

APPENDIX A-1

State Policy for Water Quality Control (1972)

CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

STATE POLICY FOR
WATER QUALITY CONTROL

I. FOREWORD

To assure a comprehensive statewide program of water quality control, the California Legislature by its adoption of the Porter-Cologne Water Quality Control Act in 1969 set forth the following statewide policy:

The people of the state have a primary interest in the conservation, control, and utilization of the water resources, and the quality of all the waters shall be protected for use and enjoyment.

Activities and factors which may affect the quality of the waters shall be regulated to attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible.

The health, safety, and welfare of the people requires that there be a statewide program for the control of the quality of all the waters of the state. The state must be prepared to exercise its full power and jurisdiction to protect the quality of waters from degradation.

The waters of the state are increasingly influenced by interbasin water development projects and other statewide considerations. Factors of precipitation, topography, population, recreation, agriculture, industry, and economic development vary from region to region. The statewide program for water quality control can be most effectively administered regionally, within a framework of statewide coordination and policy.

To carry out this policy, the Legislature established the State Water Resources Control Board and nine California Regional Water Quality Control Boards as the principal state agencies with primary responsibilities for the coordination and control of water quality. The State Board is required pursuant to legislative directives set forth in the California Water Code (Division 7, Chapter 3, Article 3, Sections 13140 Ibid) to formulate and adopt state policy for water quality control consisting of all or any of the following:

Adopted by the State Water Resources Control Board by motion of July 6, 1972.

I. (continued)

Water quality principles and guidelines for long-range resource planning, including groundwater and surface water management programs and control and use of reclaimed water.

Water quality objectives at key locations for planning and operation of water resource development projects and for water quality control activities.

Other principles and guidelines deemed essential by the State Board for water quality control.

II. GENERAL PRINCIPLES

The State Water Resources Control Board hereby finds and declares that protection of the quality of the waters of the State for use and enjoyment by the people of the State requires implementation of water resources management programs which will conform to the following general principles:

1. Water rights and water quality control decisions must assure protection of available fresh water and marine water resources for maximum beneficial use.
2. Municipal, agricultural, and industrial wastewaters must be considered as a potential integral part of the total available fresh water resource.
3. Coordinated management of water supplies and wastewaters on a regional basis must be promoted to achieve efficient utilization of water.
4. Efficient wastewater management is dependent upon a balanced program of source control of environmentally hazardous substances^{1/}, treatment of wastewaters, reuse of reclaimed water, and proper disposal of effluents and residuals.
5. Substances not amenable to removal by treatment systems presently available or planned for the immediate future must be prevented from entering sewer systems

^{1/} Those substances which are harmful or potentially harmful even in extremely small concentration to man, animals, or plants because of biological concentration, acute or chronic toxicity, or other phenomenon.

II. 5. (continued)

in quantities which would be harmful to the aquatic environment, adversely affect beneficial uses of water, or affect treatment plant operation. Persons responsible for the management of waste collection, treatment, and disposal systems must actively pursue the implementation of their objective of source control for environmentally hazardous substances. Such substances must be disposed of such that environmental damage does not result.

6. Wastewater treatment systems must provide sufficient removal of environmentally hazardous substances which cannot be controlled at the source to assure against adverse effects on beneficial uses and aquatic communities.
7. Wastewater collection and treatment facilities must be consolidated in all cases where feasible and desirable to implement sound water quality management programs based upon long-range economic and water quality benefits to an entire basin.
8. Institutional and financial programs for implementation of consolidated wastewater management systems must be tailored to serve each particular area in an equitable manner.
9. Wastewater reclamation and reuse systems which assure maximum benefit from available fresh water resources shall be encouraged. Reclamation systems must be an appropriate integral part of the long-range solution to the water resources needs of an area and incorporate provisions for salinity control and disposal of nonreclaimable residues.
10. Wastewater management systems must be designed and operated to achieve maximum long-term benefit from the funds expended.
11. Water quality control must be based upon latest scientific findings. Criteria must be continually refined as additional knowledge becomes available.
12. Monitoring programs must be provided to determine the effects of discharges on all beneficial water uses including effects on aquatic life and its diversity and seasonal fluctuations.

III. PROGRAM OF IMPLEMENTATION

Water quality control plans and waste discharge requirements hereafter adopted by the State and Regional Boards under Division 7 of the California Water Code shall conform to this policy.

This policy and subsequent State plans will guide the regulatory, planning, and financial assistance programs of the State and Regional Boards. Specifically, they will (1) supersede any regional water quality control plans for the same waters to the extent of any conflict, (2) provide a basis for establishing or revising waste discharge requirements when such action is indicated, and (3) provide general guidance for the development of basin plans.

Water quality control plans adopted by the State Board will include minimum requirements for effluent quality and may specifically define the maximum constituent levels acceptable for discharge to various waters of the State. The minimum effluent requirements will allow discretion in the application of the latest available technology in the design and operation of wastewater treatment systems. Any treatment system which provides secondary treatment, as defined by the specific minimum requirements for effluent quality, will be considered as providing the minimum acceptable level of treatment. Advanced treatment systems will be required where necessary to meet water quality objectives.

Departures from this policy and water quality control plans adopted by the State Board may be desirable for certain individual cases. Exceptions to the specific provisions may be permitted within the broad framework of well established goals and water quality objectives.

APPENDIX A-2

Statement of Policy with Respect to Maintaining High Quality of Waters in California (Anti-Degradation Policy)

STATE WATER RESOURCES CONTROL BOARD

RESOLUTION NO. 68-16

STATEMENT OF POLICY WITH RESPECT TO
MAINTAINING HIGH QUALITY OF WATERS IN CALIFORNIA

WHEREAS the California Legislature has declared that it is the policy of the State that the granting of permits and licenses for unappropriated water and the disposal of wastes into the waters of the State shall be so regulated as to achieve highest water quality consistent with maximum benefit to the people of the State and shall be controlled so as to promote the peace, health, safety and welfare of the people of the State; and

WHEREAS water quality control policies have been and are being adopted for waters of the State; and

WHEREAS the quality of some waters of the State is higher than that established by the adopted policies and it is the intent and purpose of this Board that such higher quality shall be maintained to the maximum extent possible consistent with the declaration of the Legislature;

NOW, THEREFORE, BE IT RESOLVED:

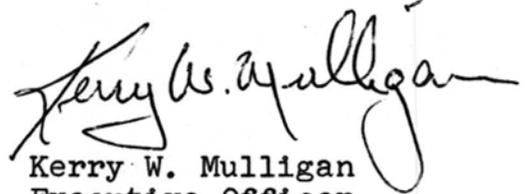
1. Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies.
2. Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained.
3. In implementing this policy, the Secretary of the Interior will be kept advised and will be provided with such information as he will need to discharge his responsibilities under the Federal Water Pollution Control Act.

BE IT FURTHER RESOLVED that a copy of this resolution be forwarded to the Secretary of the Interior as part of California's water quality control policy submission.

CERTIFICATION

The undersigned, Executive Officer of the State Water Resources Control Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on October 24, 1968.

Dated: October 28, 1968

A handwritten signature in cursive script, reading "Kerry W. Mulligan". The signature is written in dark ink and is positioned above the typed name and title.

Kerry W. Mulligan
Executive Officer
State Water Resources
Control Board

APPENDIX A-3

Water Quality Control Plan for Control of Temperature in Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (Thermal Plan)

State Water Resources Control Board

WATER QUALITY CONTROL PLAN
FOR CONTROL OF
TEMPERATURE IN THE
COASTAL AND INTERSTATE WATERS
AND ENCLOSED BAYS AND ESTUARIES
OF CALIFORNIA¹

DEFINITION OF TERMS

1. Thermal Waste - Cooling water and industrial process water used for the purpose of transporting waste heat.
2. Elevated Temperature Waste - Liquid, solid, or gaseous material including thermal waste discharged at a temperature higher than the natural temperature of receiving water. Irrigation return water is not considered elevated temperature waste for the purpose of this plan.
3. Natural Receiving Water Temperature - The temperature of the receiving water at locations, depths, and times which represent conditions unaffected by any elevated temperature waste discharge or irrigation return waters.
4. Interstate Waters - All rivers, lakes, artificial impoundments, and other waters that flow across or form a part of the boundary with other states or Mexico.
5. Coastal Waters - Waters of the Pacific Ocean outside of enclosed bays and estuaries which are within the territorial limits of California.
6. Enclosed Bays - Indentations along the coast which enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays will include all bays where the narrowest distance between headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. This definition includes but is not limited to the following: Humboldt Bay, Bodega Harbor, Tomales Bay, Drakes Estero, San Francisco Bay, Morro Bay, Los Angeles Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay.
7. Estuaries and Coastal Lagoons - Waters at the mouths of streams which serve as mixing zones for fresh and ocean water during a major portion of the year. Mouths of streams which are temporarily separated from the ocean by sandbars shall be considered as estuaries. Estuarine waters will generally be considered to extend from a bay or the open ocean to the upstream limit of tidal action but may be considered to

¹ This plan revises and supersedes the policy adopted by the State Board on January 7, 1971, and revised October 13, 1971, and June 5, 1972.

extend seaward if significant mixing of fresh and saltwater occurs in the open coastal waters. The waters described by this definition include but are not limited to the Sacramento-San Joaquin Delta as defined by Section 12220 of the California Water Code, Suisun Bay, Carquinez Strait downstream to Carquinez Bridge and appropriate areas of Smith River, Klamath River, Mad River, Eel River, Noyo River, and Russian River.

8. Cold Interstate Waters - Streams and lakes having a range of temperatures generally suitable for trout and salmon including but not limited to the following: Lake Tahoe, Truckee River, West Fork Carson River, East Fork Carson River, West Walker River and Lake Topaz, East Walker River, Minor California-Nevada Interstate Waters, Klamath River, Smith River, Goose Lake, and Colorado River from the California-Nevada stateline to the Needles-Topoc Highway Bridge.
9. Warm Interstate Waters - Interstate streams and lakes having a range of temperature generally suitable for warm water fishes such as bass and catfish. This definition includes but is not limited to the following: Colorado River from the Needles-Topoc Highway Bridge to the northerly international boundary of Mexico, Tijuana River, New River, and Alamo River.
10. Existing Discharge - Any discharge (a) which is presently taking place, or (b) for which waste discharge requirements have been established and construction commenced prior to the adoption of this plan, or (c) any material change in an existing discharge for which construction has commenced prior to the adoption of this plan. Commencement of construction shall include execution of a contract for onsite construction or for major equipment which is related to the condenser cooling system.

Major thermal discharges under construction which are included within this definition are:

- A. Diablo Canyon Units 1 and 2, Pacific Gas and Electric Company.
 - B. Ormond Beach Generating Station Units 1 and 2, Southern California Edison Company.
 - C. Pittsburg No. 7 Generating Plant, Pacific Gas and Electric Company.
 - D. South Bay Generating Plant Unit 4 and Encina Unit 4, San Diego Gas and Electric Company.
11. New Discharge - Any discharge (a) which is not presently taking place unless waste discharge requirements have been established and construction as defined in Paragraph 10 has commenced prior to adoption of this plan or (b) which is presently



taking place and for which a material change is proposed but no construction as defined in Paragraph 10 has commenced prior to adoption of this plan.

12. Planktonic Organism - Phytoplankton, zooplankton and the larvae and eggs of worms, molluscs, and arthropods, and the eggs and larval forms of fishes.
13. Limitations or Additional Limitations - Restrictions on the temperature, location, or volume of a discharge, or restrictions on the temperature of receiving water in addition to those specifically required by this plan.

SPECIFIC WATER QUALITY OBJECTIVES

1. Cold Interstate Waters

- A. Elevated temperature waste discharges into cold interstate waters are prohibited.

2. Warm Interstate Waters

- A. Thermal waste discharges having a maximum temperature greater than 5°F above natural receiving water temperature are prohibited.
- B. Elevated temperature wastes shall not cause the temperature of warm interstate waters to increase by more than 5°F above natural temperature at any time or place.
- C. Colorado River - Elevated temperature wastes shall not cause the temperature of the Colorado River to increase above the natural temperature by more than 5°F or the temperature of Lake Havasu to increase by more than 3°F provided that such increases shall not cause the maximum monthly temperature of the Colorado River to exceed the following:

January	60°F	July	90°F
February	65°F	August	90°F
March	70°F	September	90°F
April	75°F	October	82°F
May	82°F	November	72°F
June	86°F	December	65°F

- D. Lost River - Elevated temperature wastes discharged to the Lost River shall not cause the temperature of the receiving water to increase by more than 2°F



when the receiving water temperature is less than 62°F, and 0°F when the receiving water temperature exceeds 62°F.

- E. Additional limitations shall be imposed when necessary to assure protection of beneficial uses.

3. Coastal Waters

A. Existing discharges

- (1) Elevated temperature wastes shall comply with limitations necessary to assure protection of the beneficial uses and areas of special biological significance.

B. New discharges

- (1) Elevated temperature wastes shall be discharged to the open ocean away from the shoreline to achieve dispersion through the vertical water column.
- (2) Elevated temperature wastes shall be discharged a sufficient distance from areas of special biological significance to assure the maintenance of natural temperature in these areas.
- (3) The maximum temperature of thermal waste discharges shall not exceed the natural temperature of receiving waters by more than 20°F.
- (4) The discharge of elevated temperature wastes shall not result in increases in the natural water temperature exceeding 4°F at (a) the shoreline, (b) the surface of any ocean substrate, or (c) the ocean surface beyond 1,000 feet from the discharge system. The surface temperature limitation shall be maintained at least 50 percent of the duration of any complete tidal cycle.
- (5) Additional limitations shall be imposed when necessary to assure protection of beneficial uses.

4. Enclosed Bays

A. Existing discharges

- (1) Elevated temperature waste discharges shall comply with limitations necessary to assure protection of beneficial uses.



B. New discharges

- (1) Elevated temperature waste discharges shall comply with limitations necessary to assure protection of beneficial uses. The maximum temperature of waste discharges shall not exceed the natural temperature of the receiving waters by more than 20°F.
- (2) Thermal waste discharges having a maximum temperature greater than 4°F above the natural temperature of the receiving water are prohibited.

5. Estuaries

A. Existing discharges

- (1) Elevated temperature waste discharges shall comply with the following:
 - a. The maximum temperature shall not exceed the natural receiving water temperature by more than 20°F.
 - b. Elevated temperature waste discharges either individually or combined with other discharges shall not create a zone, defined by water temperatures of more than 1°F above natural receiving water temperature, which exceeds 25 percent of the cross-sectional area of a main river channel at any point.
 - c. No discharge shall cause a surface water temperature rise greater than 4°F above the natural temperature of the receiving waters at any time or place.
 - d. Additional limitations shall be imposed when necessary to assure protection of beneficial uses.
- (2) Thermal waste discharges shall comply with the provisions of 5A (1) above and, in addition, the maximum temperature of thermal waste discharges shall not exceed 86°F.

B. New discharges

- (1) Elevated temperature waste discharges shall comply with item 5A(1) above.



- (2) Thermal waste discharges having a maximum temperature greater than 4°F above the natural temperature of the receiving water are prohibited.
- (3) Additional limitations shall be imposed when necessary to assure protection of beneficial uses.

GENERAL WATER QUALITY PROVISIONS

1. Additional limitations shall be imposed in individual cases if necessary for the protection of specific beneficial uses and areas of special biological significance. When additional limitations are established, the extent of surface heat dispersion will be delineated by a calculated 1 1/2°F isotherm which encloses an appropriate dispersion area. The extent of the dispersion area shall be:
 - A. Minimized to achieve dispersion through the vertical water column rather than at the surface or in shallow water.
 - B. Defined by the Regional Board for each existing and proposed discharge after receipt of a report prepared in accordance with the implementation section of this plan.
2. The cumulative effects of elevated temperature waste discharges shall not cause temperatures to be increased except as provided in specific water quality objectives contained herein.
3. Areas of special biological significance shall be designated by the State Board after public hearing by the Regional Board and review of its recommendations.
4. Regional Boards may, in accordance with Section 316(a) of the Federal Water Pollution Control Act of 1972, and subsequent federal regulations including 40 CFR 122, grant an exception to Specific Water Quality Objectives in this Plan. Prior to becoming effective, such exceptions and alternative less stringent requirements must receive the concurrence of the State Board.
5. Natural water temperature will be compared with waste discharge temperature by near-simultaneous measurements accurate to within 1°F. In lieu of near-simultaneous measurements, measurements may be made under calculated conditions of constant waste discharge and receiving water characteristics.

IMPLEMENTATION



1. The State Water Resources Control Board and the California Regional Water Quality Control Boards will administer this plan by establishing waste discharge requirements for discharges of elevated temperature wastes.
2. This plan is effective as of the date of adoption by the State Water Resources Control Board and the sections pertaining to temperature control in each of the policies and plans for the individual interstate and coastal waters shall be void and superseded by all applicable provisions of this plan.
3. Existing and future dischargers of thermal waste shall conduct a study to define the effect of the discharge on beneficial uses and, for existing discharges, determine design and operating changes which would be necessary to achieve compliance with the provisions of this plan.
4. Waste discharge requirements for existing elevated temperature wastes shall be reviewed to determine the need for studies of the effect of the discharge on beneficial uses, changes in monitoring programs and revision of waste discharge requirements.
5. All waste discharge requirements shall include a time schedule which assures compliance with water quality objectives by July 1, 1977, unless the discharger can demonstrate that a longer time schedule is required to complete construction of necessary facilities; or, in accordance with any time schedule contained in guidelines promulgated pursuant to Section 304(b) of the Federal Water Pollution Control Act.
6. Proposed dischargers of elevated temperature wastes may be required by the Regional Board to submit such studies prior to the establishment of waste discharge requirements. The Regional Board shall include in its requirements appropriate postdischarge studies by the discharger.
7. The scope of any necessary studies shall be as outlined by the Regional Board and shall be designed to include the following as applicable to an individual discharge:
 - A. Existing conditions in the aquatic environment.
 - B. Effects of the existing discharge on beneficial uses.
 - C. Predicted conditions in the aquatic environment with waste discharge facilities designed and operated in compliance with the provisions of this plan.
 - D. Predicted effects of the proposed discharge on beneficial uses.
 - E. An analysis of costs and benefits of various design alternatives.



F. The extent to which intake and outfall structures are located and designed so that the intake of planktonic organisms is at a minimum, waste plumes are prevented from touching the ocean substrate or shorelines, and the waste is dispersed into an area of pronounced along-shore or offshore currents.

8. All waste discharge requirements adopted for discharges of elevated temperature wastes shall be monitored in order to determine compliance with effluent or receiving water temperature (or heat) requirements.

Furthermore, for significant thermal discharges as determined by the Regional Board or State, Regional Boards shall require expanded monitoring programs, to be carried out either on a continuous or periodic basis, designed to assess whether the source continues to provide adequate protection to beneficial uses (including the protection and propagation of a balanced indigenous community of fish, shellfish, and wildlife, in and on the body of water into which the discharge is made). When periodic expanded monitoring programs are specified, the frequency of the program shall reflect the probable impact of the discharge.

9. The State Board or Regional Board may require a discharger(s) to pay a public agency or other appropriate person an amount sufficient to carry out the expanded monitoring program required pursuant to paragraph 8 above if:

A. The discharger has previously failed to carry out monitoring programs in a manner satisfactory to the State Board or Regional Board, or;

B. More than a single facility, under separate ownerships, may significantly affect the thermal characteristics of the body of water, and the owners of such facilities are unable to reach agreement on a cooperative program within a reasonable time period specified by the State Board or Regional Board.



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APPENDIX A-4

**Water Quality Control Policy for the
Enclosed Bays and Estuaries of California
(Bays and Estuaries Policy)**

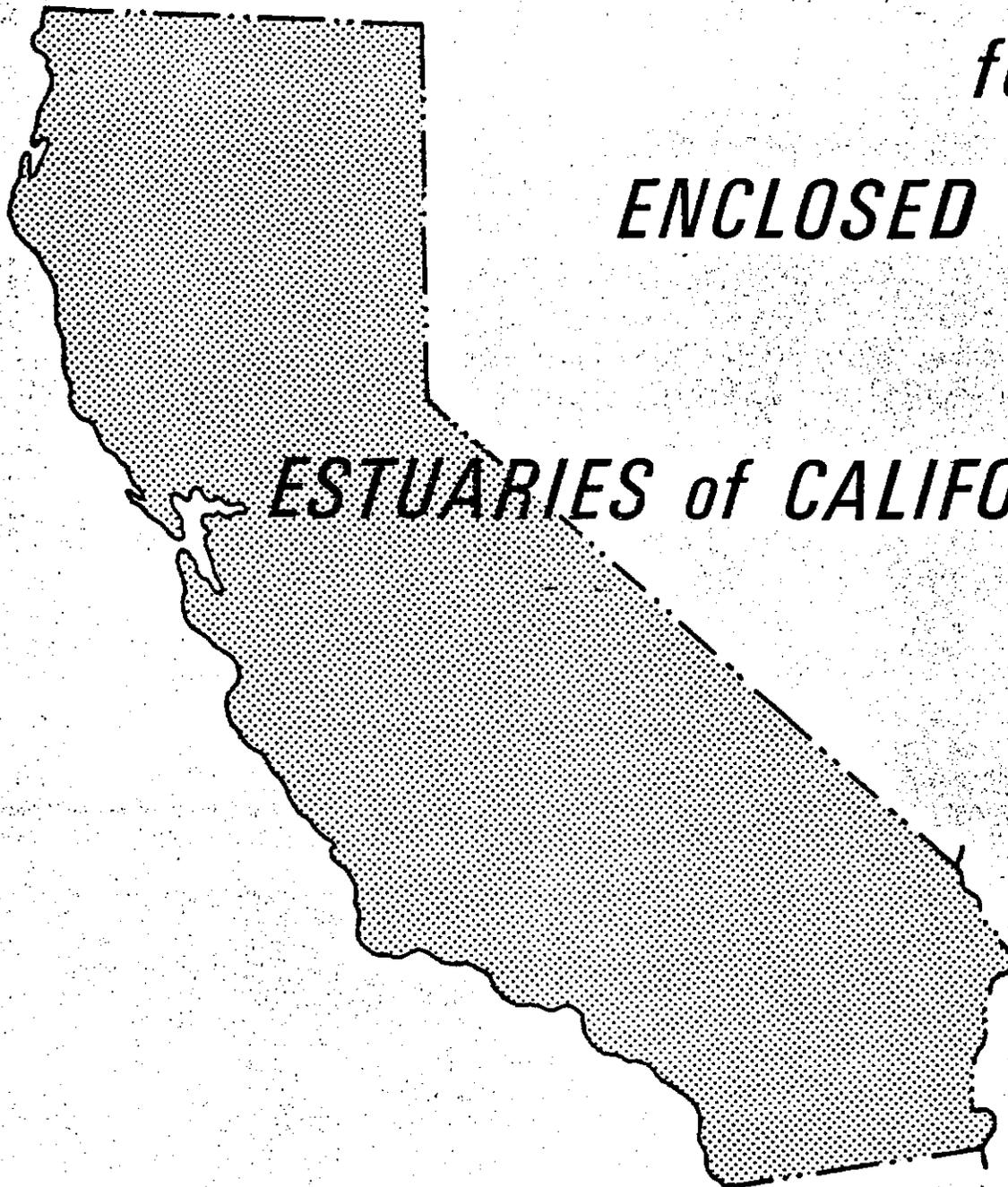
WATER QUALITY CONTROL POLICY

for the

ENCLOSED BAYS

and

ESTUARIES of CALIFORNIA



Reprinted April 1979

STATE WATER RESOURCES CONTROL BOARD

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* To be furnished upon request.

WATER QUALITY CONTROL POLICY
FOR THE ENCLOSED
BAYS AND ESTUARIES OF CALIFORNIA^{1/}

INTRODUCTION

The purpose of this policy is to provide water quality principles and guidelines to prevent water quality degradation and to protect the beneficial uses of waters of enclosed bays and estuaries. Decisions on water quality control plans, waste discharge requirements, construction grant projects, water rights permits, and other specific water quality control implementing actions of the State and Regional Boards shall be consistent with the provisions of this policy.

The Board declares its intent to determine from time to time the need for revising this policy.

This policy does not apply to wastes from vessels or land runoff except as specifically indicated for siltation (Chapter III 4.) and combined sewer flows (Chapter III 7.).

CHAPTER I.

PRINCIPLES FOR MANAGEMENT OF
WATER QUALITY IN ENCLOSED BAYS AND ESTUARIES

- A. It is the policy of the State Board that the discharge of municipal wastewaters and industrial process waters^{2/} (exclusive of cooling water discharges) to enclosed bays and estuaries, other than the San Francisco Bay-Delta system, shall be phased out at the earliest practicable date. Exceptions to this provision may be granted by a Regional Board only when the Regional Board finds that the wastewater in question would consistently be treated and discharged in such a manner that it would enhance the quality of receiving waters above that which would occur in the absence of the discharge. ^{3/}
- B. With regard to the waters of the San Francisco Bay-Delta system, the State Board finds and directs as follows:
- 1a. There is a considerable body of scientific evidence and opinion which suggests the existence of biological degradation due to long-term exposure to toxicants which have been discharged to the San Francisco Bay-Delta system. Therefore, implementation of a program which controls toxic effects through a combination of source control for toxic materials, upgraded wastewater treatment, and improved dilution of wastewaters, shall proceed as rapidly as is practicable with the objective of providing full protection to the biota and the beneficial uses of Bay-Delta waters in a cost-effective manner.

- lb. A comprehensive understanding of the biological effects of wastewater discharge on San Francisco Bay, as a whole, must await the results of further scientific study. There is, however, sufficient evidence at this time to indicate that the continuation of wastewater discharges to the southern reach of San Francisco Bay, south of the Dumbarton Bridge, is an unacceptable condition. The State Board and the San Francisco Regional Board shall take such action as is necessary to assure the elimination of wastewater discharges to waters of the San Francisco Bay, south of Dumbarton Bridge, at the earliest practicable date.
- lc. In order to prevent excessive investment which would unduly impact the limited funds available to California for construction of publicly owned treatment works, construction of such works shall proceed in a staged fashion, and each stage shall be fully evaluated by the State and Regional Boards to determine the necessity for additional expenditures. Monitoring requirements shall be established to evaluate any effects on water quality, particularly changes in species diversity and abundance, which may result from the operation of each stage of planned facilities

and source control programs. Such a staged construction program, in combination with an increased monitoring effort, will result in the most cost-effective and rapid progress toward a goal of maintaining and enhancing water quality in the San Francisco Bay-Delta system.

2. Where a waste discharger has an alternative of in-bay or ocean disposal and where both alternatives offer a similar degree of environmental and public health protection, prime consideration shall be given to the alternative which offers the greater degree of flexibility for the implementation of economically feasible wastewater reclamation options.

C. The following policies apply to all of California's enclosed bays and estuaries:

1. Persistent or cumulative toxic substances shall be removed from the waste to the maximum extent practicable through source control or adequate treatment prior to discharge.
2. Bay or estuarine outfall and diffuser systems shall be designed to achieve the most rapid initial dilution^{4/} practicable to minimize concentrations of substances not removed by source control or treatment.
3. Wastes shall not be discharged into or adjacent to areas where the protection of beneficial uses requires spatial separation from waste fields.
4. Waste discharges shall not cause a blockage of zones of passage required for the migration of anadromous fish.
5. Nonpoint sources of pollutants shall be controlled to the maximum practicable extent.

CHAPTER II.

QUALITY REQUIREMENTS FOR WASTE DISCHARGES

1. In addition to any requirements of this policy, effluent limitations shall be as specified pursuant to Chapter 5.5 of the Porter-Cologne Water Quality Control Act, and Regional Boards shall limit the mass emissions of substances as necessary to meet such limitations. Regional Boards may set more restrictive mass emission rates and concentration standards than those which are referenced in this policy to reflect dissimilar tolerances to wastewater constituents among different receiving water bodies.
2. All dischargers of thermal wastes or elevated temperature wastes to enclosed bays and estuaries which are permitted pursuant to this policy shall comply with the "Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California", State Water Resources Control Board, 1972, and with amendments and supplements thereto.
3. Radiological limits for waste discharges (for which regulatory responsibility is not preempted by the Federal Government) shall be at least as restrictive as limitations indicated in Section 30269, and Section 30355, Appendix A, Table II, of the California Administrative Code.
4. Dredge spoils to be disposed of in bay and estuarine waters must comply with federal criteria for determining the acceptability of dredged spoils to marine waters, and must be certified by the State Board or Regional Boards as in compliance with State Plans and Policies.

CHAPTER III
DISCHARGE PROHIBITIONS

1. New discharges^{5/} of municipal wastewaters and industrial process waters^{2/} (exclusive of cooling water discharges) to enclosed bays and estuaries, other than the San Francisco Bay-Delta system, which are not consistently treated and discharged in a manner that would enhance the quality of receiving waters above that which would occur in the absence of the discharge, shall be prohibited.
2. The discharge of municipal and industrial waste sludge and untreated sludge digester supernatant, centrate, or filtrate to enclosed bays and estuaries shall be prohibited.
3. The deposition of rubbish or refuse into surface waters or at any place where they would be eventually transported to enclosed bays or estuaries shall be prohibited.^{6/}
4. The direct or indirect discharge of silt, sand, soil clay, or other earthen materials from onshore operations including mining, construction, agriculture, and lumbering, in quantities which unreasonably affect or threaten to affect beneficial uses shall be prohibited.
5. The discharge of materials of petroleum origin in sufficient quantities to be visible or in violation of waste discharge requirements shall be prohibited, except when such discharges are conducted for scientific purposes. Such testing must be approved by the Executive Officer of the Regional Board and the Department of Fish and Game.
6. The discharge of any radiological, chemical, or biological warfare agent or high-level radioactive waste shall be prohibited.
7. The discharge or by-passing of untreated waste to bays and estuaries shall be prohibited.^{7/}

CHAPTER IV.

GENERAL PROVISIONS

A. Effective Date

This policy is in effect as of the date of adoption by the State Water Resources Control Board.

B. Review and Revision of Plans, Policies and Waste Discharge Requirements

Provisions of existing or proposed policies or water quality control plans adopted by the State or Regional Boards for enclosed bays or estuaries shall be amended to conform with the applicable provisions of this policy.

Each appropriate Regional Board shall review and revise the waste discharge requirements with appropriate time schedules for existing discharges to achieve compliance with this policy and applicable water quality objectives. Each Regional Board affected by this policy shall set forth for each discharge allowable mass emission rates for each applicable effluent characteristic included in waste discharge requirements.

Regional Boards shall finalize waste discharge requirements as rapidly as is consistent with the National Pollutant Discharge Elimination System Permit Program.

C. Administration of Clean Water Grants Program

The Clean Water Grants Program shall require that the environmental impact report for any existing or proposed wastewater discharge to enclosed bays and estuaries, other than the San Francisco Bay-Delta system, shall evaluate whether or not the discharge would enhance the quality of receiving waters above that which would occur in the absence of the discharge.

The Clean Water Grants Program shall require that each study plan and project report (beginning with F. Y. 1974-75 projects) for a proposed wastewater treatment or conveyance facility within the San Francisco Bay-Delta system shall contain an evaluation of the degree to which the proposed project represents a necessary and cost-effective stage in a program leading to compliance with an objective of full protection of the biota and beneficial uses of Bay-Delta waters.

D. Administration of Water Rights

Any applicant for a permit to appropriate from a water-course which is tributary to an enclosed bay or estuary may be required to present to the State Board an analysis of the anticipated effects of the proposed appropriation on water quality and beneficial uses of the effected bay or estuary.

E. Monitoring Program

The Regional Board shall require dischargers to conduct self-monitoring programs and submit reports as necessary to determine compliance with waste discharge requirements and to evaluate the effectiveness of wastewater control programs. Such monitoring programs shall comply with applicable sections of the State Board's Administrative Procedures, and any additional guidelines which may be issued by the Executive Officer of the State Board.

FOOTNOTES

- 1/ Enclosed bays are indentations along the coast which enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between headlands or outer most harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. This definition includes, but is not limited to: Humboldt Bay, Bodega Harbor, Tomales Bay, Drakes Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay.

Estuaries, including coastal lagoons, are waters at the mouths of streams which serve as mixing zones for fresh and ocean waters.

Mouths of streams which are temporarily separated from the ocean by sandbars shall be considered as estuaries.

Estuarine waters will generally be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters shall be considered to extend seaward if significant mixing of fresh and saltwater occurs in the open coastal waters. Estuarine waters include, but are not limited to, the Sacramento-San Joaquin Delta, as defined by Section 12220 of the California Water Code, Suisun Bay, Carquinez Strait downstream to Carquinez Bridge, and appropriate areas of the Smith, Klamath, Mad, Eel, Noyo, and Russian Rivers.

- 2/ For the purpose of this policy, treated ballast waters and innocuous nonmunicipal wastewater such as clear brines, wash-water, and pool drains are not necessarily considered industrial process wastes, and may be allowed by Regional Boards under discharge requirements that provide protection to the beneficial uses of the receiving water.
- 3/ Undiluted wastewaters covered under this exception provision shall not produce less than 90 percent survival, 50 percent of the time, and not less than 70 percent survival, 10 percent of the time of a standard test species in a 96-hour static or continuous flow bioassay test using undiluted waste. Maintenance of these levels of survival shall not by themselves constitute sufficient evidence that the discharge satisfies the criteria of enhancing the quality of the receiving water above that which occur in the absence of the discharge. Full and uninterrupted protection for the beneficial uses of the receiving water must be maintained. A Regional Board may require physical, chemical, bioassay, and bacteriological assessment of treated wastewater quality prior to authorizing release to the bay or estuary of concern.

- 4/ Initial dilution zone is defined as the volume of water near the point of discharge within which the waste immediately mixes with the bay or estuarine water due to the momentum of the waste discharge and the difference in density between the waste and receiving water.
- 5/ A new discharge is a discharge for which a Regional Board has not received a report of waste discharge prior to the date of adoption of this policy, and which was not in existence prior to the date of adoption of this policy.
- 6/ Rubbish and refuse include any cans, bottles, paper, plastic, vegetable matter, or dead animals or dead fish deposited or caused to be deposited by man.
- 7/ The prohibition does not apply to cooling water streams which comply with the "Water Quality Control Plan for the Control of Temperature in Coastal and Interstate Waters and Enclosed Bays and Estuaries of California" - State Water Resources Control Board.

APPENDIX A-5

Power Plant Cooling Policy

WATER QUALITY CONTROL POLICY
on the
USE and DISPOSAL of INLAND WATERS
USED for POWERPLANT COOLING

ADOPTED JUNE 19, 1975

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CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 75-58

WATER QUALITY CONTROL POLICY ON THE USE
AND DISPOSAL OF INLAND WATERS USED FOR
POWERPLANT COOLING

WHEREAS:

1. Basin Planning conducted by the State Board has shown that there is presently no available water for new allocations in some basins.
2. Projected future water demands, when compared to existing developed water supplies, indicate that general freshwater shortages will occur in many areas of the State prior to the year 2000.
3. The improper disposal of powerplant cooling waters may have an adverse impact on the quality of inland surface and groundwaters.
4. It is believed that further development of water in the Central Valley will reduce the quantity of water available to meet Delta outflow requirements and protect Delta water quality standards.

THEREFORE, BE IT RESOLVED, that

1. The Board hereby adopts the "Water Quality Control Policy on the Use and Disposal of Inland Waters Used for Powerplant Cooling".
2. The Board hereby directs all affected California Regional Water Quality Control Boards to implement the applicable provisions of the policy.
3. The Board hereby directs staff to coordinate closely with the State Energy Resources Conservation and Development Commission and other involved state and local agencies as this policy is implemented.

CERTIFICATION

The undersigned, Executive Officer of the State Water Resources Control Board, does hereby certify that the forgoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on June 19, 1975.

Bill B. Dendy
Executive Officer

WATER QUALITY CONTROL POLICY
ON THE USE AND DISPOSAL OF INLAND
WATERS USED FOR POWERPLANT COOLING

Introduction

The purpose of this policy is to provide consistent statewide water quality principles and guidance for adoption of discharge requirements, and implementation actions for powerplants which depend upon inland waters for cooling. In addition, this policy should be particularly useful in guiding planning of new power generating facilities so as to protect beneficial uses of the State's water resources and to keep the consumptive use of freshwater for powerplant cooling to that minimally essential for the welfare of the citizens of the State.

This policy has been prepared to be consistent with federal, state, and local planning and regulatory statutes, the Warren-Alquist State Energy Resources Conservation and Development Act, Water Code Section 237 and the Waste Water Reuse Law of 1974.

Section 25216.3 of the Warren-Alquist Act states:

“(a) The commission shall compile relevant local, regional, state, and federal land use, public safety, environmental, and other standards to be met in designing, siting, and operating facilities in the State: except as provided in subdivision (d) of Section 25402, adopt standards, except for air and water quality,....”

Water Code Section 237 and Section 462 of the Waste Water Reuse Law, direct the Department of Water Resources to:

237. “...either independently or in cooperation with any person or any county, state, federal, or other agency, including, but not limited to, the State Energy Resources Conservation and Development Commission, shall conduct studies and investigations on the need and availability of water for thermal electric powerplant cooling purposes, and shall report thereon to the Legislature from time to time....”

462. “...conduct studies and investigations on the availability and quality of waste water and uses of reclaimed waste water for beneficial purposes including, but not limited to ... and cooling for thermal electric powerplants.”

Decisions on waste discharge requirements, water rights permits, water quality control plans, and other specific water quality control implementing actions by the State and Regional Boards shall be consistent with provisions of this policy.

The Board declares its intent to determine from time to time the need for revising this policy.

Definitions

1. Inland Water – all waters within the territorial limits of California exclusive of the waters of the Pacific Ocean outside of enclosed bays, estuaries, and coastal lagoons.
2. Fresh Inland Waters – those inland waters which are suitable for use as a source of domestic, municipal, or agricultural water supply and which provide habitat for fish and wildlife.
3. Salt Sinks – areas designated by the Regional Water Quality Control Boards to receive saline waste discharges.
4. Brackish Waters – includes all waters with a salinity range of 1,000 to 30,000 mg/l and a chloride concentration range of 250 to 12,000 mg/l. The application of the term “brackish” to a water is not intended to imply that such water is no longer suitable for industrial or agricultural purposes.
5. Steam-Electric Power Generating Facilities – electric power generating facilities utilizing fossil or nuclear-type fuel or solar heating in conjunction with a thermal cycle employing the steam-water system as the thermodynamic medium and for the purposes of this policy is synonymous with the word “powerplant”.
6. Blowdown – the minimum discharge of either boiler water or recirculating cooling water for the purpose of limiting the buildup of concentrations of materials in excess of desirable limits established by best engineering practice.
7. Closed Cycle Systems – a cooling water system from which there is no discharge of wastewater other than blowdown.
8. Once-Through Cooling – a cooling water system in which there is no recirculation of the cooling water after its initial use.
9. Evaporative Cooling Facilities – evaporative towers, cooling ponds, or cooling canals, which utilize evaporation as a means of wasting rejected heat to the atmosphere.
10. Thermal Plan – “Water Quality Control Plan for Control of Temperature In the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California”.
11. Ocean Plan – “Water Quality Control Plan for Ocean Waters of California”.

Basis of Policy

1. The State Board believes it is essential that every reasonable effort be made to conserve energy supplies and reduce energy demands to minimize adverse effects on water supply and water quality and at the same time satisfy the State's energy requirements.
2. The increasing concern to limit changes to the coastal environment and the potential hazards of earthquake activity along the coast has led the electric utility industry to consider siting steam-electric generating plants inland as an alternative to proposed coastal locations.
3. Although many of the impacts of coastal powerplants on the marine environment are still not well understood, it appears the coastal marine environment is less susceptible than inland waters to the water quality impacts associated with powerplant cooling. Operation of existing coastal powerplants indicate that these facilities either meet the standards of the State's Thermal Plan and Ocean Plan or could do so readily with appropriate technological modifications. Furthermore, coastal locations provide for application of a wide range of cooling technologies which do not require the consumptive use of inland waters and therefore would not place an additional burden on the State's limited supply of inland waters. These technologies include once-through cooling which is appropriate for most coastal sites, potential use of saltwater cooling towers, or use of brackish water where more stringent controls are required for environmental considerations at specific sites.
4. There is a limited supply of inland water resources in California. Basin planning conducted by the State Board has shown that there is no available water for new allocations in some basins. Projected future water demands when compared to existing developed water supplies indicate that general fresh-water shortages will occur in many areas of the State prior to the year 2000. The use of inland waters for powerplant cooling needs to be carefully evaluated to assure proper future allocation of inland waters considering all other beneficial uses. The loss of inland waters considering all other beneficial uses. The loss of inland waters through evaporation in powerplant cooling facilities may be considered an unreasonable use of inland waters when general shortages occur.
5. The Regional Boards have adopted water quality objectives including temperature objectives including temperature objectives for all surface waters in the State.
6. Disposal of once-through cooling waters from powerplants to inland water is incompatible with maintaining the water quality objectives of the State Board's "Thermal Plan" and "Water Quality Control Plans."
7. The improper disposal of blowdown from evaporative cooling facilities may have an adverse impact on the quality of inland surface and ground waters and on fish and wildlife.

8. An important consideration in the increased use of inland water for powerplant cooling or for any other purpose in the Central Valley Region is the reduction in the available quantity of water to meet the Delta outflow requirements necessary to protect Delta water quality objectives and standards. Additionally, existing contractual agreements to provide future water supplies to the Central Valley, the South Coastal Basin, and other areas using supplemental water supplies are threatening to further reduce the Central Valley outflow necessary to protect the Delta environment.
9. The California Constitution and the California Water Code declare that the right to use water from a natural stream or watercourse is limited to such water as shall be reasonably required for beneficial use and does not extend to the waste or unreasonable use or unreasonable method of use or unreasonable method of diversion. Section 761, Article 17.2, Subchapter 2, Chapter 3, Title 23, California Administrative Code provides that permits or licenses for the appropriation of water will contain a term which will subject the permit or license to the continuing authority of the State Board to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of said water.
10. The Water Code authorizes the State Board to prohibit the discharge of wastes to surface and ground waters of the State.

Principles

1. It is the Board's position that from a water quantity and quality standpoint the source of powerplant cooling water should come from the following sources in this order of priority depending on site specifics such as environmental, technical and economic feasibility consideration: (1) wastewater being discharged to the ocean, (2) ocean, (3) brackish water from natural sources or irrigation return flow, (4) inland wastewaters of low TDS, and (5) other inland waters.
2. Where the Board has jurisdiction, use of fresh inland waters for powerplant cooling will be approved by the Board only when it is demonstrated that the use of other water supply sources or other methods of cooling would be environmentally undesirable or economically unsound.
3. In considering issuance of a permit or license to appropriate water for powerplant cooling, the Board will consider the reasonableness of the proposed water use when compared with other present and future needs for the water source and when viewed in the context of alternative water sources that could be used for the purpose. The Board will give great weight to the results of studies made pursuant to the Warren-Alquist State Energy Resources Conservation and Development Act and carefully evaluate studies by the Department of Water Resources made pursuant to Sections 237 and 462, Division 1 of the California Water Code.

4. The discharge of blowdown water from cooling towers or return flows from once-through cooling shall not cause a violation of water quality objectives or waste discharge requirements established by the Regional Boards.
5. The use of unlined evaporation ponds to concentrate salts from blowdown waters will be permitted only at salt sinks approved by the Regional and State Boards. Proposals to utilize unlined evaporation ponds for final disposal of blowdown waters must include studies of alternative methods of disposal. These studies must show that the geologic strata underlying the proposed ponds or salt sink will protect usable groundwater.
6. Studies of availability of inland waters for use in powerplant cooling facilities to be constructed in Central Valley basins, the South Coastal Basins or other areas which receive supplemental water from Central Valley streams as for all major new uses must include an analysis of the impact of such use on Delta outflow and Delta water quality objectives. The studies associated with powerplants should include an analysis of the cost and water use associated with the use of alternative cooling facilities employing dry, or wet/dry modes of operation.
7. The State Board encourages water supply agencies and power generating utilities and agencies to study the feasibility of using wastewater for powerplant cooling. The State Board encourages the use of wastewater for powerplant cooling where it is appropriate. Furthermore, Section 25601(d) of the Warren-Alquist Energy Resources Conservation and Development Act directs the Commission to study, “expanded use of wastewater as cooling water and other advances in powerplant cooling” and Section 462 of the Waste Water Reuse Law directs the Department of Water Resources to “...conduct studies and investigations on the availability and quality of waste water and uses of reclaimed waste water for beneficial purposes including, but not limited to... and cooling for thermal electric powerplants.”

Discharge Prohibitions

1. The discharge to land disposal sites of blowdown waters from inland powerplant cooling facilities shall be prohibited except to salt sinks or to lined facilities approved by the Regional and State Boards for the reception of such wastes.
2. The discharge of wastewaters from once-through inland powerplant cooling facilities shall be prohibited unless the discharger can show that such a practice will maintain the existing water quality and aquatic environment of the State’s water resources.
3. The Regional Boards may grant exceptions to these discharge prohibitions on a case-by-case basis in accordance with exception procedures included in the “Water Quality Control Plan for Control of Temperature In the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California.

Implementation

1. Regional Water Quality Control Boards will adopt waste discharge requirements for discharges from powerplant cooling facilities which specify allowable mass emission rates and/or concentrations of effluent constituents for the blowdown waters. Waste discharge requirements for powerplant cooling facilities will also specify the water quality conditions to be maintained in the receiving waters.
2. The discharge requirements shall contain a monitoring program to be conducted by the discharger to determine compliance with waste discharge requirements.
3. When adopting waste discharge requirements for powerplant cooling facilities the Regional Boards shall consider other environmental factors and may require an environmental impact report, and shall condition the requirement in accordance with Section 2718, Subchapter 17, Chapter 3, Title 23, California Administrative Code.
4. The State Board shall include a term in all permits and licenses for appropriation of water for use in powerplant cooling that requires the permittee or licensee to conduct ongoing studies of the environmental desirability and economic feasibility of changing facility operations to minimize the use of fresh inland waters. Study results will be submitted to the State Board at intervals as specified in the permit term.
5. Petitions by the appropriator to change the nature of the use of appropriated water in an existing permit or license to allow the use of inland water for powerplant cooling may have an impact on the quality of the environment and as such require the preparation of an environmental impact statement or a supplement to an existing statement regarding, among other factors, an analysis of the reasonableness of the proposed use.
6. Applications to appropriate inland waters for powerplant cooling purpose shall include results of studies comparing the environmental impact of alternative inland sites as well as alternative water supplies and cooling facilities. Studies of alternative coastal sites must be included in the environmental impact report. Alternatives to be considered in the environmental impact report, including but not limited to sites, water supply, and cooling facilities, shall be mutually agreed upon by the prospective appropriator and the State Board staff. These studies should include comparisons of environmental impact and economic and social benefits and costs in conformance with the Warren-Alquist State Energy Resources Conservation and Development Act, the California Coastal Zone Plan, the California Environmental Quality Act and the National Environmental Policy Act.

