

State of California

THE RESOURCES AGENCY

Department of Water Resources

BULLETIN No. 132-66

# THE CALIFORNIA STATE WATER PROJECT IN 1966

JUNE 1966


HUGO FISHER
*Administrator*
The Resources Agency

EDMUND G. BROWN
*Governor*
State of California

WILLIAM E. WARNE
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# FOREWORD

This is the fourth in a series of annual reports by the Department of Water Resources on the California State Water Project for the information of the State Legislature, the California Water Resources Development Finance Committee, project water and power users, project investors, and the public.

The Bulletin No. 132 series is a continuing annual progress report on a dynamic and growing project, and documents the project's expanding history. It systematically updates the project's long range cost and financial projections. It provides a central reference for current project data. It forms a portion of the substantiating material which, by provision of the 30 contracts executed with local agencies for a project water supply, must accompany the annual statements of water charges issued by the State.

The State Water Project constitutes the initial facilities of the State Water Resources Development System which will be constructed by California, in accordance with plan, for the water needs of the swelling population of the Nation's No. 1 State. The State Water Project is being constructed to meet the expansion of California's water needs until approximately 1990. Its purpose is to supplement and complement those facilities being constructed by the Federal Government and local agencies or municipalities.

Planning to satisfy the growth of California's water needs after 1990 must be initiated now, since experience has shown that a lead time of 25 years is needed to plan, to obtain authorization and financing, and to design and construct a major water project. The orderly planning for growth beyond that satisfied by the present State Water Project will be recorded in the Department's Bulletin No. 160 series of reports, "Implementation of the California Water Plan". The initial report of this series, Bulletin No. 160-66, was released in March 1966.

The Department is constructing the State Water Project with funds primarily provided by the California Water Resources Development Bond Act (Burns-Porter Act), ratified by Californians in the General Election of November 8, 1960, which authorized the issuance of $1,750,000,000 general obligation bonds.

Since ratification of the Burns-Porter Act, we have come to the halfway point in a decade of tremendous construction on the facilities of the State Water Project. Construction is proceeding on schedule and according to plan.

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## ABSTRACT

This bulletin reports progress on design, construction, operation, financing, and management activities of the California State Water Project since about April 1, 1965.

After 15 years of unprecedented study on high head pumping systems in both the United States and Europe, the decision was made to use a single-lift system, with four-stage pumps, to lift water 2,000 feet over the Tehachapi Mountains to Southern California.

The main line of the South Bay Aqueduct was completed, and first deliveries of water to the terminus in Santa Clara County made in June 1965. The contract has been let for construction of Del Valle Dam and reservoir, which will provide regulatory storage for the South Bay Aqueduct.

One-half of the Oroville Dam embankment has been placed. Two major settlements were made concerning the purchase of major utilities to be inundated by Oroville reservoir. The State purchased the Pacific Gas and Electric Company's Big Bend Powerplant for $25,000,000. The State also reached agreement with Georgia Pacific Corporation and purchased its 18-mile-long Feather River Railway for $1,322,605.

Plans for construction of a nuclear powerplant in cooperation with the Federal Government were changed when the Department was informed of inability to solve fuel element problems inherent in the design of a seed-blanket reactor. The Department has since embarked on a program directed toward construction of a state-owned thermo-nuclear powerplant of pressurized or boiling water reactor type, such as is now commercially available.

Only 8,600 acre-feet of the minimum project yield of 4,230,000 acre-feet remain uncommitted. Contract negotiations are under way which will cover the remaining amount. The repayment of 99 percent of the costs of the Project allocated to water supply has thus been assured.

The enactment of AB 12 of the 1966 First Extraordinary Session is noted. The new law will make an additional $5,000,000 of tidelands oil and gas revenues available annually, for costs of the Project associated with the nonreimbursable purposes of recreation and fish and wildlife enhancement.

Comprehensive estimates of project costs are updated and the financial program reanalyzed. Available funds are adequate to cover estimated construction costs, and estimated revenues and receipts are more than sufficient to repay all project costs.

# CHAPTER I. THE CALIFORNIA STATE WATER PROJECT IN 1966

The California State Water Project in 1966 has swept past the fifth anniversary of ratification of the Burns-Porter Act and entered the second half of a tremendous decade of construction. Work is proceeding on schedule to meet the primary objectives established for the Project early in 1961 -- the delivery of project water to Kern County in 1968, to Los Angeles County in 1971, and to Riverside County in 1972.

The past five years have marked completion of several project facilities. Two of the five dams and reservoirs in the Upper Feather Area, now in operation, will be joined by the third during 1966. The main line of the South Bay Aqueduct is also in operation, delivering water to Alameda and Santa Clara Counties.

Significant milestones measuring construction progress for other project facilities were reached during the past year. The placing of embankment for Oroville Dam passed the half-way mark in February 1966; final construction of canal sections is either under contract or completed on 208 miles of the 444-mile main line of the California Aqueduct; and, of the 320 contracts estimated as necessary to complete currently scheduled work, over 60 percent have been completed or are under way.

The completed State Water Project will constitute a coordinately operated system of conservation-transportation facilities. It will also include drainage facilities in the San Joaquin Valley and will provide $130,000,000 for loans and grants on projects constructed by local agencies. The conservation facilities will develop a firm annual water supply, primarily from surplus flows of the Sacramento-San Joaquin Delta. The transportation facilities will convey the conserved supply from the Delta to areas of water need.

The largest single water resource development in the United States, the State Water Project still is not the final answer to California's water problems. The conservation-transportation system has been sized to satisfy, until 1990, water demands which cannot be met by projects constructed by local and federal agencies. Project capacities are expected to be fully used on a continuing basis after 1990, but water demands will continue to expand even after that date.

The State Water Project has been founded on a conceptual and financial framework permitting orderly expansions and extensions of the Project. This framework is predicated upon the Delta Pooling Concept which guarantees that "areas of origin", where surplus flows originate, will not be deprived of their supply.

The Delta Pooling Concept recognizes the Sacramento-San Joaquin Delta as the central point through which all surplus flows originating in the great Central Valley must drain, and as the focal point for the export and distribution of surplus waters to water-deficient areas in the southerly portions of the State. It also provides a physical basis for coordinating the operation of the State Water Project with the federal Central Valley Project.

Under the Delta Pooling Concept, as surplus flows are gradually diminished by future developments within the areas of origin, additional conservation facilities would be constructed in Northern California to augment the depleted project supply. This utility-type concept provides a single rate, for water used above or exported from the Delta, to be charged in recovering costs of all conservation facilities necessary to develop project supply. This rate would apply not only to water supply contractors of the State Water Project, but also to future contractors served by subsequent expansions of the Project. The effect of this principle is to average the lower costs of initial conservation features with the higher costs of later conservation facilities. This eliminates the traditional water rights concept that "first in time is first in right" and places both present and future contractors on an equivalent footing.

The Delta Pooling Concept would be ineffective if funds for financing the construction costs of additional storage facilities were not available when needed.

The Burns-Porter Act, which establishes the primary source for financing construction of the State Water Project, also provides a future capability for financing construction of additional conservation facilities. The Act authorizes $1.75 billion of Water Bond issues for the construction of initial project facilities and appropriates money in the California Water Fund for the purposes of the Act. As and when California Water Fund moneys are expended for the construction of the initial project facilities, the amount of unissued Water Bonds available for construction of these facilities is reduced in the amount of such expenditures. A corresponding amount of Water Bonds is reserved for additional conservation facilities.

