

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
Central Valley Region

Resolution No. 73-129

Concerning
REVISION AND AMENDMENT OF WATER QUALITY CONTROL PLAN
(Interim)

BASIN 5A Sacramento River Basin
BASIN 5B Sacramento-San Joaquin Delta Basin
BASIN 5C San Joaquin River Basin
BASIN 5D Tulare Lake Basin

WHEREAS, the California Regional Water Quality Control Board, Central Valley Region, did on June 15, 1971, adopt a Water Quality Control Plan (Interim), Basins 5A, B, C and D (hereafter "Interim Plan"), which Interim Plan has been heretofore amended; and

WHEREAS, the California Regional Water Quality Control Board, Central Valley Region, after public hearing in accordance with Water Code Section 13244, has determined that said Interim Plan, as amended, requires further revision and amendment;

NOW, THEREFORE, BE IT RESOLVED that said Interim Plan is hereby revised and amended in the following particulars:

1. Chapters V, VII and Appendix A of said Interim Plan is revised to read in accordance with Chapters, V, VII and Appendix A attached hereto and incorporated herein.
2. Chapter VI of said Interim Plan is revised by addition of the prohibitions which are listed in Chapter VI attached hereto and incorporated herein.

BE IT FURTHER RESOLVED that the Executive Officer of this Regional Board is hereby directed to submit said Interim Plan, as amended and revised, to the State Water Resources Control Board for approval pursuant to Water Code Section 13245.

I, JAMES A. ROBERTSON, Executive Officer of the California Regional Water Quality Control Board, Central Valley 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 Valley Region, on December 15, 1972.



Executive Officer

CHAPTER V

POLICY GUIDELINES

To insure that the beneficial uses of the water resources of the Central Valley Region are preserved for future Californians, the State Water Resources Control Board and the Regional Board have adopted the following goals and management principles to guide the formulation of water quality objectives and wastewater facilities plans.

STATE WATER QUALITY CONTROL

POLICY

The State Water Resources Control Board adopted by motion of 6 July 1972 the STATE POLICY FOR WATER QUALITY CONTROL. The Foreword and General Principles of this policy are set forth below.

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:

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 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

^{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.

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.

A revised Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California was adopted by the State Board on 18 May 1972. In addition to specific water quality objectives, the Plan contains a statement of General Water Quality Provisions which follows:

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 $1\frac{1}{2}^{\circ}\text{F}$ 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. An exception to the specific water quality objectives of this plan may be authorized by a regional board for a specific discharge upon a finding following public hearing that:
 - A. An elevated temperature waste discharge in compliance with modified objectives will result in the enhancement of beneficial uses as compared to pre-discharge conditions, or
 - B. The use of heat on an intermittent basis to control fouling organisms in intake and discharge structures will result in less potential for deleterious effects upon beneficial uses than other alternative methods (heat, in addition to that required for cleaning of intake and discharge structures, shall not be used for cleaning of condenser units), or
 - C. Changes in existing discharge structures or their operation to obtain compliance with water quality objectives would result in an environmental impact greater than would occur with modified water quality objectives, or
 - D. Compliance by existing dischargers with specific water quality objectives would require modification of operations or facilities not commensurate with benefit to the aquatic environment.

Such authorization shall be effective only upon concurrence by the State Board and the Environmental Protection Agency.

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.

GUIDELINES FOR SOLID WASTE DISPOSAL

In the establishment of requirements for the disposal of solid wastes, the Regional Board will be guided by the classification of solid waste disposal sites and the corresponding limitation on materials which may be deposited therein as described in the California Administrative Code, Title 23, Chapter 3, Subchapter 15 - Waste Disposal to Land.

REGIONAL WATER QUALITY CONTROL POLICY

GOALS

The water quality objectives developed in this plan are directed toward implementing the following goals of the California Regional Water Quality Control Board, Central Valley Region.

1. Protect and enhance all basin waters, surface and underground, fresh and saline, for present and anticipated beneficial uses.

2. Maximize the use of municipal and industrial wastewaters as part of an integral system of fresh-water supplies to achieve maximum benefit of fresh-water resources.
3. Review waste treatment systems to assure that effective treatment and adequate capacity are available at all times.
4. Develop a planned system for water use and waste discharge to assure protection of aquatic resources for future beneficial uses, in order to achieve harmony with the natural environment.

MANAGEMENT PRINCIPLES

To implement these goals the Regional Board will direct its activities toward the following:

1. Waste discharges to receiving waters which are intermittent or have limited dilution capacity will not be considered permanent solutions.
2. Wherever feasible water quality control systems throughout the basin shall provide for eventual wastewater reclamation.
3. Waste sources and independent treatment facilities shall be consolidated where practical, and plans shall direct these consolidated systems to maximize their capacities for wastewater reclamation in order to assure efficient management of wastes and meet potential demands for reclaimed water.
4. Land use practices must assure protection of beneficial water uses and aquatic environmental values.
5. Promote rapid development of treatment and discharge systems which will provide for fail-safe protection of beneficial uses and aquate environmental values.
6. Require both source control and pretreatment to assure continuous adequacy of wastewater treatment and to protect the quality of receiving waters.
7. Programs shall provide for appropriate disposition of surplus reclaimed water, and of usable and unusable residues of reclamation processes.
8. Wastewater treatment facilities in conjunction with source control and pre-treatment must be capable of controlling the quality of reclaimed water and the composition and concentration of residues from reclamation processes.
9. Industrial and municipal effluents shall contain essentially none of the following substances:

- Chlorinated hydrocarbons
- Toxic substances
- Radioactive substances
- Certain grease, oil and phenolic compounds
- Mercury or mercury compounds
- Excessively acidic and basic substances
- Heavy metals such as lead, copper, zinc, etc.
- Other deleterious substances

10. Sewering entities should implement comprehensive regulations to prohibit the discharge to the sewer system of those substances listed in paragraph nine (9) which may be controlled at their source.
11. Sewering entities should implement comprehensive industrial waste ordinances to control the quantity and quality of organic compounds, suspended and settleable substances, dissolved solids, and all other materials which may adversely effect the operation of a master municipal treatment facility.
12. Applicants for state and federal grants for construction of waste treatment facilities shall be required to submit proof of implementation of adequate source control and of industrial waste ordinances.
13. Wastewaters percolated into the ground waters shall be of such quality at the point where they enter the ground so as to assure the continued usability of all ground waters of the State.
14. In all ground water basins known to have an adverse salt balance, the incremental addition of salts to the waste discharge shall not exceed that which normally results from domestic use; control of salinity shall be required by local ordinances which effectively limit municipal and industrial contributions to the sewerage system.
15. Land discharge systems shall generally be designated for and be capable of year-round operation without direct surface discharge to surface waters.
16. Ground water recharge with high quality water will be encouraged.
17. Disposal of economically reclaimable wastewater by evaporation will be discouraged.