APPENDIX A-6

Reclamation Policy

STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 77-1

POLICY WITH RESPECT TO WATER
RECLAMATION IN CALIFORNIA

WHEREAS:

1. The California Constitution provides that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that waste or unreasonable use or unreasonable method of use of water be prevented, and that conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare;
2. The California Legislature has declared that the State Water Resources Control Board and each Regional Water Quality Control Board shall be the principal state agencies with primary responsibility for the coordination and control of water quality;
3. The California Legislature has declared that the people of the State have a primary interest in the development of facilities to reclaim water containing waste to supplement existing surface and underground water supplies;
4. The California Legislature has declared that the State shall undertake all possible steps to encourage the development of water reclamation facilities so that reclaimed water may be made available to help meet the growing water requirements of the State;
5. The Board has reviewed the document entitled "Policy and Action Plan for Water Reclamation in California", dated December 1976. This document recommends a variety of actions to encourage the development of water reclamation facilities and the use of reclaimed water. Some of these actions require direct implementation by the Board; others require implementation by the Executive Officer and the Regional Boards. In addition, this document recognizes that action by many other state, local, and federal agencies and the California State Legislature would also encourage construction of water reclamation facilities and the use of reclaimed water. Accordingly, the Board recommends for its consideration a number of actions intended to coordinate with the program of this Board;
6. The Board must concentrate its efforts to encourage and promote reclamation in water-short areas of the State where reclaimed water can supplement or replace other water supplies without interfering with water rights or instream beneficial uses or placing an unreasonable burden on present water supply systems; and

7. In order to coordinate the development of reclamation potential in California, the Board must develop a data collection, research, planning, and implementation program for water reclamation and reclaimed water uses.

THEREFORE, BE IT RESOLVED:

1. That the State Board adopt the following Principles:

- I. The State Board and the Regional Boards shall encourage, and consider or recommend for funding, water reclamation projects which meet Condition 1, 2, or 3 below and which do not adversely impact vested water rights or unreasonably impair instream beneficial uses or place an unreasonable burden on present water supply systems;
 - (1) Beneficial use will be made of wastewaters that would otherwise be discharged to marine or brackish receiving waters or evaporation ponds,
 - (2) Reclaimed water will replace or supplement the use of fresh water or better quality water,
 - (3) Reclaimed water will be used to preserve, restore, or enhance instream beneficial uses which include, but are not limited to, fish, wildlife, recreation and esthetics associated with any surface water or wetlands.
- II. The State Board and the Regional Boards shall (1) encourage reclamation and reuse of water in water-short areas of the State, (2) encourage water conservation measures which further extend the water resources of the State, and (3) encourage other agencies, in particular the Department of Water Resources, to assist in implementing this policy.
- III. The State Board and the Regional Boards recognize the need to protect the public health including potential vector problems and the environment in the implementation of reclamation projects.
- IV. In implementing the foregoing Principles, the State Board or the Regional Boards, as the case may be, shall take appropriate actions, recommend legislation, and recommend actions by other agencies in the areas of (1) planning, (2) project funding, (3) water rights, (4) regulation and enforcement, (5) research and demonstration, and (6) public involvement and information.

2. That, in order to implement the foregoing Principles, the State Board:

- (a) Approves Planning Program Guidance Memorandum No. 9, "PLANNING FOR WASTEWATER RECLAMATION",
 - (b) Adopts amendments and additions to Title 23, California Administrative Code Sections 654.4, 761, 764.9, 783, 2101, 2102, 2107, 2109, 2109.1, 2109.2, 2119, 2121, 2133(b)(2), and 2133(b)(3),
 - (c) Approves Grants Management Memorandum No. 9.01, "WASTEWATER RECLAMATION",
 - (d) Approves the Division of Planning and Research, Procedures and Criteria for the Selection of Wastewater Reclamation Research and Demonstration Projects,
 - (e) Approves "GUIDELINES FOR REGULATION OF WATER RECLAMATION",
 - (f) Approves the Plan of Action contained in Part III of the document identified in Finding Five above,
 - (g) Directs the Executive Officer to establish an Interagency Water Reclamation Policy Advisory Committee. Such Committee shall examine trends, analyze implementation problems, and report annually to the Board the results of the implementation of this policy, and
 - (h) Authorizes the Chairperson of the Board and directs the Executive Officer to implement the foregoing Principles and the Plan of Action contained in Part III of the document identified in Finding Five above, as appropriate.
3. That not later than July 1, 1978, the Board shall review this policy and actions taken to implement it, along with the report prepared by the Interagency Water Reclamation Policy Advisory Committee, to determine whether modifications to this policy are appropriate to more effectively encourage water reclamation in California.
 4. That the Chairperson of the Board shall transmit to the California Legislature a complete copy of the "Policy and Action Plan for Water Reclamation in California".

CERTIFICATION

The undersigned, Executive Officer of the State Water Resources Control Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a special meeting of the State Water Resources Control Board held on January 6, 1977.

Dated: JAN 6 1977

Bill B. Dendy

Bill B. Dendy
Executive Officer

APPENDIX A-7

Shredder Waste Disposal Policy

STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 87-22

POLICY ON THE DISPOSAL OF SHREDDER WASTE

WHEREAS:

1. Chemical analysis of wastes resulting from the shredding of automobile bodies, household appliances, and sheet metal (hereinafter shredder waste) by methods stipulated by the Department of Health Services (hereinafter DHS) has resulted in the classification of shredder waste as a hazardous waste and the determination that, if inappropriately handled, it could catch fire and release toxic gases.
2. The California Legislature has declared that shredder waste shall not be classified as hazardous for the purposes of disposal if the producer demonstrates that the waste will not pose a threat to human health or water quality if disposed of in a qualified Class III waste management unit, as specified in Section 2533 of Subchapter 15 of Chapter 3 of Title 23 of the California Administrative Code (hereinafter Subchapter 15).
3. DHS has granted shredder waste a variance for the purposes of disposal from hazardous waste management requirements pursuant to Section 66310 of Title 22 of the California Administrative Code.
4. Hazardous waste which has received a variance from DHS for the purposes of disposal is classified as a designated waste pursuant to Section 2522 of Subchapter 15.
5. In general, designated waste must be disposed of in a Class I or Class II waste management unit. However, designated waste may be disposed of in a Class III waste management unit provided that the discharger establishes to the satisfaction of the Regional Water Quality Control Board (hereinafter Regional Board) that the waste presents a lower risk of degrading water quality than is indicated by its classification. (Authority: Section 2520, Subchapter 15)
6. Analysis of shredder waste by the U. S. Environmental Protection Agency's extraction procedure for heavy metals does not normally result in its classification as a hazardous waste.
7. The disposal of shredder waste in a manner such that it is not in contact with putrescible waste or the leachate generated by putrescible waste will not result in the high mobilization of metals indicated by the tests used to determine that shredder waste is hazardous; therefore, such disposal may occur in accordance with Section 2520 of Subchapter 15.

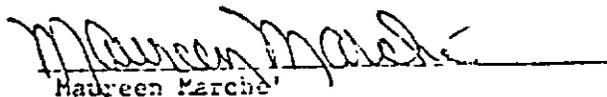
8. Levels of polychlorinated biphenyls (hereinafter PCB) which slightly exceed 50 mg/kg, the level as defined by the U. S. Environmental Protection Agency which requires disposal to an approved site in accordance with the Federal Toxic Substances Control Act, have been measured in some existing shredder waste piles.

THEREFORE BE IT RESOLVED:

1. That shredder waste which is determined hazardous by DHS, but is granted a variance for the purposes of disposal by DHS, is suitable for disposal at Class III waste management units as designated by the Regional Board when it has been demonstrated to the Regional Board that the waste management units at least meet the minimum requirements for a Class III waste management unit as defined by Subchapter 15 provided that:
 - a. The shredder waste producer has demonstrated to the Regional Board that the waste contains no more than 50 mg/kg of PCB.
 - b. The shredder waste is disposed on the last and highest lift in a closed disposal cell or in an isolated cell solely designated for the disposal of shredder waste.
2. That shredder waste which is not determined hazardous by DHS is suitable for disposal at Class III waste management units as designated by the Regional Board without special segregation or management.
3. That this resolution in no way abridges the rights of the Regional Boards to designate appropriate Class III waste management units for disposal of shredder waste consistent with Section 25143.6 of the Health and Safety Code (Chapter 1395, Statutes of 1985).

CERTIFICATION

The undersigned, Administrative Assistant to the Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on March 19, 1987.


Maureen Marché

Administrative Assistant to the Board

APPENDIX A-8

Underground Storage Tank Pilot Program

STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 88- 23

ADOPTION OF THE POLICY REGARDING THE
UNDERGROUND STORAGE TANK
PILOT PROGRAM

WHEREAS:

1. State law requires local governments to implement an underground tank permit program consisting of monitoring requirements for existing underground tanks containing hazardous substances and design, construction and monitoring requirements for new tanks.
2. Monitoring efforts have led to the identification of approximately 5,000 leaking underground storage tank release sites with approximately 150 new cases being discovered statewide each month.
3. To address the problem of funding governmental oversight of remedial actions at these release sites, the Legislature appropriated funds and enacted AB 853 (Chapter 1317, Statutes of 1987).
4. Prior to expending funds from the reserve account established by Subdivision (c) of Section 7, Chapter 1439, Statutes of 1985 the State Water Resources Control Board must adopt administrative and technical procedures for cleanup and abatement action taken under this pilot program.

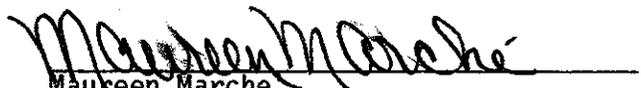
THEREFORE BE IT RESOLVED:

THAT THE STATE BOARD:

1. Adopts the attached policy regarding implementation of the underground tank pilot program.
2. Directs the Executive Director or his designee to take actions needed to implement the policy.

CERTIFICATION

The undersigned, Administrative Assistant to the Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on February 18, 1988.


Maureen Marche
Administrative Assistant to the Board

STATE WATER RESOURCES CONTROL
BOARD POLICY REGARDING THE
UNDERGROUND STORAGE TANK
PILOT PROGRAM

Statutory authority exists at the federal, state and local level to require remedial action at underground storage tank release sites and to rank and fund remedial action at underground storage tank release sites where a responsible party cannot be identified or has insufficient financial resources to accomplish the needed work. Some local agencies have used this authority to respond to some of these releases, as have the nine Regional Water Quality Control Boards. In addition, the Regional Boards are providing technical assistance to local agencies addressing underground storage tank cleanup. However, no specific statewide program for funding governmental oversight of remedial action by responsible parties has been established. As a result, underground storage tank release oversight is not being consistently addressed statewide, leaving site cleanup by responsible parties without adequate guidance.

To address this problem, the State Board, in cooperation with the Department of Health Services, is implementing a pilot program to fund oversight of remedial action at underground storage tank sites. This program will be funded through an appropriation from the state Hazardous Substances Cleanup Bond Fund and the federal Underground Storage Tank Petroleum Trust Fund.

Prior to implementation of this pilot program, the State Board is required by Section 25297.1 of the Health and Safety Code (AB 853, Chapter 1317, Statutes of 1987) to adopt, as state policy for water quality control, administrative and technical procedures to guide local agencies in development of their individual programs.

As participants in the pilot program, local agencies may contract with the State Board to oversee preliminary site assessment and, if necessary, remedial action at leaking underground storage tank sites. The State Board plans to initially enter into 12 contracts with subsequent expansion as appropriate.

Site and Agency Selection

Local agencies will be selected for participation based on their readiness to implement the pilot program and the size of program which the agencies plan to conduct. Those agencies which have existing oversight efforts and plan to expand staff using pilot program funds were ranked highest among eligible candidates. Any local agency which, unless exempted, has failed to implement Chapter 6.7 of the Health and Safety Code and/or which has failed to collect and transmit to the State Board the surcharge fees pursuant to subdivision (b) of Section 25287, was eliminated from consideration.

Under the pilot program, funds may be used at all sites containing leaking tanks which are subject to the state permit program or Subtitle (I) of the federal Resource Conservation and Recovery Act. While contracting local agencies may perform oversight activities at any site within their jurisdictions, agencies may defer lead responsibility for any case affecting, or threatening to affect, ground water to the appropriate Regional Board.

In addition, the local agencies may defer lead responsibility for any case involving a non-petroleum substance to either the appropriate Regional Board or the Department of Health Services. Under terms of the contract between the local agencies and State Board, all cases involving no financially solvent responsible party, no identifiable responsible party or no responsible party willing to conduct remedial action must be reported to the State Board for possible listing on the state Site Expenditure Plan.

Agreements Between the State Board and Local Agencies

The State Board has developed a model contract which will be used as the basis for negotiations between the local agencies and the State Board. This contract outlines in detail the types of activities expected of contracting agencies and the administrative duties of the State and Regional Boards. The model contract (Attachment 1) is hereby made a part of this water quality control policy. Language in the model contract may be modified in negotiations with the local agencies.

Petition for Review

Responsible parties or any other aggrieved persons may petition the State Board for review of actions or decisions made by a local agency as part of the agency's participation in the pilot program. The procedures for such review are contained in "Review by State Board of Action or Failure to Act by Local Agencies" (Attachment 2), which is hereby made a part of this water quality control policy.

Cost Recovery Procedures

Under terms of both the Cooperative Agreement with the federal government transferring money from the Trust Fund and Section 25297.1 of the Health and Safety Code concerning the Bond Fund, local contracting agencies must agree to keep site-specific accounting records and other such records as are necessary to verify all hours worked and expenses incurred at each underground storage tank site. Local contracting agencies will forward to the State Board monthly invoices listing all site-specific and administrative expenses.

The State Board must undertake cost recovery. Procedurally, the cost recovery efforts will be handled in the following manner. The State Board is responsible for ensuring the preparation of cost data and for invoicing responsible parties for all costs incurred by the State Board and/or local contracting agencies in performing activities covered by this agreement. Such costs shall include all additional costs required to be recovered pursuant to Health and Safety Code Section 25360. The State Board will provide guidelines to the local contracting agencies to ensure that necessary cost data are developed, maintained and reported to the State Board.

The State Board will invoice the responsible parties for all costs, both direct and indirect, attributable to that site upon conclusion of the preliminary site assessment phase. If cleanup of the site has not been completed, the State Board will continue invoicing the responsible parties at regular intervals thereafter until conclusion of site cleanup.

Upon receipt of a final invoice for each site, the State Board will invoice the responsible parties for all costs attributable to the site which have not previously been reimbursed by the responsible parties.

Payments received from responsible parties of sites having state-funded oversight will be deposited in the Hazardous Substances Clearing Account. Payments from responsible parties at federally funded sites will be handled according to procedures established by the federal Environmental Protection Agency.

Whenever a responsible party fails to repay all of the costs specified above, the State Board shall request the State Attorney General to bring a civil action to recover these moneys. The State Board shall be responsible for providing all necessary litigation support, including testimony, to the Attorney General and the Department of Health Services in any action to recover costs. The State Board will submit to the Department of Health Services a copy of each referral of state-funded sites to the Attorney General.

Evaluation Criteria

In conjunction with the pilot program, the State Board is developing the Leaking Underground Storage Tank Information System (LUSTIS). This computer tracking system will enable all local agencies and the Regional Boards to report known leaking tank sites and their cleanup status. Using LUSTIS, it will be possible to compare cleanup of sites in the pilot program with sites handled by non-contracting local agencies and the Regional Boards. Comparison criteria will include number of sites cleaned and length of time required to clean up each site. Additional statistics will be tracked by State Board staff to determine costs under the pilot program and success in cost recovery. Staff will report annually on the status of the pilot program including the above criteria. The report will be submitted to the State Board no later than September 1, 1988 and annually thereafter for the duration of the pilot program.

BECAUSE OF ITS TECHNICAL NATURE AND LENGTH, THE MODEL CONTRACT (ATTACHMENT 1) IS NOT INCLUDED IN THIS PACKET. COPIES WILL BE PROVIDED UPON REQUEST. FOR COPIES, PLEASE CONTACT BETTY MORENO, DIVISION OF WATER QUALITY, STATE WATER RESOURCES CONTROL BOARD, P.O. BOX 100, SACRAMENTO, CA 95801-0100, (916) 324-1262.

REVIEW BY STATE BOARD OF ACTION OR FAILURE TO ACT BY LOCAL AGENCIES

- (1) Applicability. This section establishes the procedures by which a responsible party or other aggrieved person may petition the State Board for review of the action or decision a local agency made as part of that local agency's participation in the pilot program. Actions or decisions made by local agencies independent of their participation in the pilot program, and actions or decisions of local agencies that are not participating in the pilot program, are not subject to review by the State Board under this section.
- (2) Petitions. Any responsible party or other aggrieved person may petition the State Board for review of an action or decision of a local agency, including a local agency's failure to act, as part of the pilot program.
 - (A) The petition shall be submitted in writing and received by the State Board within 30 days of the action or decision of the local agency. In the case of a failure to act, the 30-day period shall commence upon refusal of the local agency to act, or 60 days after the request has been made to the local agency to act. The State Board will not accept any petition received after the 30-day period for filing petitions but the State Board may, on its own motion, at any time review any local agency's action or failure to act.
 - (B) The petition shall contain the following:
 - (1) The name and address of the petitioner;
 - (2) The specific action or inaction of the local agency which the State Board is requested to review;
 - (3) The date on which the local agency acted or refused to act or on which the local agency was requested to act;
 - (4) A full and complete statement of the reasons the action or failure to act was inappropriate or improper;
 - (5) The manner in which the petitioner is aggrieved;
 - (6) The specific action by the State Board or the local agency which the petitioner requests;
 - (7) A statement of points and authorities in support of legal issues raised in the petition;
 - (8) A list of persons, if any, other than the petitioner, known by the local agency to have an interest in the subject matter of the petition. Such list shall be obtained from the local agency;
 - (9) A statement that the petition has been sent to the local agency, the appropriate Regional Board, and to any responsible parties other than the petitioner, known to the petitioner or the local agency;
 - (10) A copy of the request to the local agency for preparation of the local agency record.

- (C) If petitioner requests a hearing for the purpose of presenting additional evidence, the petition shall include a statement that additional evidence is available that was not presented to the local agency or that evidence was improperly excluded by the local agency. A detailed statement of the nature of the evidence and the facts to be proved shall also be included. If evidence was not presented to the local agency, the reason it was not presented shall be explained. If the petitioner contends that evidence was improperly excluded, the request for a hearing shall include a specific statement of the manner in which the evidence was excluded improperly.
 - (D) Upon receipt of a petition which does not comply with this subdivision, the petitioner will be notified in what respect the petition is defective and the time within which an amended petition may be filed. If a properly amended petition is not received by the State Board within the time allowed, the petition shall be dismissed unless cause is shown for an extension of time.
 - (E) The State Board may dismiss the petition at any time if the petition is withdrawn or the petition fails to raise substantial issues that are appropriate for review.
- (3) Responses. Upon receipt of a petition which complies with subdivision (2), the State Board shall give written notification to the petitioner, the responsible party or parties, if not the petitioner, the local agency, the Regional Board, the Toxic Substances Control Division Office of Legal Counsel in the Department of Health Services, and other interested persons that they shall have 20 days from the date of mailing such notification to file a response to the petition with the State Board. Respondents to petitions shall also send copies of their responses to the petitioner and the local agency, as appropriate. The local agency shall file the record specified in paragraph (B)(10) of subdivision (2) within this 20-day period. Any response which requests a hearing by the State Board shall comply with paragraph (C) of subdivision (2). The time for filing a response may be extended by the State Board. When a review is undertaken on the State Board's own motion, all affected persons known to the State Board shall be notified and given an opportunity to submit information and comments, subject to such conditions as the State Board may prescribe.
- (4) Proceedings before the State Board. After review of the record, the State Board may deny the petition or grant the petition in whole or in part.
- (A) The State Board may order one or more proceedings which are legally or factually related to be considered or heard together unless any party thereto makes a sufficient showing of prejudice.
 - (B) The State Board may, in its discretion, hold a hearing for the receipt of additional evidence. If a hearing is held, the State Board shall give reasonable notice of the time and place and of the issues to be considered to the responsible party or parties, if not the petitioner, the local agency, any interested persons who have

filed a response to the petition pursuant to subdivision (3) and such other persons as the State Board deems appropriate. The State Board in its discretion may require that, not later than ten days before the hearing, all interested parties intending to participate shall submit to the State Board in writing the name of each witness who will appear, together with a statement of the qualifications of each expert witness who will appear, the subject of the proposed testimony, and the estimated time required by the witness to present direct testimony. The Board may also require that copies of proposed exhibits be supplied to the State Board not later than ten days before the hearing.

- (C) The State Board may discuss a proposed order in a public workshop prior to final action at a State Board meeting. At the workshop meeting, the State Board may invite comments on the proposed order from interested persons. These comments shall be based solely upon factual evidence contained in the record or upon legal argument.
- (D) The evidence before the State Board shall consist of (i) the record before the local agency; (ii) any evidence admitted by the State Board at a hearing and (iii) any other relevant evidence which, in the judgment of the State Board, should be considered to effectuate and implement the pilot program. Upon the close of a hearing, the presiding officer may keep the hearing record open for a definite time, not to exceed thirty days, to allow any party to file additional exhibits, reports or affidavits. If any person desires to submit factual evidence not in the local agency record or hearing record, and the proposed order will be discussed at a workshop meeting such person may take this request to the State Board prior to or during the workshop. This request shall include a description of the evidence, and a statement and supporting argument that the evidence was improperly excluded from the record or an explanation of the reasons why the factual evidence could not previously have been submitted. If the State Board in its discretion approves the request, the evidence must be submitted in writing by the person requesting consideration of the evidence to the State Board, and to any other interested person who filed the petition or a response to the petition, within five days of such approval. The evidentiary submittal shall be accompanied by a notification that other interested parties shall be allowed an additional five days from the submittal date to file responsive comments in writing. A copy of the notification shall be filed with the State Board.
- (E) Any order granting or denying the petition will be adopted at a regularly scheduled State Board meeting. At the meeting the State Board may invite comments on the matter from interested persons. These comments shall be based solely upon factual evidence contained in the record, including any evidence accepted by the State Board pursuant to paragraph (D), or legal argument. No new factual evidence shall be submitted at the State Board meeting. If new

legal argument is to be submitted at the State Board meeting, this argument is to be filed in writing with the State Board and other interested persons at least five working days prior to the State Board meeting in order for such argument to be considered by the State Board.

- (F) An order adopted by the State Board may:
 - (i) Deny the petition upon a finding that the action or failure to act of the local agency was appropriate and proper;
 - (ii) Set aside or modify the local agency's action;
 - (iii) Direct the local agency to take appropriate action; or
 - (iv) Request appropriate action by the Regional Board or the Department of Health Services.
 - (G) If the State Board does not adopt an order or dismiss the petition within 270 days of written notification provided in subdivision (C), the petition is deemed denied. This time limit may be extended for a period not to exceed 60 days by written agreement between the State Board and the petitioner.
- (5) Stay Orders. The State Board may stay in whole or in part, pending final disposition of any petition or any proceedings for review on the State Board's own motion, the effect of the action or decision of the local agency. The filing of a petition shall not operate as a stay of the local agency's action or decision, or effect of the local agency's authority to implement or amend that action or decision, unless a stay is issued by the State Board.
- (A) A stay order may be issued upon petition of an interested person, or on the State Board's own motion. The stay order may be issued by the State Board, upon notice and a hearing, or by the State Board's Executive Director. If the stay order is issued by the Executive Director, the State Board shall conduct a hearing within 60 days after the stay order is issued by the Executive Director, to consider whether the stay order should be rescinded or modified, unless the State Board makes final disposition of the petition within that 60-day period. A request for a stay may be denied without a hearing.
 - (B) A petition for a stay shall be supported by affidavit of a person or persons having knowledge of the facts alleged. The requirement of an affidavit may be waived by the State Board in case of an emergency. A petition for a stay will be denied unless the petitioner alleges facts and produces proof of:
 - (i) Substantial harm to petitioner or to the public interest if a stay is not granted;
 - (ii) A lack of substantial harm to other interested persons and or the public interest if a stay is granted;
 - (iii) Substantial questions of law or fact regarding the action or decision of the local agency.

APPENDIX A-9

Sources of Drinking Water Policy

STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 88-63

ADOPTION OF POLICY ENTITLED
"SOURCES OF DRINKING WATER"

WHEREAS:

1. California Water Code Section 13140 provides that the State Board shall formulate and adopt State Policy for Water Quality Control; and,
2. California Water Code Section 13240 provides that Water Quality Control Plans "shall conform" to any State Policy for Water Quality Control; and,
3. The Regional Boards can conform the Water Quality Control Plans to this policy by amending the plans to incorporate the policy; and,
4. The State Board must approve any conforming amendments pursuant to Water Code Section 13245; and,
5. "Sources of drinking water" shall be defined in Water Quality Control Plans as those water bodies with beneficial uses designated as suitable, or potentially suitable, for municipal or domestic water supply (MUN); and,
6. The Water Quality Control Plans do not provide sufficient detail in the description of water bodies designated MUN to judge clearly what is, or is not, a source of drinking water for various purposes.

THEREFORE BE IT RESOLVED:

All surface and ground waters of the State are considered to be suitable, or potentially suitable, for municipal or domestic water supply and should be so designated by the Regional Boards¹ with the exception of:

1. Surface and ground waters where:
 - a. The total dissolved solids (TDS) exceed 3,000 mg/L (5,000 uS/cm, electrical conductivity) and it is not reasonably expected by Regional Boards to supply a public water system, or

- b. There is contamination, either by natural processes or by human activity (unrelated to a specific pollution incident), that cannot reasonably be treated for domestic use using either Best Management Practices or best economically achievable treatment practices, or
- c. The water source does not provide sufficient water to supply a single well capable of producing an average, sustained yield of 200 gallons per day.

2. Surface waters where:

- a. The water is in systems designed or modified to collect or treat municipal or industrial wastewaters, process waters, mining wastewaters, or storm water runoff, provided that the discharge from such systems is monitored to assure compliance with all relevant water quality objectives as required by the Regional Boards; or,
- b. The water is in systems designed or modified for the primary purpose of conveying or holding agricultural drainage waters, provided that the discharge from such systems is monitored to assure compliance with all relevant water quality objectives as required by the Regional Boards.

3. Ground water where:

The aquifer is regulated as a geothermal energy producing source or has been exempted administratively pursuant to 40 Code of Federal Regulations, Section 146.4 for the purpose of underground injection of fluids associated with the production of hydrocarbon or geothermal energy, provided that these fluids do not constitute a hazardous waste under 40 CFR, Section 261.3.

4. Regional Board Authority to Amend Use Designations:

Any body of water which has a current specific designation previously assigned to it by a Regional Board in Water Quality Control Plans may retain that designation at the Regional Board's discretion. Where a body of water is not currently designated as MUN but, in the opinion of a Regional Board, is presently or potentially suitable for MUN, the Regional Board shall include MUN in the beneficial use designation.

The Regional Boards shall also assure that the beneficial uses of municipal and domestic supply are designated for protection wherever those uses are presently being attained, and assure that any changes in beneficial use designations for waters of the State are consistent with all applicable regulations adopted by the Environmental Protection Agency.

The Regional Boards shall review and revise the Water Quality Control Plans to incorporate this policy.

-
- 1 This policy does not affect any determination of what is a potential source of drinking water for the limited purposes of maintaining a surface impoundment after June 30, 1988, pursuant to Section 25208.4 of the Health and Safety Code.

CERTIFICATION

The undersigned, Administrative Assistant to the Board, does hereby certify that the foregoing is a full, true, and correct copy of a policy duly and regularly adopted at a meeting of the State Water Resources Control Board held on May 19, 1988.



Maureen Marche'

Administrative Assistant to the Board

APPENDIX A-10

Nonpoint Source Management Plan

**STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER QUALITY
NONPOINT SOURCE PROGRAM**

**NONPOINT SOURCE
MANAGEMENT PLAN**



NOVEMBER 1988

STATE OF CALIFORNIA
WATER RESOURCES CONTROL BOARD

Paul R. Bonderson Building
901 P Street
Sacramento, CA 95801

NONPOINT SOURCE
MANAGEMENT PLAN

Jesse M. Diaz, Chief
Division of Water Quality

Ed Anton, Chief
Planning and Standards Development Branch

Syed Ali, Chief
Planning Section

Jack Hodges, Chief
Nonpoint Source Unit

This report was prepared by

OSCAR BALAGUER

Assisted by

SUSAN NORMAN

NOVEMBER 1988

FOREWORD

This is one of two reports produced by the California State Water Resources Control Board to help more effectively manage nonpoint source water pollution. The reports fulfill the requirements of Section 319 of the Federal Clean Water Act.

A Nonpoint Source Assessment Report reviews existing programs for nonpoint source management. The appended "Nonpoint Source Problem Inventory for Surface Waters" and "Nonpoint Source Problem Assessment" document the nature and magnitude of nonpoint source pollution. The Assessment Report provides the factual foundation to support the State Board's Nonpoint Source Program.

A Nonpoint Source Management Plan presents projected and proposed activities to initiate the State Board's Nonpoint Source Management Program. New implementation projects proposed in the Management Plan address some of the key problems documented in the Problem Inventory. New program development activities address the need to strengthen the State Board's nonpoint source management structure. A schedule of milestones is included in the Management Plan. Other sections of, and appendices, to the report support program implementation.

STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 88- 123

APPROVAL OF A NONPOINT SOURCE ASSESSMENT REPORT,
ADOPTION OF A NONPOINT SOURCE MANAGEMENT PLAN,
AND PARTIAL ACCEPTANCE OF
THE SUBSECTION 205(j)(2) NONPOINT SOURCE PROJECT

WHEREAS:

1. The State Water Resources Control Board (State Board) and Regional Water Quality Control Boards are committed to, and have ultimate responsibility for, nonpoint source management to protect and restore water quality in California.
2. On March 7, 1985 the State Board authorized a Phase II Subsection 205(j)(2) "State Strategy for Nonpoint Source Management" Project (Nonpoint Source Project) and on August 20, 1987 augmented the project under Phase III.
3. In February 1987 the Federal Clean Water Act (CWA) was amended to include a new Section 319 which requires each state to develop a Nonpoint Source Assessment Report (Assessment Report) and a Nonpoint Source Management Plan (Management Plan) presenting the State's Nonpoint Source Management Program.
4. The State Board has developed an Assessment Report and Management Plan which fulfill the requirements of CWA Section 319 and incorporate the products developed under the Subsection 205(j)(2) Nonpoint Source Project (except for the Ground Water Feasibility Study which will be presented separately).
5. The State Board held two public hearings to receive testimony on the draft Assessment Report and draft Management Plan, and the reports have been revised to incorporate pertinent comments.

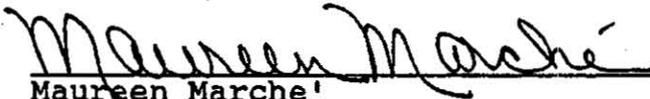
THEREFORE, BE IT RESOLVED:

That the State Board:

1. Approves the Assessment Report and adopts the Management Plan.
2. Accepts these products as partial completion of the Subsection 205(j)(2) Nonpoint Source Project.
3. Authorizes the Executive Director or his designee to transmit the Assessment Report and Management Plan to the U.S. Environmental Protection Agency for approval.

CERTIFICATION

The undersigned, Administrative Assistant to the Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a special meeting of the State Water Resources Control Board held on November 15, 1988.



Maureen Marche
Administrative Assistant to the Board

ACKNOWLEDGEMENTS

This report was made possible by the generous cooperation and skillful assistance of the following. The help of others, not listed, was also vital and is deeply appreciated.

Regional Board Liaisons

Region 1	Frank Reichmuth Susan Warner
Region 2	Dick Whitsel Thomas Mumley
Region 3	Bob Baldrige Angela Carpenter
Region 4	Dennis Dasker Reiner Hoenicke
Region 5	Dave Meith Rudy Schnagl Dennis Wescot Dennis Heiman
Region 6	Ranjit Gill Gerrold Peacock
Region 7	Jack Saluja Phil Gruenberg
Region 8	Joanne Schneider Roger Turner
Region 9	Grieg Peters Michael McCann

State Board Program Managers

Freshwater Special Studies	Dave Carlson
Ground Water	Jeff Barnickol
Oceans Standards and Policy	Craig Wilson
Pesticide Registration and Evaluation	Syed Ali
Priority Chemicals	Paul Lillebo
Surveillance and Monitoring	John Youngerman
Water Quality Planning	John Ladd
Water Quality Standards and Policy	John Norton
Bay-Delta	Dave Beringer
Agricultural Drainage	Dale Watkins
Agricultural Drainage Water Management Loans	Farouk Ismail

Interagency Advisory Committee

CA Assoc. of Resource Conservation Districts	Betty Harris
TRI-TAC	William Heaslet
CA Department of Conservation	Ken Trott
CA Department of Fish and Game	Pete Philips
CA Department of Food and Agriculture	Steven D. Wong
	Steven Monk
CA Department of Forestry	Nancy Tosta
CA Department of Transportation	John Haynes
CA Department of Water Resources	Rick Woodard
U.S. Agricultural Stabilization and Conservation Service	Larry Plumb
U.S. Bureau of Land Management	Mark Blakeslee
U.S. Bureau of Reclamation	Ted Roefs
U.S. Environmental Protection Agency	Bobbie Kahan
	George Wilson
U.S. Fish and Wildlife Service	Dan Palawski
U.S. Forest Service	John Rector
U.S. Soil Conservation Service	Wildon Fontenot
	Darwyn Briggs

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EXECUTIVE SUMMARY

Introduction

Nonpoint sources are a major cause of water pollution in California according to the State Water Resource Control Board (State Board)'s 1988 Water Quality Assessment Report and 1988 Nonpoint Problem Inventory for Surface Waters.

More effective management of nonpoint sources will require:

- o An explicit long-term commitment by the State Board and Regional Water Quality Control Boards (Regional Boards)
- o More effective coordination of existing State Board and Regional Board nonpoint-source related programs
- o Greater use of Regional Board regulatory authorities coupled with non-regulatory programs
- o Stronger links between the local, State, and Federal agencies which have powers that can be used to manage nonpoint sources
- o Development of new funding sources.

Legal Framework

The Porter-Cologne Water Quality Control Act establishes a comprehensive water quality control program for California. The principal means of implementing water quality controls is through issuance of waste discharge requirements which may be issued for both point and nonpoint source discharges affecting both surface and ground waters, including discharges to land. The program is administered by the State Board and the nine Regional Boards.

Management Options

The three general management approaches that will be used by the State Board and the Regional Boards to address nonpoint source problems are:

1. Voluntary implementation of best management practices
2. Regulatory-based encouragement of best management practices
3. Effluent requirements

Regional Boards will generally refrain from imposing effluent requirements on dischargers who are implementing best management practice in accordance with a State Board or Regional Board formal action. It will generally be up to the Regional Boards to decide which management option(s) to use to address particular problems.

Institutional Framework

A host of public agencies have existing nonpoint source-related authorities and programs. In terms of functional relationships these agencies have either land management authority or technical or financial assistance capabilities. The State Board and Regional Boards will seek agreements with these agencies which will result in implementation of best management practices and targeting of technical and financial resources to high priority nonpoint source problems.

Program Objective

The primary objective of the Nonpoint Source Program is to measurably improve water quality and/or implementation of best management practices by 1992. A number of secondary objectives are identified in this report to support this primary objective.

Program Guidance

The State Board has no formal policy regarding nonpoint sources. Pending possible adoption of a policy, Nonpoint Source Program Guidance is presented in this report to provide the framework for more effective coordination and implementation of State Board and Regional Board nonpoint source programs. The guidance is not mandatory but embodies management principles which the State Board considers useful in more effectively managing nonpoint sources. Elements of this guidance may be incorporated into draft policy for State Board consideration.

Implementation

Implementation of the State Board's Nonpoint Source Program will be accomplished in three phases. Phase One will consist of near-term implementation of the program development and implementation activities identified in this report. Phase Two will include ongoing program development and implementation through September 1991. Phase Three will comprise ongoing implementation of the Program after September 1991. Program coordination will be enhanced through the State Board's Clean Water Strategy, the Basin Plan Triennial Review Process, and the Nonpoint Source Management Information System.

New Regional Board Implementation Projects

Four new Regional Board implementation projects will be supported by Section 205(j)(5) funds:

1. Water Quality Management for Forest Activities
2. San Francisco Bay Urban Runoff Control
3. Pesticide and Sediment Discharge to the San Joaquin River
4. Southern California Coastal Lagoon Urban Runoff Management

New Regional Board Program Development Activities

Two new Regional Board program development activities will be supported by Section 205(j)(5) funds:

1. Update Nonpoint Source Problem Inventory
2. Develop Regional Nonpoint Source Management Plans

Ongoing Regional Board Activities

Previously developed nonpoint source activities which will be conducted by the Regional Boards are documented in this report.

New State Board Program Development Activities

Eleven new State Board program development activities will be supported by Section 205(j)(5) funds:

1. Program Management
2. Select 205(j)(5) Projects
3. Update Nonpoint Source Inventory and Assessment
4. Develop Nonpoint Source Policy
5. Coordinate Development of Regional Implementation Plans
6. Evaluate Development of Management Agency Agreements with State and Federal Agencies
7. Review Options for Ongoing Program Funding
8. Update Management Program
9. Water Quality Management for Forest Activities
10. Public Participation
11. Participate in Regional Board New Implementation Projects

Ongoing State Board Activities

Previously developed nonpoint source activities which will be conducted by the State Board are documented in this report.

Schedule

Milestone dates for the above activities are provided.

Project Selection and Evaluation

Projects for potential funding from federal fiscal year 1988 Section 205(j)(5) funds will be identified from existing project lists and through State Board and Regional Board proposals. The following selection criteria will be used:

1. Existing Section 205(j)(2) criteria
2. Consistent with Regional Board Triennial Review Workplans
3. Potential statewide significance
4. Meets Federal criteria
5. Availability of matching funds

Identification of Best Management Practices

To provide information on practices to address any particular problem the State Board has developed a computerized data file of reports addressing nonpoint source problems and management. Priority has been given to reports specific to California. Information noted includes report title, date, and author; nonpoint source category; waterbody; hydrologic unit; and county. References can be retrieved by any combination of the above information categories.

Sources of Assistance

A number of funding sources which could be used to support nonpoint source management are presented in this report. The State Board is considering the use of the State Revolving Fund for nonpoint source management purposes.

I. PROGRAM OVERVIEW

A. INTRODUCTION

Nonpoint sources of water pollution are generally defined as sources which are diffuse and/or not subject to regulation under the Federal National Pollutant Discharge Elimination System (for surface water discharges). Appendix A, "Nonpoint Sources" contains a listing of nonpoint source categories. Nonpoint source pollution is difficult to control for technical, political, and institutional reasons, but nonpoint sources are an important cause of water pollution. According to the State Water Resource Control Board (State Board)'s 1988 Water Quality Assessment (305(b) Report), nonpoint sources (including natural sources) are the major contributor of pollution to impacted streams, lakes, marine waters, ground water basins, and wetlands and estuaries in California and are an important contributor of pollution to harbors and bays. The State Board's 1988 Nonpoint Problem Inventory for Surface Waters (Problem Inventory) and Nonpoint Source Problem Assessment (Problem Assessment) respectively describe individual nonpoint source-related problems and present a statistical overview of nonpoint source pollution in California.

Section 319 of the Federal Clean Water Act requires each State to develop a State Nonpoint Source Management Program describing the measures the State will take to address nonpoint sources. This Nonpoint Source Management Plan (Management Plan) outlines steps to initiate systematic management of nonpoint sources in California.

More effective management of nonpoint sources will require:

- o An explicit long-term commitment by the State Board and Regional Water Quality Control Boards (Regional Boards)
- o More effective coordination of existing State Board and Regional Board nonpoint-source related programs
- o Greater use of Regional Board regulatory authorities coupled with non-regulatory programs
- o Stronger links between the local, State, and Federal agencies which have powers that can be used to manage nonpoint sources
- o Development of new funding sources.

To progress towards the above, two types of activities are presented in this document:

1. Near-term program development and implementation activities expected to be funded under Federal Clean Water Act Section 205(j)(5).
2. Ongoing implementation and planning activities using other funding.

Longer-term actions for which no specific funding sources have yet been identified will be developed as part of the program development activities referenced above.

This Management Plan, the State Board's Nonpoint Source Assessment Report (Assessment Report), and other associated documents were developed with the assistance and review of a Nonpoint Source Interagency Advisory Committee and Regional Board staff members (see Acknowledgements). Further public input to the documents was obtained through public hearings held on March 21 and June 20, 1988.

B. LEGAL FRAMEWORK

The legal framework in which California will implement a Nonpoint Source Program is briefly summarized below. A more complete description of the State Board's statutory authority to manage nonpoint sources is included in Appendix C, "Chief Counsel's Statement of Legal Authority".

1. Federal Clean Water Act

The Clean Water Act is the principal federal water quality protection statute. The Clean Water Act requires the states to adopt water quality standards and to submit those standards for approval by the U.S. Environmental Protection Agency (EPA). For point source discharges to surface waters the Clean Water Act establishes a permit system. However, nonpoint sources are exempt from federal permitting requirements, as are discharges to ground water.

The Clean Water Act also establishes a grants (now a loan) program for the construction of publicly owned treatment works. The permits, grants, and loans may be administered by states with adequate legal authority. In states with approved programs (including California), the state has primary responsibility to apply and enforce the requirements of the Clean Water Act, as a substitute for direct regulation by EPA.

In California the Clean Water Act loans program is administered by the State Board. The permits program is administered by the State Board and the nine Regional Boards. The State Board and Regional Boards also carry

out the State's water quality planning responsibilities under the Clean Water Act.

The Clean Water Act was amended in 1987 to include a new Section 319 entitled "Nonpoint Source Management Programs." Section 319 requires the states to develop Assessment Reports and Management Programs describing the states' nonpoint source problems and setting forth a program to address the problems. The State Board's November 1988 Nonpoint Source Assessment Report and Nonpoint Source Management Plan respond to this requirement. Section 319 authorizes federal grants to the states to support implementation of the Management Programs, however, no Section 319 funds were appropriated in federal fiscal year 1988, and no appropriation is anticipated by the State Board for federal fiscal year 1989.

2. Porter-Cologne Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) establishes a comprehensive water quality control program for the State of California. The Porter-Cologne Act applies to both surface and ground water. The Porter-Cologne Act provides for the establishment of water quality control standards, and requires adoption of water quality control plans to achieve those standards.

The principal means of implementing water quality controls is through issuance of waste discharge requirements. Waste discharge requirements are issued for both point and nonpoint source discharges, affecting both surface and ground waters including discharges to land.

The program is administered by the State Board and the nine Regional Boards. The State Board set overall State policy, adopts or approves all water quality control plans, and hears petitions to review Regional Board decisions. The Regional Boards have primary responsibility for individual permitting, inspection, and enforcement actions.

C. MANAGEMENT OPTIONS

The three general management approaches that will be used to address nonpoint source problems are described below. The options are presented in order of increasing stringency. In general the least stringent option that successfully protects or restores water quality will be employed, with more stringent measures considered if timely improvements in beneficial use protection are not achieved.

Two of the following options relate to implementation of best management practices (BMPs). Federal regulations (40 CFR 130.2(1)) define BMPs as methods, measures or practices selected by an agency to meet its nonpoint source control needs. BMPs include but are not limited to structural and nonstructural controls and operation and maintenance procedures. BMPs can be applied before, during, and after pollution-producing activities to reduce or eliminate the introduction of pollutants into receiving waters.

It will usually be up to the Regional Boards to decide which, or what mix of, the following three options will be used to address any given nonpoint source problem.

1. Voluntary Implementation of Best Management Practices

Property owners or managers may voluntarily implement BMPs. Implementation could occur for economic reasons and/or through awareness of environmental benefits. Voluntary implementation can be encouraged through education, training, financial assistance, technical assistance, and demonstration projects. A voluntary approach would take advantage of the expertise and incentives offered by a variety of existing State and Federal programs which are geared to promoting private actions which could have water quality benefits. Lead agencies for these programs include the U.S. Soil Conservation Service, the U.S. Agricultural Soil Stabilization and Conservation Service, Resource Conservation Districts, and the U.C. Cooperative Extension Service.

2. Regulatory-Based Encouragement of Best Management Practices

Although the Porter-Cologne Act constrains Regional Boards from specifying the manner of compliance with water quality standards, there are two ways in which Regional Boards can use their regulatory authorities to encourage implementation of BMPs.

First, Regional Boards may encourage BMPs by waiving adoption of waste discharge requirements on condition that dischargers comply with best management practices.

Alternatively, the State Board and the Regional Boards may enforce BMPs indirectly by entering into management agency agreements (MAAs) with other agencies which have the authority to enforce. Such authority derives either from the agency's regulatory authority or its management responsibility for publicly owned or controlled land. MAAs will include (or reference) specific, acceptable BMPs and their means of implementation.

Regional Boards will generally refrain from imposing effluent requirements on dischargers who are implementing BMPs in accordance with a waiver of waste discharge requirements, an approved MAA, or other State Board or Regional Board formal action. Once BMPs have been formally approved by the State Board or Regional Board they will become the primary mechanism for meeting water quality standards. While compliance with BMP requirements cannot excuse a violation of water quality standards, the Regional Boards may rely on implementation of BMPs to demonstrate compliance with standards.

Implementation of BMPs will normally include (1) design to meet specific site conditions, (2) monitoring to assure that practices are properly applied and are effective, (3) immediate mitigation of a problem where BMPs are not effective (including regulatory action, if necessary), and (4) improvement of an approved BMP when needed to resolve a deficiency.

Both the State Board and the Regional Boards may enter into MAAs. The State Board will develop MAAs, where appropriate, with State and Federal agencies with Statewide jurisdiction, such as the U.S. Bureau of Land Management or the California Department of Transportation (the State Board has existing MAAs with the U.S. Forest Service and with the California Board of Forestry and Department of Forestry). State Board MAAs will specify acceptable BMPs and their means of implementation. Formal agreements between the State Board and other agencies pertaining to the prevention and abatement of nonpoint source pollution will be referenced in Regional Board basin plans and will become the primary basis for Regional Board determination of compliance with State requirements.

Regional Boards will seek agreements, where appropriate, with local agencies, such as cities and counties (Regional Boards have existing MAAs with counties concerning regulation of onsite wastewater disposal systems). Regional Board MAAs may reference BMPs which have been adopted into basin plans.

Regional Boards have discretion in deciding what BMPs to encourage through conditional waiver of waste discharge requirements or inclusion in Regional Board MAAs. Regional Boards need not adopt BMPs into basin plans for these purposes, but may do so to facilitate region-wide application. The State Board will encourage reasonable consistency among the Regional Boards in choosing BMPs by providing for information transfer between Regional Boards on effective (or ineffective) practices, in

reviewing for approval amendments to basin plans, and through its determinations as the appeal agency for Regional Board decisions.

3. Effluent Limitations

Regional Boards can adopt and enforce requirements on the nature of any proposed or existing waste discharge, including discharges from nonpoint sources. Although Regional Boards are precluded from specifying the manner of compliance with waste discharge limitations, in appropriate cases limitations may be set at a level which, in practice, requires implementation of BMPs.

D. INSTITUTIONAL FRAMEWORK

A host of public agencies have nonpoint source-related authorities and programs. The most important of these are described in the State Board's November 1988 Nonpoint Source Assessment Report. A tabular summary of agency capabilities relating to different nonpoint source categories is also shown in this Management Plan (Appendix D). In terms of functional relationships with the State Board's Nonpoint Source Program, these agencies and programs fall into the following five categories:

1. Federal and State Land Management Agencies

This category comprises Federal and State agencies which have the authority to enforce implementation of BMPs Statewide. Such authority derives either from the agency's regulatory authority or its management responsibility for publicly owned or controlled land (e.g. U.S. Forest Service, U.S. Bureau of Land Management, California Department of Transportation, and California Department of Food and Agriculture). When such agencies have the capability of acting effectively in the area of their jurisdiction as a lead nonpoint source management agency, the State Board will seek MAAs which will provide for nonpoint source controls.