Expenditure of California Water Fund moneys has created a current reservation of approximately $150 million of Water Bonds for the construction of additional conservation facilities. This amount will be augmented throughout most of the construction period of the initial project facilities by the expenditure of accruals to the California Water Fund at the rate of $11 million annually.

The Act also provides that annual project revenues in excess of the amount required for project operating costs, Water Bond service, and repayment of the amount expended from the California Water Fund shall be available for construction of future project facilities. Such revenues (designated as "fourth priority" revenues) are not expected to be significant until after the year 2000 under the rate structure incorporated in the Project's water supply contracts.

While a conceptual and financial framework has been established for the orderly expansion and extension of the State Water Project, the identity, size, sequence, and timing of future construction of additional facilities remains to be formulated.

The date of 1990 -- terminus of today's definite plans for the State Water Project -- is only 25 years away. Experience has shown that 25 years is a short time in terms of planning, designing, and constructing major water developments. Therefore, the Department is currently formulating a staged plan of development for satisfying California's future water demands through about the year 2020.

The first in a series of progress reports on establishing this staged plan was recently released by the Department.1/ The following abstracts are from the conclusions developed therein:

> "Projections of growth of the State indicate that between 1960 and 2020 the population will increase by nearly four times to more than 54 million persons, urban land use will roughly triple to nearly six million acres, irrigated lands will increase by more than 25 percent to almost 11 million acres, and undeveloped irrigable lands will be reduced by nearly 50 percent to a little more than eight million acres.

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1/ Department of Water Resources Bulletin No. 160-66, "Implementation of the California Water Plan", dated March 1966.

"Between 1960 and 2020, net requirements . . . are expected to increase more than 60 percent to 38 million acre-feet.

"Between 1960 and 2020, water developed and used locally . . . will increase to a total of about 17 million acre-feet . . . . Imported water (water moved from one hydrologic area to another) must be increased three times above present levels to 21 million acre-feet.

"Completion of the presently authorized conveyance features of the Central Valley Project-State Water Project system will leave a remaining net water requirement of over 6.5 million acre-feet by the year 2020 to be supplied either by expansion of these projects or by other water resources developments . . . . Between 1990 and 2000, additional conveyance facilities not yet identified will be required to serve the San Joaquin Basin, Central Coastal, South Coastal, and Colorado Desert areas.

"The conservation facilities of the State Water Project-Central Valley Project system, which are under construction or authorized (excluding the authorized Upper Eel River Development of the State Water Project), should develop sufficient water supplies to meet the projected net water requirements to be served by these projects until the late 1980's. Water supply needs of the State Water Project and Central Valley Project between the late 1980's and 2000, can be met from water conservation projects in the upper Eel, Trinity, Mad and Van Duzen River Basins . . . . There are alternative means of meeting the needs for new water supplies after about the year 2000. These include reservoirs on the lower Eel and Klamath Rivers, desalination and a regional water plan. Additional surface reservoirs and ground water development in the Sacramento and Delta-Central Sierra areas may also contribute toward satisfying the system yield between the late 1980's and 2020. The schedule for construction of multiple-purpose reservoirs may be determined by the need for flood control and water quality control, rather than for water conservation purposes alone."

The Department looks to the North Coastal area as the next major source of water for the Project, and for future extensions of the Project. A seven-year, reconnaissance-level investigation of the area was concluded in 1964. The Upper Eel River Development was authorized by the Department as an additional conservation facility of the State Water Project as a result of this investigation. Advance planning studies of the Upper Eel River Development have been initiated with the objectives of determining the conveyance route from the Eel River to the Sacramento River Basin and the nominal capacities of individual features.

In another field of investigation, the Department recognizes the advancing technology of desalination and considers desalted water to be an alternative source of supply for certain locales. The Cobey-Porter Saline Water Conversion Law, enacted during the 1965 Regular Session of the Legislature, augmented the Department's basic authority to engage in saline water conversion activities; to conduct a program of investigation, study and evaluation in the field of desalination; and to finance, construct, and operate desalters and market the desalted water produced.

California is also lending its support in yet another area which might, in time, become a cooperative effort of the water-shy western states. The Western State Water Council (of which California is a charter member) was created in 1965 through resolution of the Western Governors' Conference in June of that year. The Council's role is to accomplish effective cooperation among the western states in planning for programs leading to integrated development of their water resources. Increasing demands on the water resources of California require that a planned interstate, as well as intrastate, program approach be made to produce the most desireable, and the least costly, water for future generations.

As appropriately summarized in a recent series of timely articles prepared by the Director for publication in California newspapers:

> "The tools are at hand. The new Cobey-Porter Saline Water Conversion Law provides a new weapon for the attack. The next stage beyond 1990 is apt to include desalters at strategic points on the system.
>
> "The State Water Project is extensible. It should be used as the skeleton on which to flesh out the expanded program that will be needed.

"California has a water bank in the productive and unused streams of the North Coastal counties. We certainly can meet our growth needs, if we plan to do so.

"A west-wide regional water plan is needed and California will lend its assistance in developing it. It is quite possible that the next stage of the State Water Project will be conjoined with and integrated into a western regional water project.

"The water challenge of the 1990 question has been laid down before this generation. The next generation will judge how well we meet it."

# CHAPTER II. HISTORY OF THE STATE WATER PROJECT

Previous bulletins of this series have noted those significant actions and historical events which have affected the course of the State Water Project prior to about April 1, 1965. The documents noted therein collectively constitute the historical archives of the Project.

This chapter continues to document the Project's expanding history from April 1965 to April 1966. The overall status of the Project in 1966 is covered in other chapters of this report.

## General Project History

This section discusses those legislative and administrative actions affecting the Project as a whole. Actions affecting individual facilities are discussed in a subsequent section.

### Actions by the Congress

Significant legislation enacted during the First Session of the Eighty-ninth Congress pertains to federal policy in areas affecting the project purposes of water quality control, recreation, and fish and wildlife enhancement.

Recreation and Fish and Wildlife Enhancement. The "Federal Water Projects Recreation Act"2/ creates a uniform policy for federal water development projects with regard to the purposes of recreation and fish and wildlife enhancement. Formerly, this type of development occurred on an individual project basis and federal participation varied from none at all to one of full responsibility.

Nonfederal agencies will be required, thereunder, to bear all the costs of operation, maintenance, and replacement (and not less than one-half of the separable capital costs) of a federal project allocated to the purposes of recreation and fish and wildlife enhancement. If nonfederal agencies do not agree to participate to this extent,

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2/ Public Law 89-72, 89th Congress, 1st Session.

the Federal Government will only provide minimum recreation facilities to protect public health and safety at the particular project.

The Act may indirectly affect State Water Project costs in such future joint undertakings with the Federal Government as the Peripheral Canal and the Upper Eel River Development.

Water Quality Control. The "Water Quality Control Act of 1965"3/ amends the Federal Water Pollution Control Act and establishes a national policy for the prevention, control and abatement of water pollution. The legislation authorizes the Federal Government to promulgate water quality standards for interstate waters, which would appear to involve most of the major streams in California, including the Sacramento-San Joaquin Delta.

As in the case of the Federal Water Projects Recreation Act, it is not possible to clearly estimate the impact the Water Quality Control Act of 1965 will have upon the State Water Project. It appears possible that the Federal Government could fund those costs of project facilities allocated to the purpose of water quality control, insofar as interstate streams are affected, such as the costs of augmenting salinity control releases in the specific case of the Delta Facilities.