GUIDELINES FOR ESTABLISHING WASTE DISCHARGE REQUIREMENTS

Because of continuing population increase and economic development within the Central Valley Region higher levels of waste treatment will be needed to provide positive protection to the public health and to maintain and enhance the quality of the surface and ground water resources in the region. To this end, the following guidelines will be used by the regional board and its staff in the formulation and prescription of waste discharge requirements in the Central Valley Region:

1. Waste discharge requirements for direct discharges to surface or ground waters will generally prescribe numerical limits which will require:
 - A. Substantially complete removal of all floatable and settleable solids.
 - B. Removal of sufficient biochemical oxygen demand to produce a well stabilized effluent. Eighty-five percent removal will be a guide in achieving this end.
 - C. Removal of suspended solids to the extent necessary to achieve adequate disinfection.
 - D. Disinfection when necessary prior to discharge.
 - E. That no substances known to be toxic be present in concentrations deleterious to plant or animal life.
2. In areas having suitable terrain, isolation, soil cover, and ground and surface water conditions this Board will encourage the use of land disposal techniques.
3. Pre-treatment of wastes will be required for land disposal operations where the Board determines that this is necessary to prevent nuisance conditions and/or to protect ground or surface water quality.
4. Requirements for waste discharges to waters having a specific conductance of less than 150 micromhos will generally prescribe numerical limits which will require:
 - A. Complete removal of settleable and floatable solids.
 - B. Substantially complete removal of suspended solids and biochemical oxygen demand.
 - C. Nutrient removal where necessary to control bio-stimulation.
 - D. Disinfection to achieve substantially complete removal of coliform bacteria.
 - E. Where necessary, removal of dissolved solids to levels consistent with those of the receiving waters.
 - F. Substantially complete removal of substances known to be toxic to plant and/or animal life.
5. This Board expects that industries contributing to public sewerage systems will provide any pre-treatment necessary to prevent adverse effects on the community waste collection

systems and on the waste treatment processes and equipment. All entities providing sewage collection and treatment services should adopt industrial waste discharge regulations or ordinances which will provide the degree of control necessary to this end.

6. This Board recommends that careful land use planning be accomplished and implemented in the vicinity of waste disposal facilities toward the end of avoiding land use conflicts and potential modifications of plant equipment and procedures in the future because of conflicts with adjoining land uses not otherwise necessarily related strictly to water quality requirements.
7. This Board reaffirms that these guidelines will be used in the formulation and establishment of waste discharge requirements. These requirements will be considered on a case-by-case basis and each existing discharger will be given a reasonable time within which to bring his discharge into compliance.
8. The Board will fully support applications for federal and state grants-in-aid available to waste dischargers for the construction of facilities to comply with regional board requirements in accordance with regional plans for water quality control.

GUIDELINES FOR WASTE DISPOSAL FROM LAND DEVELOPMENTS

Section 13260 of the Porter-Cologne Water Quality Control Act requires any person discharging waste or proposing to discharge waste to file a report of the discharge containing such information as may be required by the Board. In the early 1950's, the Board waived the filing of reports for discharges from individual sewage disposal systems in those counties having satisfactory ordinances or regulations. Traditionally these individual discharges have been treated by septic tank - leaching systems.

The Board has recently reviewed the septic tank - leaching system ordinances and regulations of many of the counties within the Central Valley. Most of the counties have adopted satisfactory ordinances or are currently considering the adoption of more restrictive ordinances.

The Water Quality Control Act requires local governmental agencies to notify the Board of the filing of tentative subdivision maps or applications for building permits involving six or more family units except where the waste is discharged to a community sewer system.

The Board believes that control of individual waste treatment and disposal systems can best be accomplished by local County Environmental Health Departments if these departments are strictly enforcing an ordinance that is designed to provide complete protection to ground and surface waters and to the public health.

The following principles and policies will be applied by the Board in review of water quality factors related to land developments and waste disposal from septic tank - leaching systems:

1. There are great differences in the geology, hydrology, geography and meteorology of the 40 counties which lie partially or wholly within the Central Valley. The criteria contained herein are considered to be minimally applicable to the Central Valley and pertain to: (a) all new tentative maps, (b) all new divisions of land, and (c) all final maps for which new tentative maps were not filed after December 15, 1971. Local agencies and the Board may adopt and enforce more stringent regulations which recognize particular local conditions that may be limiting to wastewater treatment and disposal.
2. The Board does not intend to preempt local authority and will support local authority to the fullest extent possible. Where local authority demonstrates the inability or unwillingness to meet or exceed the provisions of these guidelines, the Board intends to withdraw its waiver concerning waste disposal from individual systems and will require each and every party proposing to discharge waste to submit a report of waste discharge as required by Section 13260 of the Porter-Cologne Water Quality Act.
3. Evaluation of the capability of individual waste treatment systems to achieve continuous safe disposal of wastes requires detailed local knowledge of the area involved. The experience and recommendations of local agencies will, therefore, be an important input to the information upon which the Board will base its decision.
4. There are many areas within the Central Valley that are not conducive to individual waste treatment and disposal systems. In these areas, connection to an adequate community sewerage system is the most satisfactory method of disposing of sewage. The Board believes that individual disposal systems should not be used where community systems are available and that every effort should be made to secure public sewer extensions, particularly in urban areas. Where connection to a public sewer is not feasible and a number of residences are to be served, due consideration should be given to construction of a community sewage treatment and disposal system.
5. The installation of individual disposal systems, especially in large numbers, creates discrete discharges which must be considered on an individual basis. The life of such disposal system may be quite limited. Failures, once they begin in

an area, generally will occur on an areawide basis. Further, regular maintenance is important to successful operation of individual disposal systems. To assure continued protection of water quality, to prevent water pollution and to avoid the creation of public health hazards and nuisance conditions, a public entity^{1/} must be formed with powers and responsibilities defined herein for all subdivisions having 100 lots or more. Subdivisions with less than 100 lots which threaten to cause water quality or public health problems will also be required to form a public entity.