2. Federal and State Assistance Agencies

This category comprises agencies which can provide technical or financial assistance to support implementation of BMPs (e.g. U.S. Agriculture Stabilization and Conservation Service, U.S. Soil Conservation Service, U.C. Extension). These agencies can assist land managers in voluntary implementation of BMPs and can help identify appropriate BMPs for Regional Board or management agency enforcement. The State Board will seek agreements with these agencies which will result in targeting of technical and financial resources

by these agencies to high priority nonpoint source problems.

3. State Board and Regional Board Programs

The State Board and Regional Boards have numerous nonpoint source-related activities, including problem monitoring and assessment, planning, financial assistance, and regulatory and non-regulatory management. The State Board's Nonpoint Source Program will support these current activities and provide a management framework to enhance coordination. Specific functions will include:

- a. Development and administration of policy
- b. Problem identification and prioritization
- c. Update of the Nonpoint Source Management Plan to provide an overall management framework
- d. Information transfer regarding successful management approaches
- e. Procurement and administration of federal funding
- f. Development of new funding sources
- g. Program tracking and evaluation

4. Local Land Management Agencies

This category comprises agencies which have the authority to enforce implementation of BMPs locally (e.g. counties, cities, and some special districts). When such agencies have the capability of acting effectively in the area of their jurisdiction as a lead nonpoint source management agency, Regional Boards will seek MAAs which will provide for nonpoint source control.

5. Local Assistance Agencies

This category comprises local agencies which can provide technical or financial assistance to support implementation of BMPs (e.g. U.C. Agricultural Extension, Resource Conservation Districts, and some other special districts). These agencies can assist land managers in voluntary implementation of BMPs and can help identify appropriate BMPs for Regional Board or management agency enforcement. The Regional Board will seek agreements with these agencies which will result in targeting of technical and financial resources by these agencies to high priority nonpoint source problems.

E. PROGRAM OBJECTIVES

The following program objective and goals will help focus Program efforts and will provide a standard for program evaluation.

Primary Program Objective

Measurably improve water quality and/or implementation of BMPs by 1992 by meeting the following secondary objectives:

Secondary Objectives

1. Develop nonpoint source policy for State Board consideration.
2. Establish and maintain a problem identification process coordinated with other State Board and Regional Board assessment efforts.
3. Establish a systematic process to prioritize resource allocation to identified nonpoint source problems.
4. Achieve public support for nonpoint source management programs through public participation and education.
5. Coordinate State Board nonpoint source-related programs to achieve mutually supportive goal-setting, data collection, and resource allocation.
6. Coordinate Regional Board nonpoint source-related programs through the basin planning process and by assuring transfer of information concerning nonpoint source management between Regional Boards.
7. Coordinate other agency nonpoint source-related programs through formal management agency agreements and/or through informal cooperative working arrangements.
8. Develop a program tracking and assessment system to monitor program effectiveness.
9. Identify any needed statutory, regulatory, or institutional changes.
10. Propose development of new institutions and authorities as needed to address nonpoint source problems.
11. Identify and/or develop funding to achieve the above program goals.

F. PROGRAM GUIDANCE

The State Board currently has no formal policy specifically regarding control of nonpoint sources. State Board staff will develop a draft Nonpoint Source Policy for State Board consideration. Pending adoption of a policy, the following Nonpoint Source Program Guidance can provide the framework for more effective coordination and implementation of State Board and Regional Board nonpoint source-related programs. Except as otherwise required, this guidance is not mandatory for Regional Boards and State Board units, but it embodies management principles which the State Board considers useful in more effectively managing nonpoint sources. Elements of this guidance may be incorporated into the draft policy which will be presented to the State Board.

General Guidance

a. Statement of Commitment

The State Board and Regional Boards are committed to, and have ultimate responsibility for, nonpoint source management to protect and restore water quality in California.

b. Lead Capability

The lead capability for nonpoint source management rests with the Federal, State, and local agencies which have direct land-use and resource management control authority.

c. Priority of Point and Nonpoint Source Control

Regional Boards will control nonpoint sources before seeking additional point source control wherever nonpoint sources are the principal cause of existing or expected beneficial use impairment and point source dischargers are in compliance with statutory and regulatory requirements. The State Board will systematically consider which investments will maximize water quality in allocating resources to point versus nonpoint source management activities.

State Board Guidance

d. State Board Funding Priorities

When allocating nonpoint source designated funds, the State Board will give priority to activities which support Regional Nonpoint Source Management Plans (see g. below).

e. Coordination of State Board Programs

The State Board will coordinate its internal nonpoint source activities to achieve mutually supportive goal-setting, data collection, and resource allocation.

f. State Board Coordination with Management Agencies

The State Board will, to the maximum extent practical, work with State and Federal agencies to develop and implement nonpoint source management programs. Formal agreements between the State Board and other Federal and State agencies will be referenced in Regional Board basin plans and implemented as appropriate by Regional Boards.

Regional Board Guidance

g. Regional Management Plans

Regional Boards will develop and periodically update Regional Nonpoint Source Management Plans which will identify (1) priority problems consistent with the State Board's Nonpoint Source Problem Inventory and other assessment reports, (2) planned actions, and (3) needed resources. Development of the Regional Management Plans will be coordinated with the basin plan triennial review process.

h. Regional Board Coordination with Management Agencies

Regional Boards will, to the maximum extent practical, work with local land-use and resource management agencies to develop and implement nonpoint source controls which address the Regional Board's nonpoint source priorities.

i. Voluntary Implementation of Best Management Practices

Regional Boards will actively promote voluntary implementation of best management practices by working with dischargers and with agencies which can provide enforcement, technical, and financial assistance.

j. Use of Regulatory Authority

When necessary to achieve water quality objectives, Regional Boards will actively exercise their regulatory authority over nonpoint sources through enforcement of effluent limitations and other appropriate regulatory measures.

G. IMPLEMENTATION

1. Phasing

Implementation of the State Board's Nonpoint Source Program will be accomplished in three phases, as

described below. The activities presented in this document assume no reductions in current resources dedicated to nonpoint source-related work and the future availability of adequate Clean Water Act Section 205(j)(5) funds through FY 1990-91 to support a total of ten new staff positions at the State Board and the Regional Boards.

Phase One will consist of implementation of the program development and implementation activities identified in Sections II and III of this Management Plan. Implementation of Phase One will be supported by a new Nonpoint Source Unit administratively located in the State Board's Division of Water Quality and by additional staff positions at the Regional Boards.

Phase Two will include additional program development and implementation through September 1991. Phase Two will be guided by the work to be undertaken in Phase One, as documented in annual updates of this Management Plan and by the Regional Nonpoint Source Management Plans to be developed by each Regional Board.

The major elements of the State's Management Program, as generally described in this "Program Overview" section, will be put into place during the three year duration of Phases One and Two.

Phase Three will comprise ongoing implementation of the Program after September 1991. Although a mature program is projected to be in place in Phase Three, program modification to address the full scope of nonpoint source problems affecting California will continue.

2. Program Coordination

The State Board's Nonpoint Source Assessment Report describes a number of existing State Board and Regional Board programs that will be involved in implementation of the Nonpoint Source Program. An important focus during Phases One and Two will be coordination of these programs. The following State Board activities and capabilities will play important roles in this coordination.

a. Clean Water Strategy

The State Board has initiated development of a "Clean Water Strategy" for California. The Strategy will provide a framework to better integrate and coordinate State Board and Regional Board programs, including the many programs with nonpoint source-related activities. The Strategy will also provide a process to target resources for problem identification, characterization, and control to high priority problems. The Strategy will be the

mechanism to set priorities for monitoring to characterize the many nonpoint source problems for which we have inadequate information.

b. Water Quality Management Plan Triennial Review

California's Water Quality Management Plan consists of statewide and regional water quality control plans. These documents are reviewed triennially. Opportunities to strengthen the State Board's Nonpoint Source Program will be considered when the State Board reviews its statewide plans.

The regional basin plan triennial review is the process whereby Regional Boards identify priority water quality issues to be addressed and estimate needed resources. Triennial Review Workplans have been adopted by a number of Regional Boards for the next three-year planning cycle and will be prepared by all Regional Boards by the end of 1988. In the long term, Regional Board nonpoint source management planning will be integrated with the basin plan triennial review process. For the current planning cycle complete integration is infeasible due to the different time frames in which the Triennial Review Workplans and the Regional Nonpoint Source Management Plans have been, or will be, prepared. In developing the initial Regional Nonpoint Source Management Plans, Regional Boards will build upon the nonpoint source-related issues previously identified in the Triennial Review Workplans. For the most part, nonpoint source-related activities currently included in Triennial Review Workplans relate to problem characterization activities rather than to specific control programs. Since the ultimate goal of problem characterization is the development of actual control measures, the Regional Nonpoint Source Management Plans will put the preliminary studies in the context of anticipated regulatory or non-regulatory controls.

3. Nonpoint Source Management Information System

The Nonpoint Source Management Information System (NPSMIS) consists of a set of related computer files and programs regarding nonpoint source problems, studies and reports, and management activities (Figure 1). The NPSMIS will be used to help identify, characterize, and prioritize problems; to identify potential BMPs; and to track nonpoint State Board and Regional Board nonpoint source activities and accomplishments.

Files describing nonpoint source water quality problems include the problem water body, drainage area, source, water quality parameter, beneficial uses impaired, degree of impairment, geographical extent of impairment, and other information. These files were used to develop the

State Board's Nonpoint Source Problem Inventory and Nonpoint Source Problem Assessment. Associated software allows sorting and statistical analysis of the information contained in these files, and the production of reports.

The NPSMIS also includes the "Nonpoint Source Document Reference File" which is described in Section VI of this report (Identification of Best Management Practices) and partially displayed in Appendix B (Cataloged Reports Including BMPs).

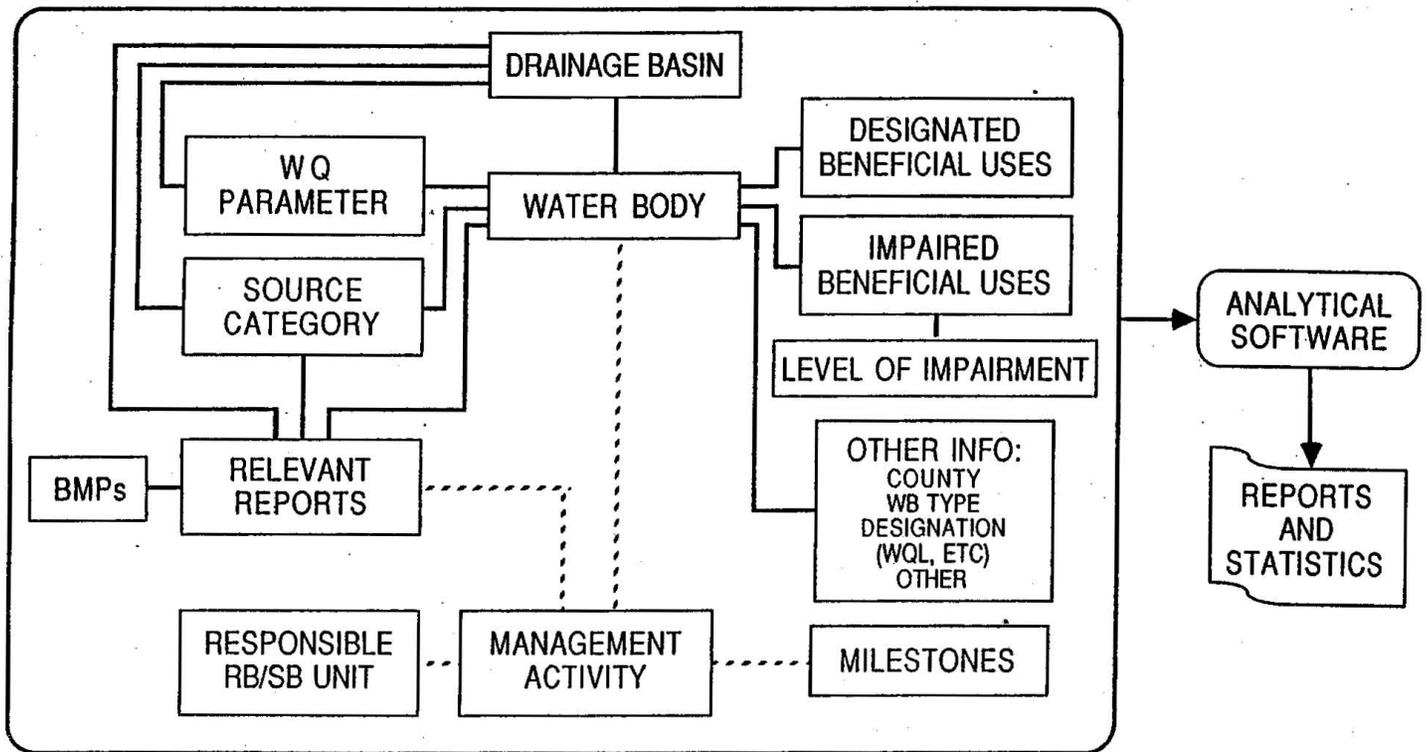
A final set of files, to be developed, will document State Board and Regional Board nonpoint source-related activities. These files will include the responsible unit, management activity, and key milestones.

All the above information categories may be directly cross-referenced in any combination or order, as diagrammed in Figure 1. For example:

- o Given a particular waterbody (e.g. Los Angeles Harbor), we can identify associated nonpoint sources and water quality parameters; previously published reports dealing with the waterbody; and current management activities and milestones.
- o Given a particular nonpoint source category (e.g. Agricultural Irrigation Return Flows), we can identify the waterbodies in any given basin or region which are affected by that source; identify previous studies which present BMPs to address the source; and identify current State Board and Regional Board activities relating to that source.
- o Given a particular beneficial use category (e.g. Spawning Habitat), we can identify which waterbodies in any given geographical area have that use, which suffer impairment of that use and the total number of stream miles or lake acres affected; identify the nonpoint source categories affecting the use and their relative importance; and identify related management activities.

FIGURE 1

NPS MANAGEMENT INFO SYSTEM



BOXES REPRESENT DATA CATEGORIES IN NPS DATA BASE
DATA RELATIONS (DIRECT CROSS-REFERENCING CAPABILITY)
ARE SHOWN BY CONNECTING LINES
EXISTING ——— UNDER DEVELOPMENT - - - - -

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APPENDIX B

CATALOGED REPORTS INCLUDING BEST MANAGEMENT PRACTICES

APPENDIX B
 CATALOGED REPORTS WHICH INCLUDE BHPS
 FOR INDICATED NONPOINT SOURCE CATEGORY

PRINCIPAL AGENCY	REPORT TITLE	ABSTRACT	A A A A A A A B C C D D D D G H H I M N O S S U C C G G G G G G G O H O I I R U E A Y H I A U E E I R E G I E N O G R S T A A N R S E M O B D D N T T A P L B R Y
ABAG	REGIONAL WETLANDS PLAN FOR URBAN RUNOFF TREATMENT: SAN FRANCISCO BAY AREA ENVIRONMENTAL MANAGEMENT PLAN: VOLS I AND II: APPENDIX O	PRESENTS WQ PORTION OF TITLE PLAN. ADDRESSES THESE WQ PROBLEMS: RECEIVING WATERS/ECOSYSTEM, POINT WASTEWATER DISCHARGE, SURFACE WATER RUNOFF, MISCELLANEOUS POLLUTION SOURCES. CONCERNED WITH WETLANDS IN SFBA, ESPECIALLY IN DEALING WITH URBAN RUNOFF.	X X X X X
AMBAG	INITIAL ASSESSMENT OF NONPOINT SOURCE POLLUTION IN THE AMBAG 20B AREA: FINAL REPORT	INITIAL ASSESSMENT OF NPS POLLUTION, INCLUDES IDENTIFICATION OF POLLUTION SEVERITY, APPROPRIATE POLLUTION CONTROL MEASURES, AND A WORK PROGRAM TO COMPLETE THE NPS PLAN.	X X X X X X X X
AMBAG	PAJARO BASIN GROUND WATER MANAGEMENT STUDY	SUMMARIZES AVAILABLE INFORMATION ON AREA, EVALUATES NEED FOR ADDITIONAL WATER SUPPLIES, RECHARGE CONDITIONS, INSTITUTIONAL, FINANCIAL ECONOMIC ASPECTS OF WATER AUGMENTATION DEVELOPMENT, OVERALL GW MNGT PLAN TO CONTROL OVERDRAFT/SEAWATER INTRUSION.	X X X
AMBAG	SAN LORENZO VALLEY SEPTIC MANAGEMENT PROJECT: FINAL REPORT	PRESENTS PROCEDURES & CONCEPTS FOR IMPLEMENTATION OF PUBLIC MNGT PROGRAMS FOR ONSITE WASTEWATER SYSTEMS IN CLASS 2 COMMUNITIES (THOSE W/ ONSITE SYSTEMS) IN SAN LORENZO V. EACH CLASS 2 AGENCY WILL NEED TO ADAPT RECOMMENDATIONS TO ITS OWN REQUIREMENTS	X
AMBAG SCCRCU	AGRICULTURAL EROSION CONTROL PROJECT: FINAL REPORT	DESCRIBES EROSION PROBLEMS IN AREA, LISTS AND EXPLAINS TASKS OF THE PROJECT WHICH ARE, INTENDED TO CONTROL CONDITIONS. DESCRIBES ACTIVITIES UNDERTAKEN TO ACCOMPLISH THESE TASKS.	X X X
BAKERSFIELD	GROUND WATER QUALITY IMPROVEMENT PROJECT 2800 ACRE AREA RECHARGE FACILITY	DESCRIBES DESIGN AND MANAGEMENT OPTIONS FOR GROUND WATER RECHARGE. INCLUDES SECTIONS ON BASIN GEOLOGY, RECHARGE EFFICIENCY, MONITORING PROGRAM, ENVIRONMENTAL IMPACTS, PREDICTIONS AND PUBLIC PARTICIPATION.	X X

PRINCIPAL AGENCY	REPORT TITLE	ABSTRACT	A A A A A A A A B C C D D D D G H H I M N O S S U C C G G G G G G G O H O I I R U E A Y N I A U E E I R E G I E N D G R S T A A N R S E M O B D D N T T A P L E R V
SANTA CRUZ CO	BEST MANAGEMENT PRACTICES FOR AGRICULTURAL SOIL CONSERVATION IN THE PAJARO VALLEY	SUGGESTS MANAGEMENT PRACTICES THAT KEEP SEDIMENT AND OTHER AGRICULTURAL POLLUTANTS FROM ENTERING WATERWAYS, AS WELL AS PREVENT PRODUCTIVE AGRICULTURAL TOPSOIL LOSSES.	X X X
SANTA CRUZ CO	SAN LORENZO VALLEY ON-SITE WASTEWATER DISPOSAL PILOT MANAGEMENT PROJECT: FINAL REPORT	USES SIX SITES TO DEMONSTRATE IMPROVEMENT METHODS FOR REDUCING WATER QUALITY (SURFACE AND GROUND WATER) PROBLEMS IN THE AREA. RECOMMENDATIONS PRESENTED WILL SERVE AS A BASIS FOR A WASTEWATER MANAGEMENT PROGRAM.	X
SANTA CRUZ CO.	SOQUEL CK CHRONIC SEDIMENT SOURCE INVENTORY FINAL REPORT	SOQUEL CK WATERSHED WAS INVENTORIED TO ASCERTAIN SEDIMENT SOURCES & STREAM OBSTRUCTIONS WHICH COULD IMPACT ANADROMOUS FISHERY HABITAT. SEDIMENT SOURCES, LOGJAMS & WATER DIVERSION DAMS WERE IDENTIFIED AS POTENTIAL PROBLEMS. BMP'S ARE PRIORITIZED.	X X
SCAG LADWP	GROUNDWATER QUALITY MANAGEMENT PLAN: SAN FERNANDO VALLEY BASIN (SFVB)	SUMMARIZES A 2 YEAR STUDY THAT RESULTED IN 8 PRIMARY RECOMMENDATIONS THAT CONSTITUTE THE GW MNGHT PLAN FOR THE SFVB. RECOMMENDATIONS ADDRESS: PUBLIC EDUCATION, REGULATION OF PRIVATE DISPOSAL SYSTEMS, LANDFILLS AND GW MNGHT AND TREATMENT PROGRAMS.	X X X X X X
SHASTA CO	SHASTA COUNTY EROSION STUDY	COMPILES PERTINENT DATA REGARDING THE NATURE, MAGNITUDE OF EROSION AND SEDIMENTATION PROBLEMS IN THE CO, ASSESSES APPROPRIATE REMEDIAL AND PREVENTIVE MEASURES. INTENDED TO PROVIDE ASSISTANCE TO THOSE INVOLVED IN THE CO'S DECISION MAKING PROCESS.	X X X
SOLANO CO	NORTHERN SOLANO CO: SURFACE RUNOFF MANAGEMENT PLAN	CONTAINS 7 MEASURES FOR THE CONTROL OF SURFACE RUNOFF IN THE CO, AND THE INSTITUTIONAL, FINANCIAL, LEGISLATIVE AND SCHEDULING DETAILS FOR PLAN IMPLEMENTATION. ALSO DESCRIBED IS THE CONTINUING PLANNING PROGRAM.	X X X X X X X X X X
SONOMA CO	AGGREGATE RESOURCES MANAGEMENT PLAN: FINAL ENVIRONMENTAL IMPACT REPORT	BASED ON AN EIR ON WATERWAY AND HARDROCK GRAVEL MINING IN THE CO, PROPOSES A MNGHT PLAN FOR ASSURING FUTURE AGGREGATE RESOURCES WHILE MINIMIZING ENVIRONMENTAL IMPACTS AND LAND USE CONFLICTS.	X X

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PRINCIPAL
AGENCY

REPORT TITLE

ABSTRACT

AAAAAAAAABCCDDDDGHHINHOSSU C
CGGGGGGGGONOIIRUEAYNIAUEEIR E G
IENDGRSTAAMRSEMOBDDHTTAPLB R W

VENTURA CO

208 AREAWIDE WQ MIGHT PLANNING
STUDY (CONTINUING PLANNING
STUDY): 1981/1982
PHASE IV
ABANDONED WATER WELLS STUDY

DISCUSSES ABANDONED WELLS IN VENTURA COUNTY AND THE
STEPS TAKEN TO CORRECT ASSOCIATED PROBLEMS INCLUDING
SEALING THE WELLS, IN ORDER TO PREVENT GROUND WATER
LOSS OR CONTAMINATION.

X X

APPENDIX C

CHIEF COUNSEL'S STATEMENT OF LEGAL AUTHORITY

CHIEF COUNSEL'S STATEMENT
FOR THE
STATE NONPOINT SOURCE MANAGEMENT PROGRAM
ADMINISTERED BY THE
STATE WATER RESOURCES CONTROL BOARD
AND THE
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARDS

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD
OFFICE OF THE CHIEF COUNSEL
OCTOBER 1988

CHIEF COUNSEL'S STATEMENT
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STATE OF CALIFORNIA, STATE WATER RESOURCES CONTROL BOARD
CHIEF COUNSEL'S STATEMENT OF LEGAL AUTHORITY TO
IMPLEMENT A STATE NONPOINT SOURCE MANAGEMENT PROGRAM

I hereby certify, pursuant to Section 319(b) of the Clean Water Act, that in my opinion the laws of the State of California provide adequate authority for the California State Water Resources Control Board (State Board) and the California Regional Water Quality Control Boards (Regional Boards) to carry out the Nonpoint Source Management Program submitted by the State Board. This authority is provided in lawfully enacted statutes and lawfully adopted regulations in full force and effect on the date of this Chief Counsel's Statement. Specific authorities provided by these statutes and regulations are discussed below.

I. INTRODUCTION

Authority for the State of California to implement the nonpoint source management program in compliance with Section 319 of the Clean Water Act (33 U.S.C. § 1329) is found in the Porter-Cologne Water Quality Control Act (Porter-Cologne Act), Division 7 (commencing with Section 13000) of the California Water Code.

The State and Regional Boards also have authority under the Toxic Pits Cleanup Act of 1984 and the state underground storage of hazardous substances law to establish and enforce requirements for surface impoundments containing hazardous waste and for underground storage tanks. (Cal. Health & Safety Code § 20208 et seq.; id. § 25280 et seq.) These statutes do not limit or abridge the State and Regional Board's Porter-Cologne Act authority. (Id. §§ 25208.11, 25299.5.) Similarly, state statutes authorizing other agencies to regulate activities which may be nonpoint sources do not bar the State and Regional Board from regulating those nonpoint sources pursuant to the Porter-Cologne Act. (See Cal. Food & Agric. Code § 11501.1(b) (pesticide use); Cal. Gov't Code § 66732 (solid waste disposal), Cal. Health & Safety Code § 25145 (hazardous waste disposal); id. § 25356.1(b) (hazardous substance releases); Cal. Pub. Res. Code § 2559 (mining); id. § 3718 (geothermal wells); id. § 4514(c) (logging).)

A. General Powers of the State and Regional Boards

The Porter-Cologne Act establishes a comprehensive program for the protection of water quality and the beneficial uses of the waters of the state. The Porter-Cologne Act applies to both surface and ground waters, and to both point and nonpoint sources. (See Cal. Water Code § 13050(e), 13172, 13260 et seq.; 63 Ops. Cal. Atty. Gen. 51, 53-57 (1980); 58 Ops. Cal. Atty. Gen. 531-32 (1975); 58 Ops. Cal. Atty. Gen. 114, 121 (1975).)

The Porter-Cologne Act is intended to provide a "statewide program for water quality control." (Cal. Water Code § 13000.) "Water quality control" is defined broadly by the Porter-Cologne

Act to mean "the regulation of any activity or factor which may affect the quality of the waters of the state and includes the prevention and correction of water quality or nuisance." (Id. § 13050(i).)

The authority to administer programs dealing with any factor affecting water quality was originally provided in amendments to the Dickey Water Pollution Act, the predecessor of the Porter-Cologne Act. (See 1963 Cal. Stat. ch. 1463, at 3021.) Interpreting these amendments, the Attorney General concluded:

Prior to 1963, the state board's concern with water quality was limited to the effect thereon of the discharge of sewage and industrial wastes. . . . [The law] now allows the state board in setting water quality control policy to consider any factor which . . . affects the quality of water for beneficial use. Thus, the state board in setting water quality control policy may now consider such matters as saline intrusion . . . and watershed management projects as they may affect water quality. (44 Ops. Cal. Atty. Gen. 126, 128 (1964)(emphasis in original).)

The Legislative history of the Porter-Cologne Act also underscores the intent to create a comprehensive water quality control program, encompassing point and nonpoint sources:

Over the past two decades the state has controlled water pollution by regulating waste discharges, but there is now an increasingly urgent need for a greatly expanded, comprehensive control program covering the many factors, apart from waste disposal, that affect water quality, such as impoundments, saline water intrusion, and land use. (Recommended Changes in Water Quality Control, Final Report of the Study Panel to the California State Water Resources Control Board, Study Project, Water Quality Control Program at 3-4 (1969)[hereinafter Study Panel Report]. See generally 1969 Cal. Stat. ch. 482, sec. 36, at 1088 (the Porter-Cologne Act is intended to implement the recommendations of the Study Panel Report).)

The State Board and the nine Regional Boards are the principal state agencies with primary responsibility for water quality control. (Cal. Water Code § 13001.) The State Board also administers the state's water rights program. (See id. § 174.)

It is the intent of the Porter-Cologne Act to create a water quality control program which is administered regionally, within a framework of statewide coordination and policy. (Id. § 13000.) The State Board provides program guidance and oversight to the Regional Boards through adoption of statewide plans, policies, regulations and administrative procedures, preparation of an

annual budget and allocation of funds to the Regional Boards, and providing legal advice to the Regional Boards. (See id. §§ 186, 13140, 13164, 13168, 13170.)

The State Board also provides oversight and policy guidance through review of Regional Board decisions. Most actions involving Porter-Cologne Act planning are initiated by the Regional Boards, but do not take effect until approved by the State Board. (See id. § 13240 et seq.) The Regional Boards also have primary responsibility for individual permitting, inspection, and enforcement actions. (See id. § 13260 et seq., 13300 et seq.) The State Board may review the action or failure to act of any Regional Board, and take appropriate action, upon petition of any aggrieved person or upon the State Board's own motion. (Id. § 13320.)

The Porter-Cologne Act provides for adoption of water quality control plans. (Id. §§ 13170, 13240 et seq.) These plans designate beneficial uses of waters, set water quality objectives to protect beneficial uses, and establish a program of implementation to achieve those objectives. (Id. § 13050(j), 13241, 13242.)

Beneficial use designations and water quality objectives are standards, not just non-binding guidelines or goals. (See Cal. Water Code § 13263(a); Study Panel Report at 12, Appendix A at 28.) They are "water quality standards" within the meaning of the Clean Water Act. (40 C.F.R. § 131.3(i); see Northwest Indian Cemetery Protective Association v. Peterson, 795 F.2d 688 (9th Cir. 1986); rev'd on other grounds, Lyng v. Northwest Indian Cemetery Protective Association, 108 S.Ct. 1319 (1988).)

Water quality control plans may include prohibitions against the discharge of waste, or certain types of waste, in specified areas or under specified conditions. (Id. § 13243.) Discharge prohibitions may be adopted for nonpoint sources, such as surface runoff or discharge of waste to land, as well as to direct discharges to surface or ground water. (See 58 Ops. Cal. Atty. Gen. § 531, 532 (1975).)

The principal means of regulating activities which affect water quality, and the principal means of implementing water quality control plans, is through issuance of waste discharge requirements. Any person discharging waste or proposing to discharge waste that could affect the quality of waters of the state, other than a discharge into a community sewer system, must submit a report of waste discharge to the Regional Board, unless the Regional Board waives the filing of a report. (Cal. Water Code § 13260.) With certain limited exceptions, no person may initiate any new discharge of waste or make any material change in any discharge prior to issuance of waste discharge requirements by the Regional Board. (Id. § 13264. See also Cal. Pub. Res. Code § 4514.3 (nonpoint source discharges from timber operations conducted pursuant to the Z'berg-Nejedly Forest Practice Act of 1973, Cal. Pub. Res. Code § 4511 et seq., ordinarily are exempt from waste discharge requirements when the Environmental Protection Agency has approved Forest Practices Act

as best management practices pursuant to Section 208 of the Clean Water Act, 33 U.S.C. § 1288.)

The term "discharge of waste," as used in the Porter-Cologne Act, has much broader applicability than the term "discharge of a pollutant," as used in the Clean Water Act. (See 33 U.S.C. § 1362(12); Attwater & Markle, Overview of California Water Rights Law and Water Quality Law, 19 Pac. L. J. 957, 997-98, 1001 (1988).) The term "discharge" under the Porter-Cologne Act includes any flowing or issuing out, including drainage, flow, seepage, leaching or other releases of pollutants or liquids containing harmful materials. (See 27 Op. Cal. Atty. Gen. 182, 183-85 (1956); 26 Op. Cal. Atty. Gen. 88, 89-90 (1955).) A continuing discharge occurs for as long as harmful material continues to migrate through or into waters of the state. (See id.)

Discharges subject to waste discharge requirements and discharge prohibitions under the Porter-Cologne Act are not limited to discharges to surface waters, but also include discharges to ground water and discharges of waste to land. (See Cal. Water Code §§ 13050(e), 13172, 13260 et seq.; 23 Cal. Code Reg. § 2510 et seq.)

The definition of "waste" in the Porter-Cologne Act (Cal. Water Code § 13050(d)) is intended to include all interpretations of the Attorney General of the meaning of "sewage", "industrial waste", or "other waste" under the Dickey Water Pollution Act. (Study Panel Report, Appendix A at 23; 63 Op. Cal. Atty. Gen. 51, 53-59 (1980).) Published opinions of the Attorney General had interpreted a discharge of "sewage", "industrial waste", or "other waste" to include the following:

- . Releases from a hydroelectric plant. (43 Op. Cal. Atty. Gen. 302, 302-03 (1964).);
- . Pesticides improperly applied to waters of the state, or which find their way into waters of the state after application for use. (Id. at 304.);
- . Changes in the physical or chemical characteristics of receiving waters caused by extraction of minerals from a streambed. (32 Op. Cal. Atty. Gen. 139, 140-41 (1958).);
- . Drainage, flow or seepage containing debris or eroded earth from logging operations. (27 Op. Cal. Atty. Gen. 182, 184 (1956).);
- . Drainage, flow or seepage containing garbage, ashes, rubbish, mixed refuse, or solid industrial waste from inactive or closed dumps. (Id.);
- . Return irrigation or drainage water from agricultural operations. (Id.);

- Liquids containing harmful materials which arise in one stratum intercepted by a water, oil or gas well and flow through the well into other intercepted strata. (Id. at 184-85.);
- Drainage from inoperative and abandoned mines. (26 Op. Cal. Atty. Gen. 88, 90 (1955).);
- Garbage disposal that may affect water quality. (16 Op. Cal. Atty. Gen. 125, 126-30 (1950).);
- Dumping of earth moved from construction operations, or drainage of waste water from construction sites. (Id. at 130-31.)

In prescribing waste discharge requirements, the regional board must take into consideration the beneficial uses to be protected, the water quality objectives required to protect those beneficial uses, and the need to prevent nuisance. (Cal. Water Code § 13263.) Waste discharge requirements must implement any applicable water quality control plan. (Id.)

The Porter-Cologne Act provides the Regional Boards with a spectrum of enforcement powers to address unauthorized discharges, discharges in violation of waste discharge requirements or discharge prohibitions, discharges which cause or threaten to cause pollution or nuisance, and violations of monitoring or reporting requirements. (Cal. Water Code §§ 13261, 13262, 13265, 13268, 13271, 13272, 13300 et seq.; Attwater & Markle, Overview of California Water Rights and Water Quality Law, 19 Pac. L. J. 957, 1009-12 (1988).)

As discussed above, most nonpoint sources -- including surface runoff, irrigation return flows, injection or percolation of wastes into ground waters, and waste discharge to land -- may be regulated as a "discharge of waste" under the Porter-Cologne Act. Salt water intrusion and reductions in waste assimilative capacity caused by diversions which reduce water quantity, on the other hand, are not discharges of waste. (See 44 Ops. Cal. Atty. Gen. 126, 128 (1964); Sawyer, State Regulation of Groundwater Pollution Caused by Changes in Groundwater Quantity or Flow, 19 Pac. L. J. 1267, 1275 (1988).) These factors can be addressed in state policy for water quality control and water quality control plans adopted or approved by the State Board, which are binding on other state agencies. (See 44 Op. Cal. Atty. Gen. 126, 128-30 (1964); Cal. Water Code §§ 13050(i), 13142, 13146, 13240, 13247).) The State Board may use its water rights authority to enforce requirements for the protection of water quality. (Cal. Water Code §§ 174, 275, 1242.5, 1258, 2100; United States v. State Water Resources Control Board, 182 Cal. App. 3d 82, 123-30, 227 Cal. Rptr. 161, 183-88 (1986); Sawyer, State Regulation of Groundwater Pollution Caused by Changes in Groundwater Quantity or Flow, 19 Pac. L. J. 1267, 1286-96 (1988).)

Additional water quality protection authority provided by the Porter-Cologne Act includes provisions for grants and loans for waste treatment facilities, a state water pollution cleanup and abatement account, regulation of use of reclaimed water, sewage treatment plant operator certification, regulation of water wells, monitoring wells, and cathodic protection wells, and regulation of discharges from houseboats. (Cal. Water Code §§ 13400 et seq.; 13440 et seq.; 13500 et seq.; 13700 et seq.; 13900 et seq.; 13955 et seq.; 13999 et seq.)

B. Additional Authority for Clean Water Act Programs

The State Board has all powers assigned to the State, or to the Governor of the State, under the Clean Water Act. (Cal. Water Code § 13160; letter from George Deukmejian, Governor to W. Don Maughan, Chairman, State Water Resources Control Board (April 30, 1987)(delegation of authority). See also Cal. Water Code § 13162.)

Thus, the State Board has authority to prepare and submit a nonpoint source assessment report and nonpoint source management program. (33 U.S.C. § 1329.) The State Board also has authority to carry out the State's responsibilities under Sections 205(j), 208, 303, 304(f), 305, 314, and 320 of the Clean Water Act. (33 U.S.C. § 1285(j), 1288, 1313, 1314(f), 1315, 1324, 1330.)

The State Board is authorized to adopt water quality control plans, without first considering a water quality control plan submitted for approval by a Regional Board, for waters for which water quality standards are required under the Clean Water Act (i.e., essentially all surface waters). (Cal. Water Code § 13170).

The State Board has authority to administer all financial assistance programs which may be administered by the State pursuant to the Clean Water Act. (Cal. Water Code § 13600; see, e.g., 33 U.S.C. §§ 1285(g)(2), 1285(j), 1329(g), 1329(i), 1381 et seq.)

Chapter 5.5 (commencing with Water Code Section 13370) of the Porter-Cologne Act authorizes the State and Regional Boards to implement the National Pollutant Discharge Elimination System (NPDES) program in California. Chapter 5.5 applies to point source discharges of pollutants to surface waters, introduction of pollutants into publicly owned treatment systems, use and disposal of sewage sludge, and disposal of pollutants into wells. (See Cal. Water Code §§ 13370, 13370.5, 13373, 13376, 13377, 13382, 13383.)

In some cases, best management practices developed through a nonpoint source management program may be implemented through the NPDES program. (See 40 C.F.R. § 122.44(k).) Activities commonly thought of as nonpoint sources may result in point source discharges in specific cases where the discharge happens to occur through a pipe, ditch, or other confined and discrete conveyance. (See United States v. Earth Sciences, Inc., 599 F.2d 368, 372-74 (10th Cir. 1979).) Urban runoff discharged through storm drains

II. REGIONAL WATER QUALITY CONTROL BOARD PROGRAMS

Projected Regional Board nonpoint source-related activities are described below. Elements identified as CWA "New" will be accomplished with Section 205(j)(5) funds. Other activities will be undertaken with other currently budgeted or expected resources.

A. NEW IMPLEMENTATION PROJECTS

Watershed-specific management work will be initiated by a number of Regional Boards using CWA Section 205(j)(5) funds. These implementation projects will:

1. address nonpoint source problems of Statewide importance, and
2. embody management approaches which are potentially applicable Statewide.

Each of the three projects described below relates to problems documented in the State Board's Problem Inventory. To place these activities in the context of CWA Section 319, the relevant implementation actions cited in CWA Section 319 are identified for each activity.

1. San Francisco Bay Urban Runoff Control

Urban Runoff Workshops

The San Francisco Bay Regional Water Quality Control Board will present several workshops for city and county officials and dischargers regarding urban runoff into San Francisco Bay. Targeted counties will fall into three groups in the following approximate order of priority: Contra Costa; San Francisco and San Mateo; Marin, Napa, Sonoma, and Solano. Information will be presented on Bay water quality, regulatory issues, point versus nonpoint control trade-offs, and proposed management strategies. Protocols for developing and funding local studies to lay the groundwork for urban runoff management will be discussed. Technical issues will include sampling strategies and land use analyses necessary to characterize urban runoff and estimate waste loads at appropriate sub-basin levels. Implementation actions: education, technology transfer, technical assistance.

Contra Costa County Urban Runoff Technical Advisory Group

The San Francisco Bay Regional Water Quality Control Board will establish a Technical Advisory Group to initiate planning for urban runoff management in Contra Costa County. This advisory group will be patterned after the one currently operating in Santa Clara County. The group will have a major responsibility for planning a study which will address urban runoff, including sources

of funding for necessary technical work. They will also evaluate existing management practices, do necessary monitoring to document flows and nonpoint source loadings, evaluate point versus nonpoint management trade-offs, and determine appropriate management strategies.

Implementation actions: technical assistance.

2. Pesticide and Sediment Discharge to the San Joaquin River

High levels of sediment with adsorbed pesticides being discharged to the San Joaquin River are accounting for a major portion of all organochlorine pesticides entering the River. The Regional Board is currently sponsoring a joint study with the U.S. Soil Conservation Service to quantify the amount of sediment discharged to the River from various westside areas. The Regional Board will develop a control program that identifies priority areas, needed management practices, and cost figures for implementation of best management practices to reduce sediment. Regional Board staff will identify needed policy and regulatory actions by the Regional Board and will work through local resource conservation, irrigation, and drainage districts to achieve implementation of best management practices.

Implementation actions: technical assistance, education.

3. Southern California Coastal Lagoon Urban Runoff Management

Runoff of urban contaminants from new commercial, light industrial, and high-density residential development is a problem in the San Elijo, San Dieguito, Bataquitos, and Agua Hedionas Lagoon watersheds. The San Diego Regional Water Quality Control Board, working jointly with the California Coastal Commission, has required developers to incorporate low flow sand filters into project designs and property owners to implement paved surface sweeping programs. Logs of sweeping operations are kept to ensure compliance with stipulated seasonal schedules.

Regional Board staff will evaluate the adequacy of these measures in removing pollutants. The staff will monitor and evaluate the quality of flows entering and leaving sand filters, using existing laboratory contract funds for the analyses. These data will be correlated with sweeping frequencies and with flow information to determine the effectiveness of the filter systems in trapping pollutants under low-flow and first-flush conditions. To the extent data are available, sweeping regimines will also be evaluated. The performance of the filters over time will be documented and visual inspections made to determine appropriate maintenance schedules. Appropriate changes to the filter design and sweeping program requirements will be made. Regional Board staff will assist project proponents in developing

appropriate control systems. Regional Board recommendations will be enforced through Coastal Commission permits.
Implementation action: Technical assistance, technology transfer.

B. NEW PROGRAM DEVELOPMENT ACTIVITIES

Each Regional Board will undertake the following Region-wide activities using CWA Section 205(j)(5) funds:

1. Update Nonpoint Source Problem Inventory

Regional Board staffs will participate in review and update of the Nonpoint Source Problem Inventory.

2. Develop Regional Nonpoint Source Management Plans

Each Regional Board will develop a Regional Nonpoint Source Management Plan which will:

a. Identify Priority Nonpoint Source Categories

Priority nonpoint source categories will be identified based on the State Board's Problem

Inventory and Assessment and other relevant information.

b. Identify Priority Basins

Priority basins will be selected based on:

- (1) the State Board's Nonpoint Source Problem Inventory and Assessment and other relevant information,
- (2) the availability of adequate data to address the problem,
- (3) the availability of identifiable BMPs to address the problem, and
- (4) the probability of achieving water quality goals with available or reasonably foreseeable resources.

c. Identify Management Actions, Schedules, and Resource Requirements

Regional Boards will identify needed management activities and implementation schedules for the priority nonpoint source categories and basins (e.g., monitoring for source identification, education, training, regulation, interagency agreements, employment of BMPs).

d. Identify Needed Basin Plan Amendments

Regional Boards will identify basin plan amendments needed to implement the Regional Management Plan.

e. Identify Necessary Agency Agreements

Regional Boards will identify needed management actions to be taken by other agencies and needed management agency agreements.

f. Be Annually Updated

The Regional Management Plans will be annually updated and included in the updated State Nonpoint Source Management Plan.

C. ONGOING ACTIVITIES

Regional Boards have initiated numerous nonpoint source management activities independent of CWA Section 205(j)(5) funding. Activities which are ongoing into FY 1988-89 and after are identified below for each region. To place these activities in the context of CWA Section 319, the relevant implementation actions cited in CWA Section 319 or in EPA program guidelines are identified for each Regional Board activity.

For purposes of presentation, activities have been identified as being "Regulatory" or "Non-Regulatory". Regulatory activities include issuance and enforcement of waste discharge requirements and enforcement of basin plan prohibitions; non-regulatory activities include planning, technical assistance, and water quality monitoring. In practice there is a continuum between regulatory and non-regulatory management actions. Also, there is no implied preference for one category of management over another. Complementary application of both regulatory and non-regulatory measures will be necessary to control nonpoint source pollution.

Although not specifically referenced in each of the following program descriptions, Regional Boards generally conduct surveillance and monitoring to support enforcement of waste discharge requirements and review environmental documents for water quality impacts.

1. NORTH COAST REGIONAL WATER QUALITY CONTROL BOARD
(Region 1)

Regulatory Program

Aerial Application of Herbicides

The Regional Board will enforce Basin Plan BMPs by requiring operators to monitor and report water quality impacts from the aerial application of herbicides. The Regional Board performs surveillance and monitoring and conducts field inspections of application sites.
Implementation action: enforcement.

Sawmill Runoff

The Regional Board will conduct surveillance and monitoring and enforce waste discharge requirements (WDRs) for approximately 60 sawmills.
Implementation action: enforcement.

Highway Construction

The Regional Board will conduct surveillance and monitoring, enforce WDRs for projects, and review environmental documents for the Redwood Park Highway bypass, the Cloverdale bypass, and other construction projects.
Implementation action: enforcement, technical assistance.

Pelican Bay Prison Site

The Regional Board will conduct surveillance and monitoring and enforce basin plan prohibitions for discharges of sediment during the site preparation and construction of the Pelican Bay Prison.
Implementation action: enforcement.

Buckhorn Sediment Dam

The Regional Board will conduct surveillance and monitoring and implement WDR's for this dam (contingent on approval of permit and construction of dam).
Implementation action: enforcement.

Non-Regulatory Program

Timber Harvest Plan Review Program

The Regional Board will participate in timber harvest review teams, review approximately 1000 harvest plans, conduct around 50 field inspections, review environmental documents, and conduct field inspections on private and National Forest Service lands.
Implementation action: technical assistance, and National Forest monitoring/evaluation for BMPs.

EIR Reviews

The Regional Board will review EIRs regarding mining and dredging operations, stormwater runoff to Humboldt Bay oyster culture, and pesticide contamination of groundwater in Del Norte County.
Implementation action: technical assistance.

2. SAN FRANCISCO BAY REGIONAL WATER QUALITY CONTROL BOARD (Region 2)

Regulatory Program

Industrial Runoff

The Regional Board will monitor approximately 33 WDRs from industrial sources.
Implementation action: enforcement.

Habitat Alteration

This activity addresses the affects of dredge and fill activities in wetlands. The Regional Board will review and comment on EIRs, issue water quality certifications, and may establish WDRs.
Implementation action: enforcement.

Construction

This activity addresses pollutants resulting from land disturbances. The Regional Board will review EIRs and issue cleanup and abatement orders when necessary.
Implementation action: enforcement, technical assistance.

Dairies

This activity addresses pollutants resulting from dairies, mainly in Marin and Sonoma Counties. The Regional Board will monitor and enforce Subchapter 15 requirements and WDRs, working with the Dairy Waste Committee, local Resource Conservation Districts and the Department of Fish and Game.
Implementation action: enforcement.

Septic Systems

This activity addresses pollutants that can result from onsite disposal systems. The Regional Board will provide overview of county ordinances which are consistent with Basin Plan guidelines.
Implementation action: enforcement, technical assistance.

Dredging

The Regional Board will continue to collect bioassay and bulk sediment data to update their dredging protocol document which establishes procedures and requirements for certifying U.S. Army Corp of Engineers dredging permits.

Implementation action: enforcement.

Seawater Intrusion in Oakland Inner Harbor

The Regional Board will review ongoing monitoring by the U.S. Army Corp of Engineers and the U.S. Navy to evaluate and control the affects of dredging in contributing to seawater intrusion.

Implementation action: enforcement.