## Actions by the State Legislature

Several actions of the Legislature during the 1965 Regular Session concerned the State Water Project as a whole, dealing primarily with general construction aspects, the purposes of recreation, fish and wildlife enhancement, and water supply, and power management activities.

Construction of State Water Projects. A series of bills was enacted generally concerning the construction of state water projects.

Senate Bill 581[4]/ requires the Department of Water Resources to pay for the value of improvements located on

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3/ Public Law 89-234, 89th Congress, 1st Session.
4/ Calif. Stats. of 1965, Chapter 1570.

national forest or national park lands when the owner's right of occupancy is terminated because of State Water Project construction. Compensation shall be based either on the value of the improvements in place, as the value existed prior to revocation of the federal permit, or on replacement cost, less depreciation, whichever is less. The bill excludes payment for improvements located on rights-of-way across national forest or national park lands. The immediate affect of this bill will be to authorize payment for substantial residential-type improvements located on forest service lands in Elizabeth Lake Canyon, the site of the Castaic Dam and reservoir.

Senate Bill 1326[5/] authorizes the Department of Water Resources to include in its lease, easement, and right-of-way documents, a provision indemnifying the grantor for any damage caused by the Department while occupying the grantor's property. On the basis of opinions issued by the Attorney General, the Department did not previously have this authority. Landowners are often more than willing to allow the Department, without fee, to conduct ground water, geologic, and other tests on their property. They desire, however, to be protected from any damage resulting from the conduct of such tests. Senate Bill 1326 provides this protection and will facilitate the acquisition of property rights necessary to carry out the Department's programs.

Senate Bill 276[6/] amends Section 11010.5 of the Government Code to permit state agencies to terminate, amend, or modify a competitively bid contract as authorized by the contract, as well as where authorized by law. The bill also provides that compensation for amendments and modifications shall be determined as provided in the contract, and that compensation in the event of termination shall be determined as provided in the contract or applicable statutory provision. Previously, Section 11010.5 was interpreted to prevent the termination or modification of state contracts let under the State Contract Act, State Purchasing Act, or other competitive bidding statutes, except as expressly authorized by statute. This deprived the state agency of the normal common law methods of contract adjustment which are available to federal and local agencies engaged in similar work. Senate Bill 276 provides consistency within state law and between state and federal law. It will place state

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5/ Calif. Stats. of 1965, Chapter 1305.
6/ Calif. Stats. of 1965, Chapter 1562.

contracting agencies on a more equal basis with federal and local agencies in dealing with the contracting industry, and will permit more realistic contracts administration.

Senate Bill 361[7] authorizes limited reimbursement to property owners for moving expenses arising from acquisition of real property for public purposes by the Department of Water Resources, the Department of Parks and Recreation and the Department of Public Works. The payment for moving expenses is limited to a maximum of $200 in case of an individual or family, and to a maximum of $3,000 in case of a business concern, farm or nonprofit organization. The bill authorizes the Department of Public Works, for property acquired by it, and the State Board of Control, for property acquired by other state agencies (including the Department), to establish rules and regulations governing the payment of moving expenses.

Two resolutions were adopted which direct the Department, together with the Departments of Public Works and General Services, to review their procedures and to report to the 1967 Legislature: House Resolution No. 282, pertaining to the quality of design; and House Resolution No. 283, pertaining to consultation, cooperation, and joint planning with other public agencies in advance of project construction.

Recreation and Fish and Wildlife Enhancement. Assembly Bill No. 1147 was described in last year's bulletin[8] as originally introduced during the 1965 Regular Session. The Bill would have provided a continuing annual appropriation of $5 million from tideland oil and gas revenues to reimburse expenditures from project funds for recreation and fish and wildlife enhancement. An amendment was added on June 13, 1965, to provide, also, for the use of tideland oil and gas revenues to finance the Davis-Grunsky Act program, when the $130 million made available by the Burns-Porter Act for this purpose had become exhausted. After having been passed by the Legislature, Assembly Bill No. 1147 was pocket-vetoed by Governor Brown by reason of the amendment.

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7/ Calif. Stats. of 1965, Chapter 1650.
8/ Department of Water Resources Bulletin No. 132-65, "The California State Water Project in 1965", page 18.

Assembly Bill No. 12[9/] of the 1966 First Extraordinary Session of the Legislature essentially corresponds with the original form of Assembly Bill No. 1147. Assembly Bill No. 12 was signed into law[10/] by Governor Brown on April 22, 1966.



Governor Edmund G. Brown signs Assembly Bill No. 12, flanked by Assemblyman Carley V. Porter, left, co-author of the Bill, and Department of Water Resources Director William E. Warne.

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9/ Assembly Bill No. 12, introduced February 10, 1966 by Assemblymen Porter, Ashcraft, Assemblywoman Davis, Assemblymen Chappie, Belotti, Dannemeyer, Garrigus, Henson, Harvey Johnson, Ray E. Johnson, Lanterman, Monagan, Quimby, Russell, and Williamson (Coauthor: Senator Cobey).

10/ Calif. Stats. of 1966, Chapter 27.

The new law sets aside annually $5,000,000 of tideland oil and gas revenues for the multiple-purpose costs of state water projects which are allocated to recreation and to fish and wildlife enhancement and also for costs of land acquired with project funds specifically for recreation at such projects. The Department is required to report on such costs annually to the Legislature. To the extent the Legislature, by subsequent acts, approves such allocations and costs, the money set aside will be released to the Department for expenditure on the State Water Project.

Another bill[11] introduced during the 1966 First Extraordinary Session would provide the necessary legislative approval to make available to the Department: (1) $1,366,281 for the costs of specific recreation lands, expended from project funds, through June 30, 1965; and (2) $5,708,619 for the allocation of the multiple-purpose costs of Frenchman and Antelope Dams and Lakes to the purposes of recreation and fish and wildlife enhancement. The bases for the above amounts are contained in the Department's Bulletin No. 153-66, which is described in a subsequent section under "Actions by the Department".

Nonreimbursable costs and the allocation of costs of the State Water Project will be the subject of a study by the Assembly Interim Committee on Water, pursuant to House Resolution No. 633 of the 1965 Regular Session. A report will be made to the 1967 Legislature.

Two bills were enacted during the 1965 Regular Session relating to recreation and fish and wildlife enhancement aspects of the State Water Project; Assembly Bill No. 1515[12] and Senate Bill No. 246[13].

Assembly Bill No. 1515 authorizes the Department to exchange property it has acquired for property owned by the United States for the purpose of furthering recreation in any of the Department's projects, even though the property received from the United States is not adjacent to any state water project.

The objective of Assembly Bill No. 1515 is to facilitate the administration of recreation areas associated with the State Water Project. It is generally more

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11/ Assembly Bill No. 183, introduced May 2, 1966, by Assemblymen Porter and Ashcraft.
12/ Calif. Stats. of 1965, Chapter 1050.
13/ Calif. Stats of 1965, Chapter 1136.

advantageous to have a recreation area administered by a single public agency. Such an agency would include the United States Forest Service. Federal law does not authorize the Forest Service to administer recreational features on lands not belonging to the United States. Many of the recreation areas associated with the State Water Project will include both federal and state lands. It is therefore desirable that the Department be authorized to transfer to the Federal Government state lands lying within recreation areas to be administered by the Forest Service.