CRITERIA FOR SEPTIC TANK - LEACHING SYSTEMS

The following criteria will be applied to assure continued preservation and enhancement of State waters for all present and anticipated beneficial uses, prevention of water pollution, health hazards and nuisance conditions. These criteria prescribe minimum conditions for waste disposal from septic tank - leaching systems for single family residential units or the equivalent and do not preclude the establishment of more stringent criteria by local agencies or the Board. The Board will prohibit the discharge from septic tank - leaching systems which do not conform to these criteria.

Minimum Distances

The Board has determined the following minimum distances are necessary to provide protection to water quality and/or public health.

^{1/} Public Entity - A local agency, as defined in the State of California Government Code Section 53090 et seq., which is empowered to plan, design, finance, construct, operate, maintain, and to abandon, if necessary, any sewerage system or the expansion of any sewerage system and sewage treatment facilities serving a land development. In addition, the entity shall be empowered to provide permits and to have supervision over the location, design, construction, operation, maintenance, and abandonment of individual sewage disposal systems within a land development, and shall be empowered to design, finance, construct, operate, and maintain any facilities necessary for the disposal of wastes pumped from individual sewage disposal systems and to conduct any monitoring or surveillance programs required for water quality control purposes. (Unless there is an existing public entity performing these tasks.)

DISTANCE IN FEET

| <u>Facility</u> | <u>Domestic Well</u> | <u>Public Well</u> | <u>Flowing Stream¹</u> | <u>Drainage Course Or Ephemeral Stream²</u> | <u>Cut Or Fill Bank³</u> | <u>Property Line⁴</u> | <u>Lake or Reservoir⁵</u> |
|---------------------------|----------------------|--------------------|-----------------------------------|--|-------------------------------------|----------------------------------|--------------------------------------|
| Septic tank or sewer line | 50 | 100 | 50 | 25 | 10 | 25 | 50 |
| Leaching field | 100 | 100 | 100 | 50 | 4h | 50 | 200 |
| Seepage pit | 150 | 150 | 100 | 50 | 4h | 75 | 200 |

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1. As measured from the line which defines the limit of a 100-year frequency flood.
 2. As measured from the edge of the channel.
 3. Distance in feet equals four times the vertical height of the cut or fill bank. Distance is measured from the top edge of the bank.
 4. When individual wells are used.
 5. As measured from the high water line.

Minimum Criteria

1. The percolation rate in the disposal area shall not be greater than 60 minutes per inch, OR not greater than 30 minutes per inch if seepage pits are proposed.
2. Soil depth below the bottom of the leaching trench or seepage pit shall not be less than 5 feet.
3. Depth to ground water below the bottom of the leaching trench or seepage pit shall not be less than 5 feet. Greater depths are required if soils do not provide adequate filtration.
4. Ground slope in the disposal area shall not be greater than 30 percent.

5. The minimum disposal area shall conform to the following:

| <u>Percolation Rate (minutes/inch)^{1/}</u> | <u>Minimum Usable Disposal Area (ft²)^{2/}</u> |
|---|---|
| 41-60 | 12,000 |
| 21-40 | 10,000 |
| 11-20 | 8,000 |
| Less than 10 | 6,000 |

1/ Determined in accordance with procedures contained in current U. S. Department of Health, Education and Welfare "Manual of Septic Tank Practice" or a method approved by the Executive Officer.

2/ Areas that are within the minimum distances which are necessary to provide protection to water quality and/or public health shall not be used for waste disposal. The following areas are also considered unsuitable for the location of disposal systems or expansion area:

- a. Areas within any easement which is dedicated for surface or subsurface improvement.
- b. Paved areas.
- c. Areas not owned or controlled by property owners unless said area is dedicated for waste disposal purposes.
- d. Areas occupied or to be occupied by structures.

Evaluation Procedures

A number of factors affect the capability of individual septic tank - leaching systems to provide safe continuous disposal of wastes. Those factors which come within the purview of the Board, in that the Board may specify conditions or areas where the discharge of waste will not be permitted, are soil absorption capability, soil depth, depth to ground water, and slope.

Any one of these factors may in itself limit the system capability, however, the general case is that system capability is affected by all factors acting simultaneously. The preceding minimum criteria establish conditions which will eliminate undue influence of a single factor upon system reliability but do not recognize the interplay among all factors. Compliance with only minimum criteria, therefore, will not necessarily result in an acceptable system.

The following procedure has been formulated to recognize the interplay among the factors listed above. The procedure utilizes the minimum criteria contained herein as a base, and credits those factors which are in excess of the minimum criteria. Compliance

with the following point system should minimize problems which occur due to concentrating large quantities of waste in limited areas.

Point allowances are calculated for each factor. The sum of the point allowances establishes the suitability of the system. A suitable disposal area for a septic tank - leaching system from a single family residence must total a minimum of 45 points.

I. Soil Absorption Capacity

| <u>Percolation Rate (minutes per inch)</u> | <u>Minimum Usable Disposal Area (ft²)</u> | <u>Point Allowance for Expansion Area</u> |
|--|--|---|
| 41-60 | 12,000 | 2/1,000 ft ² over 12,000 ft ² |
| 21-40 | 10,000 | 2/1,000 ft ² over 10,000 ft ² |
| 11-20 | 8,000 | 2/1,000 ft ² over 8,000 ft ² |
| Less than 10 | 6,000 | 2/1,000 ft ² over 6,000 ft ² |

II. Depth of Soil or Ground Water, whichever is more restrictive

| <u>Depth in feet^{1/}</u> | <u>Point Allowance</u> |
|-----------------------------------|------------------------|
| 5-10 | 5 |
| 11-15 | 15 |
| 16-20 | 20 |
| Greater than 20 | 25 |

III. Slope in Disposal Area

| <u>Slope, %</u> | <u>Point Allowance</u> |
|-----------------|------------------------|
| 21-30 | 0 |
| 11-20 | 15 |
| 10 or Less | 30 |

^{1/} Depth below the bottom of the leaching trench or seepage pit to water, rock or first impervious layer.

Implementation

1. The Board will review local ordinances for the control of individual waste disposal systems and will request local agencies to adopt criteria which are compatible with or more stringent than these guidelines.