Herbicides

This activity addresses herbicide applications, primarily in urban lakes and areas surrounding artificial lakes (e.g. Foster City Lagoon). The Regional Board will provide guidance to dischargers on correct and reduced usage of herbicides primarily through the EIR review process, and issue permits where appropriate.

Implementation action: technical assistance, enforcement.

Non-Regulatory Program

Basin Planning for Urban Runoff

This activity addresses pollutants resulting from urban runoff. The Regional Board will continue to work with dischargers in Alameda and South San Francisco Bay to conduct water quality monitoring to identify sources and pollutants and recommend control strategies. This work will be augmented with the Section 205(j)(5) activities described elsewhere in this document.

Implementation action: technical assistance, technological transfer, education.

Wasteload Allocation Study

The Regional Board is attempting to determine the affect of any additional discharges to Suisun Marsh.

Implementation Action: NA.

Channel Erosion

The Regional Board will review EIRs addressing channel erosion problems.

Implementation action: technical assistance.

3. CENTRAL COAST REGIONAL WATER QUALITY CONTROL BOARD
(Region 3)

Regulatory Program

San Lorenzo Septic System Enforcement

The Regional Board will issue and enforce cleanup or abatement orders.

Implementation action: enforcement.

Non-Regulatory Program

Evaluation of Abandoned Mines in San Luis Obispo County

The Regional Board is currently monitoring and identifying problem mines. If additional funding is received, the Regional Board will evaluate and implement BMPs for the problem mines.

Implementation action: monitoring.

Timber Harvest Plan Review Program

The Regional Board will review environmental documents and approximately 40 timber harvest plans per year.

Implementation action: technical assistance.

Carpenteria Slough Water Quality Monitoring

The Regional Board has monitored water quality in the past and will continue to monitor after dredging and enhancement operations.

Implementation action: monitoring/evaluation for BMPs.

4. LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD
(Region 4)

Non-Regulatory Program

Water Quality Monitoring

The Regional Board will conduct surveillance monitoring of water quality in a number of waterbodies impacted by nonpoint sources.

Implementation action: NA.

Sediment Monitoring in Los Angeles/Long Beach Harbors and other Mussel Watch Stations

The Regional Board will continue to collect baseline sediment data and other sources of existing water quality data to determine the location, source, and level of water quality impact from potential nonpoint source pollutants identified at various Mussel Watch Stations within the region.

Implementation action: NA.

Santa Monica Bay Management Conference

The Regional Board, the State Board, and EPA have convened a management conference on Santa Monica Bay pursuant to the provisions of CWA Section 320. The broad goals of the management conference are to: (1) restore past beneficial uses of the Bay and protect present and future uses; (2) improve or eliminate discharges to the Bay environment that may adversely affect wetlands, biologically sensitive sites, or areas important for water contact sports or sport fishing; and (3) improve water quality to a point where indigenous marine species are not degraded and human health is not threatened. From these general goals, specific objectives will be developed in a comprehensive plan to address problems related to storm drain discharges, sediment quality, fish tissue body burdens, pathogen contamination, and other issues. The management conference will develop a work plan to meet seven objectives: (1) establish a management framework (including a financial plan); (2) characterize the Bay's problems; (3) define the Bay's needs (action plans for stormwater regulation, sediment quality, bioaccumulation standards and other issues); (4) create a Comprehensive Conservation and Management Plan (CCMP); (5) establish the steps necessary to implement the CCMP; (6) monitor effectiveness of CCMP implementation; and (7) coordinate all activities with other programs.

5. CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD (Region 5)

Regulatory Program

Dairies

The Regional Board enforces compliance with Subchapter 15 when necessary and will continue developing a model to be used to determine acceptable loading rates for manure spreading.

Implementation action: enforcement.

Dredging in the Sacramento and San Joaquin River Basins

The Regional Board will produce a set of guidelines for regulation of dredging and riverbank protection projects.

Implementation action: enforcement.

Erosion Control From Land Disturbing Activities

The Regional Board will investigate potential problems and require appropriate mitigation action (which may include BMP's) to control erosion/sedimentation problems from various land disturbing activities.

Implementation Action: Enforcement.

Non-Regulatory Program

Agricultural Drainage Discharges in the San Joaquin River Basin

The Regional Board will develop a Regional Drainage Water Disposal Plan for the entire San Joaquin Basin and will review beneficial uses, establish water quality objectives, and prepare regulatory and implementation plans.

Implementation action: NA.

Acid Drainage from Abandoned Mines in the Sacramento River Basin

The Regional Board will collect data to refine present loading estimates in the basin and will conduct biotoxicity testing to assess the appropriateness of existing water quality objectives. This testing will also be used to begin to assess whether the Delta is affected by these trace elements.

Implementation action: NA.

Mercury Discharges in the Sacramento and San Joaquin River Basins

The Regional Board will conduct limited monitoring to define some upstream sources and implement abatement remedies while monitoring the Delta to see if these remedies provide a measurable benefit.

Implementation action: monitoring/evaluation for BMPs.

Rice Field Discharges in the Sacramento River Basin

The Regional Board will review progress in 1989 in the reduction of peak concentrations and mass residue discharges of Ordram and Bolero against DHS action levels, DFG guidelines, and Basin Plan objectives. They will also continue monitoring efforts to identify other polluting chemicals and their impacts on beneficial uses. The Regional Board will also work with local water agencies to reduce the volume of irrigation return flows by increasing tailwater recycling and effluent spreading on fallow fields, primarily in the Colusa Basin Drainage.

Implementation action: technical assistance, technological transfer, monitoring/evaluation for BMPs.

Effects of Large Water Storage and Diversion Projects in the Sacramento River Basin

The Regional Board will prepare management agency agreements or, as necessary, WDRs for identified problems. For suspected problems additional monitoring will be conducted.

Implementation action: technical assistance,
monitoring/evaluation for BMPs.

Beneficial Use Impairment from Silviculture

The Regional Board participates on an interagency review team. This team will perform field inspections before and after harvesting in an attempt to support compliance with BMPs. This ongoing work will be augmented through a 205(j)(5) implementation project described elsewhere in this management plan. The Regional Board will also consider adoption of a Basin Plan prohibition on the discharge of soil, silt, debris, and other materials from silviculture.

Implementation action: technical assistance,
monitoring/evaluation for BMPs

Biotoxicity Assessment of the Sacramento and San Joaquin River Basins

For nonpoint source control the staff will expand the use of biotoxicity tests in FY 1988-89 as part of an ambient monitoring program to assess nonpoint and point source toxicity.

Implementation action: monitoring/evaluation for BMPs.

Sacramento Urban Area Runoff Control

The Regional Board has initiated negotiations with the County and City of Sacramento on management of urban storm runoff. Issues under discussion include the need for further biotoxicity testing of urban runoff, development of control mechanisms, and available funding mechanisms. The City of Sacramento has developed a draft workplan addressing these issues and has sought Section 205(j)(2) funding for the work.

Implementation action: technical assistance, education.

Livestock Grazing and Water Quality Degradation

Regional Board staff will work with federal agencies (USFS and USBLM) to strengthen grazing policies and implementation programs so as to provide increased water quality protection.

Implementation Action: technical assistance.

6. LAHONTAN REGIONAL WATER QUALITY CONTROL BOARD (Region 6)

Regulatory Program

Ski Area Regulation

The Regional Board will enforce the implementation of BMPs to control sediment from ski areas by establishing WDRs.

Implementation action: enforcement

Lake Tahoe City/County Stormwater Permits

The Regional Board establishes and enforces WDRs for storm runoff into Lake Tahoe.

Implementation action: enforcement.

Lake Tahoe Commercial Establishment Review of Development

The Regional Board will enforce the implementation of BMPs by establishing and enforcing WDRs in an effort to control sediment from new commercial construction.

Implementation action: enforcement.

Non-Regulatory Programs

Lake Tahoe Single Family Home Review of Development

The Regional Board will provide funding to the Tahoe Regional Planning Agency (TRPA) to review development proposals and require BMPs to control nutrients and sediment from construction of single family homes.

Implementation action: financial assistance.

Honey Lake Project

The Regional Board will advise Lassen County, which is the responsible regulatory agency, on the control of agricultural discharges of coliform, salts, and nutrients to Honey Lake.

Implementation action: technical assistance.

Timber Harvest Review

The Regional Board helps review timber harvest plans and performs onsite inspections in coordination with the California Department of Fish and Game (CDFG) and the U.S. Forest Service (USFS). This ongoing work will be augmented through a 205(j)(5) implementation project described elsewhere in this document.

Implementation action: technical assistance, monitoring/evaluation for BMPs.

Review of USFS Activities

Staffs of the Regional Board and the USFS, Lake Tahoe Management Unit, are working together to develop clear guidelines for Regional Board review of USFS activities which may impact water quality in the Lake Tahoe basin.

Implementation action: NA.

Coordinated Resource Management Plans (CRMP)

The Regional Board will continue to work through the CRMP process with a variety of resource management agencies to develop management plans to control nonpoint sources of pollution. Two of the agencies involved are the USFS and the USBLM (Appendix E. of the State Board's Assessment Report describes the CRMP process).

Implementation action: NA

BLM Grazing Plan Review

The Regional Board will review grazing plans and advise USBLM on water quality issues, focusing on the Eagle Lake watershed.

Implementation action: technical assistance.

Erosion Control Project Grants

The Regional Board will administer State Assistance Program (SAP) grants to control erosion caused by urban development. The California Tahoe Conservancy is also a major source of funding and the Regional Board provides substantial review and coordination efforts for their grant projects.

Implementation action: financial assistance.

EIR Review

The Regional Board reviews EIRs and registers concerns pertaining to specific projects that involve potential nonpoint source impacts.

Implementation action: technical assistance.

Lake Tahoe Wetlands Policy

The Regional Board will coordinate with TRPA to develop revisions to the 1980 Basin Plan concerning Lake Tahoe Wetlands.

Implementation action: NA.

Lake Tahoe Shoreline Erosion Study

The Regional Board will continue a study to determine the amount, severity, and potential control of lake shore erosion.

Implementation action: Monitoring/evaluation for BMPs.

Mustang Mesa Groundwater Study

The Regional Board has contracted monitoring of domestic water wells in the Mustang Mesa Area in Inyo County to determine the impact of septic tank/leachfield disposal systems on ground water quality.

Implementation action: Monitoring.

Acid Rain Study

The Regional Board will review and coordinate with other agencies, primarily the TRPA, in assessing the relative impact of acid rain in contributing nutrients to Lake Tahoe.

Implementation action: NA.

Twin Lakes Phytoplankton and Groundwater Monitoring Study

The Regional Board has contracted for sampling of lake and ground water. Staff will use the data to determine the relationship between onsite disposal systems and eutrophication of Upper and Lower Twin Lakes. The Regional Board is working in coordination with the USFS and the County Health Department.
Implementation action: Monitoring/evaluation for BMPs.

7. COLORADO RIVER BASIN REGIONAL WATER QUALITY CONTROL BOARD (Region 7)

Non-Regulatory Program

Selenium Pollution in the Colorado River Basin

The Regional Board will continue a study, in coordination with the U. S. Geological Survey to identify and control sources of selenium affecting the Salton Sea and its tributaries. Upcoming work will emphasize investigation of appropriate control measures.
Implementation action: Monitoring/evaluation for BMPs.

Alamo and New Rivers Pollution Problems

The Regional Board will continue to monitor water quality in the Alamo and New Rivers at the California-Mexico border on a scheduled basis. The Regional Board will continue to work with the State Board towards implementation of corrective measures in California.

Baseline Monitoring

The Regional Board will monitor water quality on a quarterly basis through a network of 13 sampling sites. This work assists in identifying nonpoint sources of pollution.
Implementation action: NA.

Stabilization of Salinity in Salton Sea

The Regional Board will advise and assist agencies which are investigating solutions to control salinity in the Salton Sea. Other agencies working on this problem are the Department of Fish and Game, the Imperial Valley Irrigation District, and ORMAT (an energy production firm).
Implementation action: NA.

8. SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD (Region 8)

Regulatory Program

Dairies

The Regional Board will enforce WDRs on animal confinement facilities, including about 350 dairies, and will reevaluate salt loading to ground waters from dairy and other animal confinement operations to determine if changes in dairy waste management practices should be recommended for incorporation in WDRs.
Implementation action: enforcement.

Non-Regulatory Program

San Diego Creek Toxics Investigation

The Regional Board will complete a special investigation of toxics entering Newport Bay from the San Diego Creek Watershed by measuring metals and synthetic organic chemicals in freshwater clams and sediments from San Diego Creek.
Implementation action: monitoring/evaluation for BMPs.

Nutrient Inputs To Newport Bay

The Regional Board will continue to oversee a cooperative effort by several major commercial nurseries in the Newport Bay watershed to reduce and improve irrigation runoff. The Regional Board will continue monthly monitoring of flows and nutrient loads in San Diego Creek and other waters that drain to Newport Bay. Mass loads of nitrate, dissolved solids, and other materials will be calculated and input to a linear transport model which could be used in the development of wasteload allocations.
Implementation action: monitoring/evaluation for BMPs.

Management of Sediment Problems in Newport Bay

The Regional Board will review plans for grading, erosion control, construction, and BMP implementation in the Newport Bay watershed and will participate in joint inspections of installed BMPs with the Orange County Environmental Management Agency, the Irvine Company, and the cities of Irvine and Newport Beach.
Implementation action: technical assistance.

9. SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD (Region 9)

Regulatory Program

Dairies

The Regional Board will issue WDRs which limit the amount of manure that can be applied per acre per year to agricultural land.

Implementation action: enforcement.

Erosion Control

The Regional Board will implement a policy requiring cities and counties to adopt erosion control ordinances. Staff will review ordinances and assist enforcement.

Implementation action: technical assistance, enforcement.

Subsurface Disposal Policy

Regional Board staff will develop criteria for minimum lot sizes for septic systems.

Implementation action: enforcement.

Non-Regulatory Program

San Diego Bay Study

The Regional Board will continue a five year study to identify the sources and extent of water quality pollution in San Diego Bay. Possible nonpoint sources such as storm water runoff and past point source pollutants now bound to bottom sediments will be investigated. San Diego State University will sample storm water runoff in FY 1988-89.

Implementation action: enforcement.

III. STATE WATER RESOURCES CONTROL BOARD PROGRAM

State Board nonpoint source-related activities are described below. New Program Development Activities (Section III.A) will be accomplished with Section 205(j)(5) funds. Ongoing Activities (Section III.B) will be undertaken with other currently budgeted or expected resources.

Activities for FY 1989-90 and succeeding years will be progressively defined in updates to the Nonpoint Source Management Program. The updates will provide specific short-term direction and general longer-term guidance for the State Board's nonpoint source programs. Projections beyond the next fiscal year will always be subject to funding availability and emerging State Board policy.

A. NEW PROGRAM DEVELOPMENT ACTIVITIES

1. Program Management

Administration and further development of the Nonpoint Source Program is the responsibility of the Nonpoint Source Unit in the State Board's Division of Water Quality. Necessary administrative activities include the following:

a. Budget Control

To ensure fiscal accountability for federal grant funds, State Board staff will implement monitoring and control systems to avoid and/or correct budgetary problems. The State Board staff will maintain budget records for the projects and provide full fiscal accountability for all federal funds. Staff will prepare internal budgeting documents and coordinate with EPA Grants Section and State Board Budget Office. Staff will maintain files on projects and grants in accordance with federal regulations.

b. Prepare Annual Report

Section 319 requires that the State prepare an annual report detailing progress in accomplishing the milestones set forth in the Management Plan. Because management of nonpoint sources is a challenging task requiring innovative approaches, State Board staff will regularly examine progress and make timely program corrections when necessary. The annual report will be the primary mechanism for program evaluation and will be an important management tool. Because it is often difficult to evaluate nonpoint source management practices, appropriate measures of progress must be developed for program analysis.

c. Negotiate and Administer Annual Grant

Section 319 specifies that annual federal grants are conditioned on satisfactory progress in achieving the milestones included in the Management Plan. This activity is therefore related to development of the State Board's Annual Report and to the annual update of the Management Plan, including identification of new milestones. Grant application documents will be prepared in consultation with the State Board's Division of Administrative Services and EPA.

d. Coordination and Reporting to EPA

The State Board will routinely coordinate with and report to EPA on the status of the Nonpoint Source Program, problems encountered, and accomplishments achieved. Coordination and reporting will include, but not be limited to, the following:

- (1) Mid-Year and End-of-Year program reviews conducted by EPA.
- (2) Quarterly Status Reports to be submitted to EPA by the State Board within 30 days of the end of each quarter (December 31, 1988; March 31, 1989; June 30, 1989; and September 30, 1989).
- (3) Annual Report to EPA by August 31, 1989.

The Annual Report will include a status report on all milestones listed in the Management Plan, an identification of nonpoint source activities funded by federal Section 205(j)(5) funds, and, to the extent that the State Board's accounting records permit, an indication of other funding sources for nonpoint source activities.

2. Select 205(j)(5) Projects

Section 205(j)(5) provides for a set-aside of up to one percent of each State's construction grants allocation for nonpoint source management purposes. A minimum of \$100,000 must be used by the State. An estimated \$800,000 will be available for projects from the federal fiscal year 1988 allocation. State Board staff will recommend projects for funding from this source using the project selection criteria adopted by the State Board in the Management Plan. An evaluation process will be included in each funded project.

3. Update and Apply Nonpoint Source Inventory and Assessment

The State Board's Nonpoint Source Inventory was based primarily on documents developed by, or under contract to, the State Board or the Regional Boards. This approach allowed the development of a large database with limited resources, provided significant data quality control, and ensured documentation of the most serious of the State's nonpoint source problems. However, the database was developed with relatively little input from other agencies and interest groups with nonpoint source-related information. Also, Regional Board input was necessarily limited by the lack of budgeted resources for review of the Inventory. State Board staff will update the Nonpoint Source Inventory in FY 1988-89, incorporating information from a wider variety of information sources than currently represented and obtaining more thorough review by Regional Board staffs and the public than was previously possible.

a. Update Nonpoint Source Problem Inventory in conjunction with the State Board's Clean Water Strategy public hearing on impaired water bodies in the State. Review public input and coordinate with the Regional Boards and the State Board's Surveillance and Monitoring Unit to verify and characterize new problems identified by the public and other agencies.

b. Update Nonpoint Source Problem Assessment

State Board staff will update the Nonpoint Source Problem Assessment (a statistical summary of information presented in the Inventory).

c. Apply Nonpoint Source Problem Inventory

The Problem Inventory will have the following ongoing uses:

(1) Development of State Board Management Strategies

Development and refining of California's nonpoint source management strategy will be an ongoing process. The Inventory will support strategy development by providing information on the overall magnitude, severity, and nature of the State's nonpoint source problems. The Inventory will also guide resource allocation and provide justification for resource requests.

(2) Development of Regional Board Management Strategies

As California's Nonpoint Source Program matures, the Regional Boards will play increasingly active roles in formulating and implementing management strategies. The Problem Inventory will guide development of regional programs and provide the basis for resource requests.

(3) Funding Decisions

The Inventory will help guide funding for nonpoint source management from the following funding sources:

- (a) Water Conservation and Water Quality Bond Law of 1989
- (b) CWA Section 205(j)(2), Water Quality Management Planning
- (c) CWA Section 205(j)(5), Nonpoint Source Management Reservation
- (d) CWA Section 319, Nonpoint Source Management Program

4. Develop Nonpoint Source Policy

Other than the general policy which appears in the Porter-Cologne Water Quality Control Act, the State Board currently has no formal policy regarding control of nonpoint sources. Such a policy would provide the framework for more effective coordination and implementation of State Board and Regional Board programs. State Board staff will submit a Nonpoint Source Policy for State Board consideration during FY 1988-89. The starting point for this policy will be the program objectives and program guidance set forth in Sections I.E and I.F of this Management Plan. State Board staff will gain State Board approval of a policy development process which will result in input from concerned State Board staff, Regional Boards, and the Interagency Advisory Committee.

5. Coordinate Development of Regional Nonpoint Source Management Plans (Regional Plans)

The factors that make nonpoint source problems difficult to manage generally apply statewide. A fundamental requirement for increasingly effective management is a consistent Statewide approach within which Regional Boards will develop region-specific strategies. State

Board staff will do the following to provide a State framework for Regional Plans:

a. Develop Guidelines for Regional Plans

Based on the general outline presented elsewhere in this document and in consultation with Regional Board staffs, State Board staff will develop guidance on the content, format, and level of detail of Regional Plans.

b. Maximize Information Transfer Among Regional Boards During Program Development

To encourage the most practical consistency among regional nonpoint source programs and to increase statewide application of successful control strategies, State Board staff will provide for transfer of information among Regional and State Board staffs by means of periodic meetings and written communications.

c. Review Regional Plans for Conformance to Guidelines

State Board staff will review Regional Plans during and after development to ensure conformance to guidelines.

6. Evaluate Development of Management Agency Agreements (MAA) with State and Federal Agencies

A number of federal and State agencies have important nonpoint source-related mandates. The most effective State management approach will fully utilize all the existing capabilities and resources residing with the different agencies operating within the State. Coordination of large and diverse bureaucracies is difficult but important. State Board staff will evaluate the benefits and feasibility of establishing formal coordination, via management agency agreements or other means, with the following agencies.

a. U.S. Agricultural Stabilization and Conservation Service (ASCS)

The ASCS has informally agreed to pursue an MAA which would coordinate all nonpoint source water quality activities, making them consistent with the State and Regional Board's Nonpoint Source Management Plans. This would include targeting cost-sharing to problem areas identified in the Regional Board Nonpoint Source Management Plans.

b. U.S. Soil Conservation Service (SCS)

The SCS has informally agreed to pursue an MAA which would coordinate SCS's nonpoint source water quality activities making them consistent with the State and Regional Board's Nonpoint Source Management Plans. This would include recognizing water quality as a high priority item in the SCS California Multi-Year Plan, a five-year plan now being updated for the years 1989-1994. Technical and financial assistance would be targeted to be consistent with the State Nonpoint Source Program.

c. California Department of Transportation (Caltrans)

Under CWA Section 208 Caltrans published a report identifying best management practices for control of water pollution from transportation activities. The report also identified management measures to help ensure implementation. Recommendations included development of a MAA between Caltrans and the State Board, however, a MAA has not yet been initiated. In the absence of a Statewide management framework, there are disparities in the levels of water quality protection designed and implemented for different highway construction projects. An MAA could provide agreement on appropriate technical standards, more uniform Regional Board oversight, appropriate training for Caltrans field personnel, and an ongoing process to identify and resolve problems.

7. Review Options for Ongoing Program Funding

Federal Section 205(j)(5) funds are expected to maintain a Nonpoint Source Program baseline of a total of 11 PYs at the State Board and Regional Boards through FY 1990-91. An ongoing program will require funding beyond that date. State Board staff will review and evaluate the following funding options for continuing program funding.

- a. New Federal Funds
- b. New Bond Funds
- c. New General Funds
- d. Redirection of Existing Resources
- e. Title VI Revolving Funds

8. Update Management Plan

State Board staff will update the Nonpoint Source Management Plan annually, maintaining a four-year planning horizon. Future activities will be identified based on accomplishments of current year, updated

information on regional and Statewide nonpoint source problems, prevailing funding projections, and current State Board policy direction. Any changes to the Management Plan will be subject to review by Regional Boards and approval by the State Board. The following issues will be considered for inclusion in the next Management Plan update:

- a. Further coordination of State Board nonpoint source-related programs
- b. Development of new institutions and authorities as needed to address nonpoint source problems
- c. Use of State revolving funds for nonpoint purposes
- d. Identification of regulatory or statutory needs
- e. Prevention of potential future nonpoint source problems
- f. Urban stormwater program needs.

9. Water Quality Management for Forest Activities

Pursuant to CWA Section 208, the State Board has executed Management Agency Agreements (MAAs) with the U.S. Forest Service (USFS) and jointly with the California Department of Forestry and Fire Protection (CDF) and State Board of Forestry (BOF). These MAAs provide for control of pollution from nonpoint sources (primarily silviculture, but including mining and grazing) on national forest lands and from timber operations on nonfederal lands. The purpose of this program is to ensure establishment and maintenance of effective nonpoint source management programs for these wildland activities. Resources for the program will include one position at the State Board and a total of six positions at Regional Boards for a period of one year. The State Board will provide overall program management. Regional Boards will be involved primarily with implementation as described in Section II.B of this document. Major program activities include:

a. Coordination

State Board staff will coordinate related activities of affected agencies (CDF, BOF, USFS, Regional Boards, and the Department of Fish and Game) by providing a framework for open communication and conflict resolution. USFS will report annually and DCF/BOF will report biannually on the status of their activities.

b. BMP Development

State Board staff will participate in and provide oversight of development of new and revised BMPs in accordance with MAA schedules.

c. Review of Proposed BMPs

State Board staff will review proposed new or revised BMPs. A number of federal and nonfederal BMPs are to be proposed to the State Board by December 1989.

d. Improvement of Implementation Procedures

State Board staff will participate in and provide oversight of improvement of interagency BMP implementation procedures through:

- (1) improved consultation between Regional Boards and other agencies during planning and interagency review of timber operations,
- (2) augmented Regional Board participation in review of proposed silvicultural activities,
- (3) Regional Board monitoring of water quality effects during and after selected timber operations,
- (4) augmented Regional Board participation in compliance inspections and related enforcement actions, and
- (5) improved resolution of conflicts between Regional Boards and other state agencies which arise out of review, monitoring, or inspection of nonfederal timber operations.

e. Provide Guidance Documents and Training

State Board staff will provide oversight of and will participate in:

- (1) Development of new or improved technical guidance documents for nonfederal timber operations; implementation is to begin by February 1990.
- (2) Development and ongoing implementation of related training programs for state agency and private sector foresters and related professionals.

f. Conduct Technical Studies

State Board staff will provide oversight of and will participate in development and implementation of studies including:

- (1) methods for assessing cumulative watershed effects,
- (2) methods for assessing likely short-term and long-term effects of timber operations on sensitive terrain or water-related values,
- (3) feasibility of implementing compatibly-formatted watershed databases in key agencies, and
- (4) surveillance monitoring studies of selected timber harvest operations.

10. Public Participation

Because updating the State Board's Management Plan will be an ongoing activity and because management of nonpoint sources will often rely on means requiring the support of land managers, public participation will be an important program element. State Board staff will conduct the following activities:

a. Review Mail List

The State Board's nonpoint source mailing list consists of about 2,500 names compiled from a variety of other existing nonpoint source-related lists. State Board staff will query this list to determine those with continuing interest, will delete others, and will add new names.

b. Provide Information to the Public

State Board staff will provide information to the public via Interagency Advisory Committee meetings; contributing as requested to publications of interest groups; and participating as time allows in the meetings of organizations involved in aspects of nonpoint source management. In addition, the State Board will continue public outreach projects, to the extent that resources are available, by addressing public meetings, conferences, and associations.

c. Responsibilities of the Interagency Advisory Committee (IAC)

As a major element of the public participation program, an IAC will be used to advise the Nonpoint

Program on future development and implementation matters. The IAC will be composed of State agencies, including Regional Boards, federal agencies, and the California Association of Resource Conservation Districts. IAC meetings will be held in accordance with work activities and decision dates in the adopted Management Plan and as special needs arise. Subcommittees of the IAC may be formed to assist the State Board in drafting work products, providing public outreach, and/or developing input on specific nonpoint source matters. IAC meetings will be summarized in minutes prepared by a secretary rotated among the IAC membership.

The IAC will be requested to review and advise the Nonpoint Program on at least the following tasks:

- a. Task 1 -- Prepare Annual Report
- b. Task 2 -- Select Projects
- c. Task 3 -- Update Inventory
- d. Task 4 -- Develop Nonpoint Source Policy
- e. Task 8 -- Update Management Program

11. Participate in Regional Board New Implementation Projects

As described in Section II.A. of this document, Regional Boards will conduct the following implementation projects in FY 1988-89:

- a. San Francisco Bay Urban Runoff Control
- b. Pesticides and Sediment Discharge to the San Joaquin River
- c. Southern California Coastal Lagoon Urban Runoff Management

State Board staff will monitor and participate in these four activities to assess the statewide applicability of the management approaches used. State Board oversight of Regional Board implementation projects will include:

- a. Budget control of federal 205(j)(5) funds in accordance with Task 1.b.
- b. Periodic meetings with Regional Board staff to monitor progress of projects.
- c. Quarterly Status Reports for inclusion in the Nonpoint Program Reports to the State Board and EPA.

B. ONGOING ACTIVITIES

1. Bay-Delta

The State Board will hold hearings on and adopt a Water Quality Control Plan for Salinity and a Pollutant Policy Document. The Water Quality Control Plan will identify beneficial uses for the Bay-Delta, will set water quality objectives for reasonable levels of protection of the identified beneficial uses, and will set forth an implementation program. The Pollutant Policy Document will set State policy on regulation of pollutants in the Bay-Delta estuary and will be used by the San Francisco Bay and Central Valley Regions in updating their basin plans. The State Board will also develop and hold hearings on Water Rights Attainment Alternatives for enforcing the objectives adopted in the Water Quality Control Plan through amendments of existing water rights permits and licenses. Finally, the State Board will develop and adopt an Environmental Impact Report on the attainment alternatives, and will adopt a Water Right Decision to implement the selected alternative.

2. Agricultural Drainage

Future efforts will focus on expanding our understanding of selenium's impacts on areas receiving subsurface agricultural drainage and industrial discharges of selenium; documenting the biological and water quality responses to regulatory efforts; improving site-specific water quality criteria for constituents of agricultural drainage; expanding and improving the regulatory framework for subsurface agricultural drainage; investigation of best management agricultural practices for subsurface agricultural drainage reduction and quality improvement; and studies of appropriate treatment, storage, and disposal options for subsurface agricultural drainage. Significant progress in these areas will require funds above the existing baseline.

3. Agricultural Drainage Loan

Program staff will write loan contracts for projects approved by the State Board and the legislature in FY 1987-88, administer loan contracts, and submit additional projects for State Board and legislative approval until the \$75 million allocated to this program has been disbursed. Annual reports on the status of agricultural drainage problems statewide will be submitted to the legislature. Prior to exhaustion of the loan funds the State Board will consider requesting the legislature to provide additional funding for the program.

4. Water Quality Management Planning

Program staff will select, administer, provide technical overview for, and conduct follow-up evaluations of nonpoint source-related projects funded under CWA Section 205(j)(2). A detailed description of program activities is contained in the Implementation Plan for the Program. Future project selection will integrate the priorities identified in the Regional Board Nonpoint Source Management Programs. Program staff will provide information on completed studies for inclusion in the nonpoint source data base.

5. Ocean Policy and Standards

Program staff will participate in the selection of projects funded under CWA Sections 205(j)(2) and 319, will review current nonpoint source policy in the Ocean Plan and recommend possible revisions to the State Board, and will participate in the Santa Monica Bay Management Conference.

6. Surveillance and Monitoring

Program staff will implement monitoring strategies which place increased emphasis on source identification for nonpoint source problems, using the Toxic Substances Monitoring and Mussel Watch Programs. Pursuant to the requirements of Clean Water Act Section 304(l), Program staff will document the reasons for water quality impairment, and determine the areal extent, source(s), and loadings from point and nonpoint sources.

7. Review Federal Programs

The State Clearinghouse coordinates State and local review of Federal financial assistance, state plans, direct Federal development activities, and Federal environmental documents, pursuant to Executive Order 12372. The purpose of the process is to afford State and local participation in Federal activities occurring within California. The State Board and Regional Boards routinely receive through the Clearinghouse, and review and comment on, individual assistance applications for a variety of federally-funded projects. Review is conducted to assess and mitigate potential impacts on water quality. Activities affecting water quality and requiring State review are conducted by many Federal programs, however, projects proposed by the following Federal agencies most typically have direct water quality impacts and will be reviewed:

U.S. Corp of Engineers
U.S. Bureau of Reclamation
Federal Energy Regulatory Commission

IV. SCHEDULE OF MILESTONES

The following milestones are provided as an indication of the State and Regional Boards' intentions to actively pursue nonpoint source management programs; however, due to possible changes in priorities and/or available resources these milestones are not commitments to initiate or complete these activities as scheduled. Milestones for new Regional Board Implementation Projects assume an April 1988 project start.

A. REGIONAL WATER QUALITY CONTROL BOARDS

1. NEW IMPLEMENTATION PROJECTS

SAN FRANCISCO BAY URBAN RUNOFF CONTROL (San Francisco Bay Regional Board)

Conduct Urban Runoff Workshops June 1989
October 1989
January 1990

Contra Costa Workplan April 1990

Begin Contra Costa Study July 1990.

Complete Contra Costa Study April 1992

PESTICIDE AND SEDIMENT DISCHARGE TO THE SAN JOAQUIN RIVER (Central Valley Regional Board)

Sediment Control Plan September 1990.

SOUTHERN CALIFORNIA COASTAL LAGOON URBAN RUNOFF MANAGEMENT (San Diego Regional Board)

Report on Data Collection
and Analysis April 1990

2. NEW PROGRAM DEVELOPMENT ACTIVITIES

UPDATE NONPOINT SOURCE PROBLEM INVENTORY

Updated Inventory May 1989

DEVELOP REGIONAL NONPOINT SOURCE MANAGEMENT PLANS

Draft Regional Management Plans September 1989
Final Regional Management Plans March 1990

3. ONGOING REGIONAL BOARD ACTIVITIES

NORTH COAST REGIONAL WATER QUALITY CONTROL BOARD

Buckhorn Sediment Dam

WDR will be issued in June 1989.

SAN FRANCISCO BAY REGIONAL WATER QUALITY CONTROL BOARD

Dredging

Dredging Policy will be issued in June 1990.

Basin Planning for Urban Runoff

Report will be issued June 15, 1989.

CENTRAL COAST REGIONAL WATER QUALITY CONTROL BOARD

Evaluation of Abandoned Mines in San Luis Obispo County

Report will be issued in June 1989.

Carpenteria Slough Water Quality Monitoring

Report to be prepared shortly after dredging operation is completed. It is unknown when dredging will actually occur.

LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD

Sediment Monitoring in Los Angeles/Long Beach Harbors and other Mussel Watch Stations

Report will be issued in September 1988.

CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD

Dredging in the Sacramento and San Joaquin River Basins

Regulatory Guidelines (staff document) to be issued in June 1989.

Agricultural Drainage Discharges in the San Joaquin River Basin

Basin Plan Amendment will be issued in December 1988.

Compliance with water quality objectives for selenium in Grasslands waterfowl areas by October 1989.

Compliance with water quality objectives for selenium in San Joaquin River at and below Hills Ferry by October 1991.

Compliance with water quality objectives for selenium in San Joaquin River upstream of Hills Ferry and tributaries thereto by October 1993.

Compliance with water quality objectives for boron in all portions of the San Joaquin River and its tributaries by October 1991, except for Mud Slough (north) and the San Joaquin River between Sack Dam and Hills Ferry.

Compliance with Boron objectives in Mud Slough (north) and San Joaquin between Sack Dam and Hills Ferry by October 1993.

Compliance with water quality objectives for molybdenum in San Joaquin River and its tributaries by December 1988.

Acid Drainage from Abandoned Mines in the Sacramento River Basin

Funding Proposal by June 1989.

Mercury Discharges in the Sacramento and San Joaquin River Basins

Funding Proposal by March 1989.

Rice Field Discharges in the Sacramento River Basin

Attainment of standards in July 1988 and July 1989.

Effects of Large Water Storage and Diversion Projects in the Sacramento River Basin

Develop WDR by October 1988.

Beneficial Use Impairment from Silviculture

Basin Plan Prohibition will be completed by June 1989.

Biotoxicity Assessment of the Sacramento and San Joaquin River Basins

Workplan will be completed by July 1988.

Sacramento Urban Area Runoff Control

Workplan will be completed by July 1988.

LAHONTAN REGIONAL WATER QUALITY CONTROL BOARD

Lake Tahoe Single Family Home Review of Development Controls

Periodic reports received from TRPA.

Review of USFS Activities

Guidelines developed by November 1989

Coordinated Resource Management Plans (CRMP)

Approved and implemented as necessary.

Erosion Control Project Grants

Final Project Summary Reports and closeout of grant contracts completed periodically.

Lake Tahoe Wetlands Policy

Revisions to Basin Plan completed by 1988.

Lake Tahoe Shoreline Erosion Study

Report will be completed by November 1988.

Mustang Mesa Groundwater Study

Final Report due November 1988.

Twin Lakes Phytoplankton and Groundwater Monitoring Study

Report will be completed by December 1988.

COLORADO RIVER BASIN REGIONAL WATER QUALITY CONTROL BOARD

Selenium Pollution in the Colorado River Basin

Report will be completed by January 1990.

SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD

San Diego Creek Toxics Investigation

Report will be completed in January 1989.

SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD

Subsurface Disposal Policy

Criteria will be developed by October 1988.

San Diego Bay Study

Annual Progress Report will be completed by June 1989.

B. STATE WATER RESOURCES CONTROL BOARD

1. NEW PROGRAM DEVELOPMENT ACTIVITIES

Milestone dates for Tasks 1-5, 8, 10, and 11 are as shown in the State Board's August 25, 1988 workplan for program development activities to be supported by federal fiscal year 1987 Section 205(j)(5) funds. Work products are underlined. For each underlined item, the dates following "Draft" and "Final" are the dates anticipated for formal transmittal of the work product to EPA.

TASK 1, PROGRAM MANAGEMENT

Annual Report

Draft	July 15, 1989
IAC Review	July 30, 1989
Public Hearing	-
Final	August 30, 1989

TASK 2, SELECT FFY 1988 205(j)(5) PROJECTS

Staff Recommendation for Project Funding

Concept Draft	April 15, 1989
IAC Review	May 1, 1989
Draft	May 31, 1989
Public Hearing	-
*SWRCB adopt.	July 1989
Final	August 1, 1989
Start Proj.	March 1, 1990**

TASK 3, UPDATE NONPOINT SOURCE INVENTORY AND ASSESSMENT

Updated Inventory and Assessment

Public Hearing November 1988
Final May 1989

TASK 4, DEVELOP NONPOINT SOURCE POLICY

Policy

Draft February 1, 1989
IAC Review March 1, 1989
*Redraft March 30, 1989
*Mail for P.H. April 15, 1989
Public Hearing June 1, 1989
*Redraft July 1, 1989
*Agenda item July 1, 1989
*SWRCB adopt. August 1989
Final September 1, 1989

TASK 5, COORDINATE DEVELOPMENT OF REGIONAL IMPLEMENTATION PROGRAMS

Guidelines for Regional Management Programs

Draft December 1, 1988
*RB Review January 15, 1989
IAC Review -
Public Hearing -
Final February 15, 1989

TASK 6, EVALUATE DEVELOPMENT OF MANAGEMENT AGENCY AGREEMENTS

Draft Staff Report May 1988
Final Staff Report June 1989

TASK 7, REVIEW OPTIONS FOR ONGOING PROGRAM FUNDING

Draft Staff Report November 1989
Final Staff Report February 1989

TASK 8, UPDATE MANAGEMENT PROGRAM

Updated Management Program

Draft	September 1, 1989
IAC Review	September 15, 1989
*Redraft	October 15, 1989
*Mail for P.H.	November 15, 1989
Public Hearing	December 1, 1989**
*Redraft	January 30, 1990**
*SWRCB adopt.	February 1990**
Final	March 1, 1990**

TASK 9, WATER QUALITY MANAGEMENT FOR FOREST ACTIVITIES

<u>Annual USFS Status Reports</u>	January 1989 - 1991
<u>Biannual CDF Status Reports</u>	February and August 1989 - 1991
<u>Revised Nonfederal Best Management Practices</u>	December 1989
<u>Technical Guidance Documents</u>	February 1990
<u>Technical Study Workplans</u>	February 1990

TASK 10, PUBLIC PARTICIPATION

Review Mail List

Final January 1989

Interagency Advisory Committee Meetings:

Update Inventory	In coordination with Clean Water Strategy
Policy	March 1, 1989
Annual Report	July 30, 1989
Select Projects	September 30, 1989
Update Program	September 15, 1989

TASK 11, OVERVIEW OF REGIONAL BOARD SECTION 205(j)(5) IMPLEMENTATION ACTIVITIES

Status Reports	Quarterly
Annual Report	August 30, 1989

- * Interim milestone provided for information only.
- ** Date falls after funding period of FFY 1987 grant; further funding assumed.

2. ONGOING ACTIVITIES

Bay-Delta

Adoption of Water Quality Control Plan for Salinity and Pollutant Policy Document due by February 1989.

Adoption of EIR on Attainment Alternatives and Water Rights Decision due by July 1990.

Agricultural Drainage

Annual Selenium Verification Study Reports in 1989 to 1991.

Consider implementation of practices to implement San Joaquin Valley Drainage Program's recommended management plan for agricultural drainage by 1990.

Agricultural Drainage Loan

Annual reports to Legislature due in September (1988 to 1991).

Staff recommendation regarding request to Legislature for new bond monies by December 1988.

Evaluation of need for new project priority list by December 1988.

Water Quality Management Planning

Initiate Phase IV Section 205(j)(2) projects in December 1988.

Select Phase V Section 205(j)(2) projects in October 1989.

Ocean Policy and Standards

Convene CWA Section 320 Management Conference for Santa Monica Bay in June 1989.

Staff analysis of nonpoint source policy in Ocean Plan by June 1990.

Surveillance and Monitoring

Site-specific Water Quality Assessment Plans due February 1989.

V. PROJECT SELECTION AND EVALUATION

Federal funds for nonpoint source implementation projects could be made available through congressional appropriation of monies authorized under CWA Section 319 or through the CWA Section 205(j)(5) nonpoint source set-aside. At present, the only reasonably assured federal funding available to the State Board for nonpoint source implementation projects beyond those described in Section II.A is about \$800,000 of Federal fiscal year 1987 Section 205(j)(5) funds. The following discussion relates specifically to these funds. If Section 319 monies are made available to the State in the future, the following selection process will be reviewed and modified as appropriate. Regional Boards will play a major role in proposing projects. The State Board's Nonpoint Source Interagency Advisory Committee will have a consultative role in project selection. Evaluation measures will be included in all funded projects. These could include improvement of receiving water or runoff quality, implementation of best management practices, or measuring project performance against other stated project goals.

A. IDENTIFICATION OF PROJECTS

State Board staff will identify potential projects in two ways:

1. Review of Existing Project Lists

State Board staff will review existing lists of proposed projects. A number of agencies have established lists of nonpoint source-related projects for potential funding. Appearance on such a list indicates that initial project planning has been accomplished and a preliminary evaluation has been conducted by the agency. Relevant agencies and lists include:

California Association of Resource Conservation Districts
Proposed Resource Conservation District Projects

State Water Resources Control Board
Water Quality Planning Program
Agricultural Drainage Loan Program

State Coastal Conservancy
Coastal Wetlands Potential Preservation and Enhancement Sites

U.S. Soil Conservation Service
Watershed Planning Program
River Basin Planning Program

U.S. Agricultural Stabilization and Conservation Service
Agricultural Conservation Program

2. Identification of New Proposed Projects

State or Regional Board staffs may propose additional projects which fulfill the selection criteria. It is anticipated that projects proposed by Regional Boards will support implementation of the Regional Board's Triennial Review Workplan (discussed in Section I.G.b).

B. SELECTION CRITERIA

Since the State Board is still developing its Nonpoint Source Management Program and Clean Water Strategy, and since the available funding will support only about six projects, the following criteria are intended to serve as guidance for State Board staff in recommending projects while allowing the State Board flexibility in final selections:

1. Section 205(j)(2) Criteria

Criteria for selection of water quality management planning projects are contained in the State Board's Implementation Plan for the Section 205(j)(2) Water Quality Planning Program (Appendix F).

2. Consistent with Regional Board Triennial Review Workplans

The project addresses the priority nonpoint sources, waterbodies, or needed actions identified in Regional Board Triennial Review Workplans.

3. Potential Statewide Significance

The project addresses a category of nonpoint source which is of Statewide importance (as identified in the State Board's Nonpoint Source Problem Inventory) in a way that could be applied to other basins.

4. Meets Federal Criteria

Projects meet the "Priority for Effective Mechanism" criteria specified in CWA Section 319(h)(5).

5. Availability of Matching Funds

Non-federal matching funds are available to demonstrate local commitment and meet Section 319 requirements.

VI. IDENTIFICATION OF BEST MANAGEMENT PRACTICES

Clean Water Act Section 319 requires that each state identify best management practices (BMPs) to be used to address that state's nonpoint source problems, taking into account the impact of the practices on ground water quality. Numerous manuals and reports are available describing general types of BMPs to control discharges from various nonpoint sources. The actual design of BMPs is usually site-specific.

A. NONPOINT SOURCE DOCUMENT REFERENCE FILE

In order to enhance nonpoint source management capabilities, including knowledge of available BMPs, State Board staff has developed a computerized data file of reports addressing nonpoint source problems and/or management. Priority has been given to reports specific to California. For each report, the following information has been noted in the data file as appropriate:

1. Title, Date, and Author
2. Principal Agency
3. Nonpoint Source(s) for which BMP information is presented
4. Name of Waterbody addressed
5. Hydrologic Unit addressed
6. County(ies) addressed
7. Abstract of contents
8. Administrative Information, if funded by State Board

The ability to readily cross-reference any of the above categories of information makes this data file useful for determining:

1. General BMPs addressing any given nonpoint source category.
2. Site-specific BMPs which may have been developed to address any particular problem.
3. What information is available on any particular problem.
4. What problems have been studied for any given waterbody, hydrologic unit, or county.
5. Studies which have been conducted by any particular agency or under any given funding source or contract.

A listing of documents with BMP information which are currently in the data file is contained in Appendix A. Additional documents will be cataloged on a continuing basis, as resources allow, generally in the following order of priority: CWA Section 205(j)(2)-funded studies, other State Board-funded studies, other studies.

B. POTENTIAL IMPACTS OF BMPs ON GROUND WATER QUALITY

Any practice which alters the quality or quantity of recharge could impact ground water quality. For instance, the use of herbicides to minimize tillage and thus reduce soil erosion could result in increased percolation of agricultural chemicals to ground water. Such potential impacts will be considered by the State Board on a case-by-case basis in any decisions resulting in BMP implementation.

VII. SOURCES OF ASSISTANCE

A brief description of possible sources of assistance and funding for nonpoint source management in California follows.

A. TECHNICAL ASSISTANCE

Many agencies have nonpoint source-related responsibilities and expertise. Each of these could provide technical assistance for nonpoint source management. The programs of the most important of these agencies are described in the State Board's Nonpoint Source Assessment Report.