Senate Bill No. 246 provides a procedure for the purpose of preserving and protecting archeological, paleontological and historical features or sites on state lands. It provides that, prior to commencement of construction of major public works projects on state lands, the agency involved submit to the State Department of Parks and Recreation sufficient information to indicate the nature and location of the project and excavations to be undertaken. The Department of Parks and Recreation may then conduct a site survey on the lands in question to determine the presence of any historical, archeological or paleontological sites or features and make recommendations for recording or preserving the same. The agency undertaking the project may either perform the operations for preserving or recording the sites or features found by the Department of Parks and Recreation, or contract with Parks and Recreation to perform the necessary work of preservation or recordation.

Water Quality Control. Assembly Bill No. 2380[14/] authorizes the State Water Quality Control Board to make a comprehensive study to determine what can best be done to correct and prevent damage to the waters of the San Francisco Bay and Sacramento-San Joaquin Delta areas, caused by drainage and waste water discharges or by other activities that may contribute to water contamination and pollution. Reports are to be submitted to the Legislature at the 1966, 1967, and 1969 sessions. An appropriation of $170,000 was made for the study.

Assembly Bill No. 2380 neither pertains to, nor affects the construction of project facilities, such as the San Joaquin Master Drain. However, water quality standards, which may be adopted as a result of the authorized study, may affect the future operation of project facilities.

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14/ Calif. Stats. of 1965, Chapter 1351.

Water Supply. Two bills were enacted during the 1965 Regular Session concerning water supply aspects of the State Water Project; Assembly Bill No. 2504[15] and Senate Bill No. 838.[16]

Assembly Bill No. 2504 transfers to the State Water Rights Board the duties of the California Water Commission in connection with the Department's applications for water, and authorizes the Board to consolidate several requests into one hearing.

Requests for the assignment or releases of priority of a state application were previously considered, first, by the California Water Commission. Approved requests were then submitted to the State Water Rights Board in order to obtain a permit pursuant to the assigned application. This caused a considerable duplication of effort since the Board dealt with many of the same questions considered by the Commission. This was time consuming and expensive for both the applicants and the State.

Senate Bill No. 838 amends the section of the Metropolitan Water District Act relating to the issuance of bonds. The major amendment is to allow bond proceeds to be used to make capital cost payments to the State pursuant to The Metropolitan Water District of Southern California's contract for a water supply from the State Water Project.

There had been substantial doubt whether bonds issued by the District could be utilized for financing the purchase of excess capacity in the California Aqueduct and for advances to the State, under its water supply contract, for the construction of delivery facilities and measuring devices. Senate Bill No. 838 provides authority for the District to issue bonds for these and other purposes covered by its contract with the State, and will facilitate the issuance of bonds for its distribution facilities for project water.

Power Management. Two resolutions were adopted during the 1965 Regular Session requesting studies concerning pumping energy for the State Water Project.

House Resolution No. 628 requests the Department to determine the best source of energy in cooperation with water supply contractors, power suppliers, and others; to

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15/ Calif. Stats. of 1965, Chapter 989.
16/ Calif. Stats. of 1965, Chapter 445.

keep the Legislature informed on major developments; and to report to the Legislature at least 90 days before committing the State to a permanent energy source for the Tehachapi Pumping Plant. The Director of Water Resources transmitted a report[17] to the Legislature in response to House Resolution No. 628.

Senate Resolution No. 138 requests the Department, with the advice of the Division of Mines and Geology, to determine if geothermal energy can be used for generating power to raise water of the State Water Project over the Tehachapi Mountains, and to make a report to the Legislature on the subject. A date was not specified for the report and funds were not provided.

## Actions by the Department

The Department took actions regarding the project purposes of recreation, fish and wildlife enhancement, and water supply, and concerning power management activities.

Recreation and Fish and Wildlife Enhancement. In February 1966, the Department transmitted to the Legislature the second of a continuing series of annual bulletins[18] dealing with the costs of the State Water Project allocated among project purposes. This year's report presents the Department's allocations for project facilities which are completed, currently under construction, or scheduled to be under construction during fiscal year 1966-67. The report develops a figure of $7,074,900 as the requested 1966-67 appropriation for reimbursement of moneys expended from funds, other than those provided under the Davis-Dolwig Act, for recreational lands purchased through June 30, 1965, and for the capital costs of completed multiple-purpose facilities allocated to recreation and fish and wildlife enhancement. The Governor's Budget actually contains $5 million for the recommended 1966-67 appropriation, in anticipation of legislation subsequently enacted in the form of Assembly Bill No. 12 during the 1966 Extraordinary Session.

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17/ Department of Water Resources Report, "Energy Sources for the State Water Project and Other Power Matters", dated December 1965.

18/ Department of Water Resources Bulletin No. 153-66, "Allocations of Costs Among Purposes of the California State Water Project", dated January 1966.

Water Supply. As of April 1, 1965, long-term water supply contracts had been executed committing 4,206,400 acre-feet of the minimum project yield of 4,230,000 acre-feet. Requests totaling more than 124,000 acre-feet were subsequently received from agencies, including several of the Project's water supply contractors, for all or a part of the 23,600 acre-feet then remaining uncommitted.

The Director of Water Resources approved the following disposition of the remaining 23,600 acre-feet of the minimum project yield on November 4, 1965:19/

| Agency | Amount, in acre-feet annually |
|---|---|
| Upper Santa Clara Valley Water Agency[a/] | 15,000 |
| Big Bear Municipal Water District[b/] | 4,600 |
| Kings County[b/] | 4,000 |
| Total | 23,600 |

a/ Water supply contractor.
b/ Potential water supply contractor.

The maximum annual entitlement of the water supply contract with the Upper Santa Clara Valley Water Agency was increased on January 24, 1966, to include an additional 15,000 acre-feet. Negotiations are under way with the other two agencies listed above, for water supply contracts covering the amounts shown.

The Department released a two-volume compilation20/ of all contracts executed with agencies for a water supply from the State Water Project, and all amendments thereto, as of May 1, 1965. Additional volumes will be prepared covering contracts and amendments executed subsequent to that date.

19/ Department of Water Resources Memorandum by Messrs. Wesley E. Steiner and John R. Teerink to Messrs. Alfred R. Golze' and William E. Warne, dated October 27, 1965.
20/ Department of Water Resources Bulletin No. 141, "The California State Water Project, Water Supply Contracts", dated November 1965 (Volumes I and II).

Chapter VI of this bulletin presents a summary of the water supply contract negotiation and administration activities to date.

Power Management. Power Management activities for the State Water Project principally involve the disposition of Oroville-Thermalito power and the acquisition of supplemental power supplies for project pumping requirements. Progress in these activities is reported by the Department in a series of quarterly bulletins.21/ The current status of each activity is described in Chapter VIII of this bulletin under the section heading entitled "Project Electric Power Production and Supply". Significant events occurring during the year ending on April 1, 1966, are noted in the following paragraphs.

Last year's bulletin referred to the technical problem encountered in the design of the long-life fuel elements for the large seed-blanket reactor, then contemplated as a low-cost energy source for the State Water Project.22/

Dr. Glenn T. Seaborg, Chairman of the Atomic Energy Commission, notified the State in December 196523/ that the Commission had decided not to contract for construction of the proposed reactor. Vice-Admiral H. G. Rickover had concluded the fuel element problem made it unlikely that satisfactory development of a reactor core, meeting the performance objectives of a nine-year life at low cost, could be achieved within the original framework of the reactor concept, fuel element material, and design.

The Department's plans for a nuclear powerplant are being reoriented toward building a plant of the standard pressurized or boiling water type such as is now commercially available.

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21/ Department of Water Resources Bulletin, "Electric Power in the State Water Project", a quarterly series commencing April 1964.

22/ Department of Water Resources Bulletin No. 132-65, "The California State Water Project in 1965", dated June 1965, page 16.