2. In those counties which have implemented the guidelines, the Board will pursue the following course of action for discharges from individual septic tank - leaching systems.
 - a. Land developments consisting of five or less family units will be processed entirely by the county.
 - b. Tentative maps for land developments containing less than 100 lots shall be transmitted to the Board along with sufficient information^{1/} to clearly determine that the proposed development will meet these guidelines. The Board may require a public entity if potential water quality or public health problems are anticipated.
 - c. Tentative maps for land developments containing 100 lots or more shall be transmitted to the Board. The map shall be accompanied by a report of waste discharge and sufficient information to clearly determine that the proposed development will meet these guidelines. A public entity is required prior to any discharge of waste.
3. The Board will prohibit the discharge of wastes from land developments which threaten to cause water pollution, quality degradation, or the creation of health hazards or nuisance conditions. These guidelines will be used to evaluate potential water quality or health problems. In certain locations and under special circumstances, the Board's Executive Officer may waive individual criteria or he may waive the formation of a public entity. Land developers are to be aware that a waiver by the Executive Officer is not binding on any local entity.

Examples of these special circumstances would be:

- a. Short time, interim use of individual septic tank - leaching systems may be acceptable if sufficient, dependable funding of community collection, treatment and disposal is demonstrated.
- b. A failure to meet the minimum criteria could be negated by other favorable conditions. For example, the installation of individual septic tank - leaching system may be allowed in areas steeper than 30% if percolation rates are good, soil is deep and available disposal areas are large.

^{1/} The Board's staff will develop guidelines pertaining to the necessary reports, maps, etc., that must be submitted in order to evaluate proposed land developments. These guidelines will be circulated to local agencies, developers, and consulting engineers.

4. Severe impact on water quality has resulted from improper storm drainage and erosion control. Land developers must provide plans for the control of such runoff from initial construction up to complete buildout of the development.
5. The disposal of solid waste can have an impact on water quality and public health. Land developers must submit a plan which conforms to the regional or county master plan and contains adequate provisions for solid waste disposal for complete buildout of the development.
6. The disposal of septic tank sludge is an important part of any area wide master plan for waste disposal. Land developers must submit a plan which conforms to the regional or county master plan and contains adequate provisions for septic tank sludge disposal for complete buildout of the development.
7. The responsibility for the timely submittal of information necessary for the Board to determine compliance with these guidelines rests with persons submitting proposals for development or discharge. The Porter-Cologne Water Quality Control Act provides that no person shall initiate any new discharges of wastes prior to filing a report of waste discharge and prior to (1) issuance of waste discharge requirements, (2) the expiration of 120 days after submittal of an adequate report of waste discharge, or (3) the issuance of a waiver by the Regional Board.
8. A report of waste discharge which does not provide the information required by these guidelines is an inadequate report. The 120 day time period does not begin until an adequate report has been submitted. Thus to avoid extensive delay, every effort should be made to comply with these guidelines at the earliest possible date during formulation of proposals.

CHAPTER VI

DISCHARGE PROHIBITIONS

1. The discharge of wastes within the following areas from leaching or percolation systems installed after January 1, 1973, is prohibited. An exemption to this prohibition may be granted after presentation by the proposed discharger of geologic and hydrologic evidence that leaching system disposal will not, individually or collectively, result in a pollution or nuisance.
2. The discharge of waste within the following areas from leaching or percolation systems is prohibited after July 1, 1976. An exemption to this prohibition may be granted whenever the Regional Board finds that the continued operation of septic tanks, cesspools, or other means of disposal in a particular area will not, individually or collectively, directly or indirectly, adversely affect water quality.

Areas:

- a. Amador City, Amador County
All area within the incorporated City.
- b. Martell Area, Amador County
All area within Sections 17, 18, 19, 20, 29 and 30, T6N, R11E, MDB&M.
- c. Shasta Dam Area Public Utility District, Shasta County
All area within the boundaries of the Public Utility District.
- d. Vallecito Area, Calaveras County
All area encompassed within Calaveras County Health Department 1971 Survey.
- e. West Point Area, Calaveras County
All area encompassed within Calaveras County Health Department 1971-1972 Survey.
- f. Snelling Area, Merced County
All area within the S $\frac{1}{2}$ of Section 4 and those portions of Sections 2, 3, 9, 10, 11 and 12 between Merced Falls Road and Merced River, and the easterly $\frac{1}{4}$ of Section 8, all in T5S, R14E, MDB&M.
- g. Celeste Subdivision Area, Merced County
Those portions of Sections 21, 22, 27, and 28 between State Highway 140 and Bear Creek, T7S, R13E, MDB&M.

CHAPTER VII
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 the State Policy for Water Quality Control.

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.

During the past two fiscal years allocations from the State and Federal grant programs have been made for construction of waste treatment facilities. During the five-year period from 1973 to 1978, funds will continue to be available from State and Federal grant programs for continued construction of wastewater treatment facilities. These funds, together with local and other governmental funds will enable continued implementation of facilities plans.

The State's "Water Quality Control Plan for the Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California" shall be implemented through the following steps:

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. Completed studies for existing discharges shall be submitted to the appropriate regional board prior to July 1973. The regional board shall review all studies and make necessary revisions to waste discharge requirements prior to January 1974 to assure compliance with all applicable provisions of this plan.

Revised waste discharge requirements shall include a time schedule which assures compliance at the earliest possible date but not later than January 1976.

6. Completed studies for existing discharges of thermal wastes, existing waste discharge requirements, and proposed revised waste discharge requirements will be submitted by the State Board to EPA for review and comment prior to September 1973 and prior to adoption of revised waste discharge requirements.
7. 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.
8. 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.

APPENDIX A

Project Lists

Sacramento River Basin (5A)
 Sacramento-San Joaquin-Delta Basin (5B)
 San Joaquin River Basin (5C)
 Tulare Lake Basin (5D)

Sacramento River Basin (5A)

The Sacramento River Basin has one large metropolitan area (Northern Sacramento County) located at the southern end of the basin. The other portions of the basin consist of rural and urban land, both of which are found in mountainous, foothill and valley areas. There is an excess of surface water in most of the developed portions of this basin. Ground water is used by the smaller communities for water supply. The agricultural industry uses both surface and ground water sources. The water quality in the basin is excellent, with the exception of a few isolated problem areas.