B. FUNDING ASSISTANCE

Because nonpoint sources are varied and ubiquitous, a number of Federal and State funding programs dealing with water development and flood control could provide nonpoint source-related benefits. In addition, The U.S. Environmental Protection Agency administers a number of water quality funding programs which could be used to support nonpoint source management. Funding sources which appear to be most relevant to California's nonpoint source management needs are:

1. U.S. Environmental Protection Agency

a. Clean Water Act Section 319(h) and (i) Grants

These are the primary NPS grants authorized by the Clean Water Act 1987 amendments. Section 319(h) authorized grants for implementing NPS controls for surface water, and 319(i) authorizes grants for ground water protection. The Act requires at least a 40 percent non-federal match for surface water grants. Other activities identified by the Act for BMP implementation include non-regulatory or regulatory programs for enforcement, education, training, technology transfer, and technical and financial assistance. The Act requires the state to maintain its funding for NPS management at or above the average of its NPS management funding for federal fiscal years (FFY) 1985 and 1986. CWA Section 319(i) ground water grants require a 50 percent match, and are limited to \$150,000 per fiscal year for each participant. Activities covered under ground water grants must advance the state toward comprehensive NPS control programs. There was no FFY 1988 appropriate for 319(h) or 319(i) although \$70 million was authorized. The President's FFY 1989 budget does not contain a request for the \$100 million authorized by the CWA. For FFY 1990 and FFY 1991, the annual

authorizations are \$100 and \$130 million respectively, but it is unknown how much funding will be appropriated.

b. Clean Water Act Section 205(j)(2) Water Quality Management Planning Grants

Section 205(j)(2) designated a one percent set-aside of construction grant funds for water quality management planning including NPS management.

c. Clean Water Act Section 205(j)(5) Grants

Section 205(j)(5) is a new (1987) amendment to the CWA. It allows a one percent set-aside of construction grant funds in addition to the 205(j)(2) monies, or a minimum of \$100,000 annually per state, to carry out activities identified under Section 319 of the Act. The funds may be used for: (1) developing NPS assessments, management programs, and data management systems; and (2) implementing NPS management programs. No state match is required for program development grants, although implementation grants must meet the match requirements of 319(h) (40 percent) and 319(i) (50 percent). FFY 1987 funds were available in February 1987. FFY 1988 funds are currently available.

d. Clean Water Act Section 201(g)(1)(B) Discretionary Funds

Section 201(g)(1)(B) of the Act gives each state's governor the discretion to set aside up to 20 percent of its construction grant allotment for NPS management. The Governor determines the amount to be set aside and the purpose for which it is to be used. The set-aside allocation must be consistent with the state's priority list (for construction grants) and EPA's Construction Grants Regulations (40 CFR 35.2012 et seq).

e. Clean Water Act Section 603(c)(2) State Revolving Loan Funds

The Act establishes a State Revolving Fund which may be used for water pollution control activities, including implementation of state NPS management programs and estuary management plans. To be eligible, states must submit an "Intended Use Plan" and identify the types of NPS implementation activities that will be eligible. States have considerable flexibility in establishing policies such as interest rates and repayment periods for administering their revolving fund. The State Board is presently considering the use of the State Revolving Fund for nonpoint source purposes.

f. Clean Water Act Section 604(b) Water Quality Management Planning Grants

The Act authorizes states to reserve one percent of the funding allocated for capitalization of the state revolving loan fund for the purposes of CWA Section 205(j).

2. U.S. Soil Conservation Service

Watershed Protection and Flood Prevention (Small Watershed) Program

This program provides both technical and financial assistance to improve and protect land and water resources.

3. U.S. Agricultural Stabilization and Conservation Service

This agency annually solicits proposals for cost-sharing, including for implementation of agricultural best management practices.

4. State Water Resources Control Board

a. Agricultural Drainage Water Management Loan Program

This program provides low-interest loans for facilities to prevent pollution caused by agricultural drainage.

b. Other State Board Programs

As noted elsewhere in this Management Plan, the State Board conducts a variety of programs relating to nonpoint source management. Expenditures for nonpoint source related activities have risen steadily over the last four fiscal years as summarized below:

STATE BOARD NONPOINT SOURCE
MANAGEMENT EXPENDITURES

FY 1984-85	\$3,189,093
FY 1985-86	4,030,036
FY 1986-87	5,884,859
FY 1987-88	7,222,502

A more detailed break-down of these expenditures is contained in Appendix G, "State Water Resources Control Board Nonpoint Source Expenditures."

FIGURE 2

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARDS

NORTH COAST REGION (1)

1440 Guerneville Road
 Santa Rosa, CA 95403
 (707) 576-2220

SAN FRANCISCO BAY REGION (2)

1111 Jackson Street, Rm. 6040
 Oakland, CA 94607
 (415) 464-1255

CENTRAL COAST REGION (3)

1102-A Laurel Lane
 San Luis Obispo, CA 93401
 (805) 549-3147

LOS ANGELES REGION (4)

107 South Broadway, Rm. 4027
 Los Angeles, CA 90012
 (213) 620-4460

CENTRAL VALLEY REGION (5)

3443 Routier Road
 Sacramento, CA 95827-3098
 (916) 361-5600

Fresno Branch Office

3614 East Ashlan Ave.
 Fresno, CA 93726
 (209) 445-5116

Redding Branch Office

100 East Cypress Avenue
 Redding, CA 96002
 (916) 225-2045

LAHONTAN REGION (6)

2092 Lake Tahoe Boulevard
 P. O. Box 9428
 South Lake Tahoe, CA 95731
 (916) 544-3481

Victorville Branch Office

15371 Bonanza Road
 Victorville, CA 92392
 (619) 241-6583

COLORADO RIVER BASIN REGION (7)

73-271 Highway 111, Ste. 21
 Palm Desert, CA 92260
 (619) 346-7491

SANTA ANA REGION (8)

6809 Indiana Avenue, Ste. 200
 Riverside, CA 92506
 (714) 782-4130

SAN DIEGO REGION (9)

9771 Clairemont Mesa Blvd. Ste. B
 San Diego, CA 92124
 (619) 265-5114



APPENDIX A

NONPOINT SOURCE CATEGORIES

APPENDIX A

NONPOINT SOURCE CATEGORIES

- ACID = Acid Precipitation
- AGAN = Agriculture, Confined Animals, except Dairy
- AGAE = Agriculture, Drift from aerial application of agricultural chemicals
- AGDA = Agriculture, Confined Animals, Dairy
- AGGR = Agriculture, Grazing Impacts, including overgrazing, land disturbance, and direct impacts by livestock on waterbodies
- AGRU = Agriculture, Storm Runoff
- AGSU = Agriculture, Subsurface Drainage, natural or engineered
- AGTA = Agriculture, Irrigation Tailwater (Return Flows)
- ATMO = Atmospheric Deposition, except acid precipitation
- BOAT = Discharges from Vessels
- CHAN = Channel Erosion
- CONS = Construction: active land disturbance phase
- DIRE = Direct application of pesticide or herbicide to water body for aquatic pest control
- DIST = Disturbed sites no longer subject to active disturbance, including roadcuts and unstabilized development
- DRED = Re-suspension of pollutants by Dredging
- DUMP = Waste Disposal Site, land or marine
- GEOT = Geothermal Development

(continued on next page)

APPENDIX A
NONPOINT SOURCE CATEGORIES

(continued)

- HABI = Physical Habitat Alteration, including filling, rip-rapping, physical effects of dredging
- HYDR = Hydrologic Modification, including diversion, impoundment, hydrologic effects of discharges
- INDU = Industrial
- MINI = Mineral Extraction, surface and subsurface, including oil and gas
- NATU = Natural Sources, e.g. natural erosion of mercury deposits resulting in contamination of fish tissue
- OUTS = Out-of-State: any nonpoint source discharging to California waters from across state or international boundaries
- SEAW = Seawater Intrusion
- SEPT = Septic Systems/Onsite Disposal
- SILV = Silviculture, including road building and other associated activities
- UNKN = Unknown
- URBA = Urban Runoff

may require an NPDES permit under specified circumstances, and all storm drains will be subject to the NPDES program beginning October 1, 1992. (33 U.S.C. § 1342(p); see Cal. Water Code § 13377.) In addition, where an industrial facility is required to have an NPDES permit, the permit may impose best management practices to control nonpoint source discharges of toxic or hazardous pollutants from ancillary industrial activities. (33 U.S.C. § 1314(e).)

II. SPECIFIC AUTHORITY

A. Problem Assessment and Identification of Best Management Practices

The State and Regional Boards have broad authority to conduct investigations into water quality. (Cal. Water Code §§ 183, 186, 13267.) This includes authority to identify water bodies where additional controls on nonpoint sources are needed to meet water quality standards, and to identify nonpoint sources contributing to water quality standards violations. (See 33 U.S.C. § 1329(a). See also Cal. Water Code § 13160.)

The State Board is authorized to administer a program of research in the technical phases of water quality control, research which may include development of best management practices. (Cal. Water Code § 13162.)

The State and Regional Board's planning authority also includes the authority to identify areas where nonpoint source controls are necessary to protect water quality, and to identify or develop best management practices. Water quality control plans must include a program of implementation to achieve water quality standards. (Cal. Water Code § 13050(j)(3), 13242.) The authority to prepare and adopt water quality control plans necessarily includes the authority to identify water quality problems and appropriate control measures. (See *id.* §§ 186, 13050(j), 13170, 13241, 13242. See generally Rich Vision Center v. Board of Medical Examiners, 144 Cal.App.3d 110, 114, 192 Cal.Rptr. 455, 457 (1983) (an administrative agency's powers include those powers which are necessary for the due and efficient administration of the powers expressly granted to the agency by statute, or which may be fairly implied from the agency's express powers.)

The State and Regional Boards themselves may carry out problem assessment and identification of best management practices, or carry out these activities in cooperation with other agencies. The Porter-Cologne Act assigns the State Board primary responsibility for the coordination of water quality related investigations in California. (See Cal. Water Code § 13301, 13163.)

The State and Regional Board also have authority to require that others carry out water quality related investigations, including assessment of water quality impacts of nonpoint sources

and identification of best management practices as appropriate. A Regional Board may require any discharger, including a federal, state, local or private entity, to investigate, monitor and report on technical factors involved in water quality. (Id. § 13267(b); see id. §§ 19, 13050(c). See also 26 Ops. Cal. Atty. Gen. 88, 90-91 (1955) (a Regional Board may regulate a landowner as a "discharger," even though the discharge from the landowner's property is caused by the activities of others, because the landowner has the legal power to control the discharge.) The State and Regional Boards may also require any state or local agency to investigate and report on technical factors involved in water quality, even if that agency is not a discharger. (Id. §§ 13165, 13225(c).) Thus, the State and Regional Boards may require reports on nonpoint sources, including evaluation of water quality impacts and identification of best management practices, from state and local agencies which regulate activities such as land development and timber harvesting.

B. Voluntary Implementation of Best Management Practices

The State and Regional Boards have authority to undertake programs to promote voluntary implementation of best management practices, either independently or in cooperation with other public agencies.

The State Board is authorized to implement a public information program, which may include dissemination of information necessary for the voluntary implementation of best management practices. (Id. § 13167.) The Regional Boards are directed to "[o]btain coordinated action in water quality" and to "[e]ncourage and assist in self-policing waste disposal programs," authority which includes the power to carry out a public education program or similar efforts to encourage voluntary implementation of best management practices. (Id. § 13225.)

Water quality control plans may also include programs to promote voluntary implementation of best management practices. A water quality control plan must include a program of implementation for achieving water quality objectives, "including recommendations for appropriate action by any entity, public or private." (Id. § 13242.) Accordingly, a water quality control plan may include both voluntary and regulatory programs. The implementation program should provide for the attainment of water quality standards. (See id.; Study Panel Report at 12. See also Cal. Water Code § 13263(a) (waste discharge requirements must implement the applicable water quality control plan).) A water quality control plan therefore should not rely on voluntary programs to the exclusion of regulatory programs needed to protect water quality. A water quality control plan may properly rely on a voluntary program for implementation where there is reasonable assurance that a voluntary program will achieve water quality standards, either by itself or in combination with regulatory programs.

C. Regulatory Programs

1. Monitoring and Reporting

The State and Regional Boards are authorized to require any state or local agency, or any person discharging or proposing to discharge, from a point or nonpoint source or into a community sewer system, to submit technical or monitoring reports. (Cal. Water Code §§ 13165, 13225(c), 13267(b).) Monitoring, recording and reporting requirements may also be established in waste discharge requirements. (See 23 Cal. Code Reg. § 2230.)

The State and Regional Boards also have authority to obtain information on nonpoint sources, independent of information supplied by regulated persons. The State and Regional Boards have broad powers to conduct water quality investigations. (Cal. Water Code § 13267(a); see id. § 183; Joseph v. Masonite Corp., 148 Cal.App.3d 6, 9, 195 Cal.Rptr. 629, 630-31 (1983).) These investigations may be conducted for any purpose necessary to carry out the powers of the boards, including "establishing or reviewing a water quality control plan, or waste discharge requirements, or in connection with any action relating to any plan or requirement or authorized by [the Porter-Cologne Act]." (Cal. Water Code §§ 183, 13267(a).) The State and Regional Boards have authority under their investigatory powers to conduct sampling and monitoring, inspect records, facilities and monitoring equipment, and issue subpoenas requiring production of evidence. (Id. §§ 183, 186, 1080, 13267(b); Cal. Gov't Code § 11181.)

The Regional Boards have authority to obtain an administrative inspection warrant to enter and inspect the facilities of any person to determine whether the purposes and requirements of the Porter-Cologne Act are being complied with. (Cal. Water Code § 13267(c); see Cal. Civ. Proc. Code § 1822.50 et seq.) The Regional Board may enter and inspect facilities without an inspection warrant if it obtains the consent of the owner, or in an emergency. (Cal. Water Code § 13267(c).)

2. Waste Discharge Control

With limited exceptions, nonpoint sources are subject to regulation through waste discharge requirements and discharge prohibitions issued pursuant to the Porter-Cologne Act. (See Cal. Water Code §§ 13243, 13260 et seq. But see 44 Ops. Cal. Atty. Gen. 126, 128 (1964) (salt water intrusion is not subject to waste discharge requirements).) Waste discharge requirements and enforcement orders usually are issued by the Regional Boards, but may also be issued by the State Board upon review of the action or failure to act of a Regional Board. (Cal. Water Code § 13320(c); see, e.g., State Water Resources Control Board Order No. WQ 85-1.) Discharge prohibitions may be established in water quality control plans or waste discharge requirements. (Cal. Water Code § 13243.)

There is an exemption from waste discharge requirements for timber harvest operations conducted pursuant to the Z'berg Nejedly Forest Practice Act of 1973. (Cal. Pub. Res. Code § 4511 et seq.) With specified exceptions, including cases where the State Board finds that compliance with best management practices will not provide water quality protection required by the applicable water quality control plan, timber harvest operations conducted pursuant to the Act may be exempt from waste discharge requirements. (Id. § 4514.3.) This exemption will take effect only if the Environmental Protection Agency certifies that the requirements of the Act constitute best management practices for silviculture pursuant to Section 208 of the Clean Water Act. (Id.) The Department of Forestry is required to consult with the Regional Boards in its review of timber harvest plans submitted pursuant to the Act. (See id. § 4582.6.)

Waste discharge requirements and discharge prohibitions may implement best management practices, either by setting limitations on the discharge which lead the discharger to employ best management practices or, in some cases, by specifying best management practices to be followed.

Effluent Limitations and Discharge Prohibitions

Waste discharge requirements specify "the nature of any proposed discharge . . . with relation to the conditions existing . . . in the disposal area or receiving waters." (Cal. Water Code § 13263.) In so doing, waste discharge requirements may set limitations on the characteristics of the discharge (effluent limitations), establish conditions to be maintained in the disposal area or receiving waters, or regulate through a combination of these methods. (See 16 Ops. Cal. Atty. Gen. 203 (1950).) These requirements may be set as either numerical limitations or narrative standards.

Discharge prohibitions prohibit discharges, or specified types of discharges, in certain areas or under certain conditions. (Id. § 13243.)

In some cases, a best management practice is a limitation on the volume, characteristics, area or timing of discharge, which may be specified as an effluent limitation or discharge prohibition adopted by a Regional Board. Examples include requirements that discharges not occur under specified conditions, such as periods of low stream flow, and requirements that wastes be disposed to land instead of being allowed to runoff into surface waters.

In other cases, effluent limitations and discharge prohibitions may serve to implement best management practices, without specifically requiring that those best management practices be followed, where those best management practices are the most cost-effective means of achieving the results required by the effluent limitations or discharge prohibitions. (See Pacific Water Conditioning Association, Inc. v. City Council, 73

Cal.App.3d 546, 554, 40 Cal.Rptr. 812, 816-17 (1977).) For example, a prohibition against discharges to surface waters may have the effect of requiring construction of retention ponds or other facilities to control surface runoff.

Waste discharge requirements must implement the applicable water quality control plan, provide for the reasonable protection of beneficial uses, and prevent nuisance. (Cal. Water Code § 13263.) Where a water quality control plan calls for implementation of best management practices, or best management practices are necessary to protect water quality or prevent nuisance, any waste discharge requirements issued should limit the allowable discharge to that attainable by following those best management practices.

Specification of Best Management Practices

Waste discharge requirements may set conditions to assure protection of water quality. (See Cal. Water Code § 13263.) In appropriate cases, these may include conditions requiring implementation of best management practices.

The Porter-Cologne Act limits the authority of the Regional Boards to specifically require compliance with best management practices under certain circumstances. Ordinarily, waste discharge requirements and other Porter-Cologne Act orders may not "specify the design, location, type of construction, or particular manner in which compliance may be had," but must allow compliance "in any lawful manner." (Cal. Water Code § 13360.) In other words, waste discharge requirements ordinarily should be framed in terms of the results to be achieved -- in terms of allowable discharge or conditions in the disposal area or receiving waters -- rather than specify the particular manner by which those results shall be achieved. (See id. § 13263(a).)

Limitations on the volume, characteristics, area or timing of discharge specify the result to be achieved, not the manner of compliance, and are not affected by the statutory restriction on specifying the manner of compliance. The Regional Boards may set and enforce these limitations, even where in practical effect there is no means of compliance except to follow a particular best management practice. (Pacific Water Conditioning Association, Inc. v. City Council, 73 Cal.App.3d 546, 554, 40 Cal.Rptr. 812, 816-17 (1977).) Thus, waste discharge requirements may limit allowable discharges to those which would occur if best management practices are followed, even where they may not specify that those best management practices be followed. Discharge prohibitions, by their very nature, specify the results to be achieved, in terms of discharge, not the manner of compliance. (See Cal. Water Code § 13243.)

A Regional Board may also require that a discharger's report of waste discharge include information relevant to the discharge, including identification of any proposed treatment facilities, containment facilities, or best management practices. (See id. §

13260(a).) The Regional Board may refuse to approve the discharge as proposed if, taking into account any best management practices or other control measures proposed, there is not reasonable assurance that water quality will be adequately protected. (See id. § 13260.) If the Regional Board approves the discharge, it may require that the discharger submit a new report of waste discharge before initiating any material change in treatment, containment, or other practices used to control the discharge. (See id. §§ 13260, 13264; 23 Cal. Code Reg. § 2210.) These restrictions do not amount to an invalid specification of the manner of compliance, so long as the Regional Board affords the discharger an opportunity to propose alternative methods of compliance.

There are also a number of exceptions to the statutory restriction against specifying the manner of compliance. (See, e.g. People v. Barry, 194 Cal.App.3d 158, 180-89, 239 Cal.Rptr. 349, 363-64.) NPDES permits may specify that best management practices be followed as a means of compliance. (See 40 C.F.R. § 122.44(k); Cal. Water Code §§ 13327, 13377; State Water Resources Control Board Order No. WQ 80-19 at 19-21.) Waste discharge requirements for injection wells may also specify the manner of compliance. (Cal. Water Code § 13360(a)(1).) For solid waste disposal sites, waste discharge requirements may specify the construction of particular containment or drainage control facilities, or set other reasonable requirements to achieve similar purposes. (Id. § 13360(a)(2).)

Conformity with best management practices will not excuse a violation of effluent limitations, discharge prohibitions or water quality standards. Best management practices are a means to achieve water quality standards, not a substitute for those standards. (Northwest Indian Cemetery Protective Association v. Peterson, 795 F.2d 688 (9th Cir. 1986), rev'd on other grounds, Lyng v. Northwest Indian Cemetery Protective Association, 108 S.Ct. 1319 (1988).)

Multiple Dischargers

In many cases, nonpoint source pollution problems will be the result of a large number of individual dischargers. The existence of large numbers of dischargers does not vitiate the State and Regional Boards' authority to regulate individual dischargers through waste discharge requirements or other orders.

In considering issuance of waste discharge requirements, the Regional Boards should take into account the cumulative impacts of the proposed discharge and other discharges, activities or factors affecting water quality, not just the impacts of the particular discharge being proposed. (See 14 Cal. Code Reg. § 15041, 15065(c); 23 Cal. Code Reg. § 3721, 3742.) The State and Regional Boards are not required to demonstrate that, but for the requirements imposed on a particular discharger or class of

dischargers, water quality standards would be violated. The State and Regional Boards are not required to authorize the utilization of the full waste assimilation capacities of the receiving waters. (Cal. Water Code § 13263(b).) The Porter-Cologne Act also declares that:

[A]ctivities and factors which may affect the quality of waters of the state shall be regulated to attain the highest water quality which is reasonable .

[and] the state must be prepared to exercise its full power and jurisdiction to protect the quality of waters in the state. (Id. § 13000.)]

Accordingly, the State and Regional Boards are authorized to impose requirements for an individual or class of dischargers if those requirements are reasonable and promote the protection of water quality, even if it cannot be demonstrated that the requirements are necessary to achieve applicable water quality standards.

The State and Regional Boards may employ a variety of planning and regulatory tools to facilitate regulation of multiple dischargers. A water quality control plan, as part of its program of implementation, may include an allocation of permissible discharges, specifying what level of discharge is allowable from individual dischargers or categories of dischargers. (See Cal. Water Code § 13242.) The implementation plan may also specify requirements which will apply generally to a class or category of discharger. These will establish minimum requirements to be applied through waste discharge requirements, eliminating the need to develop limits on a case-by-case basis for most dischargers. (See id. §§ 13242, 13263.) Discharge prohibitions adopted in water quality plans also serve to set restrictions for a category or class of dischargers. (See id. § 13243.)

The Porter-Cologne Act has been interpreted to authorize issuance of general waste discharge requirements. (See, e.g., 23 Cal. Code Reg. 2524(c).) The Regional Board may also adopt resolutions which waive waste discharge requirements for a category or class of nonpoint sources. (See Cal. Water Code § 13269.) Waivers must be conditional, and may be terminated at any time by the Regional Board. (Id.) Accordingly, a Regional Board may decide to waive waste discharge requirements for a category or class of nonpoint sources upon condition that identified best management practices are followed. By issuing general waste discharge requirements or waivers, a Regional Board may establish appropriate water quality control measures for a group of discharges, reserving the issuance of individual waste discharge requirements for specific cases identified as presenting significant water quality problems and for dischargers requesting individual requirements. (Cf. 40 C.F.R. § 122.28(b)(2)(setting forth situations when individual permits may

be issued instead of general permits under the NPDES permit program.)

The State Board also has authority to adopt regulations setting requirements for a class or category dischargers. (Cal. Water Code § 1058; see, e.g., 23 Cal. Code Reg. § 2510 et seq. (landfills, surface impoundments, waste piles and land treatment facilities); id. § 2560 et seq. (confined animal facilities); id. § 2570 (mining waste management).

Enforcement

The Porter-Cologne Act provides several options for enforcement of violations of water quality control plans, waste discharge requirements and provisions of the Porter-Cologne Act itself, including cease and desist orders, cleanup and abatement orders, administrative civil liability orders, actions in court for civil liability or injunctive relief, and criminal prosecutions. (Cal. Water Code §§ 13261, 13262, 13265, 13268, 13271, 13272, 13300 et seq.; Attwater & Markle, Overview of California Water Rights and Water Quality Law, 19 Pac. L. J. 957, 1009-12 (1988).)

When a Regional Board finds that a discharge is taking place or threatening to take place in violation of waste discharge requirements, or that waste collection, treatment, or disposal facilities are approaching capacity, the Regional Board may require the discharger to submit a detailed time schedule of corrective action to correct or prevent a violation of requirements. (Cal. Water Code § 13000.)

The Regional Boards are also authorized to issue cease and desist orders in response to violations or threatened violations of waste discharge requirements or discharge prohibitions. (Id. § 13001.) The cease and desist order may require the discharger to comply with requirements or prohibitions, to comply according to a time schedule, or, in the case of a threatened violation, to take appropriate remedial or preventive action. (Id.) A cease and desist order may restrict or prohibit new sources of waste to a community sewer system. (Id.)

Cleanup and abatement orders require a discharger to clean up a discharge or abate its effects or, in the case of a threatened pollution or nuisance, take other necessary remedial action. (Id. § 13304.) The Regional Boards may issue cleanup and abatement orders in response to discharges in violation of waste discharge requirements or discharge prohibitions. (Id.) Cleanup and abatement orders may also be issued to any person who has caused or permitted, causes or permits, or threatens to cause or permit a discharge or deposit of waste which create or threatens to create a condition of pollution, even if there is no violation of waste discharge requirements or discharge prohibitions. (Id.) In the event the State must arrange for a cleanup or abatement effort, the person who discharged the waste is liable to the government agency to the extent of the

reasonable costs actually incurred in the cleanup or abatement. (Id. § 13304 (c).)

The Porter-Cologne Act establishes civil monetary liability for specified violations, including failure to submit a requested report of waste discharge, initiating a new or materially changed discharge without issuance or waiver of waste discharge requirements, failure or refusal to submit technical and monitoring reports, and violation of waste discharge requirements or other orders or prohibitions. (Cal. Water Code §§ 13261, 13265, 13268, 13350.) Under some provisions liability may be imposed based upon a standard of strict liability, while under other provisions liability may not be imposed unless the violation was intentional or negligent or the discharger continued the violation after notification. (Compare id. § 13268 with id. §§ 13265, 13350(a).) The Regional Board may impose liability administratively, or refer the matter to the Attorney General for imposition of liability in an action in the Superior Court. (Id. §§ 13261, 13265, 13268, 13350.)

The Porter-Cologne Act also provides authority to petition the Superior Court to enjoin threatened or continuing violations in appropriate cases. (Id. §§ 13262, 13264(b), 13304, 13331.) The Regional Board's may also request the Attorney General to bring an action for an injunction in an emergency requiring immediate action in response to a discharge or threatened discharge that threatens to create a condition of pollution or nuisance. (Id. § 13340.)

Criminal penalties may be imposed for certain violations, including continuing a new or materially changed discharge without issuance or waiver of waste discharge requirements, after the violation has been called to the discharger's attention, and for violations of monitoring and reporting requirements. (Id. § 13265(a), 13268(a), 13271, 13272.)

3. Ground Water

State law provides authority to take into account the impact on ground water quality of best management practices identified to control nonpoint sources.

The Porter-Cologne Act establishes a comprehensive water quality protection program, applicable to both surface and ground waters. (Cal. Water Code §§ 13000, 13050(e).) The planning and waste discharge control provisions applicable to nonpoint sources also apply to discharges to ground water, providing authority not only to consider impacts on ground water, but also authority to plan an implement any necessary controls.

In addition, the California Environmental Quality Act requires all state and local agencies to take into account any significant adverse impacts on ground water of the actions they carry out and approve. (Cal. Pub. Res. Code § 21000 et seq.) State and local agencies must avoid or mitigate these adverse impacts where feasible. (Id. § 21002.)

For a complete discussion of California state ground water quality law, see Appendix C-1.

4. Federal Facilities

Federal officials and federal agencies are subject to the nonpoint source control requirements administered or imposed by state and local agencies, including any nonpoint source control requirements or administrative authority established pursuant to the Porter-Cologne Act or state water rights law. (Clean Water Act Section 313; 33 U.S.C. § 1323; see, e.g., Northwest Indian Cemetery Protective Association v. Peterson, 795 F.2d 688 (9th Cir. 1986), rev'd on other grounds, Lyng v. Northwest Indian Cemetery Protective Association, 108 S.Ct. 1319 (1988); United States v. State Water Resources Control Board, 182 Cal.App.3d 82, 134-37, 227 Cal.Rptr. 161, 190-92 (1986).)

Date: October 12, 1988



William R. Attwater
Chief Counsel
California State Water
Resources Control Board

APPENDIX C-1

CALIFORNIA STATE GROUND WATER QUALITY LAW

by ANDREW H. SAWYER

is available upon request by contacting:

STATE WATER RESOURCES CONTROL BOARD

901 P STREET

SACRAMENTO, CALIFORNIA 95814

ATTN: TERRY HEISER

APPENDIX D

AGENCY FUNCTIONS IN CONTROLLING NONPOINT SOURCE POLLUTION

APPENDIX D

AGENCY FUNCTIONS IN CONTROLLING
NPS POLLUTION

AGENCY*	ACID	AGAN	AGAE	AGDA	AGGR	AGRU	AGSU	AGTA	ATMO	BOAT	CHAN	CONS	DIRE	DIST
RWQCB		RT		RT	RT	RT	RT	RT						
SWRCB		RFT		RFT	RFT	RFT	RFT	RFT						
CALTRAN (1)												B		B
CARCD (2)		T		T	T	T	T	T			T	T		T
CDFA (3)			T			T	T	T					T	
CDF (4)														
CDFG (5)	T	T	T	T	T	T	T	T	T	T	T	T	T	T
CDDC														
CDWR (6)											F			
CSCC (7)	F	F	F	F	F	F	F	F	F	F	F	F	F	F
UCCES		T	T	T	T	T	T	T						
USACE (8)														
USASCS		F	F	F	F	F	F	F						
USBLM					B									
USBUREC (9)							B	B						
USFHA		F	F	F	F	F	F	F						
USFS (10)					B							B		B
USFWS (11)	T	T	T	T	T	T	T	T	T	T	T	T	T	T
USSCS (12)		FT		FT	FT	FT	FT	FT				FT		F

* See Appendix E for key to agency acronyms

R = REGULATORY AUTHORITY

T = TECHNICAL ASSISTANCY

F = FINANCIAL ASSISTANCE

B = DIRECT BMP IMPLEMENTATION

(continued on next page)

AGENCY FUNCTIONS IN CONTROLLING
NPS POLLUTION

AGENCY	DRED	DUMP	GEOT	HABI	HYDR	INDU	MINI	NATU	OUTS	SEAW	SEPT	SILV	UNKN	URBA
RWQCB	RT	T	RT	RT	RT	RT	T	RT						
SWRCB	RFT	FT	RFT	RFT	RFT	RFT	FT	RFT						
CALTRAN (1)				B										
CARCD (2)														
CDFA (3)														
CDF (4)								FB				R		
CDFG (5)	T	T	T	RT	T	T	T	T	T	T	T	T	T	T
CDOC								R				T		
CDWR (6)				B	B									F
CSCC (7)	F	F	F	F	F	F	F	F	F	F	F	F	F	F
UCCES														
USACE (8)	R			R										
USASCS												F		
USBLM								B				B		
USBUREC (9)					B					B				
USFHA														
USFS (10)								B				B		
USFWS (11)	T	T	T	T	T	T	T	T	T	T	T	T	T	T
USSCS (12)														

- (1) B - RELATING TO STATE HWY CONSTRUCTION AND MAINTENANCE
- (2) T - RELATING TO CONTROL OF RUNOFF AND SOIL EROSION FROM PRIMARILY AG LANDS
- (3) R - RELATING TO PESTICIDE USE
- (4)FB - RELATING TO REVEGETATION AFTER FIRES
- (5) R - RELATING TO STREAMBED ALTERATION, T - ANY SOURCE THAT MAY IMPACT FISH AND WILDLIFE
- (6) B - RELATING TO WATER PROJECTS, F - URBAN STREAMS RESTORATION PROGRAM
- (7) F - PROJECTS MAY ADDRESS ANY NPS IN COASTAL ZONE
- (8) R - HABI, RELATING TO WETLANDS ALTERATION
- (9) B - RELATING TO OPERATION OF CENTRAL VALLEY PROJECT
- (10) B - RELATING TO ANY SOURCES ON FOREST LANDS
- (11) T - MAY PROVIDE TECHNICAL REVIEW FOR ANY PROGRAM OR ACTIVITY THAT MAY AFFECT FISH AND WILDLIFE

APPENDIX E

LIST OF AGENCY ACRONYMS

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APPENDIX E

LIST OF AGENCY ACRONYMS

RWQCB	REGIONAL WATER QUALITY CONTROL BOARD
SWRCB	STATE WATER RESOURCES CONTROL BOARD
CALTRANS	CALIFORNIA DEPARTMENT OF TRANSPORTATION
CARCD	CALIFORNIA ASSOCIATION OF RESOURCE CONSERVATION DISTRICTS
CDFA	CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE
CDFG	CALIFORNIA DEPARTMENT OF FISH AND GAME
CDOC	CALIFORNIA DEPARTMENT OF CONSERVATION
CDWR	CALIFORNIA DEPARTMENT OF WATER RESOURCES
CSCC	CALIFORNIA STATE COASTAL CONSERVANCY
UC EXTENSION	UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION SERVICE
USACE	U.S. ARMY CORP OF ENGINEERS
USASCS	U.S. AGRICULTURE STABILIZATION AND CONSERVATION SERVICE
USBLM	U.S. BUREAU OF LAND MANAGEMENT
USBUREC	U.S. BUREAU OF RECLAMATION
USFHA	U.S. FARMERS HOME ADMINISTRATION
USFS	U.S. FOREST SERVICE
USFWS	U.S. FISH AND WILDLIFE SERVICE
USSCS	U.S. SOIL CONSERVATION SERVICE

APPENDIX F

SELECTION CRITERIA FOR CWA SECTION 205(j)(2) PROJECTS

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APPENDIX F

SELECTION CRITERIA FOR CWA SECTION 205(j)(2) PROJECTS

Prior to requesting proposals for Subsections 205(j)(2) and 205(j)(5) and/or Section 319 funding, the State Board will provide each potential participant with updated guidance to be used in developing proposals.

Regulations prepared by EPA and guidance provided by EPA, Region 9, relative to this program indicate that states are to use 205(j)(2) funds to determine the nature, extent, and causes of point and nonpoint source pollution problems and to develop plans to resolve these problems. The following discussion relates specifically to projects funded under Subsection 205(j)(2). Additional complementary criteria would be developed for nonpoint source management projects to be funded under Subsection 205(j)(5) and Section 319. These criteria would be based on the nonpoint source problem inventory and assessment.

In managing the selection and funding of projects conducted by RPCPOs/IOs, EPA guidance states that water quality goals and program priorities should be clearly communicated by the State. The State of California's water quality goals and program priorities are directed towards the cleanup or prevention of water quality problems. California's water quality problems are assessed and presented in the biennial State Board Section 305(b) report. Additionally, the list of water bodies impacted by toxics developed pursuant to Section 131.11(a)(2), Title 40, Code of Federal Regulations, the list of nonpoint source problems, and the State ground water strategy, identify water bodies which may be considered as program priorities by the State Board. The Regional Board and State Board triennial review and Ocean Plan Update workplans and processes also identify priority water quality issues and resources necessary to conduct continued basin planning efforts. The water bodies with adversely impacted beneficial uses identified in these documents are defined, for the purposes of this document, as "State identified water quality impacted water bodies". Further, EPA, Region 9, has indicated that Subsection 205(j)(2) funds should be used for examination of water quality standards, development of waste load allocations, and initiation or continuation of monitoring to support planning for point and nonpoint sources of pollution.

In considering project proposals, EPA guidance indicates states should assess the capacity of each agency's current or proposed water quality staff to manage the proposed work, any previous water quality or environmental experience, the potential of the proposed work to abate significant water quality problems, and other relevant criteria. This does not mean that only projects that are directly associated with corrective action on a State identified water quality impacted water body or only agencies with experienced water quality management staff may be funded.

It is intended, however, that such projects and agencies receive special consideration.

By using the concept of "State identified water quality impacted water bodies", the State's water quality goals and program priorities are broadly and comprehensively presented. This is intended to allow public agencies to make comments on the draft Plan and to develop project proposals which address the State Board's primary requirements for funding projects. These requirements are that projects focus on identified water quality problems, and that projects lead directly to the correction or prevention of the problem. During the review and comment period for the draft Plan, commentors will have the opportunity to advise the State Board as to what specific water quality problems should be given high priority in evaluation proposals. Therefore, the State Board may choose to revise the final Plan to contain a more specific list of water quality problems to be given high priority in the project evaluation process.

The following criteria focus on State identified water quality impacted water body clean up and/or protection, but also provide for funding high priority planning efforts not directly associated with such efforts.

These criteria will assist the State Board in evaluating projects. It is intended that the limited planning funds be allocated to projects that have substantial support from local agencies, and to agencies that have illustrated their intention and ability to implement the project recommendations. The criteria are:

1. Is the project directed at cleaning up or protecting a State identified water quality impacted water body?

Factors to be considered:

- (1) What is the use to be protected?
- (2) To what extent does pollution contribute to the impairment of the use and what are the pollutant(s) constituents?
- (3) What is the level of point source pollution control necessary to restore or enhance the use?
- (4) What is the level of nonpoint source pollution control necessary to restore or enhance the use?
- (5) Is there a public health threat?
- (6) Are water quality standards being violated?

(7) Is the problem caused or aggravated by financial inability to comply with waste discharge requirements or NPDES standards?

2. Is the project directed at solving (or contributing to the solution of) a significant water quality problem not directly associated with a State identified water quality impacted water body?

Factors to be considered:

o Same as for (1) above.

3. Are the causes of the problems known or is there a good probability that they can be determined? Are the causes of the problem correctable and to what extent will the project results be applicable to other similar problems in the State?

Factors to be considered:

- o Is there an existing data base?
- o Is there convincing evidence that water users believe there is a problem?
- o Is the physical extent of the problem well defined?
- o Are there existing technologies or institutional processes to determine or correct the problem?
- o Will the results of the project be applicable to similar problems throughout the State?

4. Is there a regional and local interest in solving the problem?

Factor to be considered:

- o Is there specific evidence of regional and local interest in solving the problem?

5. Is there a regional and local commitment to implement the final recommendations of the project?

Factors to be considered:

- o Is there existing documentation of the regional and local commitment to implement the project recommendations (e.g., letters of intent, MOUs, resolutions, etc.)?
- o Has there been a history of regional and local entities accepting and implementing similar recommendations?

6. What is the capacity of the proposing agency's current or proposed water quality or environmental staff to manage, perform, and complete the proposed work?

Factor to be considered:

- o Has the proposing agency completed and implemented other significant water quality or environmental projects?

APPENDIX G

STATE WATER RESOURCES CONTROL BOARD NONPOINT SOURCE EXPENDITURES

STATE WATER RESOURCES CONTROL BOARD
NON POINT SOURCE (NPS)
EXPENDITURES
FY 1984-85

TASK DESCRIPTION	FED FUND EXPENDITURES	STATE FUND EXPENDITURES	TOTAL EXPENDITURES	NPS %	NPS % IN DOLLARS
NPS GENERAL SUPPORT					
TECHNICAL ASSISTANCE*		767,730	767,730	2%	15,355
TOTAL	0	767,730	767,730		15,355
NPS PARTIAL SUPPORT					
WASTE DISCHARGE REQ		2,254,112	2,254,112	19%	428,281
COMPLIANCE INSPECTION	208,298	2,018,345	2,226,643	19%	423,062
COMPLIANCE INVESTIGATION	531,065	0	531,065	19%	100,902
SELF-MONITORING REVIEW	67,594	562,955	630,549	19%	119,804
ENFORCEMENT/CLEAN-UP	2,282,499	429,456	2,711,955	19%	515,271
PRIORITY CHEMICALS**		0	632,620	80%	506,096
BASIN PLANNING & POLICIES FOR SURFACE WATER		700,217	700,217	5%	35,011
205(J) PROJECT ADM	317,609	0	317,609	95%	301,729
TECHNICAL REVIEWS*		923,115	923,115	50%	461,558
TOTAL	3,407,065	6,888,200	10,927,885		2,891,714

STATE WATER RESOURCES CONTROL BOARD
NON POINT SOURCE (NPS)
EXPENDITURES
FY 1984-85

TASK DESCRIPTION	FED FUND EXPENDITURES	STATE FUND EXPENDITURES	TOTAL EXPENDITURES	NPS %	NPS % IN DOLLARS
NPS SPECIFIC					
FOREST PRACTICES RULES ASSESSMENT PROJECT		147,778	147,778	100%	147,778
PESTICIDES		130,995	130,995	80%	104,796
AGRICULTURAL DRAINAGE SAN JOAQUIN RIVER BASIN		196,331	196,331	15%	29,450
TOTAL	0	475,104	475,104		282,024
GRAND TOTAL	3,407,065	8,131,034	12,170,719		3,189,093

* TECHNICAL ASSISTANCE DOES NOT INCLUDE TECHNICAL REVIEWS (25508)

** THE EXPENDITURE REPORT (Q16) DOES NOT BREAK OUT STATE AND FEDERAL DOLLARS

STATE WATER RESOURCES CONTROL BOARD
NON POINT SOURCE (NPS)
EXPENDITURES
FY 1985-86

TASK DESCRIPTION	FED FUND EXPENDITURES	STATE FUND EXPENDITURES	TOTAL EXPENDITURES	NPS %	NPS % IN DOLLARS
NPS GENERAL SUPPORT	:	:	:	:	:
TECHNICAL ASSISTANCE*	:	956,085	956,085	2%	19,122
TOTAL	0	956,085	956,085		19,122
NPS PARTIAL SUPPORT	:	:	:	:	:
WASTE DISCHARGE REQUIREMENT:	:	3,530,852	3,530,852	19%	670,862
COMPLIANCE INSPECTIONS	2,002	3,740,561	3,742,563	19%	711,087
COMPLIANCE INVESTIGATIONS	618,991	207,538	826,529	19%	157,041
SELF-MONITORING REVIEW	160,564	895,761	1,056,325	19%	200,702
ENFORCEMENT/CLEAN-UP	2,098,089	1,800,369	3,898,458	19%	740,707
PRIORITY CHEMICAL**	0	0	91,075	80%	72,860
205(J) PROJECT ADM - PH I	98,469	0	98,469	95%	93,546
205(J) PROG ADM - PH II**	:	0	184,590	95%	175,361
BASIN PLANNING & POLICIES FOR SURFACE WATER	:	1,009,946	1,009,946	5%	50,497
TECHNICAL REVIEWS*	:	1,287,121	1,287,121	50%	643,561
TOTAL	2,978,115	12,472,148	15,725,928		3,516,222

STATE WATER RESOURCES CONTROL BOARD
NON POINT SOURCE (NPS)
EXPENDITURES
FY 1985-86

TASK DESCRIPTION	FED FUND EXPENDITURES	STATE FUND EXPENDITURES	TOTAL EXPENDITURES	NPS %	NPS % IN DOLLARS
NPS SPECIFIC					
PESTICIDES		147,140	147,140	80%	117,712
FOREST PRACTICES RULES					
ASSESSMENT PROJECT		145,438	145,438	100%	145,438
AGRICULTURAL DRAINAGE					
SAN JOAQUIN RIVER BASIN		272,403	272,403	85%	231,543
TOTAL	0	564,981	564,981		494,693
GRAND TOTAL	2,978,115	13,993,214	17,246,994		4,030,036

* TECHNICAL REVIEWS DOES NOT INCLUDE TECHNICAL ASSISTANCE (25508)

** THE EXPENDITURE REPORT (Q16) DOES NOT BREAK OUT STATE AND FEDERAL DOLLARS

STATE WATER RESOURCES CONTROL BOARD
NON POINT SOURCE (NPS)
EXPENDITURES
FY 1986-87

TASK DESCRIPTION	FED FUND EXPENDITURES	STATE FUND EXPENDITURES	TOTAL EXPENDITURES	NPS %	NPS & IN DOLLARS
NPS GENERAL SUPPORT					
QUALITY ASSURANCE		32,045	32,045	3%	961
TECHNICAL ASSISTANCE*		822,586	822,586	3%	24,678
TOTAL	0	854,631	854,631		25,639
NPS PARTIAL SUPPORT					
WASTE DISCHARGE REQUIREMENT		3,696,434	3,696,434	19%	702,322
COMPLIANCE INSPECTIONS		4,107,546	4,107,546	19%	780,434
COMPLIANCE INVESTIGATIONS		741,077	741,077	19%	140,805
SELF-MONITORING REVIEW		1,489,937	1,489,937	19%	283,088
ENFORCEMENT/CLEAN-UP	2,587,121	1,774,680	4,361,801	19%	828,742
PRIORITY CHEMICALS		0	0	80%	0
AB 1803		5,714,744	5,714,744	5%	285,737
BASIN PLANNING & POLICIES FOR SURFACE WATER		914,021	914,021	5%	45,701
BASIN PLANNING FOR GROUND WATER BASINS		521,966	521,966	2%	10,439
GROUND WATER STRATEGY	271,701	34,366	306,067	5%	15,303

STATE WATER RESOURCES CONTROL BOARD
 NON POINT SOURCE (NPS)
 EXPENDITURES
 FY 1986-87

TASK DESCRIPTION	FED FUND EXPENDITURES	STATE FUND EXPENDITURES	TOTAL EXPENDITURES	NPS %	IN DOLLARS
:205(J) PROJECT ADM - PH I	83,786	0	83,786	95%	79,597
:205(J) PROGRAM ADM - PH II	405,228	0	405,228	95%	384,967
:TECHNICAL REVIEWS*		1,166,971	1,166,971	50%	583,486
TOTAL	3,347,836	20,161,742	23,509,578		4,140,621

NPS SPECIFIC					

:FOREST PRACTICES RULES					
: ASSESSMENT PROJECT	99,484	0	99,484	100%	99,484
:SUBSURFACE AGRICULTURAL					
: DRAINAGE PLANNING		1,241,183	1,241,183	100%	1,241,183
:PESTICIDES		188,086	188,086	80%	150,469
:AGRICULTURAL DRAINAGE					
: SAN JOAQUIN RIVER BASIN		267,604	267,604	85%	227,463

TOTAL	99,484	1,696,873	1,796,357		1,718,599
GRAND TOTAL	3,447,320	22,713,246	26,160,566		5,884,859

* TECHNICAL ASSISTANCE DOES NOT INCLUDE TECHNICAL REVIEWS (25508)

STATE WATER RESOURCES CONTROL BOARD
NON POINT SOURCE (NPS)
EXPENDITURES
FY 1987-88

TASK DESCRIPTION	FED FUND EXPENDITURES	STATE FUND EXPENDITURES	TOTAL EXPENDITURES	NPS %	NPS % IN DOLLARS
NPS GENERAL	:	:	:	:	:
SUPPORT	:	:	:	:	:
TECHNICAL ASSISTANCE*	:	675,565	675,565	4%	27,023
WATER QUALITY CRITERIA	:	182,876	182,876	25%	45,719
TOTAL	0	858,441	858,441		72,742
NPS PARTIAL	:	:	:	:	:
SUPPORT	:	:	:	:	:
WDR/NON-SUBCHAPTER 15	29,719	7,613,196	7,642,915	19%	1,452,154
WDR/SUBCHAPTER 15	6,482	3,627,271	3,633,753	50%	1,816,877
AB 1803	:	2,240,992	2,240,992	20%	448,198
205(J) PROGRAM ADM - PH II	110,219	0	110,219	95%	104,708
205(J) PROJECT ADM - PH I	112,499	0	112,499	95%	106,874
NPS MANAGEMENT PH II	:	:	:	:	:
205(J)(2)	80,137	0	80,137	100%	80,137
PRIORITY CHEMICALS	:	720,653	720,653	80%	576,522
BASIN PLANNING & POLICIES	:	:	:	:	:
FOR SURFACE WATER	:	966,587	966,587	8%	77,327
BASIN PLANNING FOR GROUND	:	:	:	:	:
WATER BASINS	:	637,196	637,196	3%	19,116
GROUND WATER STRATEGY	197,521	136,847	334,368	5%	16,718

STATE WATER RESOURCES CONTROL BOARD
NON POINT SOURCE (NPS)
EXPENDITURES
FY 1987-88

TASK DESCRIPTION	FED FUND EXPENDITURES	STATE FUND EXPENDITURES	TOTAL EXPENDITURES	NPS %	NPS % IN DOLLARS
: 205(J) PROGRAM ADM PH III :	317,171 :	0 :	317,171 :	95% :	301,312 :
: TECHNICAL REVIEWS* :	:	1,032,709 :	1,032,709 :	50% :	516,355 :
: TOTAL :	853,748 :	16,975,451 :	17,829,199 :	:	5,516,298 :
: NPS SPECIFIC :	:	:	:	:	:
: FOREST PRACTICES RULES :	:	:	:	:	:
: ASSESSMENT PROJECT :	47,476 :	0 :	47,476 :	100% :	47,476 :
: NPS PROGRAM PH III :	:	:	:	:	:
: 205(J)(2) :	45,937 :	0 :	45,937 :	100% :	45,937 :
: PESTICIDES :	:	263,623 :	263,623 :	80% :	210,898 :
: SUBSURFACE AGRICULTURAL :	:	:	:	:	:
: DRAINAGE PLANNING :	:	1,322,640 :	1,322,640 :	100% :	1,322,640 :
: AGRICULTURAL DRAINAGE :	:	:	:	:	:
: SAN JOAQUIN RIVER BASIN :	:	43,404 :	43,404 :	15% :	6,511 :
TOTAL	93,413	1,629,667	1,723,080		1,633,462
GRAND TOTAL	947,161	19,463,559	20,410,720		7,222,502

* TECHNICAL ASSISTANCE DOES NOT INCLUDE TECHNICAL REVIEWS (25508)

APPENDIX A-11

**Water Quality Control Plan for Ocean Waters of California (1990)
(Ocean Plan)**

WATER QUALITY CONTROL PLAN

OCEAN WATERS OF CALIFORNIA

CALIFORNIA OCEAN PLAN



1990

STATE WATER RESOURCES CONTROL BOARD

State of California
STATE WATER RESOURCES CONTROL BOARD

1990
CALIFORNIA OCEAN PLAN
WATER QUALITY CONTROL PLAN
OCEAN WATERS OF CALIFORNIA

Adopted and Effective

March 22, 1990

CORRECTED COPY
(TABLE B, RADIOACTIVITY)
OCTOBER 18, 1990.

STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 90-27

APPROVAL OF AMENDMENT TO THE
WATER QUALITY CONTROL PLAN FOR OCEAN WATERS OF CALIFORNIA
(CALIFORNIA OCEAN PLAN)

WHEREAS:

1. The State Water Resources Control (State Board) adopted the Ocean Plan on July 6, 1972 and revised the plan in 1978, 1983, and 1988.
2. The State Board may adopt water quality control plans for waters for which water quality standards are required by the Federal Clean Water Act in accordance with California Water Code Section 13170.
3. The State Board is responsible for reviewing Ocean Plan water quality standards and for modifying and adopting standards in accordance with Section 303(c)(1) of the Federal Clean Water Act and Section 13170.2(b) of the California Water Code.
4. The State Board has considered relevant management agency agreements in accordance with Section 13170.1 of the California Water Code.
5. Additional information pertinent to water quality objectives for dioxin and related compounds is being developed and reviewed by the scientific community.
6. The State Board prepared and circulated a draft Function Equivalent Document in accordance with the provisions of the California Environmental Quality Act and Title 14, California Code of Regulations 15251(g).
7. The State Board conducted a public hearing in Torrance on August 29, 1989 to solicit comments regarding the proposed amendments of the Ocean Plan and has reviewed and considered carefully all comments and testimony received. The State Board considered the information contained in the Functional Equivalent Document prior to approval of the California Ocean Plan.
8. The California Ocean Plan as approved will not have a significant adverse effect on the environment.

THEREFORE BE IT RESOLVED:

1. That the State Board approves the Functional Equivalent Document for the amendment of the Water Quality Control Plan for Ocean Waters of California.
2. That the State Board hereby adopts amendments to the California Ocean Plan (attached).

3. That the State Board authorizes the Executive Director, or his designee, to transmit the Plan to the U.S. Environmental Protection Agency, Region 9 in compliance with Section 303(c)(1) of the Clean Water Act.
4. That the State Board directs its staff to review the water quality objective for dioxin and related compounds as soon as possible within the next triennial review period.
5. That the State Board declares its intent to require continual monitoring of the marine environment to assure that the Plan reflects the latest available data and that the water quality objectives are adequate to fully protect indigenous marine species and to protect human health.

CERTIFICATION

The undersigned Administrative Assistant to the Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on March 22, 1990.

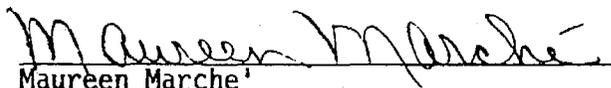
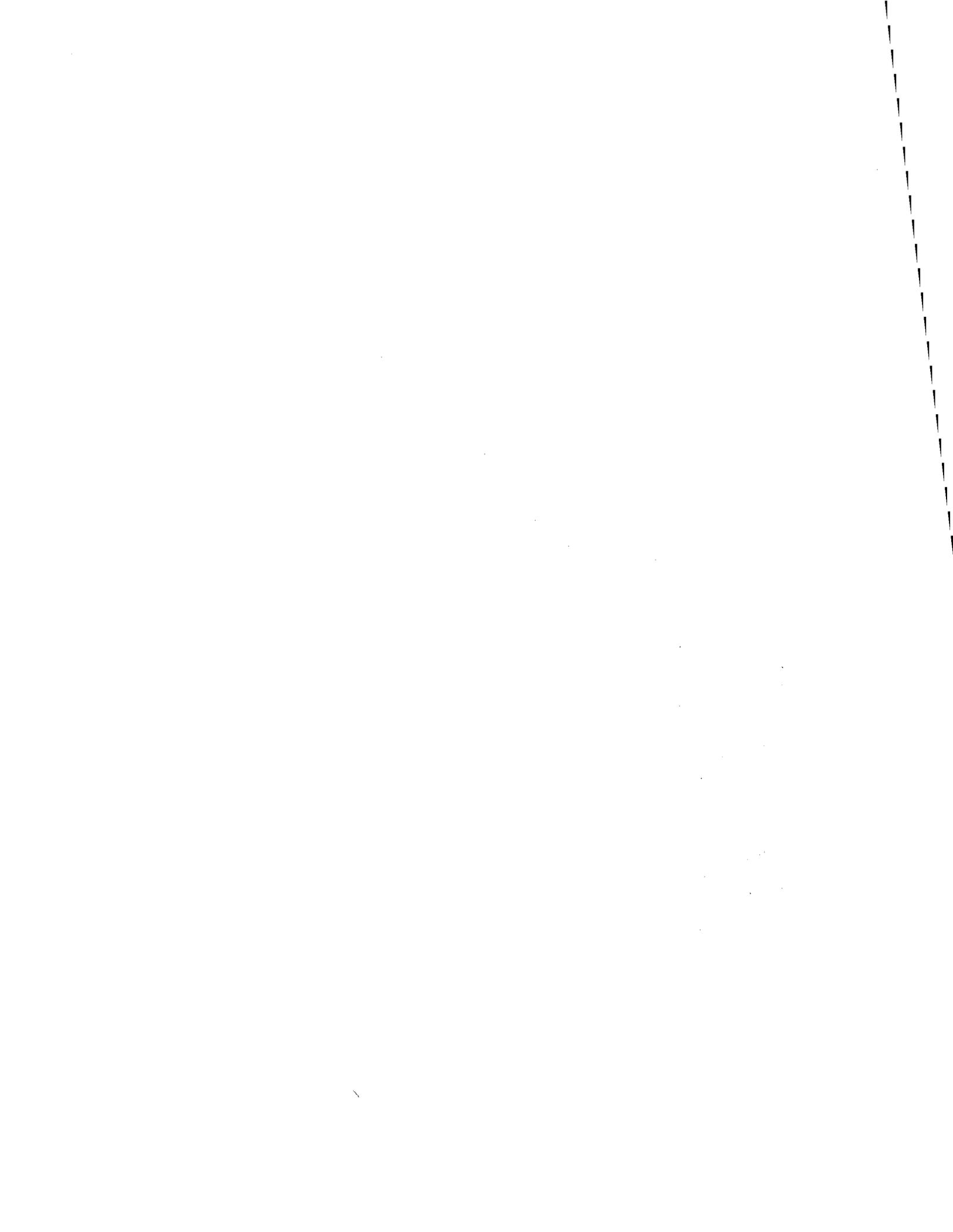

Maureen Marche
Administrative Assistant to the Board

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CALIFORNIA OCEAN PLAN
WATER QUALITY CONTROL PLAN FOR
OCEAN WATERS OF CALIFORNIA

INTRODUCTION

In furtherance of legislative policy set forth in Section 13000 of Division 7 of the California Water Code (Stats. 1969, Chap. 482) pursuant to the authority contained in Section 13170 and 13170.2 (Stats. 1971, Chap. 1288) the State Water Resources Control Board hereby finds and declares that protection of the quality of the ocean* waters for use and enjoyment by the people of the State requires control of the discharge of waste* to ocean* waters in accordance with the provisions contained herein. The Board finds further that this plan shall be reviewed at least every three years to guarantee that the current standards are adequate and are not allowing degradation* to marine species or posing a threat to public health.

This plan is applicable, in its entirety, to point source discharges to the ocean*. Nonpoint sources of waste* discharges to the ocean* are subject to Chapter I Beneficial Uses, Chapter II - Water Quality Objectives, Chapter III - General Requirements, Chapter IV - Table B (wherein compliance with water quality objectives shall, in all cases, be determined by direct measurements in the receiving waters) and Chapter V - Discharge Prohibitions.

This plan is not applicable to discharges to enclosed* bays and estuaries* or inland waters nor is it applicable to vessel wastes, or the control of dredging spoil.

Provisions regulating the thermal aspects of waste* discharged to the ocean* are set forth in the Water Quality Control Plan for the Control of Temperature in the Coastal and Interstate Waters and Enclosed* Bays and Estuaries* of California.

Chapter I
BENEFICIAL USES

The beneficial uses of the ocean* waters of the State that shall be protected include industrial water supply, water contact and non-contact recreation, including aesthetic enjoyment, navigation, commercial and sport fishing, mariculture*, preservation and enhancement of Areas of Special Biological Significance, rare and endangered species, marine habitat, fish migration, fish spawning and shellfish* harvesting.

Chapter II
WATER QUALITY OBJECTIVES

This chapter sets forth limits or levels of water quality characteristics for ocean* waters to ensure the reasonable protection of beneficial uses and the prevention of nuisance. The discharge of waste* shall not cause violation of these objectives.

The Water Quality Objectives and Effluent Quality Requirements are defined by a statistical distribution when appropriate. This method recognizes the normally occurring variations in treatment efficiency and sampling and analytical techniques and does not condone poor operating practices.

* See Appendix I for definition of terms.

Compliance with the water quality objectives of this chapter shall be determined from samples collected at stations representative of the area within the waste field where initial* dilution is completed.

A. Bacterial Characteristics

1. Water-Contact Standards

Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone used for water contact sports, as determined by the Regional Board, but including all kelp* beds, the following bacterial objectives shall be maintained throughout the water column:

- a. Samples of water from each sampling station shall have a density of total coliform organisms less than 1,000 per 100 ml (10 per ml); provided that not more than 20 percent of the samples at any sampling station, in any 30-day period, may exceed 1,000 per 100 ml (10 per ml), and provided further that no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 per 100 ml (100 per ml).
- b. The fecal coliform density based on a minimum of not less than five samples for any 30-day period, shall not exceed a geometric mean of 200 per 100 ml nor shall more than 10 percent of the total samples during any 60-day period exceed 400 per 100 ml.

The "Initial* Dilution Zone" of wastewater outfalls shall be excluded from designation as "kelp* beds" for purposes of bacterial standards, and Regional Boards should recommend extension of such exclusion zone where warranted to the State Board (for consideration under Chapter V.I.F.). Adventitious assemblages of kelp plants on waste discharge structures (e.g., outfall pipes and diffusers) do not constitute kelp* beds for purposes of bacterial standards.

2. Shellfish* Harvesting Standards

At all areas where shellfish* may be harvested for human consumption, as determined by the Regional Board, the following bacterial objectives shall be maintained throughout the water column:

The median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.

B. Bacterial Assessment and Remedial Action Requirements

The requirements listed below shall be used to 1) determine the occurrence and extent of any impairment of a beneficial use due to bacterial contamination; 2) generate information which can be used in the development of an enterococcus standard; and 3) provide the basis for remedial actions necessary to minimize or eliminate any impairment of a beneficial use.

* See Appendix I for definition of terms.

Measurement of enterococcus density shall be conducted at all stations where measurement of total and fecal coliforms are required. In addition to the requirements of Section II.A.1., if a shore station consistently exceeds a coliform objective or exceeds a geometric mean enterococcus density of 24 organisms per 100 ml for a 30-day period or 12 organisms per 100 ml for a six-month period, the Regional Board shall require the appropriate agency to conduct a survey to determine if that agency's discharge is the source of the contamination. The geometric mean shall be a moving average based on no less than five samples per month, spaced evenly over the time interval. When a sanitary survey identifies a controllable source of indicator organisms associated with a discharge of sewage, the Regional Board shall take action to control the source.

Waste discharge requirements shall require the discharger to conduct sanitary surveys when so directed by the Regional Board. Waste discharge requirements shall contain provisions requiring the discharger to control any controllable discharges identified in a sanitary survey.

C. Physical Characteristics

1. Floating particulates and grease and oil shall not be visible.
2. The discharge of waste* shall not cause aesthetically undesirable discoloration of the ocean* surface.
3. Natural* light shall not be significantly* reduced at any point outside the initial* dilution zone as the result of the discharge of waste*.
4. The rate of deposition of inert solids and the characteristics of inert solids in ocean* sediments shall not be changed such that benthic communities are degraded*.

D. Chemical Characteristics

1. The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally, as the result of the discharge of oxygen demanding waste* materials.
2. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.
3. The dissolved sulfide concentration of waters in and near sediments shall not be significantly* increased above that present under natural conditions.
4. The concentration of substances set forth in Chapter IV, Table B, in marine sediments shall not be increased to levels which would degrade* indigenous biota.
5. The concentration of organic materials in marine sediments shall not be increased to levels which would degrade* marine life.
6. Nutrient materials shall not cause objectionable aquatic growths or degrade* indigenous biota.

* See Appendix I for definition of terms.

E. Biological Characteristics

1. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded*.
2. The natural taste, odor, and color of fish, shellfish*, or other marine resources used for human consumption shall not be altered.
3. The concentration of organic materials in fish, shellfish* or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.

F. Radioactivity

1. Discharge of radioactive waste* shall not degrade* marine life.

Chapter III
GENERAL REQUIREMENTS FOR MANAGEMENT OF
WASTE* DISCHARGE TO THE OCEAN*

- A. Waste* management systems that discharge to the ocean* must be designed and operated in a manner that will maintain the indigenous marine life and a healthy and diverse marine community.
- B. Waste discharged* to the ocean* must be essentially free of:
 1. Material that is floatable or will become floatable upon discharge.
 2. Settleable material or substances that may form sediments which will degrade* benthic communities or other aquatic life.
 3. Substances which will accumulate to toxic levels in marine waters, sediments or biota.
 4. Substances that significantly* decrease the natural* light to benthic communities and other marine life.
 5. Materials that result in aesthetically undesirable discoloration of the ocean* surface.
- C. Waste* effluents shall be discharged in a manner which provides sufficient initial* dilution to minimize the concentrations of substances not removed in the treatment.
- D. Location of waste* discharges must be determined after a detailed assessment of the oceanographic characteristics and current patterns to assure that:
 1. Pathogenic organisms and viruses are not present in areas where shellfish* are harvested for human consumption or in areas used for swimming or other body-contact sports.

* See Appendix I for definition of terms.

2. Natural water quality conditions are not altered in areas designated as being of special biological significance or areas that existing marine laboratories use as a source of seawater.
3. Maximum protection is provided to the marine environment.

Waste* that contains pathogenic organisms or viruses should be discharged a sufficient distance from shellfishing* and water-contact sports areas to maintain applicable bacterial standards without disinfection. Where conditions are such that an adequate distance cannot be attained, reliable disinfection in conjunction with a reasonable separation of the discharge point from the area of use must be provided. Disinfection procedures that do not increase effluent toxicity and that constitute the least environmental and human hazard should be used.

Chapter IV
QUALITY REQUIREMENTS
FOR WASTE* DISCHARGES
(EFFLUENT QUALITY REQUIREMENTS)

This chapter sets forth the quality requirements for waste* discharge to the ocean*.

Table A limitations apply only to publicly owned treatment works and industrial discharges for which Effluent Limitations Guidelines have not been established pursuant to Sections 301, 302, 304, or 306 of the Federal Clean Water Act.

Table B limitations apply to all discharges within the jurisdiction of this plan.

Table A limitations, and effluent concentrations calculated from Table B limitations, shall apply to a discharger's total effluent, of whatever origin (i.e. gross, not net, discharge), except where otherwise specified in this Plan.

The State Board is authorized to administer and enforce effluent requirements established pursuant to the Federal Clean Water Act. Effluent limitations established under Sections 301, 302, 306, 307, 316, 403, and 405 of the aforementioned Federal Act and administrative procedures pertaining thereto, are included in this plan by reference. Compliance with Table A limitations, or Environmental Protection Agency Effluent Limitations Guidelines for industrial discharges, based on Best Practicable Control Technology, shall be the minimum level of treatment acceptable under this plan, and shall define reasonable treatment and waste control technology.

* See Appendix I for definition of terms.

TABLE A
MAJOR WASTEWATER CONSTITUENTS AND PROPERTIES

	<u>Unit of measurement</u>	<u>Limiting Concentrations</u>		
		<u>Monthly (30 day Average)</u>	<u>Weekly (7 day Average)</u>	<u>Maximum at any time</u>
Grease and Oil	mg/l	25	40	75
Suspended Solids			see below+	
Settleable Solids	ml/l	1.0	1.5	3.0
Turbidity	NTU	75	100	225
pH	units		within limits of 6.0 to 9.0 at all times	
Acute* Toxicity	TUa	1.5	2.0	2.5

+Suspended Solids: Dischargers shall, as a 30-day average, remove 75% of suspended solids from the influent stream before discharging wastewaters to the ocean*, except that the effluent limitation to be met shall not be lower than 60 mg/l. Regional Boards may recommend that the State Board (Chapter VI.F.), with the concurrence of the Environmental Protection Agency, adjust the lower effluent concentration limit (the 60 mg/l above) to suit the environmental and effluent characteristics of the discharge. As a further consideration in making such recommendation for adjustment, Regional Boards should evaluate effects on existing and potential water* reclamation projects.

If the lower effluent concentration limit is adjusted, the discharger shall remove 75% of suspended solids from the influent stream at any time the influent concentration exceeds four times such adjusted effluent limit.

Effluent limitations shall be imposed in a manner prescribed by the State Board such that the concentrations set forth below as water quality objectives shall not be exceeded in the receiving water upon completion of initial* dilution, except that limitations indicated for radioactivity shall apply directly to the undiluted waste* effluent.

* See Appendix I for definition of terms.

TABLE B
TOXIC MATERIALS LIMITATIONS

	<u>Limiting Concentrations</u>			
	<u>Units of Measurement</u>	<u>6-Month Median</u>	<u>Daily Maximum</u>	<u>Instantaneous Maximum</u>
OBJECTIVES FOR PROTECTION OF MARINE AQUATIC LIFE				
Arsenic	ug/l	8	32	80
Cadmium	ug/l	1	4	10
Chromium (Hexavalent) (see below, a)	ug/l	2	8	20
Copper	ug/l	3	12	30
Lead	ug/l	2	8	20
Mercury	ug/l	0.04	0.16	0.4
Nickel	ug/l	5	20	50
Selenium	ug/l	15	60	150
Silver	ug/l	0.7	2.8	7
Zinc	ug/l	20	80	200
Cyanide (see below, b)	ug/l	1	4	10
Total Chlorine Residual (For intermittent chlorine sources, see below, c)	ug/l	2	8	60
Ammonia (expressed as nitrogen)	ug/l	600	2400	6000
Chronic* Toxicity	TUc		1	
Phenolic Compounds (non-chlorinated)	ug/l	30	120	300
Chlorinated Phenolics	ug/l	1	4	10
Endosulfan	ng/l	9	18	27
Endrin	ng/l	2	4	6
HCH*	ng/l	4	8	12
Radioactivity	Not to exceed limits specified in Title 17, Division 5, Chapter 4, Group 3, Article 3, Section 32069 of the California Code of Regulations.			

* See Appendix I for definition of terms.

Table B Continued

<u>Chemical</u>	<u>Units of Measurement</u>	<u>30-day Average</u>
OBJECTIVES FOR PROTECTION OF HUMAN HEALTH -- NONCARCINOGENS		
acrolein	ug/l	220
antimony	mg/l	1.2
bis(2-chloroethoxy) methane	ug/l	4.4
bis(2-chloroisopropyl) ether	mg/l	1.2
chlorobenzene	ug/l	570
chromium (III)	mg/l	190
di-n-butyl phthalate	mg/l	3.5
dichlorobenzenes*	mg/l	5.1
1,1-dichloroethylene	mg/l	7.1
diethyl phthalate	mg/l	33
dimethyl phthalate	mg/l	820
4,6-dinitro-2-methylphenol	ug/l	220
2,4-dinitrophenol	ug/l	4.0
ethylbenzene	mg/l	4.1
fluoranthene	ug/l	15
hexachlorocyclopentadiene	ug/l	58
isophorone	mg/l	150
nitrobenzene	ug/l	4.9
thallium	ug/l	14
toluene	mg/l	85
1,1,2,2-tetrachloroethane	mg/l	1.2
tributyltin	ng/l	1.4
1,1,1-trichloroethane	mg/l	540
1,1,2-trichloroethane	mg/l	43

OBJECTIVES FOR PROTECTION OF HUMAN HEALTH -- CARCINOGENS

acrylonitrile	ug/l	0.10
aldrin	ng/l	0.022
benzene	ug/l	5.9
benzidine	ng/l	0.069
beryllium	ng/l	33
bis(2-chloroethyl) ether	ug/l	0.045
bis(2-ethylhexyl) phthalate	ug/l	3.5
carbon tetrachloride	ug/l	0.90
chlordane*	ng/l	0.023
chloroform	mg/l	0.13
DDT*	ng/l	0.17
1,4-dichlorobenzene	ug/l	18
3,3'-dichlorobenzidine	ng/l	8.1

* See Appendix I for definition of terms.

Table B Continued

<u>Chemical</u>	<u>Units of Measurement</u>	<u>30-day Average</u>
1,2-dichloroethane	mg/l	0.13
dichloromethane	mg/l	0.45
1,3-dichloropropene	ug/l	8.9
dieldrin	ng/l	0.040
2,4-dinitrotoluene	ug/l	2.6
1,2-diphenylhydrazine	ug/l	0.16
halomethanes*	mg/l	0.13
heptachlor*	ng/l	0.72
hexachlorobenzene	ng/l	0.21
hexachlorobutadiene	ug/l	14
hexachloroethane	ug/l	2.5
N-nitrosodimethylamine	ug/l	7.3
N-nitrosodiphenylamine	ug/l	2.5
PAHs*	ng/l	8.8
PCBs*	ng/l	0.019
TCDD equivalents*	pg/l	0.0039
tetrachloroethylene	ug/l	99
toxaphene	ng/l	0.21
trichloroethylene	ug/l	27
2,4,6-trichlorophenol	ug/l	0.29
vinyl chloride	ug/l	36

- a) Dischargers may at their option meet this limitation as a total chromium limitation.
- b) If a discharger can demonstrate to the satisfaction of the Regional Board (subject to EPA approval) that an analytical method is available to reliably distinguish between strongly and weakly complexed cyanide, effluent limitations for cyanide may be met by the combined measurement of free cyanide, simple alkali metal cyanides, and weakly complexed organometallic cyanide complexes. In order for the analytical method to be acceptable, the recovery of free cyanide from metal complexes must be comparable to that achieved by Standard Methods 412F, G, and H (Standard Methods for the Examination of Water and Wastewater. Joint Editorial Board, American Public Health Association, American Water Works Association, and Water Pollution Control Federation. Most recent edition.).
- c) Water quality objectives for total chlorine residual applying to intermittent discharges not exceeding two hours, shall be determined through the use of the following equation:

$$\log y = -0.43 (\log x) + 1.8$$

where: y = the water quality objective (in ug/l) to apply when chlorine is being discharged;

x = the duration of uninterrupted chlorine discharge in minutes.

* See Appendix I for definition of terms.

Implementation Provisions for Table B

A. Calculation of Effluent Limitations

Effluent limitations for parameters identified in Table B with the exception of Radioactivity, shall be determined through the use of the following equation:

$$C_e = C_o + D_m (C_o - C_s) \quad (1)$$

where:

- C_e = the effluent concentration limit,
- C_o = the concentration to be met at the completion of initial* dilution,
- C_s = background seawater concentration (see Table C below),
- D_m = minimum probable initial* dilution expressed as parts seawater per part wastewater.

For the purpose of this Plan, minimum initial dilution is the lowest average initial dilution within any single month of the year. Dilution estimates shall be based on observed waste flow characteristics, observed receiving water density structure, and the assumption that no currents, of sufficient strength to influence the initial dilution process, flow across the discharge structure.

The Executive Director of the State Board shall identify standard dilution models for use in determining D_m, and shall assist the Regional Board in evaluating D_m for specific waste discharger. Dischargers may propose alternative methods of calculating D_m, and the Regional Board may accept such method upon verification of its accuracy and applicability.

TABLE C
BACKGROUND SEAWATER CONCENTRATIONS (C_s)

<u>Waste Constituent</u>	<u>C_s (ug/l)</u>
Arsenic	3
Copper	2
Mercury	0.0005
Silver	0.16
Zinc	8

For all other Table B parameters, C_s = 0.

The six-month median effluent concentration limit shall apply as a moving median of daily values for any 180 day period in which daily values represent flow weighted

* See Appendix I for definition of terms.

average concentrations within a 24-hour period. For intermittent discharges, the daily value shall be considered to equal zero for days on which no discharge occurred.

The daily maximum effluent concentration limit shall apply to flow weighted 24 hour composite samples.

The instantaneous maximum shall apply to grab sample determinations.

If only one sample is collected during the time period associated with the water quality objective (e.g., 30-day average or 6-month median), the single measurement shall be used to determine compliance with the effluent limitation for the entire time period.

Discharge requirements shall also specify effluent requirements in terms of mass emission rate limits utilizing the general formula:

$$\text{lbs/day} = 8.34 \times C_e \times Q \quad (2)$$

The six-month median limit on daily mass emissions shall be determined using the six-month median effluent concentration as C_e and the observed flow rate Q in millions of gallons per day. The daily maximum mass emission shall be determined using the daily maximum effluent concentration limit as C_e and the observed flow rate Q in millions of gallons per day.

Any significant change in waste* flow shall be cause for reevaluating effluent quality requirements.

B. Compliance Determination

All analytical data shall be reported uncensored with detection limits and quantitation limits identified. For any effluent limitation, compliance shall be determined using appropriate statistical methods to evaluate multiple samples. Compliance based on a single sample analysis should be determined where appropriate as described below.

When a calculated effluent limitation is greater than or equal to the PQL*, compliance shall be determined based on the calculated effluent limitation and either single or multiple sample analyses.

When the calculated effluent limitation is below the PQL*, compliance determinations based on analysis of a single sample shall only be undertaken if the concentration of the constituent of concern in the sample is greater than or equal to the PQL*.

When the calculated effluent limitation is below the PQL* and recurrent analytical responses between the PQL* and the calculated limit occur, compliance shall be determined by statistical analysis of multiple samples. Sufficient sampling and analysis shall be required to determine compliance.

Published values for MDL*s and PQL*s should be used except where revised MDL*s and PQL*s are available from recent laboratory performance evaluations, in which case the

* See Appendix I for definition of terms.

revised MDL*s and PQL*s should be used. Where published values are not available the Regional Boards should determine appropriate values based on available information.

If a discharger believes the sample matrix under consideration in the waste discharge requirements is sufficiently different from that used for an established MDL* value, the discharger may demonstrate to the satisfaction of the Regional Board what the appropriate MDL* should be for the discharger's matrix. In this case the PQL* shall be established at the limit of quantitation (equal to 10 standard deviations above the average measured blank used for development of the MDL* in the discharger's matrix).

When determining compliance based on a single sample, with a single effluent limitation which applies to a group of chemicals (e.g., PCBs) concentrations of individual members of the group may be considered to be zero if the analytical response for individual chemicals falls below the MDL* for that parameter.

Due to the large total volume of powerplant and other heat exchange discharges, special procedures must be applied for determining compliance with Table B limitations on a routine basis. Effluent concentration values (C_e) shall be determined through the use of equation 1 considering the minimal probable initial* dilution of the combined effluent (in-plant waste streams plus cooling water flow). These concentration values shall then be converted to mass emission limitations as indicated in equation 2. The mass emission limits will then serve as requirements applied to all inplant waste* streams taken together which discharge into the cooling water flow, except that limitations on total chlorine residual, chronic* toxicity and instantaneous maximum limitations on Table B toxic materials shall apply to, and be measured in, the combined final effluent, as adjusted for dilution with ocean water. The Table B limitation on radioactivity shall apply to the undiluted combined final effluent.

C. Toxicity Reduction Requirements

If a discharge consistently exceeds an effluent limitation based on a toxicity objective in Table B, a toxicity reduction evaluation (TRE) is required. The TRE shall include all reasonable steps to identify the source of toxicity. Once the source(s) of toxicity is identified, the discharger shall take all reasonable steps necessary to reduce toxicity to the required level.

The following shall be incorporated into waste discharge requirements: (1) a requirement to conduct a TRE if the discharge consistently exceeds its toxicity effluent limitation, and (2) a provision requiring a discharger to take all reasonable steps to reduce toxicity once the source of toxicity is identified.

* See Appendix I for definition of terms.

Chapter V
DISCHARGE PROHIBITIONS

A. Hazardous Substances

The discharge of any radiological, chemical, or biological warfare agent or high-level radioactive waste* into the ocean* is prohibited.

B. Areas of Special Biological Significance

Waste* shall not be discharged to areas designated as being of special biological significance. Discharges shall be located a sufficient distance from such designated areas to assure maintenance of natural water quality conditions in these areas.

C. Sludge

Pipeline discharge of sludge to the ocean* is prohibited by federal law; the discharge of municipal and industrial waste* sludge directly to the ocean*, or into a waste* stream that discharges to the ocean*, is prohibited by this Plan. The discharge of sludge digester supernatant directly to the ocean*, or to a waste* stream that discharges to the ocean* without further treatment, is prohibited.

It is the policy of the State Board that the treatment, use and disposal of sewage sludge shall be carried out in the manner found to have the least adverse impact on the total natural and human environment. Therefore, if federal law is amended to permit such discharge, which could affect California waters, the State Board may consider requests for exceptions to this section under Chapter VI, F. of this Plan, provided further that an Environmental Impact Report on the proposed project shows clearly that any available alternative disposal method will have a greater adverse environmental impact than the proposed project.

D. By-Passing

The by-passing of untreated wastes* containing concentrations of pollutants in excess of those of Table A or Table B to the ocean* is prohibited.

Chapter VI
GENERAL PROVISIONS

A. Effective Date

This Plan is in effect as of the date of adoption by the State Water Resources Control Board.

* See Appendix I for definition of terms.

B. Waste Discharge Requirements

The Regional Boards may establish more restrictive water quality objectives and effluent quality requirements than those set forth in this Plan as necessary for the protection of beneficial uses of ocean* waters.

Regional Boards may impose alternative less restrictive provisions than those contained within Table B of the Plan, provided an applicant can demonstrate that:

Reasonable control technologies (including source control, material substitution, treatment and dispersion) will not provide for complete compliance; or

Any less stringent provisions would encourage water* reclamation;

Provided further that:

- a) Any alternative water quality objectives shall be below the conservative estimate of chronic toxicity, as given in Table D below, and such alternative will provide for adequate protection of the marine environment;
- b) A receiving water toxicity* objective of 1 TUc is not exceeded; and
- c) The State Board grants an exception (Chapter VI.F.) to the Table B limits as established in the Regional Board findings and alternative limits.

**TABLE D
CONSERVATIVE ESTIMATES OF CHRONIC TOXICITY**

<u>Constituent</u>	Estimate of Chronic Toxicity <u>(ug/l)</u>
Arsenic	19
Cadmium	8
Hexavalent Chromium	18
Copper	5
Lead	22
Mercury	0.4
Nickel	48
Silver	3
Zinc	51
Cyanide	10
Total Chlorine Residual	10.0
Ammonia	4,000.0
Phenolic Compounds (non-chlorinated)	a)(see below)
Chlorinated Phenolics	a)
Chlorinated Pesticides and PCB's	b)

* See Appendix I for definition of terms.

- a. There is insufficient data for phenolics to estimate chronic toxicity levels. Requests for modification of water quality objectives for these waste* constituents must be supported by chronic toxicity data for representative sensitive species. In such cases, applicants seeking modification of water quality objectives should consult the Regional Water Quality Control Board to determine the species and test conditions necessary to evaluate chronic effects.
- b. Limitations on chlorinated pesticides and PCB's shall not be modified so that the total of these compounds is increased above the limitations in Table B (6-Month Median = 31 ng/l, Daily Maximum = 62 ng/l, and Instantaneous Maximum = 93 ng/l).

C. Revision of Waste* Discharge Requirements

The Regional Board shall revise the waste* discharge requirements for existing discharges as necessary to achieve compliance with this Plan and shall also establish a time schedule for such compliance.

D. Monitoring Program

The Regional Boards shall require dischargers to conduct self-monitoring programs and submit reports necessary to determine compliance with the waste* discharge requirements, and may require dischargers to contract with agencies or persons acceptable to the Regional Board to provide monitoring reports. Monitoring provisions contained in waste discharge requirements shall be in accordance with the Monitoring Procedures provided in Appendix II.

Where the Regional Board is satisfied that any substance(s) of Table B will not significantly occur in a discharger's effluent, the Regional Board may elect not to require monitoring for such substance(s), provided the discharger submits periodic certification that such substance(s) are not added to the waste* stream, and that no change has occurred in activities that could cause such substance(s) to be present in the waste* stream. Such election does not relieve the discharger from the requirement to meet the limitations of Table B.

The Regional Board may require monitoring of bioaccumulation of toxicants in the discharge zone. Organisms and techniques for such monitoring shall be chosen by the Regional Board on the basis of demonstrated value in waste* discharge monitoring.

E. Areas of Special Biological Significance

Areas of special biological significance shall be designated by the State Board after a public hearing by the Regional Board and review of its recommendations.

F. State Board Exceptions to Plan Requirements

The State Board may, in compliance with the California Environmental Quality Act, subsequent to a public hearing, and with the concurrence of the Environmental Protection Agency, grant exceptions where the Board determines:

* See Appendix I for definition of terms.

1. The exception will not compromise protection of ocean* waters for beneficial uses,
and
2. The public interest will be served.

* See Appendix I for definition of terms.

APPENDIX I
DEFINITION OF TERMS

ACUTE TOXICITY

a. Acute Toxicity (TUa)

Expressed in Toxic Units Acute (TUa)

$$TUa = 100/96\text{-hr LC } 50\%$$

b. Lethal Concentration 50% (LC 50)

LC 50 (percent waste giving 50% survival of test organisms) shall be determined by static or continuous flow bioassay techniques using standard test species. If specific identifiable substances in wastewater can be demonstrated by the discharger as being rapidly rendered harmless upon discharge to the marine environment, but not as a result of dilution, the LC 50 may be determined after the test samples are adjusted to remove the influence of those substances.

When it is not possible to measure the 96-hour LC 50 due to greater than 50 percent survival of the test species in 100 percent waste, the toxicity concentration shall be calculated by the expression:

$$TUa = \frac{\log(100 - S)}{1.7}$$

S = percentage survival in 100% waste. If S > 99, TUa shall be reported as zero.

CHLORDANE shall mean the sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.

CHRONIC TOXICITY: This parameter shall be used to measure the acceptability of for waters supporting a healthy marine biota until improved methods are developed to evaluate biological response.

a. Chronic Toxicity (TUc)

Expressed as Toxic Units Chronic (TUc)

$$TUc = 100/NOEL$$

b. No Observed Effect Level (NOEL)

The NOEL is expressed as the maximum percent effluent or receiving water that causes no observable effect on a test organism, as determined by the result of a critical life stage toxicity test listed in Appendix II.

* See Appendix I for definition of terms.

DDT shall mean the sum of 4,4'DDT, 2,4'DDT, 4,4'DDE, 2,4'DDE, 4,4'DDD, and 2,4'DDD.

DEGRADE: Degradation shall be determined by comparison of the waste field and reference site(s) for characteristics species diversity, population density, contamination, growth anomalies, debility, or supplanting of normal species by undesirable plant and animal species. Degradation occurs if there are significant differences in any of three major biotic groups, namely, demersal fish, benthic invertebrates, or attached algac. Other groups may be evaluated where benthic species are not affected, or are not the only ones affected.

DICHLOROBENZENES shall mean the sum of 1,2- and 1,3-dichlorobenzene.

ENCLOSED BAYS are indentations along the coast which enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. This definition includes but is not limited to: Humboldt Bay, Bodega Harbor, Tomales Bay, Drakes Estero, San Francisco Bay, Morro Bay, Los Angeles Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay.

ENDOSULFAN shall mean the sum of endosulfan-alpha and -beta and endosulfan sulfate.

ESTUARIES AND COASTAL LAGOONS are waters at the mouths of streams which serve as mixing zones for fresh and ocean waters during a major portion of the year. Mouths of streams which are temporarily separated from the ocean by sandbars shall be considered as estuaries. Estuarine waters will generally be considered to extend from a bay or the open ocean to the upstream limit of tidal action but may be considered to extend seaward if significant mixing of fresh and salt water occurs in the open coastal waters. The waters described by this definition include but are not limited to the Sacramento-San Joaquin Delta as defined by Section 12220 of the California Water Code, Suisun Bay, Carquinez Strait downstream to Carquinez Bridge, and appropriate areas of the Smith, Klamath, Mad, Eel, Noyo, and Russian Rivers.

HALOMETHANES shall mean the sum of bromoform, bromomethane (methyl bromide), chloromethane (methyl chloride), chlorodibromomethane, and dichlorobromomethane.

HEPTACHLOR shall mean the sum of heptachlor and heptachlor epoxide.

HCH shall mean the sum of the alpha, beta, gamma (lindane) and delta isomers of hexachlorocyclohexane.

INITIAL DILUTION is the process which results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge.

For a submerged buoyant discharge, characteristic of most municipal and industrial wastes that are released from the submarine outfalls, the momentum of the discharge and its initial buoyancy act together to produce turbulent mixing. Initial

* See Appendix I for definition of terms.

dilution in this case is completed when the diluting wastewater ceases to rise in the water column and first begins to spread horizontally.

For shallow water submerged discharges, surface discharges, and nonbuoyant discharges, characteristic of cooling water wastes and some individual discharges, turbulent mixing results primarily from the momentum of discharge. Initial dilution, in these cases, is considered to be completed when the momentum induced velocity of the discharge ceases to produce significant mixing of the waste, or the diluting plume reaches a fixed distance from the discharge to be specified by the Regional Board, whichever results in the lower estimate for initial dilution.

KELP BEDS, for purposes of the bacteriological standards of this plan, are significant aggregations of marine algae of the genera Macrocystis and Nereocystis. Kelp beds include the total foliage canopy of Macrocystis and Nereocystis plants throughout the water column.

MARICULTURE is the culture of plants and animals in marine waters independent of any pollution source.

MDL (Method Detection Limit) is the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero, as defined in 40 CFR 136 Appendix B.

NATURAL LIGHT: Reduction of natural light may be determined by the Regional Board by measurement of light transmissivity or total irradiance, or both, according to the monitoring needs of the Regional Board.

OCEAN WATERS are the territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. If a discharge outside the territorial waters of the State could affect the quality of the waters of the State, the discharge may be regulated to assure no violation of the Ocean Plan will occur in ocean waters.

PAHs (polynuclear aromatic hydrocarbons) shall mean the sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, indeno[1,2,3-cd]pyrene, phenanthrene and pyrene.

PCBs (polychlorinated biphenyls) shall mean the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254 and Aroclor-1260.

PQL (Practical Quantitation Level) is the lowest concentration of a substance which can be consistently determined within +/- 20% of the true concentration by 75% of the labs tested in a performance evaluation study. Alternatively, if performance data are not available, the PQL* for carcinogens is the MDL* x 5, and for noncarcinogens is the MDL* x 10.

SHELLFISH are organisms identified by the California Department of Health Services as shellfish for public health purposes (i.e., mussels, clams and oysters).

* See Appendix I for definition of terms.

SIGNIFICANT difference is defined as a statistically significant difference in the means of two distributions of sampling results at the 95 percent confidence level.

TCDD EQUIVALENTS shall mean the sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown in the table below.

<u>Isomer Group</u>	<u>Toxicity Equivalence Factor</u>
2,3,7,8-tetra CDD	1.0
2,3,7,8-penta CDD	0.5
2,3,7,8-hexa CDDs	0.1
2,3,7,8-hepta CDD	0.01
octa CDD	0.001
2,3,7,8 tetra CDF	0.1
1,2,3,7,8 penta CDF	0.05
2,3,4,7,8 penta CDF	0.5
2,3,7,8 hexa CDFs	0.1
2,3,7,8 hepta CDFs	0.01
octa CDF	0.001

WASTE: As used in this Plan, waste includes a discharger's total discharge, of whatever origin, i.e., gross, not net, discharge.

WATER RECLAMATION: The treatment of wastewater to render it suitable for reuse, the transportation of treated wastewater to the place of use, and the actual use of treated wastewater for a direct beneficial use or controlled use that would not otherwise occur.

* See Appendix I for definition of terms.

APPENDIX II

STANDARD MONITORING PROCEDURES

The purpose of this appendix is to provide direction to the Regional Boards on the implementation of the California Ocean Plan and to ensure the reporting of useful information. It is not feasible to cover all circumstances and conditions that could be encountered by all dischargers. Therefore, this appendix should be considered as the basic components of any discharger monitoring program. Regional Boards can deviate from the procedures required in the appendix only with the approval of the State Water Resources Control Board unless the Ocean Plan allows for the selection of alternate protocols by the Regional Boards. If no direction is given in this appendix for a specific provision of the Ocean Plan, it is within the discretion of the Regional Board to establish the monitoring requirements for the provision.

The appendix is organized in the same manner as the Ocean Plan.

Chapter II. A. Bacterial Standards:

For all bacterial analyses, sample dilutions should be performed so the range of values extends from 2 to 16,000. The detection methods used for each analysis shall be reported with the results of the analysis.

Detection methods used for coliforms (total and fecal) shall be those presented in the most recent edition of Standard Methods for the Examination of Water and Wastewater or any improved method determined by the Regional Board (and approved by EPA) to be appropriate.

Detection methods used for enterococcus shall be those presented in EPA publication EPA 600/4-85/076, Test Methods for Escherichia coli and Enterococci in Water By Membrane Filter Procedure or any improved method determined by the Regional Board to be appropriate.

Chapter IV. Table B. Compliance with Table B objectives:

Procedures, calibration techniques, and instrument/reagent specifications used to determine compliance with Table B shall conform to the requirements of federal regulations (40 CFR 136). All methods shall be specified in the monitoring requirement section of waste discharge requirements.

Where methods are not available in 40 CFR 136, the Regional Boards shall specify suitable analytical methods in waste discharge requirements. Acceptance of data should be predicated on demonstrated laboratory performance.

The State or Regional Board may, subject to EPA approval, specify test methods which are more sensitive than those specified in 40 CFR 136. Total chlorine residual is likely to be a method detection limit effluent requirement in many cases. The limit of detection of total chlorine residual in standard test methods is less than or equal to 20 ug/l.

* See Appendix I for definition of terms.

Monitoring for the substances in Table B shall be required periodically. For discharges less than 1 MGD (million gallons per day), the monitoring of all the Table B parameters should consist of at least one complete scan of the Table B constituents one time in the life of the waste discharge requirements. For discharges between 1 and 10 MGD, the monitoring frequency shall be at least one complete scan of the Table B substances annually. Discharges greater than 10 MGD shall be required to monitor at least semiannually.

Chapter IV. Compliance with Toxicity Objectives:

Compliance with the acute toxicity objective (TUa) in Table A shall be determined using an established protocol, e.g., American Society for Testing Materials (ASTM), EPA, American Public Health Association, or State Board.

The Regional Board shall require the use of critical life stage toxicity tests specified in this Appendix to measure TUC. Other species or protocols will be added to the list after State Board review and approval. A minimum of three test species with approved test protocols shall be used to measure compliance with the toxicity objective. If possible, the test species shall include a fish, an invertebrate, and an aquatic plant. After a screening period, monitoring can be reduced to the most sensitive species. Dilution and control water should be obtained from an unaffected area of the receiving waters. The sensitivity of the test organisms to a reference toxicant shall be determined concurrently with each bioassay test and reported with the test results.

Use of critical life stage bioassay testing shall be included in waste discharge requirements as a monitoring requirement for all discharges greater than 100 MGD by January 1, 1991 at the latest. For other major dischargers, critical life stage bioassay testing shall be included as a monitoring requirement one year before the waste discharge requirement is scheduled for renewal. For major dischargers scheduled for waste discharge requirements renewal less than one year after the adoption of the toxicity objective, critical life stage bioassay testing shall be included as a monitoring requirement at the same time as the chronic toxicity effluent limits is established in the waste discharge requirements.

The following tests shall be used to measure TUC. Other tests may be added to the list when approved by the State Board.