23/ Letters to Governor Edmund G. Brown and to Mr. William E. Warne from Dr. Glenn T. Seaborg, dated December 24, 1965.

The Fluor Corporation, Ltd., retained by the Department in 1963 to investigate alternative sources of energy for project pumping, and to recommend the most economical and reliable source, or sources, completed a supplemental study and submitted an additional report[24/] thereon in January 1966. The basic comprehensive study was summarized by Fluor in its final report of September 1964, "Energy Source Study for the California State Water Project". In the supplemental study, Fluor reevaluated the cases of its September 1964 report for a state-owned nuclear powerplant commencing operation in 1971 (Case 1) and in 1982 (Case 3), and also made a reanalysis of the case for purchase of power from the California Power Pool Companies[25/] (Case 2) on the basis of the revised offer made by the Suppliers[26/] in their proposal of March 2, 1965.

The report confirms and reemphasizes that the least expensive power for pumping would involve a state-owned nuclear powerplant and a minimum onpeak mode of aqueduct operation. Contributing to the favorable economics of this plan is the conclusion of the study that power, surplus to the immediate project needs, could be sold to utilities within a range of rates which, in Fluor's best judgment, were conservative and reflected costs of capacity and energy from alternative sources available to prospective purchasers. The study also points to the probability that maximum economy would be achieved with the earlier construction of the nuclear powerplant, as noted in Case 1 of the basic report.

## History of Individual Facilities

Significant actions and events pertaining to individual facilities of the State Water Project, during the general period April 1, 1965, to April 1, 1966, are described in this section.

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24/ The Fluor Corporation, Ltd., Los Angeles, California, "Supplemental Economic Review to Energy Source Study", dated January 1966.

25/ The Pacific Gas and Electric Company, The Southern Edison Company, and the San Diego Gas and Electric Company.

26/ Includes the California Power Pool Companies and the City of Los Angeles Department of Water and Power. The Suppliers' Proposal of March 2, 1965, was described on page 101 of Bulletin No. 132-65, "The California State Water Project in 1965", dated June 1965.

Upper Feather Area

Conflicts in land use at Grizzly Valley Dam and Lake Davis were resolved by Assembly Bill No. 668.[27] The boundaries of Fish and Game District IV were changed so that the Smith Peak Game Refuge is now outside the Department's recreation area.

The Department released the final edition of the advance planning report[28] on Grizzly Valley Dam and Lake Davis in May 1965.

Oroville Area

Negotiations were successfully concluded concerning the disposition of two major utilities located within the area to be inundated by Oroville reservoir. The resultant agreements, together with other events concerning the construction of facilities of the Oroville Area, are described herein.

Acquisition of Big Bend Powerplant. Negotiations initiated in 1964 for acquisition of the Pacific Gas and Electric Company's Big Bend Powerplant were completed by signed agreements between the Department and the Company on December 2, 1965. The State agreed to pay $25 million for the powerplant, 5,770 acres of adjoining land, and a 230 to 110 kilovolt connection. The transaction[29] was submitted to the Public Utilities Commission and approved on January 18, 1966. Formal changeover took place on January 28, 1966.

The Pacific Gas and Electric Company will operate the plant for the State until inundation in the fall of 1967. During this time the State will sell the generated energy to the Company at a rate of 2.95 mills per kilowatt-hour. The hydroelectric generation of the plant has been replaced, within the Company's system, by thermal-electric generating capacity located in the Delta area.

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27/ Calif. Stats. of 1965, Chapter 141.
28/ Department of Water Resources Bulletin No. 128, "Lake Davis", dated May 1965.
29/ Application No. 48140 to the California Public Utilities Commission by the Pacific Gas and Electric Company and the Department of Water Resources "For an Order Authorizing the Former to Sell to the Latter Certain Electric Utility Property", December 22, 1965.

Agreement with the Georgia-Pacific Corporation. A long dispute between the State and the Georgia-Pacific Corporation was settled concerning the disposition of the latter's wholly owned subsidiary, the 18-mile-long Feather River Railway. An agreement30/ was signed on November 30, 1965, by officials of the Department and the Corporation which terminated all legal proceedings between the parties. The Corporation agreed to accept $1,322,605 for the railway, which will be inundated for one-third of its length by Oroville reservoir. The Corporation had originally demanded that the State replace and relocate the railroad, which would have cost between $8,500,000 and $9,000,000.

The Corporation also agreed to cease operation of its railway by October 1, 1966; to continue operation of its Feather Falls mill for at least five years or repay to the State a prorated sum, not in excess of $100,000 for failure to do so; to give up all but $20,000 of its claim of $272,717 for flood damages in 1964; and, to convey to the State, for an additional $177,396, more than 500 acres of the Corporation's land in the reservoir site including its reversionary interest in Bidwell Bar State Park.

Dredger Tailings Litigation. On March 22, 1966, the Supreme Court of California denied the petition of the Natomas Company to review State of California, et al v. Natomas Company, 239 ACA 608, a condemnation case involving dredger tailing lands which supply the fill material for most of the Oroville Dam embankment. This confirmed the determination of both the trial court and the District Court of Appeals that the Department is authorized to acquire lands in fee title for fish and wildlife and recreation purposes incidental to construction and operation of a reservoir project, even though such lands may be located downstream from the dam and reservoir.

Dedication of Bidwell Bar Bridge. Middle Fork Bridge, renamed the Bidwell Bar Bridge31/ on January 12, 1966,

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30/ Department of Water Resources Agreement No. 854828, "By and Between Feather River Railway Company, Georgia-Pacific Corporation, and the State of California, acting By and Through its Department of Water Resources", signed November 30, 1965.

31/ Department of Water Resources Project Nomenclature Order No. 7, dated January 12, 1966.

was officially dedicated during a ceremony held at the site on September 25, 1965. It is the highest highway suspension bridge in the United States.

Construction Accident. On October 7, 1965, at about 9:00 p.m., four construction workers were killed in a head-on collision between two trains of the highly automated system utilized by the contractor to transport embankment material from the borrow area to the Oroville Dam site. The wreck occurred inside a tunnel on the old alignment of the relocated Western Pacific Railroad.

## South Bay Aqueduct

The completion of construction of the main line of the South Bay Aqueduct and the commencement of water deliveries to Santa Clara County were celebrated with dedication ceremonies at the Santa Clara terminal facilities on July 1, 1965.

## Delta Facilities

The Director of Water Resources, on March 16, 1966, officially designated[32/] the Peripheral Canal as the State Water Project facility to transfer water across the Sacramento-San Joaquin Delta.

The Department and the Bureau of Reclamation have been negotiating a memorandum of understanding for federal-state implementation of the Peripheral Canal. In an attempt to hasten agreement as to the general terms and extent of state and federal participation in the Canal as a joint-use facility, Governor Brown wrote to Secretary of the Interior Stewart L. Udall in December 1965.[33/] His letter outlined reasons for state operation of the facility, and stressed the State's capability and willingness to integrate the Canal operation into its planned automated control system for the State Water Project.

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32/ Department of Water Resources, Project Order No. 12, dated March 16, 1966.

33/ Letter, from Edmund G. Brown, Governor of California, to The Honorable Stewart L. Udall, Secretary of the Interior, U. S. Department of the Interior, Washington, 25, D. C., December 21, 1965, cc. The Honorable William E. Warne.

Secretary Udall replied[34/] to Governor Brown's letter, pointing out that differences between the state and federal agencies still centered on the question of which agency would actually operate the facility.

