, beaches and the marine ecosystem).
- Watershed planning.
- Public education and involvement.
- Comprehensive monitoring and research.

## San Francisco Bay

The San Francisco Bay Estuary Project is a joint effort by USEPA, the State Board and the San Francisco Bay and Central Valley Regional Boards to develop a management plan for the San Francisco Bay Estuary. The Project's Management Committee is charged with developing a CCMP to protect the "physical, chemical and biological integrity of the Bay and Delta". The Management Committee released a draft CCMP in August 1992.

The Project's accomplishments over the past four years include the publication of in-depth scientific status and trends reports on issues



*Morro Bay*