FACILITIES PLAN FOR THE SACRAMENTO RIVER BASIN (5A)

Within Basin 5A there are a number of projects listed on the revised project list for F.Y. 1973-78 that are located in remote areas which are not conducive to consolidation into regional wastewater treatment and disposal systems. These projects are listed below:

| <u>AGENCY</u> | <u>1973-74</u> <u>DESCRIPTION OF PROJECT</u> | <u>ESTIMATED</u> <u>ELIGIBLE</u> <u>COST</u> |
|---------------------------------|--|--|
| Corning, City of | Interceptor & T.P. Improve. | \$ 300,000 |
| Lincoln, City of | T.P. Improvements | 500,000 |
| Plumas Co. S.A. (Bucks Lake) | New Holding Facilities and Treatment Facilities | 100,000 |
| Thermalito School Dist. | New Treatment Facilities | 20,000 |
| Vinton, Community of | New Treatment Facilities | 20,000 |
| Woodland, City of | T.P. Improvements and Disposal Facilities | 700,000 |
| Burney Co. W.D. | Secondary Treatment | 1,209,600 |
| Placerville, City of | T.P. Improvements | 300,000 |
| North San Juan | New T.P. & Collection Facil's. | 40,000 |
| Dunnigan, Community of | New T.P. & Collection Facil's. | 85,000 |

Basin 5A (cont.)
1973-74

| <u>AGENCY</u> | <u>DESCRIPTION OF PROJECT</u> | <u>ESTIMATED ELIGIBLE COST</u> |
|--|--|--|
| Placer Co. S.A. #6 | T.P. Improvements | 35,000 |
| Butte Co. S.A. (Paradise) | New T.P. & Collection Facil's. | 700,000 |
| El Dorado Co. I.D. (Cold Springs) | New T.P. & Collection System | 300,000 |
| El Dorado Co. I.D. (Sly Park) | New T.P. & Collection Facil's. | 350,000 |
| Cottonwood Co. W.D. | New T.P. & Land Disp. Facil's. | 210,000 |
| Vacaville, City of | Outfall | 300,000 |
| <u>1974-75</u> | | |
| Chico Airport | T.P. Improvement | 50,000 |
| Dixon, City of | Interceptor | 130,000 |
| Donner Summit P.U.D. | Interceptor Pump Station, T.P. & Disposal Facilities Expansion | 1,650,000 |
| Dunnigan, Community of | New T.P. & Collection System | 85,000 |
| Durham, City of | New T.P. & Collection System | 200,000 |
| El Dorado W.D., S.D. #1 (Camino) | Outfall, Effluent Storage Facility & Spray Irrigation | 170,000 |
| El Dorado W.D., S.D. #2 (El Dorado) | Outfall, Pond & Effluent Storage Facilities | 400,000 |
| El Dorado W.D. (Sly Park Recl. Dist.) | New T.P. & Collection System | 350,000 |
| Lime Saddle Area (near Paradise) | New T.P. & Collection System | 250,000 |
| Madison Serv. Dist. | Additional Ponds | 20,000 |
| Plumas Co. (Chilcoot Co. S.A.) | New T.P. & Collection System | 310,000 |
| Plumas Co. (Clio P.U.D.) | New T.P. & Collection System | 220,000 |
| Plumas Co. (Lake Davis S.A.) | New T.P. & Collection System | 2,950,000 |

Basin 5A (cont.)
1974-75

| <u>AGENCY</u> | <u>DESCRIPTION OF PROJECT</u> | <u>ESTIMATED ELIGIBLE COST</u> |
|--|--|--------------------------------|
| Stirling City, City of | Pond Improvement & Intercep. | 80,000 |
| Tehama Co. (Gerber Area) | New T.P., Collection System & Land Disposal | 100,000 |
| Tehama Co. (Los Molinos Area) | New T.P. & Collection System | 250,000 |
| <u>1975-76</u> | | |
| Clear Creek C.S.D. | New T.P. & Collection System | 150,000 |
| Dixon, City of | Additional Ponds | 40,000 |
| Graeagle S.D. | New T.P. & Collection System | 2,300,000 |
| Middletown, Comm. of | New T.P. & Collection System | 400,000 |
| Sierraville, Comm. of | New T.P. & Collection System | 50,000 |
| Tehama Co. (Los Molinos) | T.P. Improvement | 400,000 |
| Westwood, City of | Interceptor to Westwood T.P. & T.P. Expansion | 480,000 |
| Wheatland, City of | T.P. Improvement | 117,000 |
| <u>1976-77</u> | | |
| County Services Area (Future Estray Creek C.S.D.) | New T.P. & Collection System | 1,240,000 |

1977-78

None

Sacramento-San Joaquin-Delta Basin (5B)

The Sacramento-San Joaquin-Delta Basin consists of the Western slope of the Sierra Mountains, foothills and the valley floor. Much of the valley floor in this basin is near sea level or below. The water quality above the valley floor is of excellent quality, except for limited local problems. The waters in the delta have a history of high total dissolved solids and nutrient constituents.

Basin 5B (cont.)
1973-74

FACILITIES PLAN FOR THE SACRAMENTO-SAN JOAQUIN-DELTA BASIN (5B)

Within Basin 5B there are a number of projects listed on the revised project list for F.Y. 1973-78 that are located in remote areas which are not conducive to consolidation into regional wastewater treatment and disposal systems. These projects are listed below:

| <u>AGENCY</u> | <u>DESCRIPTION OF PROJECT</u> | <u>ESTIMATED ELIGIBLE COST</u> |
|--|---|--------------------------------|
| <u>1973-74</u> | | |
| Bear Valley W.D. | T.P. Improvements | 500,000 |
| California, State of Dept. of Corrections (Deuel Vocational Inst.) | T.P. Improvements & Land Disposal Facilities | 150,000 |
| Rio Vista, City of | T.P. Improvements | 500,000 |
| Westpoint, Community of | New T.P. & Collection System | 250,000 |
| Plymouth, City of | T.P. Improvements | 50,000 |
| Galt, City of | T.P. Improvements | 250,000 |
| <u>1974-75</u> | | |
| Thornton, Community of | New T.P. & Collection System | 200,000 |
| <u>1975-76</u> | | |
| Lockeford S.D. | T.P. Improvements & Land Disp. | 100,000 |
| Pine Grove S.D. | New T.P. & Collection System | 50,000 |
| Vacaville, City of | T.P. Expansion | 3,000,000 |
| <u>1976-78</u> | | |

None

Basin 5C
1973-74

San Joaquin River Basin (5C)

The San Joaquin River Basin consists of the western slope of the Sierra Mountains, foothills, valley floor and the eastern slope of the Diablo Range. The upland waters are generally of excellent quality, except for isolated local problems. The San Joaquin River provides drainage from this basin to the Delta. Agricultural activity in the basin produces irrigation runoff to surface streams and percolates excess water to the underground aquifers. Both conditions add total dissolved solids and nutrients to the basin's water resource. This problem occurs for the most part below the 300 foot elevation. There is a good potential for disposal of waste waters to land in this basin. This is especially true in the lower elevations where intensive agricultural irrigation occurs.