The Department, on February 10, 1966, began immediate studies to establish the alignment and required right-of-way take lines for the Peripheral Canal. A joint Department-Bureau Interagency Work Group was established to assure that the work done by the Department will be acceptable to the Bureau, in the event the latter acts as the design and construction agency.

A series of five joint hearings was held during early 1966, by the Department and the Bureau, in the cities of Tracy, Lodi, Sacramento, Thornton, and Stockton to obtain local reaction to the proposed canal alignment. The Department is studying several route modifications as a result of these hearings.

The Department estimates that the total cost of the alignment studies prior to the commencement of final design will be approximately $1.6 million. Selection of the final alignment must be made by July 1967, in order to coordinate the acquisition of rights-of-way for the Westside Freeway with the Division of Highways, as well as to meet the required completion date for the Canal.

Operation studies indicate that the Peripheral Canal must be in operation by 1974 in order to maintain suitable water quality within the California Aqueduct. These operation studies and underlying criteria were discussed with engineering representatives of the Project's water supply contractors on March 4, and March 16, 1966.

## California Aqueduct

A large majority of actions taken by authorities in the past year, on behalf of the State Water Project, have been those which pertain to, or concern, the 444-mile-long California Aqueduct.

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34/ Letter from Stewart L. Udall, Secretary of the Interior, to Honorable Edmund G. Brown, Governor of California, Sacramento, California, February 5, 1966.

One of the actions taken by the Legislature, and pertaining specifically to the Aqueduct, was the adoption of Assembly Concurrent Resolution No. 51.35/ This resolution requested the Department to erect a historical marker, memorializing John F. Kennedy, at the San Luis Dam site where the late President participated in ground-breaking ceremonies in 1962.

Department actions, described in the following sections, pertained to the resizing and renaming of some Aqueduct features, the new effects on cost allocations of the Aqueduct, new agreements with water contractors and the advertising for bids on new construction contracts.

Addition of Clifton Court Forebay. Clifton Court Forebay, included as a feature of the Peripheral Canal in an investigative report,36/ was officially designated in March 1966 as a feature of the California Aqueduct.37/

One of the major reasons for the change in designation was the need for a forebay at the Delta Pumping Plant of the California Aqueduct. The Pumping Plant has been designed to allow a substantial portion of the water to be pumped with offpeak power, thus assuring delivery of water to the contractors at the least possible cost.

The Forebay will also serve as an interim intake to the Aqueduct, prior to operational status of the Peripheral Canal, in lieu of improving the capacity of Italian Slough. Construction of the Forebay will also provide the opportunity for increased recreation development in the San Francisco Bay area.

In conjunction with The Resources Agency's development of a recreation master plan for the Delta, the East Bay Regional Park District has expressed its desire to design, construct, and operate recreation facilities at Clifton Court Forebay, provided the State will acquire necessary rights-of-way, and design the project to be compatible with the recreation use.38/ Acting Administrator William F. Grader, of The Resources Agency, requested that both the

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35/ Calif. Stats. of 1965, Resolution Chapter 121.
36/ Interagency Delta Committee Report, "Plan of Development, Sacramento-San Joaquin Delta", January 1965.
37/ Department of Water Resources Project Order No. 13, March 21, 1966.
38/ Letters from Mr. William Penn Mott, Jr., General Manager, East Bay Regional Park District, to Mr. Hugo Fisher, Administrator, The Resources Agency, September 13, 1965, and to Mr. Fred Jones, Director, Department of Parks and Recreation, January 31, 1966.

Departments of Water Resources and Parks and Recreation cooperate and give full consideration to the concepts outlined by the Park District.39/

Allocations Among Project Purposes. Actions were taken which will affect the allocations of costs of the California Aqueduct among project purposes.

The inclusion of Clifton Court Forebay will affect the overall allocations of California Aqueduct costs among project purposes.

Assembly Concurrent Resolution No. 5440/ requests the Department to implement the recommendations in Department of Water Resources Bulletin No. 154 ("Potential Recreation Areas Along the California Aqueduct", January 1965) by acquiring recreational sites along the California Aqueduct in the San Joaquin Valley, and also requests the Department of Parks and Recreation to begin development of these areas. The resolution expresses the legislative intent, pursuant to the Davis-Dolwig Act, to appropriate funds to reimburse expenditures of both Departments for such purposes.

The Bureau of Reclamation has agreed41/ to bear about 47 percent of the costs of Los Banos Creek Detention Dam and reservoir in the San Luis division as a preliminary allocation for flood control benefits to the downstream area. The allocation percentage will be reexamined after the final construction costs of the Dam and reservoir are known. The remaining costs of the Dam and reservoir, which are properly allocable to flood protection of the Aqueduct and to recreation and fish and wildlife enhancement, will be jointly shared in accordance with the 45:55 federal-state ratio. The Department was informed42/ that the Bureau was initiating the necessary studies, and will make appropriate nonreimbursable

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39/ Resources Agency Memorandum by Mr. William F. Grader, Acting Administrator, to Directors Warne and Jones, "Recreation Facilities at Italian Slough", September 22, 1965.

40/ Calif. Stats. of 1965, Resolution Chapter 109.

41/ Letter to Mr. William E. Warne, Director, Department of Water Resources, from Mr. C. H. Kadie, Assistant Regional Director, Region 2, Bureau of Reclamation, November 17, 1965.

42/ Letter to Mr. William E. Warne, Director, Department of Water Resources, by Mr. R. J. Pafford, Jr., Regional Director, Region 2, Bureau of Reclamation, March 9, 1966.

allocations of federal funds, in other cases where area flood control benefits result from construction in the San Luis division.

Tehachapi Lift. Fifteen years of study were climaxed on August 18, 1965, with a decision by the Department's Chief Engineer to proceed with final design of a single-lift scheme for the Tehachapi Pump Lift. This decision, together with its supporting research program, is described in Chapter III.

A comprehensive bulletin[43/] on design of the Tehachapi Crossing and Pump Lift was published recently, documenting the research work accomplished by the Department's consultants, the firm of Daniel, Mann, Johnson, and Mendenhall, and the Bechtel Corporation, consultant retained by The Metropolitan Water District of Southern California. The bulletin summarizes the Department's study of the Tehachapi Crossing as a whole, and contains reports of consulting boards, consultants, and the Chief Engineer.

Revised Aqueduct Nomenclature. For purposes of working drawings and plans, the portion of the California Aqueduct previously known as the "East Branch" was separated into two divisions and renamed in November 1965.[44/] The newly designated "Mojave" division includes the portions of the Aqueduct from the junction of the West Branch to, and including, Cedar Springs reservoir. The "Santa Ana" division includes the San Bernardino Tunnel and the downstream portions of the Aqueduct through Perris reservoir.

Sizing of Features. The design capacities of the California Aqueduct have been established upstream of the West Branch junction. The capacities of reaches and reservoirs downstream from that point have not been set, as yet. However, a preliminary report[45/] has been distributed,

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43/ Department of Water Resources Bulletin No. 164, "Tehachapi Crossing Design Studies", Volume I through IV, May 1965, and Volume V, August 1965.

44/ Department of Water Resources Memorandum by John R. Teerink to Alfred R. Golze', November 23, 1965, approved November 28, 1965.

45/ Department of Water Resources, "Design Capacities of the California Aqueduct - Junction, West Branch to: (1) Perris Reservoir, and (2) Castaic Reservoir", (Preliminary Edition), December 1965.

setting forth the basis for proposed design capacities in this area.