<u>Species</u>	<u>Effect</u>	<u>Test Duration</u>	<u>Reference</u>
red alga, <u>Champia parvula</u>	number of cystocarps	7-9 days	1
giant kelp, <u>Macrocystis pyrifera</u>	percent germination; germ tube length	48 hours	2
abalone, <u>Haliotis rufescens</u>	abnormal shell development	48 hours	2

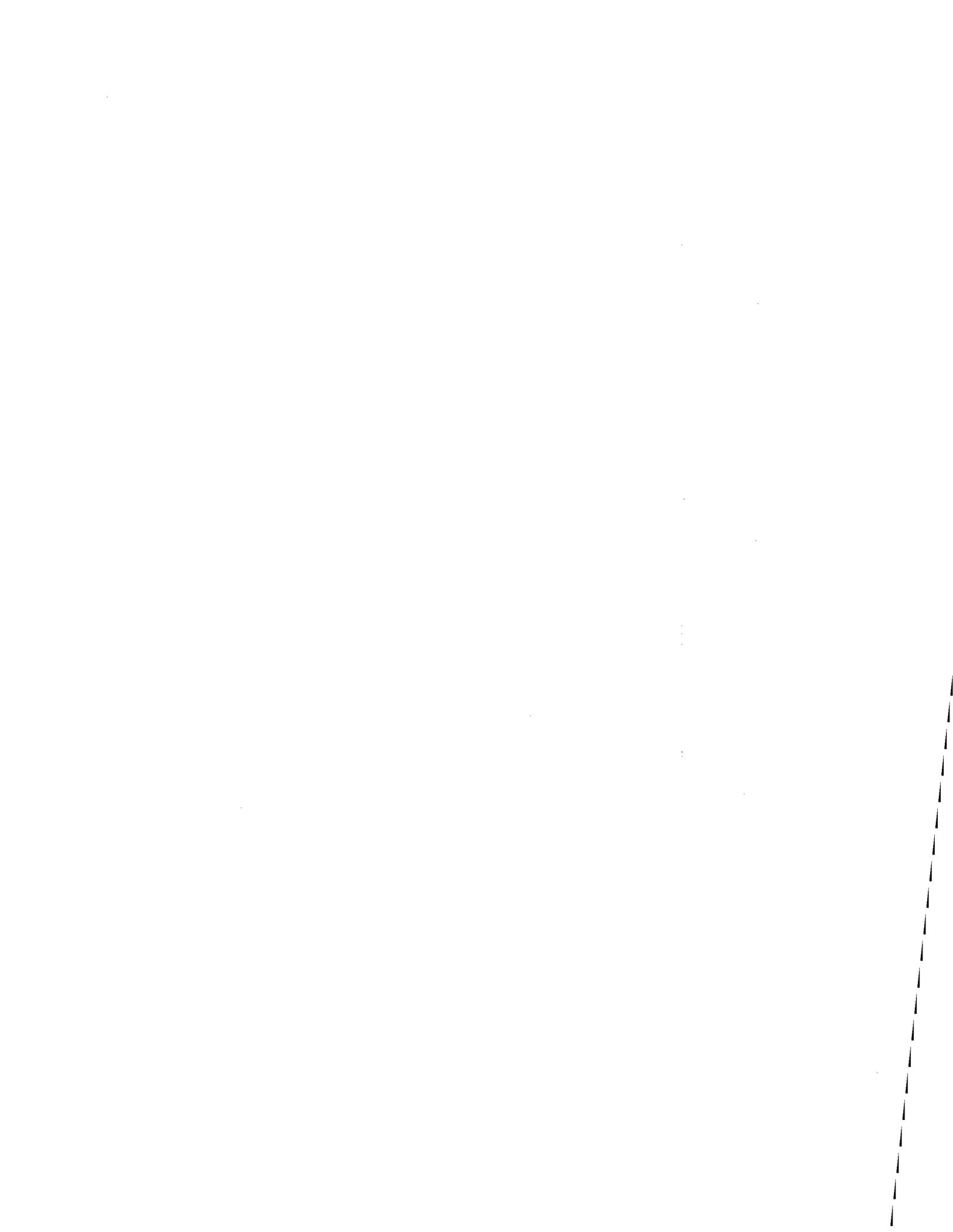
* See Appendix I for definition of terms.

oyster, <u>Crassostrea gigas</u> ; mussel, <u>Mytilus edulis</u>	abnormal shell development; percent survival	48 hours	3
urchins, <u>Strongylocentrotus purpuratus</u> , <u>S. franciscanus</u> ; sand dollar, <u>Dendraster excentricus</u>	percent fertilization	1 hour	4
shrimp, <u>Mysidopsis bahia</u>	percent survival; growth; fecundity	7 days	1
silversides, <u>Menidia beryllina</u>	larval growth rate; percent survival	7 days	1

Bioassay References

1. Weber, C.I., W.B. Horning, II, D.J. Klemm, T.W. Neiheisel, P.A. Lewis, E.L. Robinson, J. Menkedick, and F. Kessler (eds.). 1988. Short-term methods for estimating the chronic toxicity of effluents and receiving waters to marine and estuarine organisms. EPA-600/4-87/028. National Technical Information Service, Springfield, VA.
2. Hunt, J.W., B.S. Anderson, S.L. Turpin, A.R. Conlon, M. Martin, F.H. Palmer, and J.J. Janik. 1989. Experimental Evaluation of Effluent Toxicity Testing Protocols with Giant Kelp, Mysids, Red Abalone, and Topsmelt. Marine Bioassay Project. Fourth Report. California State Water Resources Control Board, Sacramento.
3. American Society for Testing Materials (ASTM). 1987. Standard Practice for conducting static acute toxicity tests with larvae of four species of bivalve molluscs. Procedure E 724-80. ASTM, Philadelphia, PA.
4. Dinnel, P.J., J. Link, and Q. Stober. 1987. Improved methodology for sea urchin sperm cell bioassay for marine waters. Archives of Environmental Contamination and Toxicology 16: 23-32.

* See Appendix I for definition of terms.



APPENDIX A-12

Discharges of Municipal Solid Waste Policy

STATE WATER RESOURCES CONTROL BOARD

RESOLUTION NO. 93-62

POLICY FOR REGULATION OF DISCHARGES OF MUNICIPAL SOLID WASTE

WHEREAS:

1. **Water quality protection**—The State Water Resources Control Board (State Water Board) and each Regional Water Quality Control Board (Regional Water Board) are the state agencies with primary responsibility for the coordination and control of water quality (California Water Code Section 13001, "WC §13001");
2. **State Policy for Water Quality Control**—The State Water Board is authorized to adopt State Policy For Water Quality Control which may consist of or contain "...principles and guidelines deemed essential by the state board for water quality control" (Authority: WC §§1058, 13140, 13142);
3. **State agency compliance**—All State agencies shall comply with State Policy For Water Quality Control regarding any activities that could affect water quality (WC §13146);
4. **Waste Discharge Requirements**—Regional Water Boards regulate discharges of waste that could affect the quality of waters of the state, including discharges of solid waste to land, through the issuance of waste discharge requirements (WC §13263);
5. **Solid waste disposal**—The State Water Board is directed to classify wastes according to threat to water quality and to classify waste disposal sites according to ability to protect water quality (WC §13172);
6. **Chapter 15**—The State Water Board promulgated regulations, codified in Chapter 15 of Division 3 of Title 23 of the California Code of Regulations (23 CCR §§2510-2601, "Chapter 15"), governing discharges of waste to land. These regulations:
 - a. Contain classification criteria for wastes and for disposal sites;
 - b. Prescribe minimum standards for the siting, design, construction, monitoring, and closure of waste management units;
7. **Federal authority**—The federal Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (42 USC §6901, *et seq.*, "SWDA"), authorizes development of nationwide standards for disposal sites for municipal solid waste [MSW], including criteria for sanitary landfills (SWDA §§1007, 4004, 42 USC §§6907, 6944);
8. **Federal MSW regulations**—On October 9, 1991, the United States Environmental Protection Agency (USEPA) promulgated regulations that apply, in California, to dischargers who own or operate landfills which accept municipal solid waste on or after October 9, 1991, (MSW landfills), regardless of whether or not a permit is issued (Title 40, Code of Federal Regulations [CFR], Parts 257 and 258, "federal MSW regulations"). The majority of the federal MSW regulations become effective on what is hereinafter referred to as the "Federal Deadline" [40 CFR §258.1(e)], currently October 9, 1993;
9. **States required to apply federal MSW regulations**—Each state must "...adopt and implement a permit program or other system of prior approval and conditions to assure that each...[MSW landfill]...within such state...will comply with the...[federal MSW landfill regulations]." State regulations promulgated to satisfy this requirement are subject to approval by USEPA. (SWDA §§4003, 4005, 42 USC §§6943, 6945);
10. **Approved state's authority**—The permitting authority in an "approved state" may approve engineered alternatives to certain prescriptive standards contained in the federal MSW regulations, provided that the alternative meets specified conditions and performance standards (40 CFR 256.21);
11. **State application**—The State Water Board and the Integrated Waste Management Board submitted an application for program approval to the USEPA on February 1, 1993;
12. **Chapter 15 deficiencies**—The State Water Board's Chapter 15 regulations are comparable to the federal MSW regulations. Nevertheless, the USEPA has identified several areas of Chapter 15 which are not adequate to ensure compliance with

certain provisions of the federal MSW regulations, as summarized in Attachment I;

13. **Rulemaking to amend Chapter 15**—There is insufficient time, prior to October 9, 1993, for the State Water Board to amend Chapter 15 to ensure complete consistency with the federal MSW regulations and subsequently for the USEPA to carry out a review of the revised chapter and to render a decision approving California's permit program;
14. **Composite liner(s) needed**—Solid Waste Assessment Test Reports, submitted to Regional Water Boards pursuant to WC §13273, have shown that releases of leachate and gas from MSW landfills that are unlined are likely to degrade the quality of underlying ground water. Research on liner systems for landfills indicates that (a) single clay liners will only delay, rather than preclude, the onset of leachate leakage, and (b) the use of composite liners represents the most effective approach for reliably containing leachate and landfill gas;
15. **Lack of compliance with Chapter 15**—WDRs for many MSW landfills have not been revised to meet the most recent Chapter 15 amendments;
16. **CEQA**—Adoption of this policy is categorically exempt from the provisions of the California Environmental Quality Act (Division 13, commencing with §21000, of the Public Resources Code, "CEQA") because it is an action by a regulatory agency for the protection of natural resources, within the meaning of §15307 of the *Guidelines For Implementation of California Environmental Quality Act* in Title 14 of the California Code of Regulations;
17. **Public notice**—Notice of the State Water Board's proposal to adopt a State Policy for Water Quality Control regarding Regulation of Discharges of Municipal Solid Waste was published on March 31, 1993, and a public hearing on the matter was held on June 1, 1993; and
18. **Reference**—This Policy implements, interprets, or makes specific the following Water Code Sections: §13142, §13160, §13163, and §13172.

THEREFORE BE IT RESOLVED:

I. Implementation of the Chapter 15 and federal MSW regulations:

- A. **WDR revision**—In order to insure compliance with SWDA §§4003, 4005 (42 USC §§6943, 6945), each Regional Water Board shall henceforth implement in waste discharge requirements for discharges at MSW landfills,

both the Chapter 15 regulations and those applicable provisions of the federal MSW regulations that are necessary to protect water quality, particularly the containment provisions stipulated in Section III of this Policy and the provisions identified in Attachment I to this Policy, and shall revise existing waste discharge requirements to accomplish this according to the schedule provided in Section II of this Policy;

- B. **Alternatives limited**—The Regional Water Board shall not rely upon any exemption or alternative allowed by Chapter 15 if such an exemption or alternative would not be allowed under the federal MSW regulations, nor shall the Regional Water Board waive waste discharge requirements for the discharge of municipal solid waste at landfills;
- C. **Applicability in the absence of useable waters**—Although all other provisions of this Policy would continue to apply, the Regional Water Board shall have the discretion to prescribe requirements for containment systems and water quality monitoring systems that are less stringent than the design and construction standards in this Policy, in the federal MSW regulations, and in Chapter 15 if the Regional Water Board finds that the containment systems satisfy the performance standard for liners in the federal MSW regulations [40 CFR §§258.40(a)(1) and (c)], that the prerequisite for an exemption from ground water monitoring in the federal MSW regulations is satisfied [40 CFR §258.50(b)], and that either of the following two conditions is satisfied:
 1. A hydrogeologic investigation shows that:
 - a. There is no aquifer (i.e., a geological formation, group of formations, or portion of a formation capable of yielding significant quantities of ground water to wells or springs) underlying the facility property; and
 - b. It is not reasonably foreseeable that fluids—including leachate and landfill gas—migrating from the landfill could reach any aquifer or surface water body in the ground water basin within which the landfill is located; or
 2. The ground water in the basin underlying the facility has no beneficial uses and a hydrogeologic investigation shows that it is not reasonably foreseeable that fluids—including leachate and landfill gas—migrating from the landfill could reach any aquifer or surface water body having beneficial uses.

II. Implementation schedule:

A. **MSW landfills**—By the Federal Deadline (e.g., October 9, 1993), each Regional Water Board shall amend the waste discharge requirements for discharges of waste at all MSW landfills in its region (including discharges to any area outside the actual waste boundaries of an MSW landfill as they exist on that date ["lateral expansion" hereinafter]), to require persons who own or operate such landfills to:

1. Except for the ground water monitoring and corrective action requirements under 40 CFR §§258.50-258.58, comply with all applicable portions of the federal MSW regulations by the Federal Deadline; and
2. Achieve full compliance with Chapter 15 and with the federal ground water monitoring and corrective action requirements under 40 CFR §§258.50-258.58 as follows:

- a. For all MSW landfills that are less than one mile from a drinking water intake (surface or subsurface), by no later than October 9, 1994; and
- b. For all other MSW landfills that have accepted waste prior to the effective date of this Policy, by no later than October 9, 1995;

B. **Proposed MSW landfills**—As of the date of the Federal Deadline, waste discharge requirements for the discharge of waste at all MSW landfills that have not accepted waste as of that date shall ensure full compliance both with Chapter 15 and with the federal MSW regulations prior to the discharge of waste to that landfill.

III. **Containment**—As of the Federal Deadline, discharges of waste to either an MSW landfill that has not received waste as of that date or to a lateral expansion of an MSW landfill unit are prohibited unless the discharge is to an area equipped with a containment system which is constructed in accordance with the standard of the industry and which meets the following additional requirements for both liners and leachate collection systems:

A. Standards for liners

1. **Post-Federal Deadline construction**—Except as provided in either §III.A.3. (for steep sideslopes) or §III.A.2. (for new discharges to pre-existing liners), after the Federal Deadline, all containment systems shall include a composite liner that consists of an upper synthetic flexible membrane

component (Synthetic Liner) and a lower component of soil, and that either:

a. Prescriptive Design:

- i. **Upper component**—Has a Synthetic Liner at least 40-mils thick (or at least 60-mils thick if of high density polyethylene) that is installed in direct and uniform contact with the underlying compacted soil component described in paragraph III.A.1.a.ii.; and

- ii. **Lower component**—Has a layer of compacted soil that is at least two feet thick and that has an hydraulic conductivity of no more than 1×10^{-7} cm/sec (0.1 feet/year); or

- b. **Alternative design**—Satisfies the performance criteria contained in 40 CFR §§258.40(a)(1) and (c), and satisfies the criteria for an engineered alternative to the above Prescriptive Design [as provided by 23 CCR §2510(b)], where the performance of the alternative composite liner's components, in combination, equal or exceed the waste containment capability of the Prescriptive Design;

2. **New discharges to liners constructed prior to the Federal Deadline**—Except as provided in §III.A.3. (for steep sideslopes), containment systems that will begin to accept municipal solid waste after the Federal Deadline, but which have been constructed prior to the Federal Deadline, are not required to meet the provisions of §III.A.1. if the containment system includes a composite liner that:

- a. **Prescriptive Design**—Features as its uppermost component a Synthetic Liner at least 40-mils thick (or at least 60-mils if high density polyethylene) that is installed in direct and uniform contact with the underlying materials; and

- b. **Performance**—Meets the performance criteria contained in 40 CFR §§258.40(a)(1) and (c);

3. **Steep sideslopes**—Containment systems installed in those portions of an MSW landfill where an engineering analysis shows, and the Regional Water Board finds, that sideslopes are too steep to permit construction of a stable composite liner that meets the prescriptive standards contained in §III.A.1 or 2. shall include an alternative liner that meets the performance criteria

contained in 40 CFR §§258.40(a)(1) and (c) and that either:

- a. Is a composite system and includes as its uppermost component a Synthetic Liner at least 40-mils thick (or at least 60-mils if high density polyethylene) that is installed in direct and uniform contact with the underlying materials; or
- b. Is not a composite system, but includes a Synthetic Liner at least 60-mils thick (or at least 80-mils if of high density polyethylene) that is installed in direct and uniform contact with the underlying materials; and

B. Standards for leachate collection—Include a leachate collection and removal system which conveys to a sump (or other appropriate collection area lined in accordance with §III.A.) all leachate which reaches the liner, and which does not rely upon unlined or clay-lined areas for such conveyance.

CERTIFICATION

The undersigned, Administrative Assistant to the Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on June 17, 1993.

Maureen Marchè
Administrative Assistant to the Board

ATTACHMENT I

To Resolution No. 93-62

Pursuant to §I.A., in writing or revising the waste discharge requirements for MSW landfills, Regional Water Boards shall implement those portions of the following sections of the federal MSW regulations that either are more stringent than, or do not exist within, Chapter 15.

- o **Floodplains**—40 CFR §§258.11 and 258.16
- o **Wetlands**—40 CFR §258.12
- o **Unstable areas**—40 CFR §§258.15 and 258.16
- o **Run-on/Run-off control systems**—40 CFR §258.26
- o **Liquids acceptance**—40 CFR §§258.28 [esp. §(a)(2)]
- o **Design Criteria**—40 CFR §258.40, according to the provisions of Section III
- o **Well/piezometer performance**—40 CFR §258.51
- o **Ground-water sampling/analysis**—40 CFR §258.53
- o **Monitoring Parameters**—40 CFR §258.54 and Appendix I to Part 258
- o **Constituents of Concern**—40 CFR §258.55 and Appendix II to Part 258
- o **Response to a release**—40 CFR §§258.55 [esp. §(g)(1)(ii, iii)]
- o **Establishing corrective action measures**—40 CFR §§258.56 [esp. §§(c and d)] and 258.57
- o **Ending corrective action program**—40 CFR §258.58 [esp. §(e)]
- o **Closure/post-closure**—40 CFR §§258.60-258.61 [esp. §§258.60(a-g)]
- o **Deed notation**—40 CFR §258.60(i)
- o **Ending post-closure**—40 CFR §258.61 [esp. §§(a and b)]
- o **Corrective action financial assurance**—40 CFR §258.73

APPENDIX A-13

**Sewerage Facilities and Septic Tanks in Urbanizing Areas in the
Central Coast Region**

CENTRAL COASTAL REGIONAL WATER QUALITY CONTROL BOARD

RESOLUTION NO. 69 - 1

ADOPTING POLICY STATEMENT REGARDING SEWERAGE FACILITIES AND
SEPTIC TANKS IN URBANIZING AREAS IN THE CENTRAL COASTAL REGION.

WHEREAS, Section 13052(e) of the California Water Code states that each regional board, with respect to its region, shall:

"Formulate and adopt long-range plans and policies with respect to water pollution control and water quality control within the region to conform with the policies set forth in Chapter 1 (commencing at Section 13000) and any water quality control policy adopted at any time by the state board."; and,

WHEREAS, Section 13052(a) of the California Water Code states that each regional board, with respect to its region, shall:

"Obtain coordinated action in water quality control and in the abatement, prevention and control of water pollution and nuisance by means of formal or informal meetings of the persons involved."; and,

WHEREAS, Section 13052(d) of the California Water Code states that each regional board, with respect to its region, shall:

"Request enforcement of laws concerning water pollution or nuisance by appropriate federal, state and local agencies."; and,

WHEREAS, Section 13052(c) of the California Water Code states that each regional board, with respect to its region, shall:

"Require any state or local agency to inspect and report on any technical factors involved in water pollution or nuisance."; and,

WHEREAS, within the context of this policy the term "urbanizing areas" refers to areas subject to rapid and/or concentrated development and subdivision areas of less concentrated development with individual parcels of land less than 2.5 acres; and,

WHEREAS, this board has evidence that many past, present and potential water pollution problems in the region result from the practice of serving new residential subdivisions and other urbanizing areas with individual septic tanks and leaching systems or with small, community sewerage systems that fail to provide satisfactory service; and,

WHEREAS, this board has observed that water pollution problems do not develop where local government recognizes the potential for such problems well in advance and takes steps to prevent them; and,

WHEREAS, after adequate notice, public hearings were held to receive testimony from all persons present and desiring to be heard concerning this matter; and,

WHEREAS, the board has reviewed the testimony received at the public hearings and the written statements from interested persons; now therefore, be it

RESOLVED, that it is the policy of this Board that city and county governments are requested to:

1. Prohibit the use of septic tanks and leaching systems for sewage disposal:
 - a. For any subdivision of land which comes under the provisions of the Subdivision Map Act of California unless the subdivider clearly demonstrates to the satisfaction of the governing body having jurisdiction that the use of septic tanks will be in the best public interest and that the beneficial uses of water of the state will not be adversely affected;
 - b. For any area where minimum lot sizes, dwelling densities, construction standards, percolation rates and minimum physiographic conditions have not been established by county ordinance; and
 - c. For any other area where the continued use of septic tanks constitutes a public health hazard, or existing or threatened condition of water pollution or nuisance.
2. Prohibit the development of any subdivision, trailer park, or similar development that will use its own community system for the disposal of sewage unless:
 - a. The subdivision, trailer park, or similar development is within or has access to a pre-existing governmental entity (city or district) that has authority to and has stated its intent to assume responsibility for the planning, construction, operation, and maintenance of the sewerage system or has authority to and has stated its intent to review plans and construction and assume operation and maintenance of the sewerage system upon certification by the appropriate health officer that the system is failing; and,

- b. The governmental entity (county, city or district) has developed a master plan for sewerage, pursuant to Section 65300, et seq. of the California Government Code, which includes the subdivision, trailer park, or similar development; and, be it further

RESOLVED, that this Board intends:

1. To continue to observe the progress made by local government in the Central Coastal Region toward prevention of water pollution and nuisance problems which may result from individual sewage disposal systems and from small community sewerage systems; and,
2. To seek enforcement action if and when it appears to the Board that such action is needed to prevent water pollution, nuisance or contamination because of inadequate control of development in urbanizing areas by local government; and be it further

RESOLVED, that this Board instructs its Executive Officer to transmit this resolution to all interested parties, including but not limited to the governing body of each city and county and to appropriate districts in the Central Coastal Region, and urges each body to give its full support to the policy enunciated above; and be it further

RESOLVED, that this Board requests each agency which has power to regulate the types of development that are covered by this resolution to make copies of this resolution available to all persons proposing such developments at the earliest practicable time so that each will be advised of the policy of the Regional Board in this matter.

Adopted by the Central Coastal Regional Water Quality Control Board on February 14, 1969.


BERTRAM H. MUDGETT, Chairman

ATTEST:


KENNETH R. JONES, Executive Officer

APPENDIX A-14

**Acceptance of Monterey County Board of Supervisor's Ordinance
Applying Development Restrictions to the Bays Hills
(Bay Farms/Hillcrest)**

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
1102 A Laurel Lane
San Luis Obispo, California 93401

RESOLUTION NO. 86-02

Acceptance of Monterey County Board of Supervisor's
Ordinance Applying Development Restrictions to the
Bay Hills Area

WHEREAS, the California Regional Water Quality Control Board, Central Coast Region (hereafter Regional Board), adopted the Water Quality Control Plan for the Central Coast Basin (hereafter Basin Plan), on March 14, 1975; and,

WHEREAS, in a meeting on May 16, 1984, the Monterey County Supervisor for the Bay Farms/Hillcrest area (also known as Bay Hills) discussed the area's sewage disposal problems with Regional Board staff; and,

WHEREAS, in a letter to the County dated June 8, 1984, Regional Board staff recommended the County further investigate wastewater problems and consider a local building moratorium in lieu of a Regional Board Basin Plan amendment prohibiting individual septic system discharges in Bay Hills; and,

WHEREAS, the Bay Farms/Hillcrest area of Northern Monterey County has been designated Bay Hills County Water District, and is recognized by the State of California as such; and,

WHEREAS, the County conducted investigations and prepared a report entitled "Bay Farms Groundwater & Septic Tank Report, May, 1985," providing documentation for a moratorium; and,

WHEREAS, the State Water Resources Control Board (hereafter State Board), adopted Resolution No. 84-3, which accepts locally imposed moratoriums in lieu of Regional Board prohibitions; and,

WHEREAS, the County has declared the Bay Farms/Hillcrest area in Pajaro, California, as a "Health Hazard Area" because of contamination of domestic water systems from existing septic tank systems and endangerment of public health due to surfacing septic system effluent; and,

WHEREAS, the County, on June 25, 1985, adopted "An Ordinance of the County of Monterey, State of California, Applying Development Restrictions to the Area Generally Within the Proposed Bay Hill County Water District;" and,

WHEREAS, the Regional Board accepted public testimony and considered the County's Ordinance at the Regional Board's regularly scheduled meeting on January 10, 1986, in the Salinas City Council Chambers Rotunda, 200 Lincoln Avenue, Salinas, California.

NOW, THEREFORE, BE IT RESOLVED, that the Regional Board accepts the County's moratorium for Bay Hills adopted under its Ordinance, in lieu of a Regional Board prohibition.

BE IT FURTHER RESOLVED, that the County of Monterey is requested to coordinate a project to eliminate discharge from individual sewage disposal systems in Bay Hills according to the following schedule:

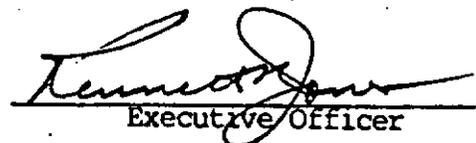
<u>Task</u>	<u>Compliance Date</u>
Begin Planning	February 1, 1986
Complete Planning	September 1, 1986
Begin Design	November 1, 1986
Complete Design	June 1, 1987
Begin Construction	March 1, 1988
Complete Construction	March 1, 1989
Cease Discharge	June 1, 1989

BE IT FURTHER RESOLVED, the Regional Board assumes authority for approval of any exemptions to the moratorium, consistent with exemption criteria contained in the Basin Plan.

BE IT FURTHER RESOLVED, that the State Water Resources Control Board is hereby requested to amend forthwith all appropriate Clean Water Grant Project Priority Lists to recognize the necessary structural solution for Bay Hills Area as a Class "A" project.

BE IT FURTHER RESOLVED, that the State Board is hereby requested to assist the local agencies in finding means to finance the design and construction of the recommended project (e.g., favorable consideration for a State Water Quality Control Fund loan or Small Communities Supplemental Assistance for the local share of project costs).

I, KENNETH R. JONES, Executive Officer of the California Regional Water Quality Control Board, Central Coast Region, do hereby certify that the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Central Coast Region, on January 10, 1986.


Executive Officer

APPENDIX A-15

**Acceptance of Monterey County Board of Supervisors' Ordinance
Applying Development Restrictions to the Area within the San Lucas
County Water District**

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
1102A Laurel Lane
San Luis Obispo, California 93401

RESOLUTION NO. 87-05

Acceptance of Monterey County Board of Supervisors'
Ordinance Applying Development Restrictions to the
Area within the San Lucas County Water District

- WHEREAS, the California Regional Water Quality Control Board, Central Coast Region (hereafter Regional Board), adopted the Water Quality Control Plan for the Central Coast Basin (hereafter Basin Plan), on March 14, 1975; and,
- WHEREAS, the Monterey County Health Department conducted investigations, and with Clean Water Bond pollution studies grant contracted EMCON Associates to conduct a study of the area; and,
- WHEREAS, EMCON prepared a report based on this study entitled "San Lucas Water District Pollution Study, Monterey County, California, December 19, 1986," and arrived at the conclusion that ground water quality beneath San Lucas has been significantly degraded due to high septic system density and large percentages of septic system failures in the community; and,
- WHEREAS, in a letter to the Monterey County Health Department dated May 29, 1987, the Division of Clean Water Grants, State Water Resources Control Board (hereafter State Board), stated after its review of the pollution study report, it was recommending that the project be placed on the FY 1988 Clean Water Grant Priority List in an "A" classification; and,
- WHEREAS, in this same letter, the State Board advised the County that they and the Central Coast Regional Board must adopt a local moratorium before the San Lucas project could be placed in Priority Class "A;" and,
- WHEREAS, the County has declared the San Lucas County Water District area as a "Health Hazard Area" because of contamination of domestic water systems from existing septic tank systems and endangerment of public health due to surfacing septic system effluent; and,

WHEREAS, the County, on June 23, 1987, adopted "An Ordinance of the County of Monterey, State of California, Applying Development Restrictions to the Area Generally Within the San Lucas County Water District;" and,

WHEREAS, the State Board adopted Resolution No. 84-3, which accepts locally imposed moratoriums in lieu of Regional Board prohibitions; and,

WHEREAS, the Regional Board accepted public testimony and considered the County's Ordinance at the Regional Board's regularly scheduled meeting on September 4, 1987, in San Luis Obispo City Hall Council Chambers, 990 Palm Street, San Luis Obispo, California.

NOW, THEREFORE, BE IT RESOLVED, that the Regional Board accepts the County's moratorium for the area within the San Lucas County Water District, adopted under County Ordinance No. 3247, in lieu of a Regional Board prohibition.

BE IT FURTHER RESOLVED, that the County of Monterey is requested to coordinate a project to eliminate discharge from individual sewage disposal systems in San Lucas according to the following schedule:

<u>Task</u>	<u>Compliance Date</u>
Begin Planning	November 20, 1987
Complete Planning	March 1, 1988
Begin Design	April 1, 1988
Complete Design	July 1, 1988
Begin Construction	October 15, 1988
Complete Construction	November 1, 1989
Cease Discharge	February 15, 1990

BE IT FURTHER RESOLVED, the Regional Board assumes authority for approval of any exemptions to the moratorium, consistent with exemption criteria contained in the Basin Plan.

BE IT FURTHER RESOLVED, that the State Board is hereby requested to amend forthwith all appropriate Clean Water Grant Project Lists to recognize the necessary structural solution for San Lucas County Water District as a Class "A" project.

I, WILLIAM R. LEONARD, Executive Officer of the California Regional Water Quality Control Board, do hereby certify that the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Central Coast Region, on September 4, 1987.


Executive Officer

APPENDIX A-16

Deleted

APPENDIX A-17

**Adopting Amendments to the Water Quality Control Plan And Requesting Approval
from the State Water Resources Control Board, Resolution No. 89-04 amended by
Resolution No. 2005-0013**

(Resolution 89-04 amended on September 9, 2005 by Resolution No. 2005-0013)

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

RESOLUTION 89-04

ADOPTING AMENDMENTS TO THE WATER QUALITY CONTROL PLAN
AND REQUESTING APPROVAL FROM
THE STATE WATER RESOURCES CONTROL BOARD

WHEREAS:

1. The Water Quality Control Plan, Central Coastal Basin (Basin Plan) was approved by the State Water Resources Control Board (State Board) on March 20, 1975.
2. Since March 20, 1975, thirty-seven Basin Plan amendments have been approved by the Regional Water Quality Control Board (Regional Board) and the State Board.
3. Since 1975, several changes in water quality regulations and administrative procedures have occurred.
4. An updated Basin Plan incorporating all previously approved amendments, updated regulations, and procedures is needed.
5. Several significant new Basin Plan amendments are needed:
 - a. Revise PCB and Phthalate Ester objective for all Inland Surface Waters, Enclosed Bays, and Estuaries in the Water Quality Objectives chapter.
 - b. Update "Municipal Wastewater Management Plans" in the Implementation Plan chapter.
 - c. Update "Solid Waste Management" in the Implementation Plan chapter.
 - d. Add "Water Quality Limited Segments" designation in the Plans and Policies chapter.
 - e. Add general toxic or hazardous materials discharge prohibition to all waters in the Plans and Policies chapter.
 - g. Add Regional Board policy for Highway Grooving Residues in the Plans and Policies chapter.

- h. Add Regional Board Policy for Waiver of Regulation of Specific Types of Waste Dischargers in the Plans and Policies chapter.
 - i. Add Water Bodies Needing Intensive Surveillance in the Surveillance and Monitoring chapter.
6. Several additional changes (as described in Attachment "A") are necessary to update the 1975 Basin Plan.
 7. Several minor wording changes are necessary to improve the readability of the Basin Plan.
 8. Drafts of the proposed Basin Plan have been prepared and distributed to interested persons and agencies for review and comment.
 9. Regional Board staff has followed appropriate procedures to satisfy the environmental documentation requirements of both the California Environmental Quality Act, under Public Resources Code Section 21080.5 (Functional Equivalent) and the Federal Clean Water Act of 1977 (PL 92-500 and PL 95-217). The Regional Board finds adoption of these objectives will not have a significant adverse effect on the environment.
 10. Due notice of public hearing was given by advertising in newspapers of general circulation within the Region
 11. On September 8, 1989, and November 17, 1989, in the Salinas City Council Chamber Rotunda, 200 Lincoln Avenue, Salinas, California, and in the Embassy Suites-Edna Room, 222 Madonna Road, San Luis Obispo, California, respectively, after due public notice, the Regional Board received evidence and considered all factors concerning the proposed revisions and amendments to the Plan.

THEREFORE BE IT RESOLVED:

1. All amendments mentioned above and in Attachment "A," will not have a significant adverse impact on the environment and the Executive Officer of the Regional Board is hereby directed to file a Notice of Decision to this effect with Secretary of the Resources Agency.
2. All amendments mentioned above and in Attachment "A" are adopted.
3. Any minor editorial changes to correct data or grammar and/or clarify meaning in the final copy which may not be included in Attachment "A", are also adopted.

4. Staff responses which propose specific Basin Plan changes provided in the Regional Water Quality Control Board letter dated October 12, 1989, are adopted.
5. The State Board is requested to approve the proposed updated Basin Plan with amendments in accordance with Sections 13245 and 13245 of the California Water Code.
6. Upon approval, the State Board is requested to transmit the updated Basin Plan to the U.S. Environmental Protection Agency for approval.

I, WILLIAM R. LEONARD, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Central Coastal Region, on November 17, 1989.



Executive Officer

APPENDIX A-18

**Recommendation to the State Water Resources Control Board
Concerning the Designation of Terrace Point in Santa Cruz County as an
Area of Special Biological Significance**

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

RESOLUTION NO. 76-10

RECOMMENDATION TO THE STATE WATER RESOURCES
CONTROL BOARD CONCERNING THE DESIGNATION OF
TERRACE POINT IN SANTA CRUZ COUNTY AS AN AREA
OF SPECIAL BIOLOGICAL SIGNIFICANCE

WHEREAS:

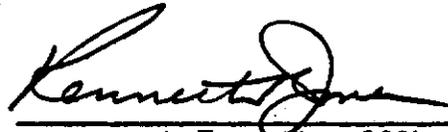
1. The State Water Resources Control Board has adopted a Water Quality Control Plan, Ocean Waters of California;
2. This plan established the concept of designating some ocean waters as Areas of Special Biological Significance to afford special protection for marine life to the extent that waste discharge requirements or other procedures will not insure;
3. Such areas are to be designated by the State Water Resources Control Board after public hearings by the Regional Board and review of the Regional Board's recommendation;
4. Testimony was received by the Central Coast Regional Board concerning the Terrace Point area of Santa Cruz County as an Area of Special Biological Significance at hearings on February 9, 1973 and March 9, 1973;
5. The Regional Board did not include Terrace Point in its list of areas recommended to the State Board for consideration because of insufficient evidence;
6. The State Water Resources Control Board received further testimony regarding Terrace Point as an Area of Special Biological Significance at its hearing on March 21, 1974, but remanded it to the Regional Board for further hearing and recommendation;
7. After due notice, including publication in the Santa Cruz Sentinel, a third hearing was held by the Regional Board on November 19, 1976, pertaining to the designation of Terrace Point as an Area of Special Biological Significance;
8. Testimony for and against designating Terrace Point as an Area of Special Biological Significance was received at that hearing;
9. After considering all testimony received, the hearing panel did agree upon a recommendation to be submitted to the Regional Board.
10. At its regular meeting on December 10, 1976, the Board did receive the recommendation of the hearing panel and did review the record of the hearings concerning this matter;
11. The Board finds that adequate protection of water quality and beneficial uses can be provided through waste discharge requirements, permits, and aforementioned

activities, and that designation of the Terrace Point area as an Area of Special Biological Significance is not warranted;

NOW, THEREFORE, BE IT RESOLVED:

1. The California Regional Water Quality Control Board, Central Coast Region, recommends to the State Water Resources Control Board that Terrace Point not be considered for the designation of Area of Special Biological Significance; and, furthermore,
2. That copies of this resolution and the Board's staff report and copies of all other evidence presented, be transmitted to the State Water Resources Control Board.

I, KENNETH R. JONES, Executive Officer of the California Regional Water Quality Control Board, Central Coast Region, do hereby certify the foregoing is a full, true, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Central Coast Region, on December 10, 1976.



Executive Officer

APPENDIX A-19

**Supporting Approval of the Clean Water and Water Conservation Bond
Law of 1978**

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

RESOLUTION NO. 78-04

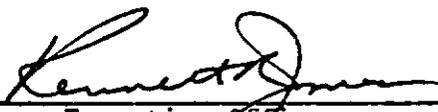
SUPPORTING APPROVAL OF THE CLEAN
WATER AND WATER CONSERVATION BOND
LAW OF 1978

- WHEREAS, the people of the State of California repeatedly have expressed their interest in ending water pollution in this State; and
- WHEREAS, the Legislature passed the Porter-Cologne Water Quality Control Act which provides the authority and policy to require rapid compliance with high water quality standards; and
- WHEREAS, the Board is determined to protect and enhance the quality of all waters of the State; and
- WHEREAS, in order to carry out these objectives it is essential that new and improved facilities for the treatment, disposal and reclamation of sewage and other wastes be constructed at the earliest possible date; and
- WHEREAS, the United States Congress has passed legislation which requires improved standards in water pollution control facilities, and provides Federal grants to assist in achieving such objectives; and
- WHEREAS, in accelerating the needed waste treatment construction program of municipalities, inordinate financial burdens will be placed on the property taxpayers in a relatively short period of time unless the State assumes a share of the cost; and
- WHEREAS, all of the citizens of the State benefit from improved water quality; and
- WHEREAS, the drought of 1976 and 1977 demonstrated the need for conservation of freshwater and greater reuse of wastewater; and
- WHEREAS, the Legislature has passed and the Governor has signed the Clean Water and Water Conservation Bond Law of 1978, which will provide needed financial aid to local governments; and
- WHEREAS, this law will be considered by the voters of the State as Proposition 2 on June 6, 1978; and
- WHEREAS, some public agencies will be unable to construct necessary wastewater treatment, disposal and/or reclamation systems without State assistance; and
- WHEREAS, discontinuance of State assistance will cause delays in the construction of some necessary treatment works, reclamation systems, and water conservation projects; and

WHEREAS, the California Regional Water Quality Control Board, Central Coast Region, is the State agency with primary responsibility for the coordination and control of water quality in the Region;

NOW, THEREFORE, BE IT RESOLVED, that the California Regional Water Quality Control Board, Central Coast Region, expresses its support for Proposition 2 and urges every California voter to vote "yes" so that pollution control and environmental enhancement activities of local agencies can be continued.

I, KENNETH R. JONES, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Central Coast Region on April 14, 1978.


Executive Officer

APPENDIX A-20

**Regarding Marina County Water District's Petition to Delete the Southern
Monterey Bay Discharge Prohibition Zones from the Basin Plan**

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

RESOLUTION NO. 79-06

Resolution Regarding Marina County Water District's
Petition to Delete the Southern Monterey Bay Discharge
Prohibition Zone from the Basin Plan

WHEREAS, The California Regional Water Quality Control Board, Central Coast Region, (hereafter Regional Board), adopted the Water Quality Control Plan for the Central Coastal Basin (hereafter Basin Plan) on March 25, 1975, pursuant to Section 13240, et. seq. of the California Water Code and,

WHEREAS, The Basin Plan was reviewed and approved by the California State Water Resources Control Board and the United States Environmental Protection Agency; and,

WHEREAS, The Basin Plan prohibits waste discharges to the southern extreme of Monterey Bay, inshore from an imaginary line extending from Point Pinos (36°-38.3' N., 121°-56.0' W.) to the mouth of the Salinas River (36°-44.9' N., 121°-48.3' W.), effective July 1, 1983, and

WHEREAS, the Marina County Water District discharges treated wastewater to the southern Monterey Bay prohibition zone, and

WHEREAS, in April, 1979, Marina County Water District challenged the southern Monterey Bay prohibition zone, as contained in the Basin Plan, and waste discharge requirements and enforcement orders based on this prohibition, and

WHEREAS, during a public hearing on June 18, 1979, the Regional Board received testimony and reconsidered factors which prompted prohibition zone establishment, including:

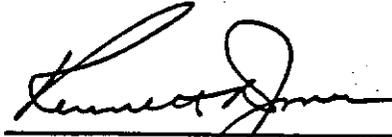
1. Weak ocean currents and sluggish circulation
2. High ammonia concentrations and nutrient build-up
3. Adverse affects on designated Areas of Biological Significance
4. History of beach contamination
5. Importance of water-contact recreation and marine habitat
6. Projected wastewater flow increases
7. Political, social, and economic concerns, and

NOW, THEREFORE, be it resolved, that the Regional Board finds the following:

1. The establishment of the southern Monterey Bay prohibition zone in the Basin Plan was appropriate, based on information available at that time.
2. Data available since Basin Plan adoption supports the southern Monterey Bay discharge prohibition.

3. Amendment of the Basin Plan with respect to the southern Monterey Bay discharge prohibition zone is unwarranted.

I, Kenneth R. Jones, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a Resolution duly and regularly adopted by the California Regional Water Quality Control Board, Central Coast Region, on June 18, 1979.



Executive Officer

APPENDIX A-21

**Certification of Santa Cruz County's Wastewater Management Program
for the San Lorenzo River Watershed**

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

RESOLUTION NO. 87-04

CERTIFICATION OF SANTA CRUZ COUNTY'S
WASTEWATER MANAGEMENT PROGRAM
FOR THE
SAN LORENZO RIVER WATERSHED

WHEREAS, Chapter 962 of the Statutes of 1986 states it is the intent of the Legislature to assist the San Lorenzo Valley Water District with its cash-flow problem by providing a loan; and,

WHEREAS, one condition of the state making the loan is "the County of Santa Cruz shall agree to undertake a program which will adequately ensure that the use of on-site waste water disposal systems will not pollute waters of the state;" and,

WHEREAS, the County of Santa Cruz developed a multifaceted wastewater management program for the San Lorenzo River Watershed; and,

WHEREAS, the County of Santa Cruz submitted the program to the Regional Board; and,

WHEREAS, the Regional Board has reviewed the program and the progress of its implementation through reports, including periodic presentations by county staff to the Board; and,

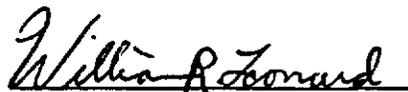
WHEREAS, prior to the state making a loan the Regional Board must certify the adequacy of the County's program; and,

WHEREAS, Resolution No. 339-87, "Concerning Continued Implementation of a Wastewater Management Program for the San Lorenzo River Watershed," adopted by the Santa Cruz County Board of Supervisors on May 12, 1987, assures continued implementation of that wastewater management plan; and,

WHEREAS, the wastewater management plan contains the elements necessary to ensure protection of the waters of the state.

THEREFORE BE IT RESOLVED: the Regional Water Quality Control Board, Central Coast Region, certifies Santa Cruz County's Wastewater Management Program for the San Lorenzo Valley is adequate to satisfy the condition for the loan authorized by Chapter 962 of the Statutes of 1986.

I, WILLIAM R. LEONARD, Executive Officer of the California Regional Water Quality Control Board, Central Coast Region, do hereby certify that the foregoing is a full, true, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Central Coast Region, on June 12, 1987.


Executive Officer

APPENDIX A-22

Policy Regarding Disposal of Highway Grooving Residues

POLICY REGARDING DISPOSAL OF HIGHWAY GROOVING RESIDUES

1. Each highway grooving residue site shall be approved by the Executive Officer prior to use.
2. Waste Discharge Requirements may be waived, provided the following conditions are met:
 - a. Grooving residues are confined to the trenches without overflow.
 - b. Trenches do not intercept ground water.
 - c. Disposal activities do not occur during the rainy season (December through April).

APPENDIX A-23

Waiver of Regulations of Specific Types of Waste Dischargers

State of California
California Regional Water Quality Control Board
Central Coast Region

April 15, 1983

ITEM: 7

SUBJECT: Review of Staff Procedures Regarding Waiver of Regulation of Specific Types of Waste Discharges.

DISCUSSION: Water Code Section 13263 provides Regional Boards with authority to issue waste discharge requirements for any discharge, other than into a community sewer system, that could affect the quality of the waters of the State. However, Water Code Section 13269 allows the Boards to waive regulation of a specific discharge or specific types of discharges where such action is in the public interest. This paragraph in the code allows flexibility to the Regional Boards so regulatory resources can be directed toward potential problems rather than consumed through regulation of waste discharges that will have no effect on quality of the state's waters.

Historically, staff has made most decisions regarding which discharges to regulate. Those decisions were based upon the size, type, duration, location, and significance of each existing or proposed waste discharge as well as staff resources available. All waivers granted by staff have been conditional and could be terminated at any time. Types of discharges which have received waivers from regulation by staff have usually fallen into one of the categories listed in Appendix A of this agenda item.

A recent opinion from the State Board's Office of Chief Counsel states that only the Regional Board itself can waive regulation of any discharge. One method of complying with this opinion would be for staff to schedule every waste discharge for a hearing before the Regional Board. However, because of limited resources, both Board and staff time must be directed to the more significant water quality problems. There are hundreds of waste discharges in the Region which have little or no impact on water quality. Many discharges are regulated through development of Best Management Practices rather than waste discharge requirements. For scattered sources of relatively minor quantities of pollutants, this management by exception is a more cost-effective method of regulation.

In order to meet the terms of the legal opinion and still effectively use resources that are available, the Executive Officer proposes the following procedure:

A proposed discharge or an existing unregulated discharge, which can be categorized as one of the types of discharges shown on the list in Appendix A, will be evaluated by staff. Discharges without perceivable significant impacts on water quality or public health will receive a tentative waiver from staff. With some exceptions, these tentative waivers will be reported to the Board on its next available agenda. Regional Board will be requested to ratify the staff's preliminary decisions and thus the Board can grant waivers from direct regulation generally on a case-by-case basis. Exceptions to this procedure are those types of discharge marked by an asterisk. These discharges are too small, insignificant, or numerous to list on the Board's agenda; or they are discharges for which regulating authority has been delegated by the Regional Board. For example, Regional Board Resolution 82-09 establishes applicable criteria for individual on-site sewage disposal systems. When a valid memorandum of understanding exists between the Regional Board and the local agency, permitting authority is delegated to the local agency.

Those dischargers which (1) cannot be categorized as one of the types of discharges on the attached list, or (2) may have significant water quality impacts (e.g., due to low flow rate of receiving water, or unique location of discharge), or (3) where any questions or uncertainty concerning conditions or facts remain, will be required to submit a Report of Waste Discharge with appropriate filing fee, and proposed requirements will be brought to the Board for consideration under normal procedures. After evaluating the facts, the Board may in some cases still determine that a waiver of direct regulation is appropriate.

Where waste discharge requirements have been issued by the Regional Board and have not expired, a waiver of that regulation cannot be obtained without a decision by the Board following a hearing. Thus, the procedure described above cannot be used to modify any existing order of the Board during the life of the permit. When a permit expires, staff will follow the procedure outlined above. Past self-monitoring reports and inspection reports will be used in evaluating the need for permit renewal. If staff determines that a tentative waiver is appropriate, that recommended action will be subject to Board ratification.

ATTACHMENT: Appendix A

RECOMMENDATION: Unless the Regional Board objects, staff will operate as described above.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

TYPES AND NATURE OF WASTE DISCHARGES
WHICH WILL BE CONSIDERED
FOR WAIVER OF REGULATION

<u>Type of Waste Discharge</u>	<u>Limitations</u>
1. Air conditioner, cooling and elevated temperature waters	Discharged to storm drains, to land, or in small volumes which will not change temperature of receiving water more than one degree C.
2. Drilling muds	<p>Discharged to sump with at least two feet of freeboard. Sump must be dried by evaporation or pumping. Drilling muds may remain in sump only if discharger demonstrates mud is non-toxic. Sump area shall be restored to preconstruction state within sixty (60) days of completion or abandonment of well.</p> <p>Clean, oil-free, freshwater drilling mud removed from the oil well drilling operation prior to the time the first production casing is installed.</p>
3. Oilfield waste materials	Clean oil not mixed with contaminants such as salt brines or toxic materials, (Reference: Staff Guidelines) used for beneficial purposes such as dust control, weed control and mosquito abatement where oil cannot reach State waters.
4. Minor dredge operations	When operation is short-term and spoil is nontoxic, and discharged to land.
5. Group 3 solid wastes	Small-scale operations using good disposal and erosion control practices.
*6. Test pumpings of fresh water wells	When pollutants are neither present nor added.
7. Storm water runoff	Where no water quality problems are contemplated and no federal NPDES permit is required.
*8. Erosion from construction projects	Where Best Management Practice (BMP) plans have been formulated and implemented or the local entity has an approved program for implementing BMP's (Reference: Resolution No. 79-09).