FACILITIES PLAN FOR THE SAN JOAQUIN RIVER BASIN (5C)

Within Basin 5C there are a number of projects listed on the revised project list for F.Y. 1973-78 that are located in remote areas which are not conducive to consolidation into regional wastewater treatment and disposal systems. These projects are listed below:

| <u>AGENCY</u> | <u>DESCRIPTION OF PROJECT</u> | <u>ESTIMATED ELIGIBLE COST</u> |
|---------------------------------|-------------------------------|--|
| | <u>1973-74</u> | |
| Madera Co. M.D. #8 | Plant Improvements | 200,000 |
| Planada S.D. | T.P. Improvements | 14,000 |
| Sierra Joint U.H.S. | New T.P. | 60,000 |
| Snelling S.D. | New T.P. & Class A Inter. | 150,000 |
| Tuolumne City S.D. | T.P. Improvements | 125,000 |
| New Auberry | New T.P. | 78,000 |
| Fresno Co. W.D. #18 (Friant) | New T.P. & Collection System | 150,000 |
| Waterford C.S.D. | T.P. Improvement | 250,000 |
| Oakdale, Community of | T.P. Improvement | 100,000 |
| Franklin Co. W.D. | T.P. Improvement | 75,000 |
| Kerman, Community of | T.P. Improvement | 100,000 |

Basin 5C (cont.)
1974-75

| <u>AGENCY</u> | <u>DESCRIPTION OF PROJECT</u> | <u>ESTIMATED ELIGIBLE COST</u> |
|--------------------------|-------------------------------|--|
| | <u>1974-75</u> | |
| Huntington Lake Co. S.D. | New T.P. & Collection System | 2,000,000 |
| Mariposa P.U.D. | T.P. Improvements | 145,000 |
| | <u>1975-76</u> | |
| Newman, City of | T.P. Expansion | 250,000 |
| Patterson, City of | Effluent Disposal Improve. | 200,000 |
| | <u>1976-77</u> | |
| Shaver Lake C.S.D. | New T.P. & Collection System | 3,500,000 |
| | <u>1977-78</u> | |

None

Tulare Lake Basin (5D)

See following pages, 7-11.

INTERIM WASTEWATER FACILITIES PLAN

SACRAMENTO RIVER BASIN (5A)

Siskiyou County

Within Siskiyou County there are two major wastewater disposal problems--the communities of Dunsmuir and Mt. Shasta City. Each has a project processing for the F.Y. 1972-73. At this date a decision of which project report alternative will be recommended for grant funding has not been made. It appears evident that to provide for further growth and development in the Sacramento River canyon above Shasta Reservoir much more land must be located for effluent disposal or a major export project will be required. Such works would probably require a coordinated effort by both of the cities and the rural areas expecting intensive development. Land suitable for waste disposal is limited in the areas producing wastewater. The closest large area of land suitable for large volumes of wastewater disposal from a climatic and geologic standpoint is the area north of Mt. Shasta City in the North Coastal Region.

Other existing waste disposal sources in the county are minor in nature and will be treated as separate and discreet discharges.

Shasta County

Shasta County will consolidate many of the individual waste discharges now in existence. New development should be planned with existing and proposed new facilities in mind. The Redding-Enterprise Project Report will be developed by mid-1974. That report should provide the basis of the revised Shasta County Plan, Water and Sewer Element. A detailed schedule of future consolidations will be provided in the Basin Comprehensive Plan. Until that schedule is developed, only limited cost, high need interim facilities should be approved for construction. It is anticipated that the following discharges will be consolidated within the foreseeable future:

| | |
|--------------------|----------------|
| City of Redding | Central Valley |
| Enterprise P.U.D. | Buckeye |
| Shasta Dam P.U.D. | Cascade |
| Summit City P.U.D. | North Redding |

This regional plant is expected to be built south of Redding. Other potential consolidation projects include the Lower Churn Creek Area wastewater being transported to the City of Anderson Treatment Plant. This should occur when the development pattern indicates that sewers are required.

Control of wet weather infiltration into the existing sewers is needed in most of the above systems.

Modoc County

No consolidations are anticipated. Individual waste discharges should be treated on land during most of the year. Limited discharges to streams may be necessary.

Lassen County

The Communities of Westwood and Clear Creek C.S.D. are located north-east of Lake Almanor. If a regional wastewater disposal system is built in the lake area these two communities might be consolidated with such a regional plan. Their projects are scheduled for F.Y. 1975-76. The Almanor regional plan should be developed by that date.

Tehama County

The Antelope Area located east of Red Bluff is in need of a collection system and interceptor that will cross the Sacramento River and join the Red Bluff wastewater disposal system for treatment. The area southeast of Red Bluff may develop to the point that a regional plan is needed. This is in the future. Presently, the following communities need collection systems and wastewater treatment:

Gerber Area

Los Molinos Area

As flows increase, consolidation may be feasible. A recreation development in the area is being considered.

Plumas County

There are two areas in Plumas County that need area-wide planning for wastewater treatment and disposal. The Quincy-East Quincy Area is scheduled for a consolidation project in 1973-74. Existing sewer areas may require treatment plant improvements that would necessitate relocation of the existing treatment facilities. The East Quincy Area requires collection facilities and treatment plant capacity. All treatment in the area should occur at one plant.

The Lake Almanor Area should be studied to provide a regional wastewater collection and treatment system. As development increases in the area, the waste disposal problem will become more severe. During the 1974-77 time frame there are four projects proposed in the Lake Almanor basin. As project reports are developed, information will become available that will indicate what consolidations should occur. This information will be used to update the Regional Board's Plans.