In July 1965, the Department's Division of Safety of Dams, pursuant to Division 3 of the Water Code, recommended[46/] that Cedar Springs Dam be limited to a height which would create a reservoir with maximum storage of only about 75,000 acre-feet, as compared with the 200,000 acre-feet capacity contemplated in last year's bulletin. The Department conducted intensive geological explorations which indicated the presence of several fault zones in the immediate site area. A consultant was retained, who concluded that these faults may be active. The Division of Safety of Dams conducted an independent study, retained its own consultant, and arrived at essentially the same conclusion. The Department is currently studying alternative ways of providing substitute regulation storage, required pursuant to water supply contract commitments, over and above the reduced capacity of the reservoir.

The Department executed a contract amendment[47/] with The Metropolitan Water District of Southern California, in November 1965, whereby the District will advance to the State the funds necessary for preliminary exploratory work, surveys, geologic studies, alternative designs, and any and all other work required to enable the District to arrive at a decision as to the capacity of Perris reservoir best suited for the District's needs (but not to exceed 500,000 acre-feet). The District's decision in this matter is required within 90 days after notification by the Department as to the optimum size of the reservoir determined by the State. Notice is expected to be given in the latter part of May 1966. The District also agreed to advance, to the State, funds necessary to acquire rights-of-way permitting a reservoir capacity of 500,000 acre-feet, and any additional costs occasioned thereby.

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46/ Department of Water Resources Memorandum by Robert B. Jansen to Mr. H. G. Dewey, Jr., "Proposed Cedar Springs Dam", July 16, 1965.

47/ Amendment No. 4, November 19, 1965, to the "Contract Between the State of California Department of Water Resources and The Metropolitan Water District of Southern California for a Water Supply", originally executed November 4, 1960.

West Branch Power Developments. In October 1965, the Director of Water Resources signed a memorandum of intent[48] with representatives of the City of Los Angeles Department of Water and Power for the City to construct and operate a 1,200,000 kilowatt Castaic Powerplant as a peaking power facility. Project water would be released from Pyramid reservoir during peak power demand periods and would flow through an enlarged Angeles Tunnel.[49] The water would then drop about 1,000 feet through the city-constructed powerplant at Castaic reservoir. A form of contract has been prepared, and negotiations are continuing.

A Department plan to operate the portion of the West Branch from Quail Lake to, and including, Pyramid Powerplant on a limited onpeak basis was approved in February 1966.[50] Heretofore, the operation of this portion of the West Branch had been contemplated to match the planned operation of Oso Pumping Plant. Under the recently approved plan, the capacity of Quail Lake will be enlarged, the conveyance capacity between the Lake and the Powerplant increased, and affected canal sections designed to accommodate significant water surface fluctuations.

Initial Construction of the Coastal Branch. Bids were opened February 2, 1966, for the construction of the first 15-mile portion of the Coastal Branch, from the main line of the California Aqueduct to the Devil's Den Pumping Plant. Bids were also opened January 26, 1966, for furnishing and installing pumps at the Las Perillas and Badger Hill Pumping Plants.

Certain objections[51] to the work covered by these two contracts were raised by water supply contractors in the

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48/ "Basis of Understanding for Cooperative Power Development Between the Pyramid and Castaic Reservoirs on the West Branch of the California Aqueduct", signed by representatives of the Department of Water Resources for the State of California and the Department of Water and Power for the City of Los Angeles, October 4, 1965.

49/ Department of Water Resources, Project Nomenclature Order No. 6, October 27, 1965.

50/ Department of Water Resources, "A Position Paper re: Onpeak Operation of the Pyramid Powerplant", approved February 23, 1966.

51/ Letters to Mr. William E. Warne by Mr. Daniel G. Grant, Chairman of the Santa Barbara County Board of Supervisors, February 3, 1966, and by Mr. Fred C. Kimball, Chairman of the San Luis Obispo County Board of Supervisors, February 16, 1966.

Central Coastal area. After consultation, the Department decided on the following course of action and notified the contracting agencies:52/

1. The contract for construction of the canal portion of the Coastal Aqueduct would be awarded.

2. The pumps that were scheduled for initial installation at the Las Perillas and Badger Hill Pumping Plants would be installed in two stages. The pump bids that had been received would be rejected and the contract readvertised.

3. The discharge lines from the Badger Hill Pumping Plant would be installed in two stages. However, both of the discharge lines from the Las Perillas Pumping Plant would be installed at the same time, due to problems associated with staged construction.

The contract discussed in (2) above was readvertised March 18, 1966, and opened April 20, 1966.

## Local Projects

The Davis-Grunsky Act authorizes state financial assistance by grants, loans, or both, to public agencies for local water projects. State loans are authorized to agencies for the construction of needed local projects and for the preparation of feasibility reports on such projects. State grants are authorized for construction costs allocated to the enhancement of fish and wildlife, to recreation, and to initial water supply and sanitary facilities. Actions of the Legislature and the Department both affect implementation of these local projects.

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52/ Letters to Mr. Fred C. Kimball, March 22, 1966, and to Mr. Daniel G. Grant, April 1, 1966, by Mr. James J. Doody, District Director, Southern District of the Department of Water Resources.

Legislative Action

During the 1965 Regular Session of the Legislature, the following 10 bills[53/] were enacted, authorizing an additional $43,348,200 in Davis-Grunsky grants:

1. Senate Bill No. 22 authorizes a $3,285,000 Davis-Grunsky Act recreation grant to the San Luis Obispo County Flood Control and Water Conservation District for its proposed Lopez Dam and Reservoir Project.

2. Senate Bill No. 54 authorizes a $6,500,000 recreation and fish and wildlife enhancement grant to the Merced Irrigation District for its proposed new Exchequer and McSwain Dams and Reservoirs on the Merced River.

3. Senate Bill No. 94 authorizes a $1,950,000 grant to the Sonoma County Flood Control and Water Conservation District for the Santa Rosa Creek Dam and Reservoir Project.

4. Senate Bill No. 152 authorizes a grant to the Turlock and Modesto Irrigation Districts of $7,000,000 for the New Don Pedro Dam and Reservoir on the Tuolumne River.

5. Assembly Bill No. 251 authorizes an additional grant to the Siskiyou County Flood Control and Water Conservation District, or the Mount Shasta Recreation and Park District of $2,000,000 for the Box Canyon Dam and Reservoir Project. The 1963 Legislature had authorized $2,800,000 for this project.

6. Senate Bill No. 439 authorizes an additional grant of $363,200 to the South Sutter Water District for the Camp Far West Dam and Reservoir Project in Placer and Yuba Counties. The 1963 Legislature had authorized $960,000 for this project.

7. Senate Bill No. 837 authorizes a grant to the Calaveras County Water District of $16,000,000 for fish and wildlife enhancement and recreational functions of its proposed project.

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53/ Calif. Stats. of 1965, Chapters 338, 143, 1399, 282, 478, 775, 1412, 778, 1428, and 1432, respectively.

8. Senate Bill No. 842 authorizes a grant to the Mariposa County Water Agency of $2,000,000 for recreation and enhancement of fish and wildlife functions of its Agua Fria Project.

9. Senate Bill No. 1152 increases the authorized grant to the Nevada Irrigation District from $3,500,000 to $4,750,000 for recreational functions in connection with the construction of four proposed dams and reservoirs.

10. Senate Bill No. 1337 authorizes a grant of $3,000,000 for recreation and fish and wildlife enhancement to the City of Salinas and the County of Monterey for the Alisal-Gabilan Watershed Project in Monterey County.