9. Pesticide rinse waters from applicators
Where discharger complies with State Board's Pesticides Guidance Document, (January, 1982)
10. Confined animal wastes
Where discharger complies with the Basin Plan and no federal NPDES permit is required.
11. Minor stream channel alterations and suction dredging
Where regulated by Department of Fish and Game conditions.
12. Short-term sand and gravel operations
Operations where washwaters are confined to land.
13. Metals mining operations
Operations confined to land where toxic materials are not used in recovery operations.
- *14. Swimming pool discharges
Where adequate dilution exists to offset chlorine toxicity or where beneficial uses will not be affected.
15. Food processing wastes spread on land
Small, seasonal, confined to land, and removed from populated areas.
16. Agricultural commodity wastes
Small, seasonal, confined to land, and removed from populated areas.
17. Industrial wastes utilized for soil amendments
Where industry certifies nontoxic and non-hazardous content and BMP for agricultural application used.
- *18. Timber harvesting
Operating under approved Timber Harvest Plan.
19. Minor hydro projects
Operating under water rights permit from State Water Resources Control Board or Fish and Game conditions.
20. Irrigation return water
Where sediment meets Basin Plan turbidity objectives and discharge is not toxic fish or wildlife. (Exempted from NPDES permit as per consolidated regulations)
- *21. Project where application for Water Quality Certification is required
Where project (normally minor construction) is not expected to have a significant water quality effect, and project complies with Fish and Game conditions.

22. Brine disposal
To ocean without toxic constituents or to impermeable ponds.
- *23. Individual sewage disposal systems
Where project is required to meet standard criteria of county or city that is implementing Basin Plan requirements pursuant to MOU, or an individual project that complies with Basin Plan.
24. Treatment and disposal systems for sanitary waste from small community, institutional, commercial, industrial operations.
Small community systems (serving five or less residential units) or institutional, commercial, or industrial systems (less than 2500 gallons per or day) with subsurface disposal, regulated by local agency that is implementing the Basin Plan through MOU with Regional Board, or an individual project that complies with the Basin Plan.
25. Flow-thru seawater systems and aquacultural operations.
Where no water quality problems are anticipated and no federal NPDES permit is provided.
- *26. Injection wells
Where waste is produce water (CDOG/SWRCB MDA)

*The Board will not be requested to ratify staff waivers for these discharge types.

APPENDIX A-24

**Interpretation of Minimum Parcel Size Requirements
for On-Site Sewage Systems**

**REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
1102-A Laurel Lane
San Luis Obispo, CA 93401**

RESOLUTION NO. 91-04

**INTERPRETATION OF BASIN PLAN'S MINIMUM PARCEL SIZE
FOR ON-SITE SEWAGE SYSTEMS**

The California Regional Water Quality Control Board, Central Coast Region (hereafter Regional Board), finds that:

WHEREAS:

1. The Water Quality Control Plan for the Central Coastal Region (Basin Plan) contains the following language: "For new land divisions, lot sizes less than one acre should not be permitted." The Basin Plan allows on-site sewage disposal systems for parcel sizes not less than one-half acre when conditions are particularly favorable.
2. The Basin Plan is not specific as to gross or net area when referring to parcel size.
3. When this Basin Plan criterion was adopted by the Board, lot sizes required for on-site disposal systems were calculated by including building area, landscape area, driveway area, pool area, disposal area (including expansion area), and drainage area. Lot size calculations did not include streets, curbs, sidewalks, commons, or green belts.
4. There are environmental benefits to cluster subdivisions where dwellings are clustered and open space areas dedicated so long as densities do not exceed safe soil loading rates.
5. Lot sizes may be safely reduced in very favorable soil areas with fast percolation rates and minimal slopes. Staff calculations show percolation rates less than five minutes per inch and slopes less than five degrees can be suitable for on-site sewage disposal systems under very favorable conditions.

NOW, THEREFORE BE IT RESOLVED:

1. For new land divisions, the Regional Water Quality Control Board considers all one acre and one-half acre parcels to be gross area (i.e., including streets, curbs, sidewalks, commons, or green belts.)
2. For new land divisions, the one-half acre area requirement may be reduced to 20,000 square feet net area under very favorable site conditions as certified by the County Environmental Health Officer. Such conditions include, but are not limited to, slope less than five percent and percolation rates faster than five minutes per inch. Approval of the 20,000 square feet net lot size must be obtained in writing from the Regional Board's Executive Officer after certification by the County's Environmental Health Officer.

I, WILLIAM R. LEONARD, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Central Coast Region, on May 10, 1991.



Executive Officer

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APPENDIX A-25

Appreciation for Discharger Compliance

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

**81 Higuera Street, Suite 200
San Luis Obispo, CA 93401-5427**

RESOLUTION NO. 93-04

APPRECIATION FOR DISCHARGER COMPLIANCE

WHEREAS, the California Regional Water Quality Control Board, Central Coast Region, regulates discharges to surface and ground waters in the region through implementation of increasingly complex laws and regulations; and

WHEREAS, the dischargers in the region have increasing responsibilities and costs due to greater complexity of environmental regulatory compliance; and

WHEREAS, in spite of these problems, the vast majority of regulated dischargers do an excellent job of protecting water quality and complying with regulations; and

WHEREAS, prevention of pollution is much more cost effective and protects resources more effectively than cleanup; and

WHEREAS, Cal/EPA has stated goals which include regulatory streamlining as well as building and maintaining the capability to achieve environmental protection, given fiscal constraints.

NOW, THEREFORE BE IT RESOLVED, the region's regulated dischargers are commended for their excellent overall compliance record and continued efforts to protect water quality and public health in the face of economic difficulties.

THEREFORE BE IT FURTHER RESOLVED, the Regional Board will continue its endeavor to achieve the Board's mission of water quality protection and improvement, at the most cost effective manner to society, via the following:

- 1. The Board will maintain a significant level of field surveillance with a primary goal of early detection of threats to water quality and needed corrective actions, in addition to verification of on-going compliance with requirements.**

- 2. The Board will require dischargers to do what is necessary for water quality protection and regulatory compliance, without asking for more than what is needed to do the job. Where applicable, general permits or waivers of requirements will be used.**

- 3. In situations where staff is asking for discharger actions that go beyond regulatory minima (e.g., areas of regulatory ambiguity relying more on professional judgement, or where resources require protection beyond bare regulatory minima) the Board's staff will provide justification for its requests.**

- 4. Staff will request technical and monitoring reports to the extent that they are required by the situation and will ensure that the burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports.**

- 5. Staff will try to consolidate requests and encourage dischargers to consolidate reports or cross reference reports to accomplish reporting in the most cost effective manner. Time schedules may be adjusted to accommodate this goal so long as water quality or public health protection are not compromised.**

THEREFORE BE IT FURTHER RESOLVED, that the State Water Resources Control Board is asked to consider the above listed principles in its communications with the Regional Board and dischargers.

I, WILLIAM R. LEONARD, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Central Coast Region, on May 14, 1993.


EXECUTIVE OFFICER

May 14, 1993

APPENDIX A-26

**Support Material for Calculating Adjusted
Sodium Absorption Ratio (SAR)**

TABLES FOR CALCULATING pHc VALUES OF WATERS

pHc can be calculated, using the table below; $pHc = (pK_1 - pK_c) + p(Ca+Mg) + pAlk$ where $pK_1 - pK_c$ is obtained from Ca+Mg+Na
 $p(Ca+Mg)$ " " " Ca+Mg
 $pAlk$ " " " CO_3+HCO_3

Tables for Calculation pHc

Conct. Ca+Mg+Na (me/l)	$pK_1 - pK_c$	Conct. Ca+Mg (me/l)	$p(Ca+Mg)$	Conct. CO_3+HCO_3 (me/l)	$pAlk$
.5	2.11	.05	4.60	.05	4.30
.7	2.12	.10	4.30	.10	4.00
.9	2.13	.15	4.12	.15	3.82
1.2	2.14	.2	4.00	.20	3.70
1.6	2.15	.25	3.90	.25	3.60
1.9	2.16	.32	3.80	.31	3.51
2.4	2.17	.39	3.70	.40	3.40
2.8	2.18	.50	3.60	.50	3.30
3.3	2.19	.63	3.50	.63	3.20
3.9	2.20	.79	3.40	.79	3.10
4.5	2.21	1.00	3.30	.89	3.00
5.1	2.22	1.25	3.20	1.25	2.90
5.8	2.23	1.58	3.10	1.57	2.80
6.6	2.24	1.98	3.00	1.98	2.70
7.4	2.25	2.49	2.90	2.49	2.60
8.3	2.26	3.14	2.80	3.13	2.50
9.2	2.27	3.90	2.70	4.0	2.40
11	2.28	4.97	2.60	5.0	2.30
13	2.30	6.30	2.50	6.3	2.20
15	2.32	7.90	2.40	7.9	2.10
18	2.34	10.00	2.30	9.9	2.00
22	2.36	12.50	2.20	12.5	1.90
25	2.38	15.80	2.10	15.7	1.80
29	2.40	19.80	2.00	19.8	1.70
34	2.42				
39	2.44				
45	2.46				
51	2.48				
59	2.50				
67	2.52				
76	2.54				

Example: To calculate adj.SAR of water from

$$adj.SAR = \frac{Na}{\sqrt{\frac{Ca+Mg}{2}}} [1 + (8.4 - pHc)]$$

With report of water analysis

- Na = 3.5 me/l
- Ca+Mg = 1.0 me/l
- Ca+Mg+Na = 4.5 me/l
- CO_3+HCO_3 = 3.0 me/l

$$pHc = 2.21 + 3.30 + 2.5 = 8.01 \text{ (from tables)}$$

$$adj.SAR = \frac{3.5}{\sqrt{1/2}} [1 + (8.4 - 8.01)] = 4.95 (1 + .39)$$

$$adj.SAR = 6.88$$

NOTE: Values of pHc above 8.4 indicate tendency to dissolve lime from soil through which the water moves; values below 8.4 indicate tendency to precipitate lime from waters applied.

(ref: L.V. Wilcox, U.S. Salinity Laboratory, mimeo Dec. 30, 1966)

APPENDIX A-27

**Nipomo Individual Sewage Disposal System
Prohibition Area Description**

NIPOMO INDIVIDUAL SEWAGE DISPOSAL SYSTEM PROHIBITION #1A

BEGINNING at the point of the southernmost property corner of Assessor's Parcel Number (APN) 92-331-8 near the intersection of Southland Street and Orchard Road; thence north-easterly along the northerly boundary line at Southland Street to intersect the easterly boundary line of U.S. Highway 101; thence northwesterly along said line to the westernmost property corner of APN 92-301-12; thence along a bearing approximately N 48° 15' to intersect the easterly boundary line of Oakglen Avenue; thence northwesterly along said line to the southerly boundary line of Division Street; thence along an extension of said line to the easterly boundary line of Thompson Avenue; thence northwesterly along said line to the south property corner of APN 90-081-10; thence northeasterly along southeastern boundary of said parcel to the east property corner; thence northwesterly along an extension of the westerly boundary line of Cedar Street to the northerly boundary line of Tefft Street; thence northeasterly along said line to the easternmost property corner of APN 90-371-58; thence northwesterly along an extension of the boundary of said parcel to the southerly boundary line of Chestnut Street; thence southwesterly along said line to the westerly boundary line of Thompson Avenue; thence northwesterly along said line to the easternmost property corner of APN 90-151-13; thence along a bearing approximately S 48° W to intersect the easterly boundary line of Willow Road; thence southeasterly along said line to the southerly boundary line of Juniper Street; thence northeasterly along said line to the westernmost property corner of APN 92-131-06; thence along a bearing S 34° 30'E to the southerly boundary line of Tefft Street; thence southwesterly along said line to the west corner of APN 92-132-34; thence along a bearing of S 34° 30'E to the southerly boundary line of Hill Street; thence northeasterly along said line to the west corner of APN 92-133-26; thence along a bearing of S 34° 30'E to intersect the northerly boundary line of Division Street; thence southwesterly along said line to the easternmost property corner of APN 92-172-02; thence along a bearing approximately N 67° 28'W to the northernmost property corner of APN 92-454-20; thence along a bearing approximately S 22° 26'W to the westernmost property corner of APN 9-111-25; along a bearing approximately S 67° 28'E to intersect the easterly boundary line of Division Street; thence northeasterly along said line to the westernmost property corner of APN 92-181-13; thence along a bearing approximately S 64° 33'E to the southernmost property corner of APN 92-181-13; thence along a bearing approximately N 37° 30'E to the easterly boundary line of Orchard Road; thence southeasterly along said line to the true POINT OF BEGINNING.

APPENDIX A-28

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APPENDIX A-29

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APPENDIX A-30

**Los Osos Baywood Park Individual and Community
Sewage Disposal System Prohibition Area**

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

RESOLUTION NO. 83-13

Revision and Amendment of Water Quality Control
Plan by the Addition of a Prohibition of Waste
Discharge from Individual Sewage Disposal
Systems Within the Los Osos/Baywood Park Area,
San Luis Obispo County

- WHEREAS, the California Regional Water Quality Control Board, Central Coast Region (hereafter Regional Board), adopted the Water Quality Control Plan for the Central Coastal Basin (hereafter Basin Plan) on March 14, 1975; and,
- WHEREAS, the Regional Board, after notice and public hearing in accordance with Water Code Section 13244, periodically revises and amends the Basin Plan to ensure reasonable protection of beneficial uses of water and prevention of pollution and nuisance; and,
- WHEREAS, in protecting and enhancing water quality, the Basin Plan specifies certain areas where the discharge of waste, or certain types of waste, is prohibited; and,
- WHEREAS, Article 5, Chapter 4, Division 7, of the California Water Code defines criteria for such prohibition areas (Section 13240 et seq.); and,
- WHEREAS, Los Osos/Baywood Park is an unincorporated community, with a 1980 population of 10,933 persons located south of the City of Morro Bay, in San Luis Obispo County; and,
- WHEREAS, current zoning will accommodate a population in excess of 27,000 people and an average residential lot size of about 6600 ft²; and,
- WHEREAS, on-site soil absorption or evapotranspiration systems are the sole means of wastewater disposal in the Los Osos/Baywood Park area; and,
- WHEREAS, the Los Osos/Baywood Park area soil permeability is rapid and there are substantial areas with high groundwater; and,
- WHEREAS, the majority of lots are too small to provide adequate dispersion of individual sewage disposal system effluent; and,

- WHEREAS, the San Luis Obispo County Environmental Health Department has provided documentation concerning the problem of liquid waste disposal in the Los Osos/Baywood Park area; and,
- WHEREAS, the County of San Luis Obispo is preparing an environmental impact report (EIR) in accordance with the California Environmental Quality Act and a project report that identifies adverse environmental impacts from continued use of septic tanks in the Los Osos/Baywood Park area and discusses alternatives to existing wastewater management practices; and,
- WHEREAS, "Los Osos-Baywood Park/Phase I Water Quality Management Study" cites conditions which constitute contamination and pollution as defined in Section 13050 of the California Water Code; and,
- WHEREAS, chemical analyses of wells in Los Osos/Baywood Park indicates 38% of the shallow wells tested in the Phase I study, taking water from the Old Dune Sands deposits portion of the aquifer, contain nitrate concentrations which exceed State Health Department Drinking Water Standards of 45 milligrams per liter; and,
- WHEREAS, bacterial analyses of 42 wells tested in the Phase I study resulted in 26 wells indicating total coliform in violation of State Health Drinking Water Standards, and 2 wells indicating fecal coliform in violation of Basin Plan limits for groundwater; and,
- WHEREAS, surface water bacterial analyses tested in the Phase I study indicated total and fecal coliform levels exceeding Basin Plan recommended limits for water contact recreation (REC-1); and,
- WHEREAS, a letter from the California Health and Welfare Agency, Department of Health Services, states their concerns regarding the high nitrate levels in the waters of Los Osos/Baywood Park area, and recommends adequate measures be taken to correct the nitrate problems to bring the waters into compliance with California Drinking Water Standards; and,
- WHEREAS, a letter from the San Luis Obispo County Health Agency Director cites violation of the public health limit for nitrates and recommends elimination of shallow groundwater usage and adoption of a discharge prohibition; and,
- WHEREAS, the Regional Board is obligated to include a program of implementation for achieving water quality objectives in its Basin Plan; and,
- WHEREAS, present and anticipated future beneficial uses of Los Osos/Baywood Park creeks include recreation and aquatic habitat; and,

WHEREAS, Los Osos Basin groundwaters are suitable for agricultural, municipal, domestic, and industrial water supply; and,

WHEREAS, a Regional Board staff report finds beneficial uses of Los Osos ground and surface waters are adversely affected by individual sewage disposal system discharges, there appears to be a trend of increasing degradation, and public health is jeopardized by occurrences of surfacing effluent; and,

WHEREAS, drafts of proposed revisions and amendments of the Basin Plan, prohibiting discharges from Los Osos/Baywood Park individual sewage disposal systems, have been prepared and provided to interested persons and agencies for review and comment; and,

WHEREAS, Regional Board staff has prepared documents and followed appropriate procedures to satisfy the environmental documentation requirements of both the California Environmental Quality Act, under Public Resources Code Section 21080.5 (Functional Equivalent), and the Federal Clean Water Act of 1977 (PL 92-500 and PL 95-217), and the Regional Board finds adoption of this prohibition area will not have a significant adverse effect on the environment; and,

WHEREAS, on September 16, 1983, in the San Luis Obispo City Council Chambers, 990 Palm Street, San Luis Obispo, California, after due notice, the Regional Board conducted a public hearing at which evidence was received pursuant to Section 13281 of the California Water Code concerning the impact of discharges from individual sewage disposal systems on water quality and public health; and,

WHEREAS, pursuant to Section 13280 of the California Water Code, the Regional Board finds that discharges of wastes from new and existing individual disposal systems which utilize subsurface disposal in the affected area will result in violation of water quality objectives; will impair beneficial uses of water; will cause pollution, nuisance, or contamination; and will unreasonably degrade the quality of waters of the State; and,

WHEREAS, the Regional Board finds the aforestated conditions in need of remedy to protect present and potential beneficial uses of water and to prevent pollution and nuisance.

NOW, THEREFORE, BE IT RESOLVED, that the Water Quality Control Plan, Central Coastal Basin, be amended as follows:

Page 5-66, after Item 7, following the legal description for Pasatiempo Pines (added by Resolution 83-09), insert the following prohibitions:

- "8. Discharges of waste from individual and community sewage disposal systems are prohibited effective November 1, 1988, in the Los Osos/Baywood Park area, and more particularly described as:

"Groundwater Prohibition Zone

(Legal description to be provided for area prescribed by Regional Board).

"Failure to comply with any of the compliance dates established by Resolution 83-13 will prompt a Regional Board hearing at the earliest possible date to consider adoption of an immediate prohibition of discharge from additional individual and community sewage disposal systems."

Discharges from individual or community systems within the prohibition area in excess of an additional 1150 housing units (or equivalent) are prohibited, commencing with the date of State Water Resources Control Board approval.

BE IT FURTHER RESOLVED, that the above area is consistent with the recommendations of the staff report as shown on "Attachment A."

BE IT FURTHER RESOLVED, that the Regional Board does intend standard exemption criteria, first paragraph of Page 5-67 of the Basin Plan, to apply to this action.

BE IT FURTHER RESOLVED, that compliance with the above prohibition of existing individual or community sewage disposal systems shall be achieved according to the following time schedule:

<u>Task</u>	<u>Compliance Date</u>
Begin Design	November 1, 1984
Complete Design	November 1, 1985
Obtain Construction Funding	December 1, 1985
Begin Construction	April 1, 1986
Complete Construction	November 1, 1988

BE IT FURTHER RESOLVED, that reports of compliance or noncompliance with schedules shall be submitted to the Regional Board within 14 days following each scheduled date unless otherwise specified, where noncompliance reports shall include a description of the reason, a description and schedule of tasks necessary to achieve compliance, and an estimated date for achieving full compliance.

BE IT FURTHER RESOLVED, the County will continue a monitoring program, approved by the Regional Board staff, that will monitor ground water quality within the prohibition boundaries as set forth in this resolution, and also a monitoring program which covers areas outside the prohibition boundaries but within the urban reserve line as shown in Attachment A.

BE IT FURTHER RESOLVED, that the Regional Board has determined this action will not have a significant adverse impact on the environment and the Executive Officer of the Regional Board is hereby directed to file a Notice of Decision to this effect with the Secretary of the Resources Agency.

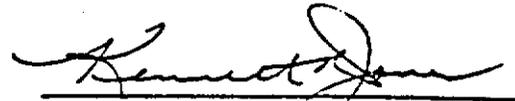
BE IT FURTHER RESOLVED, that the State Water Resources Control Board is hereby requested to amend forthwith the Clean Water Grant Project Priority List to recognize the necessary structural solution for Los Osos/Baywood Park as a Priority "A" project.

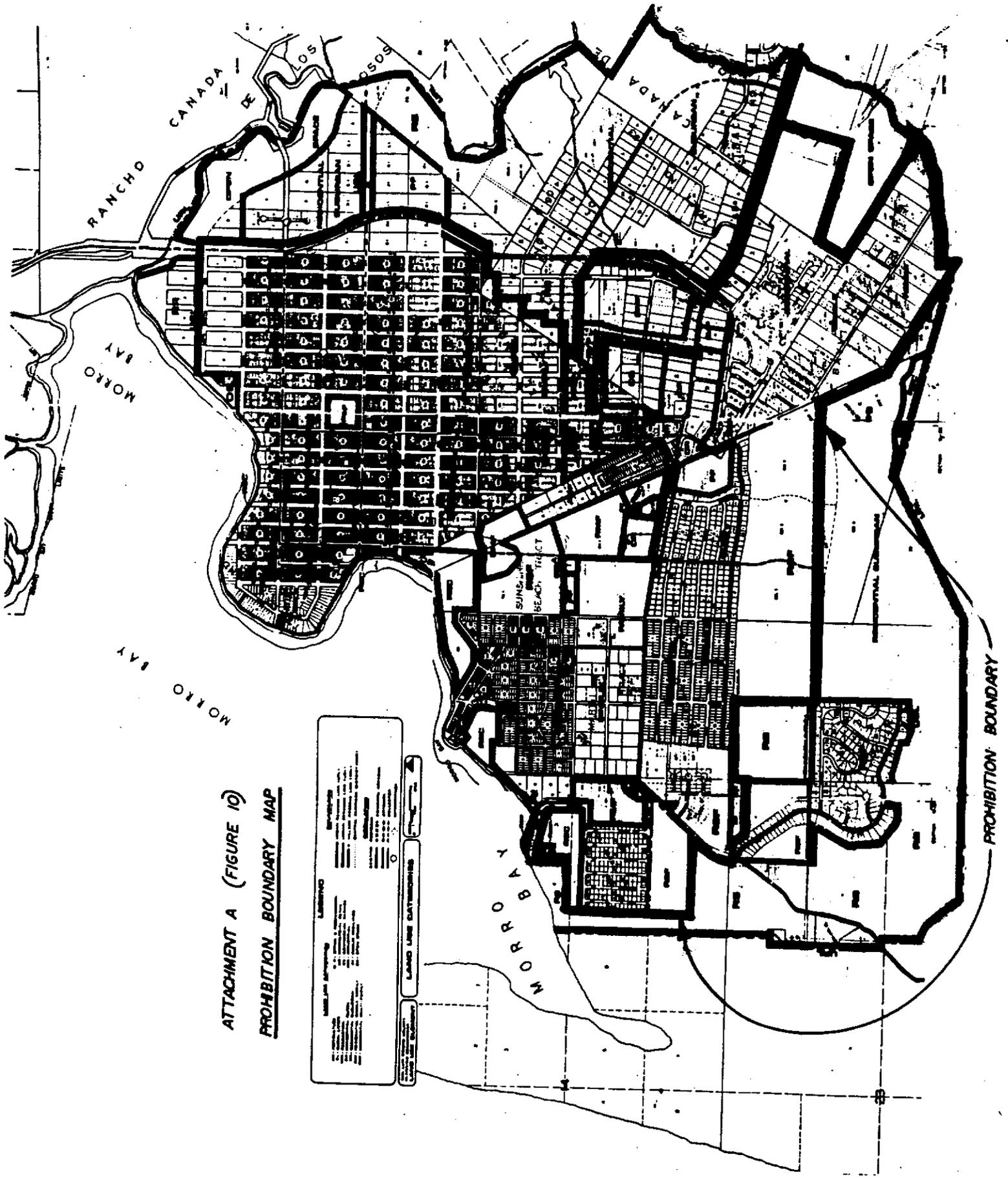
BE IT FURTHER RESOLVED, that if the Board holds a hearing and adopts an immediate prohibition as described above, the prohibition is effective as of the date the Regional Water Quality Control Board adopts a prohibition of discharge from additional individual and community sewage disposal systems.

BE IT FURTHER RESOLVED, the Executive Officer of the Regional Board is hereby directed to submit this revision of the Basin Plan to the State Water Resources Control Board for approval pursuant to Section 13245 of the California Water Code.

BE IT FURTHER RESOLVED, upon approval by the State Water Resources Control Board, Chapter 5 of the Water Quality Control Plan is revised by the addition of the above prohibition.

I, KENNETH R. JONES, Executive Officer of the California Regional Water Quality Control Board, Central Coast Region, do hereby certify the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Central Coast Region, on September 16, 1983.


Executive Officer



ATTACHMENT A (FIGURE 10)
PROHIBITION BOUNDARY MAP

LAND USE DESIGNATIONS	
[Symbol]	RESIDENTIAL
[Symbol]	COMMERCIAL
[Symbol]	INDUSTRIAL
[Symbol]	AGRICULTURAL
[Symbol]	UNDEVELOPED
[Symbol]	WATER
[Symbol]	ROADS
[Symbol]	RAILROADS
[Symbol]	UTILITIES
[Symbol]	BOUNDARIES
[Symbol]	PROHIBITION BOUNDARY

PROHIBITION BOUNDARY

APPENDIX A-31

Preliminary List of Potential Toxic Hot Spots

**PRELIMINARY LIST OF
POTENTIAL
TOXIC HOT SPOTS
REGION 3**

Water Body	Segment	Known or Potential	Constituents	Supporting Information
Carmel Bay	Estuary and Bay	Potential	Silver, Zinc, cadmium, in shellfish	SMW 1978-79, 1983-89, 1991 TSM 1988 Carmel Valley Wastewater Study, HPLMD, 1981 (at Cal Poly Library) Wastewater Monitoring Program, Carmel Sanitation District, 1981 Carmel WTP NPDES monitoring
Santa Cruz Harbor	same	Potential	Cadmium and Copper	SMW 1980-81, 1989-90 Monterey County Bacteria monitoring, 1981-89 Santa Cruz WTP NPDES monitoring
Santa Barbara Harbor	same	Potential	Mercury, zinc, copper in shellfish	SMW 1988-90 RWOCB Bacteria Study 1988 Santa Barbara WTP NPDES monitoring RWOCB Bacteria Study 1992
San Luis Harbor	same	Potential	Possible metals and hydrocarbons from oil facilities	SMW 1983-91 Avila NPDES Permit monitoring (County Water District) Unocal Pipeline Investigation Reports (Dames & Moore), Avila Facility
San Luis Creek	Estuary	Potential	Bacteria, Sulfur, pesticides, fertilizers	SMW 1989-92 SLO Creek Restoration Plan, SLO County Land Conservancy, 1988 SLO Creek Water Quality Study, 1986 RWOCB Nutrient Study, 1983 DWR Water Quality Survey 1980 RWOCB Prop 65 Sampling, year? Invertebrate and Toxicity Testing, year? TSM 1989-90 San Luis Obispo WTP NPDES monitoring
Monterey Bay	Monterey Harbor	Potential	Lead in shellfish and sediments Possible TBT in sediments	SMW 1978-89 RWOCB report 1988 IT Corp report 1990 (Southern Pacific Railroad lead cleanup) TSM 1987-90
Morro Bay	same	Potential	Possible pesticides, bacteria, metals, TBT	DWS report 1985 Morro Bay WTP NPDES monitoring SMW 1978-90 RWOCB report 1986 PG&E Morro Bay NPDES monitoring

**PRELIMINARY LIST OF
POTENTIAL
TOXIC HOT SPOTS
REGION 3**

Water Body	Segment	Known or Potential	Constituents	Supporting Information
Monterey Bay	Elkhorn Slough	Potential	Pesticides in shellfish	SMW 1979-89 PG&E Moss Landing NPDES Permit monitoring TSM 1988 DHS Shellfish Study, 1989 SURCB/EPA Water Quality Study, 205j study, date ?
Monterey Bay	Moss Landing Harbor	Potential	Pesticides & bacteria in shellfish, TBT	SMW 1984, 1987-89 PG&E Moss Landing NPDES monitoring TSM 1988-90
Goleta Slough/ Estuary	same	Potential	Bacteria in shellfish & copper in water, Metals in sediments	Goleta Sanitary District NPDES monitoring SMW 1988-90 TSM 1988-89 RWQCB ag drain study 1988
Monterey Bay	Harkins Slough	Potential	Pesticides in fish and shellfish	SMW 1987-88 TSM 1985-86, 1988
Monterey Bay	Moro Cojo Slough	Potential	Pesticides in shellfish	SMW 1983, 1989
Monterey Bay	Tembladero Slough	Potential	Pesticides in fish	TSM 1983-84
Salinas River	Salinas River Lagoon	Potential	Pesticides in fish and shellfish	SMW 1984 TSM 1983 Biotic Assessment Salinas River Lagoon, Harvey and Stanley, 1988 Salinas River Lagoon Study, for MRWPCA by Ecomar, 1982 Lower Salinas River Ecological Study, Engineering Science, 1980 DHS Sanitary Eng. Investigation, Lower Salinas River, Rec. Canal, and Blanco Drain, 1971

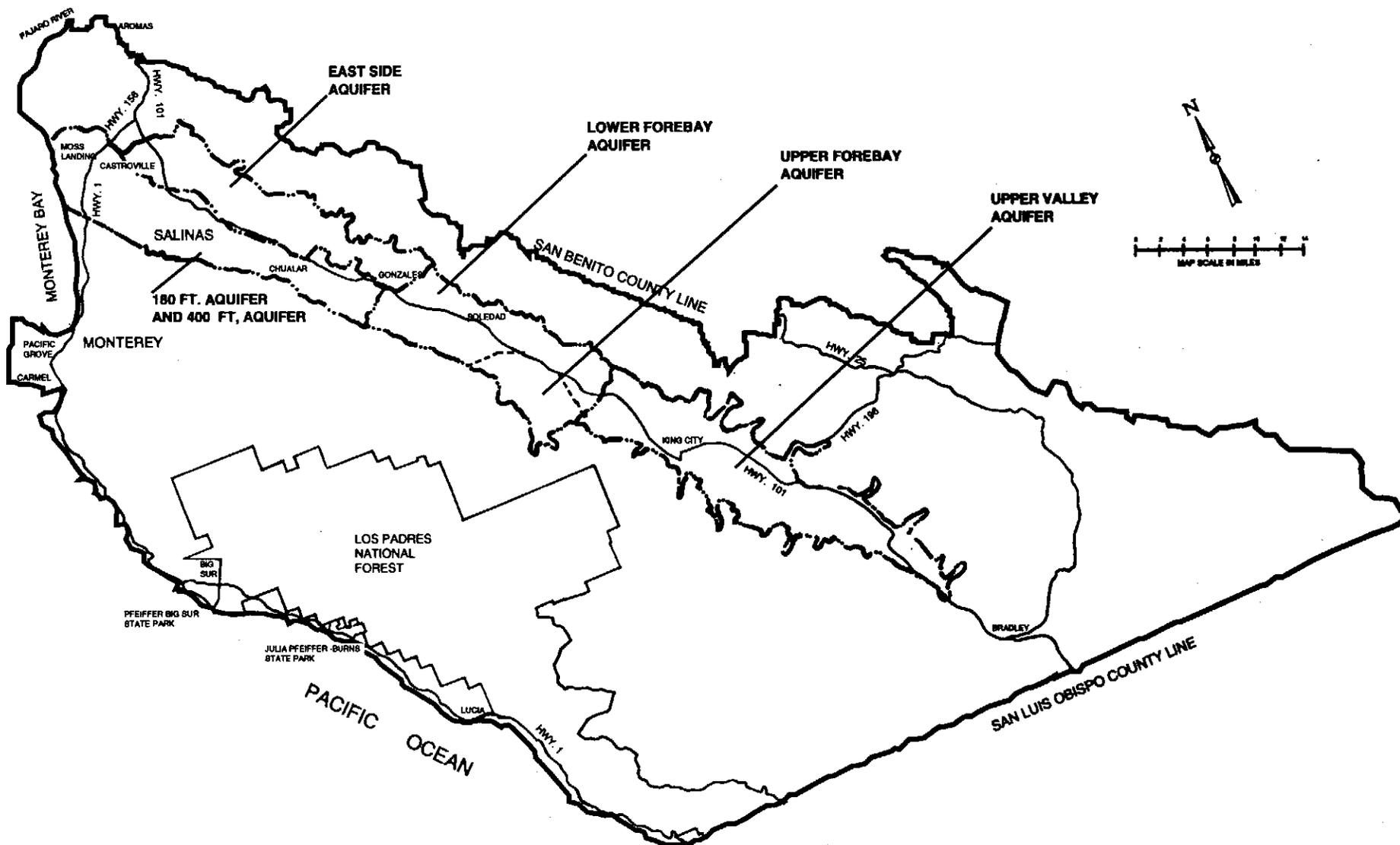
PRELIMINARY LIST OF
POTENTIAL
 TOXIC HOT SPOTS
 REGION 3

Water Body	Segment	Known or Potential	Constituents	Supporting Information
Monterey Bay	Espinosa Slough & Salinas Rec. Canal	Potential	Pesticides in fish and shellfish	SMW 1984-88 TSM 1984-88 DHS Sanitary Eng. Investigation, Lower Salinas River, Rec. Canal, and Blanco Drain, 1971 Abbot Street Properties NPDES monitoring Christian Salveson NPDES monitoring Shippers Development Co. NPDES monitoring
Salinas River	Old Salinas River Estuary	Potential	Pesticides in fish and shellfish	SMW 1984-85 TSM 1982-83 Biotic Assessment of Old Salinas River & Tembladero Slough, Harvey and Stanley, 1988
Monterey Bay	Watsonville Slough & Pajaro Slough	Potential	Pesticides in fish and shellfish	SMW 1983-84, 1986, 1988 TSM 1982, 1984-86, 1988

mt/THS.lst/E

APPENDIX A-32

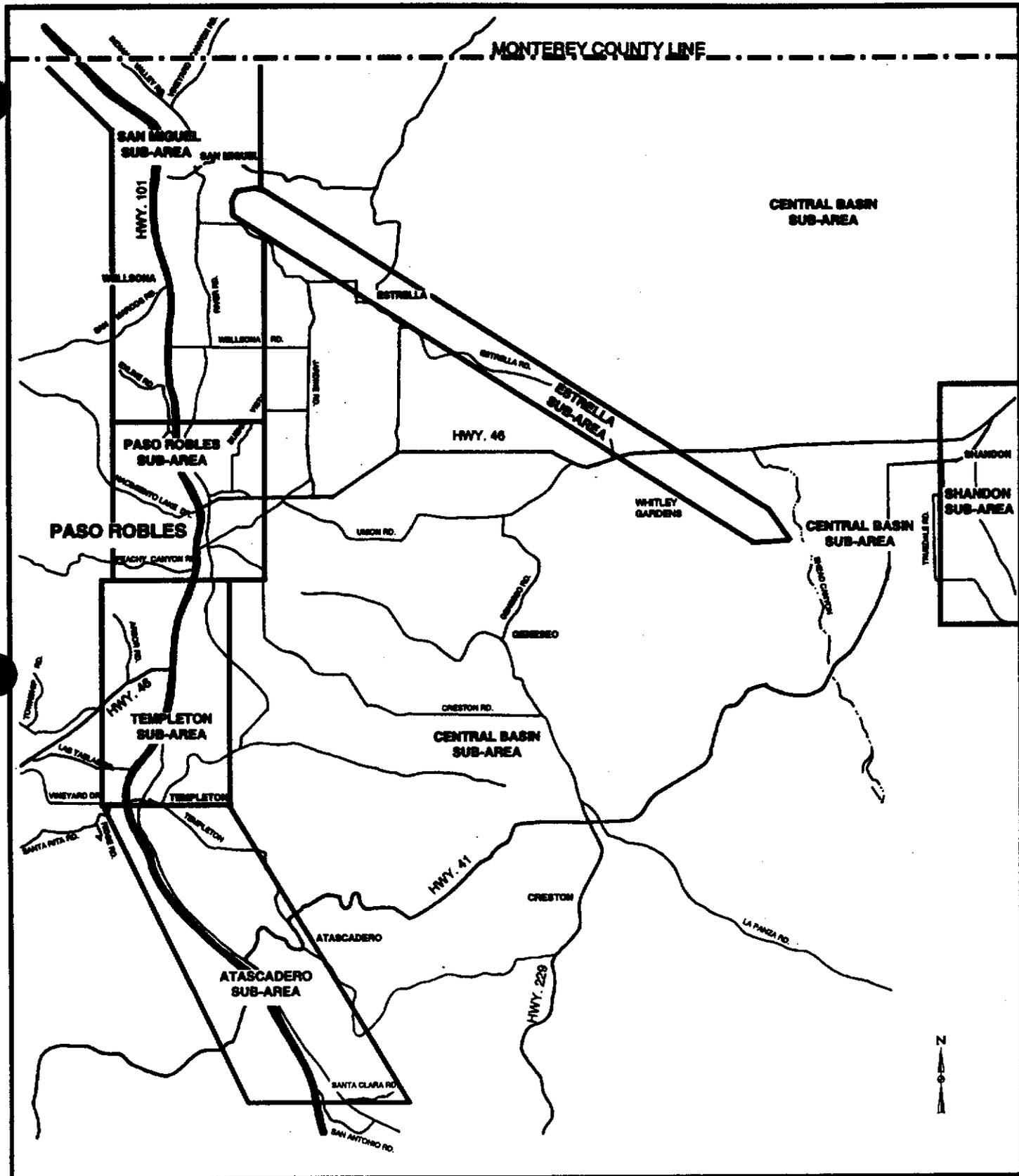
Salinas Ground Water Basin and Sub-Areas



**SALINAS
GROUND WATER
SUB-AREAS**

APPENDIX A-33

Paso Robles Ground Water Basin and Sub-Areas

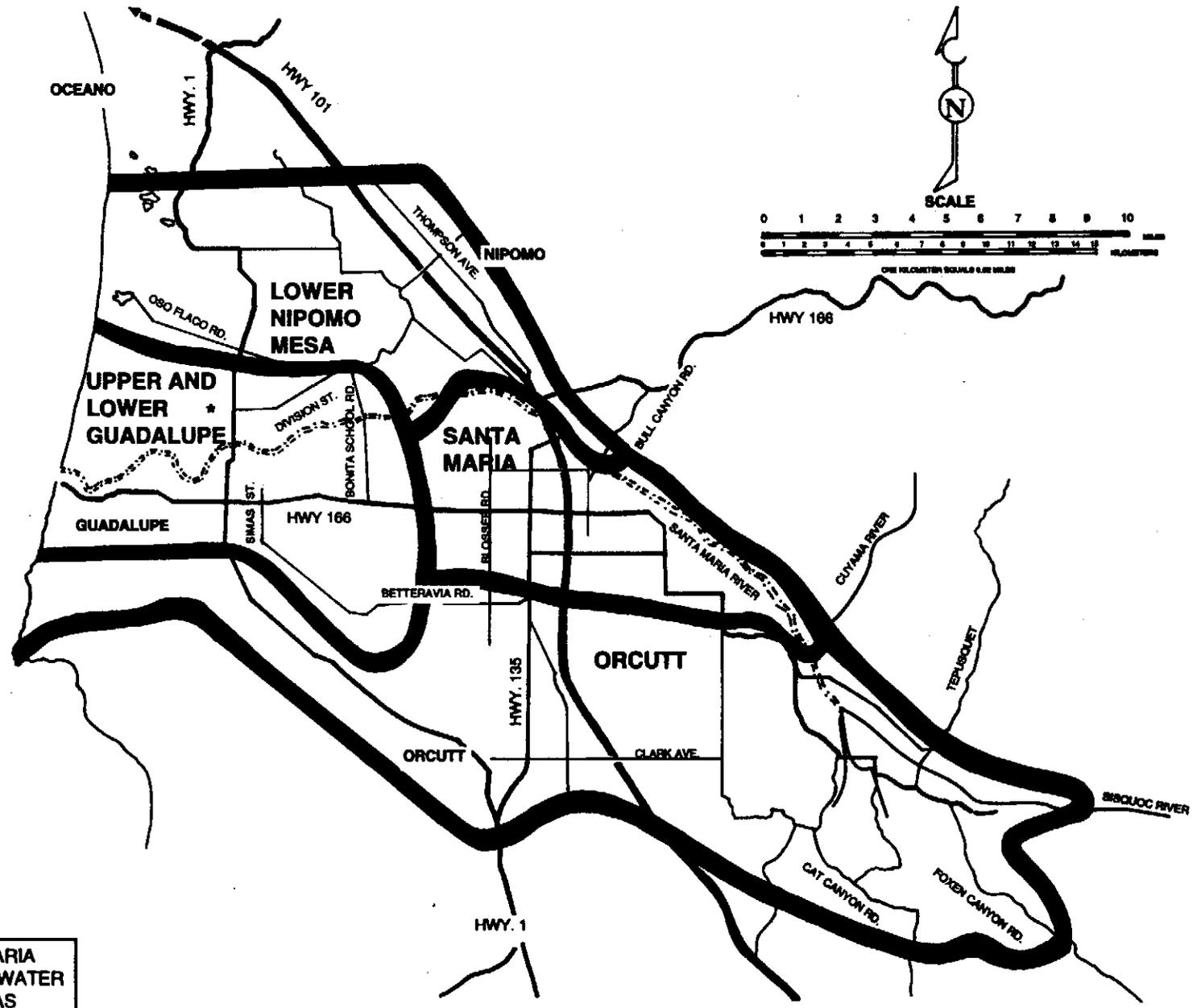


**PASO ROBLES
GROUND WATER BASIN AND
SUB-AREAS**

APPENDIX A-34

Santa Maria Ground Water Basin and Sub-Areas

PACIFIC OCEAN

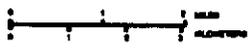
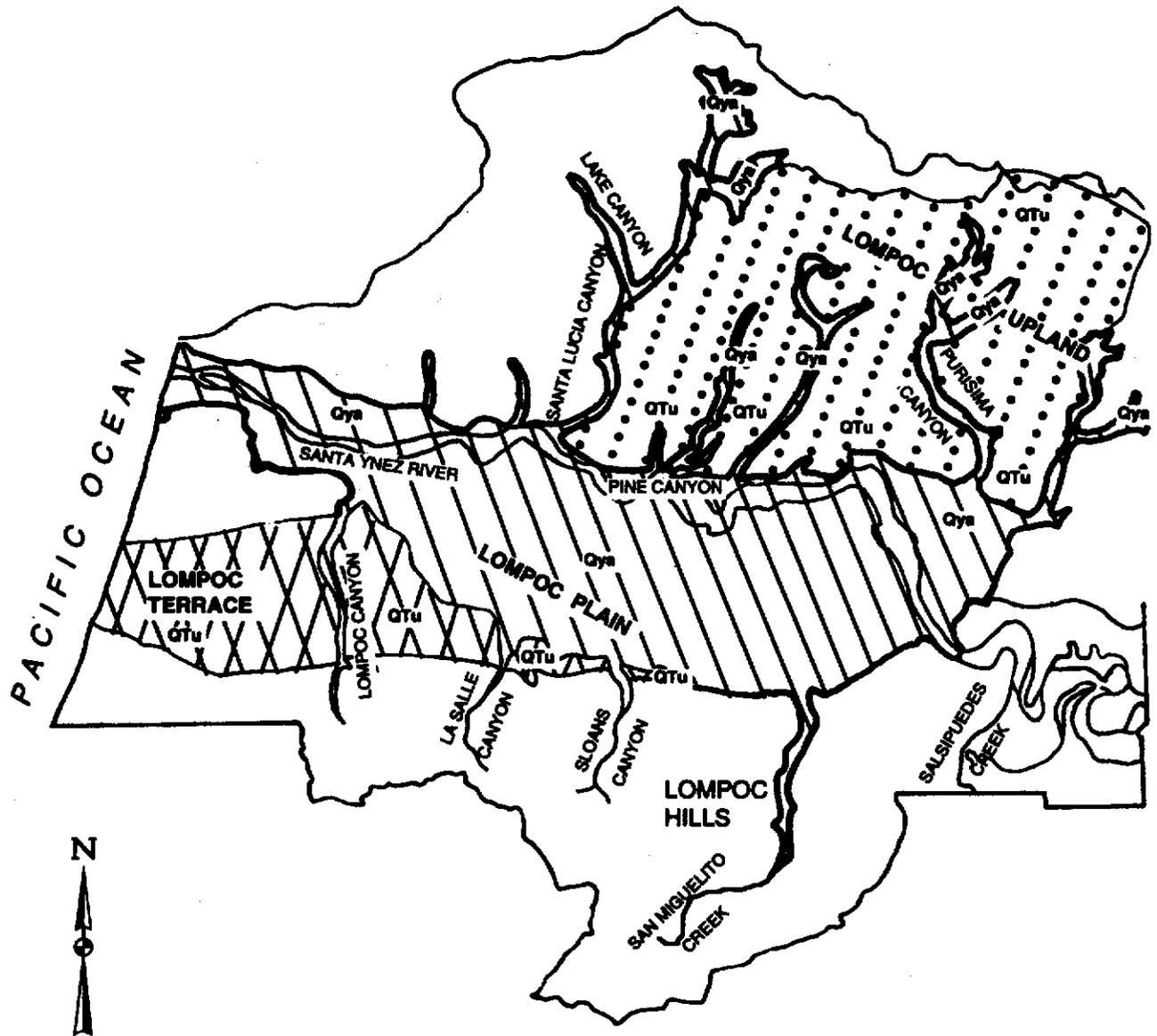


SANTA MARIA
GROUND WATER
SUB-AREAS

* (LOWER GUADALUPE IS 80 FEET BELOW GROUND SURFACE)

APPENDIX A-35

Lompoc Ground Water Basin and Sub-Areas



**LOMPOC
GROUND WATER
SUB-AREAS**

Qys— YOUNGER ALLUVIUM OF HOLOCENE AGE—Sand, gravel, silt, and some clay; beneath LompoC plain upper member predominantly sand and silt; lower member predominantly gravel and sand.

QTu— TERRACE DEPOSITS, ORCUTT SAND, PASO ROBLES FORMATION, AND CAREAGE SAND OF PLIOCENE AGE—Sand, gravel, silt, and some clay.

 LOMPOC TERRACE

 LOMPOC PLAIN

 LOMPOC UPLAND

 CONSOLIDATED ROCKS OF TERTIARY AGE—Mostly sandstone, shale, diatomite, and mudstone of the Monterey, Siqoc, and Foxen Formations.