Sierra County

There are no consolidations of sewage treatment systems contemplated.

Glenn County

There are no consolidations of sewage treatment systems contemplated.

Butte County

The Greater Oroville Area will be served by a consolidation of the following four dischargers: Oroville, North Burbank, Thermalito I.D., Community of Palermo. A project for that facility appeared on the 1971-72 Project List. It is anticipated this project will be built during the 1973-74 time frame.

The Butte County Service Area #45 (Paradise) and the Lime Saddle Area are both unsewered. Projects for these communities appear in the 1973-75 time frame.

Lake County

The Regional Plan for the Clear Lake Basin has been developed under project reports for projects on the 1971-72 and 1972-73 project lists. The general concept for the basin is for a treatment plant to be located south of Clear Lake Highlands (now under construction), that will serve the south and eastern portions of the basin. A second plant (or possibly two plants) will be located in the vicinity of Lakeport and will serve the north and western portions of the basin. It is anticipated that the interceptors and treatment plants will be owned and operated by the Clear Lake Sanitation District. Services will be available to the Communities of Lakeport and Kelseyville when needed. It is anticipated that all effluent will be discharged to land or utilized as reclaimed wastewater.

Colusa County

There are no consolidations of sewage treatment systems contemplated.

Sutter-Yuba County

The major dischargers in Sutter-Yuba County are located near the confluence of the Yuba River and Feather River. The long-range concept of waste disposal can be summarized as follows:

1. Yuba City is presently constructing a new sewage treatment plant two miles south of the City.
2. The new treatment plant is so located as to be accessible to the discharge from the Olivehurst Sanitary District, Linda Water District, and the City of Marysville.
3. It is anticipated that the Olivehurst S.D. and Linda W.D. will consolidate into the new plant during the next two years. The Marysville T.P. will be used throughout the foreseeable future and will be consolidated with the regional plant when existing capacities are exhausted.

Nevada County

It is expected that the Nevada County Regional Wastewater Treatment Facility now listed on the 1972-73 Project List will be constructed during the next three years. This plant will provide wastewater treatment facilities for the major dischargers in that county. Based on development patterns, the small communities of Nevada County will provide treatment facilities on an individual basis.

Napa County

There are no consolidations of sewage treatment systems contemplated.

Yolo County

The City of Davis has completed its new sewage treatment plant. An interceptor scheduled on the 1972-73 Project List will consolidate the sewerage flows now being treated at the El Macero T.P. It is anticipated that the existing waste treatment plants at the University of California will be consolidated into the Davis system. The Community of Woodland is planning to upgrade their treatment plant and land disposal and irrigation facilities.

The West Sacramento Sanitary District is being considered in the Sacramento Metropolitan Regional Wastewater Disposal Plan. It is anticipated that their discharge will become integrated with that system.

Solano County

There are no consolidations of sewage treatment systems contemplated.

Placer County

The Loomis Basin and Auburn Ravine Watersheds receive the major wastewater flows generated in southern Placer County. The 1972-73 Project List contains projects to construct a skeleton system for the Loomis Basin dischargers. The City of Auburn is proceeding on a project report for 1973-74. It is anticipated that that system will provide service to the Greater Auburn Area, including Auburn Lake Trails located on the south side of the American River. Determination of where the above waste should be treated will be clarified during the development of this project report. Continued discharge to the Auburn Ravine Watershed or consolidation with the Loomis Basin dischargers appear to be the two most realistic solutions. Some consideration is being given to further consolidation of this system into the Sacramento Metropolitan Regional Plan. Based on water quality considerations and economics, it appears that a treatment plant should be built in Roseville with discharge to Dry Creek, as opposed to consolidation into the Sacramento Regional Plan.

El Dorado County

The El Dorado County Water District provides service to most of the unincorporated and sewerd sewerd areas. There is a general plan to develop a consolidated wastewater treatment plant and land disposal system near the Sacramento County line on Deer Creek. It is anticipated that this system will provide for the bulk of the population in lower El Dorado County. This would include Cameron Park, Shingle Springs, El Dorado Hills and other development which may occur in the area.

The City of Placerville Wastewater Treatment Plant is proposing to improve their wastewater treatment facilities during 1973-74. It is anticipated that that plant will provide capacity for all developments in the Greater Placerville Area. Other dischargers in the portion of El Dorado County east of the City of Placerville will be served by individual treatment plants with land disposal of the effluent. Due to the geography of the area it will be necessary to locate such developments in areas where reliable treatment and disposal of wastes can occur.

It is anticipated that the area east of Folsom Reservoir and the proposed Auburn Reservoir will be served by the Greater Auburn treatment facilities as indicated in the narrative concerned with Placer County.

Sacramento County

The 1972-73 Project List contained major projects for the solution of present water quality problems in the northwestern section of Sacramento County. The following dischargers produce the major portion of waste in this area: City of Sacramento, Sacramento County, West Sacramento Sanitary District, McClellan Air Force Base. In addition to these flows, a seasonal wasteload is generated by a variety of canneries located in the Sacramento Area. The City of Sacramento has a portion of its collection system connected to combination sanitary and storm sewers. Wet weather flows through this system, though brief in duration, provide for hydraulic shock loads to even such large facilities as the existing City treatment plant. The general concept for the Sacramento Regional Plan can be summarized as follows:

1. Initial consolidation of all upstream municipal and major industrial flows to the following three treatment plants will occur as quickly as projects can be designed and funded:

Sacramento County, Natomas Sanitation District
Sacramento County, Northeast Sanitation District
Sacramento County, Central Sanitation District

2. The major discharger into the Central S.D. will be the City of Sacramento Main T.P.
3. Additional treatment capacity will be necessary in the above three existing plants. Additional capacity has been approved for the Northeast S.D. plant.

Sacramento County (cont.)

4. The long-term concept for wastewater treatment in the regional system appears to hinge on two plants-- an expanded wastewater treatment plant at the existing Central S.D. site and a new treatment plant near the existing Northeast S.D. plant. The concept of one single wastewater treatment plant for the entire area is also being considered at the present time. This decision will be made based on data included in project reports and studies prepared by the major dischargers in the Sacramento County Area. A final decision as to the conceptual means of handling waste in this area will be made early in 1973.

SACRAMENTO-SAN JOAQUIN-DELTA BASIN (5B)

San Joaquin County

San Joaquin County has four principal areas of wastewater generation:

Lodi
Stockton

Manteca-Lathrop Area
Tracy

Each should have one wastewater treatment plant. The Lodi Plant is suitably located and has ample capacity planned to serve Woodbridge and the Greater Lodi Area developments requiring sewage service.

The Stockton Area will be served by an advanced treatment plant located at the present Stockton Main Plant. Improvements to that plant are now under construction. Total or final treatment at the main plant should be provided for wastewater now being treated at the Stockton Northwest Plant and the San Joaquin County Plant serving Lincoln Village.

The Manteca-Lathrop Area should be served by the existing Manteca wastewater Treatment Plant. That area south of the Stockton Airport and east of the San Joaquin River now being proposed for development should be considered when the Manteca Plant is enlarged in 1974-75 project year. The Manteca Plant is located in the San Joaquin River Basin (5C). It is anticipated that much of the service area for this plant will, in the future, be in Basin 5B.

The Tracy Wastewater Treatment Plant will be the only major plant located west of the San Joaquin River. New and existing development in that area should be included in future plans for the City plant. A new plant is being planned for the City. Construction should start about July 1, 1973.

Contra Costa County

The Contra Costa County Regional Plan for exporting wastewater from the Antioch-Pittsburg Area to a new "water factory" treatment plant at

Contra Costa County (cont.)

Concord is being carried forward by State and County governmental agencies. The concept of treatment and reuse of wastewater in Central Contra Costa County is in harmony with present guidelines for wastewater management. The major waste producers in the Antioch-Pittsburg Area are industrial sources. Municipal dischargers in the area include Antioch, Oakley, Brentwood and two County S.D. (No. 15 and No. 19). These communities may require additional capacity and upgraded treatment to meet State requirements. Any interim projects should be planned to complement the regional facility. Costs of interim treatment should be minimized to provide only reasonable capacity for the municipal dischargers until the regional facilities are on line.

Amador County

The Sutter Creek Wastewater Treatment Plant is being built under a grant for project year 1971-72. A condition of that grant requires that it be a regional facility that can be expanded to provide capacity for other waste producers in the area. It is anticipated that the following dischargers will utilize the Sutter Creek plant for secondary treatment of their wastewater:

City of Jackson
Argonaut Heights

Martell
Amador City

Effluent from the plant will be used by the Preston School of Industry for industrial and agricultural uses.

The new Ione Treatment Plant will provide service to the Preston School of Industry and Division of Forestry facilities located nearby. If, in the future, the industrial school cannot utilize all of the wastewater from the Sutter Creek plant, the Ione plant could be improved to the level of advanced treatment with ground water recharge potential.

Calaveras County

The waste discharges originating in Calaveras County along California Highway No. 4 above Angels Camp should be included in an area-wide plan. This work will be done as a part of the Calaveras County project report for the above project, which now appears on the 1973-74 Project List. To date, there are no in-depth plans available to give guidance as to disposal concepts. The decision of a single plant alternative, as opposed to a multiple plant system cannot be determined until further information is available. It is anticipated this information will be available by October 1973. The projects located in Alpine County, which consist of Bear Valley Water District, Lake Alpine and Mt. Reba Ski Lodge appear to be too remote for inclusion in a regional system. Other discharges in Calaveras County will be treated on an individual basis.

SAN JOAQUIN RIVER BASIN (5C)

Stanislaus County

Stanislaus County has three major concentrations of waste. The area north of Modesto, served by the Salida Sanitary District, appears to be in an ideal location for the collection and treatment of wastes from the following dischargers: City of Ripon, Simpson-Lee Paper Mill, Pirrone Winery, and Shell Research Laboratories. Project reports submitted by Salida Sanitary District indicate that land disposal is available for the combined volumes of waste indicated above. Review of project reports from the City of Ripon and Salida Sanitary District will determine the Regional Board's recommendation for grant funding of a project in this area.

The City of Modesto has the largest waste treatment facility in the county. It is anticipated that the existing capacity will be increased in the future to serve the neighboring communities of Ceres and Hughson. The location of the City's remote ponds does not provide for wastewater reclamation to the agricultural industry.

The Turlock waste treatment facilities have served the communities of Keyes and Denair for several years. It is anticipated that these facilities will be enlarged and improved to handle the future flows from the south Stanislaus County Area.

Tuolumne County

The Tuolumne County Regional Plan as proposed in project reports submitted to this Board on October 1, 1972, will provide waste treatment for the major portions of the county as now developed. It is anticipated that Phase I of the Regional Plan will provide waste service to the following communities: Twain Harte, Sonora, Columbia and Jamestown. Phase II of the Regional Plan will provide service to the area between Mi-Wuk Village and Twain Harte. It is anticipated that this corridor will delineate the major future growth in the county.

The new wastewater treatment facilities at Groveland are expected to treat and dispose of wastewaters in that area. The major potential discharger is the Pine Mountain Lake Subdivision.

The other area which has been developed into recreational homesites and recreational facilities is located around Don Pedro Reservoir. It is anticipated that initially these homes will be served by individual septic tank systems. At such time as development reaches densities prohibiting use of septic tanks and leach fields a major sewage collection and treatment system may be required.

Merced County

The Communities of Atwater, Winton and the City of Merced, along with Castle Air Force Base, are the major producers of wastewater in Central Merced County. It is anticipated that a regional wastewater treatment facility will be constructed at Atwater. This plant will serve the

Merced County (cont.)

Communities of Winton and Castle Air Force Base. Further consolidation with the City of Merced may become desirable should advanced wastewater treatment become necessary.

Other waste dischargers in the county are located in areas where there is an excellent demand for irrigation water. Advanced treatment in these areas will probably not be required in the foreseeable future. Hence, further consolidations in the county are unlikely.

Madera County

The unsewered areas in the vicinity of the City of Madera should be sewerred with interceptors transporting the wastewater to the Madera Treatment Plant for processing and disposal. Further consolidation within the county is unlikely at this time.

Mariposa County

It is anticipated that the wastewater treatment facilities at the Mariposa Public Utilities District plant will be expanded and that these facilities will treat all of their wastewater produced in the Greater Mariposa Area. No additional consolidation of wastewater systems is anticipated within the county at this time.