Department Action

Prior to April 1, 1966, the Department had approved a total of $25,485,000 in grant and loan applications under the Davis-Grunsky Program. The following six projects, approved in the past year, account for $12,791,000 of the total:

1. A $380,000 loan to Centerville Community Services District for construction of a municipal distribution system to serve the community of Centerville in Shasta County.

2. A $62,000 loan to Applegate-Clipper Gap County Water District for construction of a domestic distribution system to serve the district in Placer County.

3. A total of $3,348,400 in recreation and initial water supply and sanitary facility grants to Placer County Water Agency for its Middle Fork American River Project in Placer County.

4. A total of $3,944,800 in recreation and initial water supply and sanitary facility grants to San Luis Obispo County Flood Control and Water Conservation District for its Lopez Project in San Luis Obispo County.

5. A total of $4,693,000 in recreation and initial water supply and sanitary facility grants to Nevada Irrigation District for its Yuba-Bear Project in Nevada, Placer, and Sierra Counties.

6. A supplemental recreation grant of $363,200 to South Sutter Water District for its Camp Far West Project. This grant was authorized by the Legislature in 1965, and was in addition to the grants reported on page 59 of Bulletin No. 132-65.

# CHAPTER III. RESEARCH AND DEVELOPMENT ACTIVITIES FOR THE STATE WATER PROJECT

This chapter describes the more significant research and development programs directly involved with the State Water Project.

For this year's report, one example has been selected to illustrate research activities in each of the following areas:

1. Design - the determination of the most reliable and economic pump lift system for the Tehachapi crossing.

2. Construction - the development of preconsolidation techniques to be applied where the California Aqueduct will traverse areas susceptible to land subsidence.

3. Operation - the development of an automated monitor and control system for the complex conservation and distribution network.

Future annual reports of this series will highlight other unique developments, until all of the more significant research programs for the Project have been covered.

## Tehachapi Pump Lift

Since 1951, when the Legislature authorized construction of a "conduit to transport water from the Sacramento-San Joaquin Delta to the San Joaquin Valley and to Southern California" (now known as the California Aqueduct), Department engineers have been studying various specific alignments for transporting water into Southern California.

The key reach in these alignments has been the crossing of the Tehachapi Mountains, the major physical barrier between Northern and Southern California.

These rugged mountains rise nearly a mile higher than the water elevation in the Sacramento-San Joaquin Delta, and are in an area of high seismic activity. Tunneling conditions vary widely because of extensive major faults, such as Pastoria, Garlock, Gorman, and San Andreas.

A 1955 State Engineer's report[54] described three possible routes for transporting water over the Tehachapi Mountains and into Southern California: (1) the "High Line Route", with a pumping plant at Pastoria Creek, at the base of the northern Tehachapi Mountains (about 25 miles south of Bakersfield), where water would be lifted from about the 1,500-foot elevation to a relatively short series of tunnels at a 3,357-foot elevation; (2) the "Long Tunnel Route", also with a pumping plant at Pastoria Creek, but lifting water only to the 1,870-foot elevation and through a combination of tunnels of considerably greater aggregate length; and, (3) the "Coastal Line", which would avoid the mountains entirely, by following an extension of what is now known as the Coastal Branch of the California Aqueduct. These routes would not provide equivalent service to the same service areas.

Later studies were made by the Department on the alignment of the California Aqueduct and the elevation of the Aqueduct's hydraulic gradient.[55] The selected Aqueduct alignment was one that would traverse the southwest periphery of the San Joaquin Valley floor and cross the Tehachapi Mountains in the vicinity of Pastoria Creek Canyon, about five miles east of Interstate 5 (U.S. 99). The Department, with the concurrence of The Metropolitan Water District of Southern California,[56] established the hydraulic gradient at 3,165 feet above sea level. With the Aqueduct at a 1,200-foot elevation at the foot of the mountains, the pumping lift for the Tehachapi Pumping Plant became fixed at approximately 2,000 feet.

Other design particulars were progressively developed.

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54/ Department of Public Works, Division of Water Resources Report, "Program for Financing and Constructing the Feather River Project as the Initial Unit of the California Water Plan", dated February 1955.

55/ Department of Water Resources Bulletin No. 78, "Investigation of Alternative Aqueduct Systems to Serve Southern California", dated December 1959.

56/ "Memorandum of Understanding Regarding Elevation and Alignment of Tehachapi Crossing, State Water Facilities", dated February 8, 1963; signed by Robert A. Skinner, General Manager and Chief Engineer, The Metropolitan Water District of Southern California; and Alfred R. Golze', Chief Engineer, Department of Water Resources.

The decision to use electric-drive pumps at the Tehachapi Pumping Plant, in lieu of steam-driven pumps, was made by the Chief Engineer on the basis of recommendations[57] by a Department consulting firm. The final design capacity of the Tehachapi Pumping Plant later was established at 4,100 cubic feet per second.[58]

The remaining major items to be established before actual design of the Tehachapi Pumping Plant could proceed further were the types of pumps and the number of pump lifts to be used to raise the water the required total of about 2,000 feet.

## Research Program

The Department employed two consulting boards,[59] to advise staff engineers: one was concerned with engineering and geological problems; the other with earthquake forces. The consulting firm of Daniel, Mann, Johnson and Mendenhall of Los Angeles (hereinafter referred to as DMJM) was placed under contract[60] to make pump model studies, working with the firm of Motor-Columbus, Baden, Switzerland. The Metropolitan Water District of Southern California conducted parallel studies, employing its own consulting firm (The Bechtel Corporation of Los Angeles), which favored a two-lift scheme. The reference papers and supporting documents, together with the technical studies by Metropolitan, have been assembled and bound in the Department's five-volume Bulletin No. 164, "Tehachapi Crossing Design Studies".

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57/ Department of Water Resources, "Engineering Evaluation of Electric Motor and Steam Turbine Drive for Tehachapi Pumping Plant", prepared by the Fluor Corporation, Ltd., dated March 1964.

58/ Department of Water Resources, "Design Capacities of the California Aqueduct-Kettleman City to: 1. Junction, East and West Branch, 2. Devil's Den Pumping Plant", (Final Edition), dated April 1965.

59/ The Tehachapi Crossing Consulting Board (John R. Hardin, R. C. Hornberger, Thomas M. Leps, Elmer C. Marliave, Robert Sailer, John Parmakian, Louis G. Puls) and The Consulting Board for Earthquake Analysis (Dr. Hugo Benioff, Dr. George Housner, Dr. Clarence Allen, Dr. H. Bolton Seed, N. D. Whitman, Jr., Dr. James L. Sherard).

60/ State of California, Department of Water Resources, Tehachapi Pumping Plant, Research and Development Program, Contract No. 352872 with Daniel, Mann, Johnson and Mendenhall, Los Angeles, California.

The Department's careful decision, and its supporting research program, is briefly described in the following sections.

Alternative Pump Lift Systems Investigated. As studies of the Tehachapi Crossing progressed, it became apparent that there were two possible alignments for the pump lift over the Tehachapi Mountains, one up a natural ravine at Pastoria Creek Canyon and the other up a rocky ridge called the Ridge Route, about a mile east of Pastoria Creek Canyon.

A great deal of geological field exploration study was made in the area. The Department drilled numerous holes and excavated large test pits. The entire geological situation in the Pastoria Creek Canyon and along the Ridge alignment was evaluated. Selection of a multi-lift system would require small dams for forebay purposes and large pumping plants to be constructed on the steep hillsides of the Tehachapis.

A complete engineering analysis was conducted on three possible lift systems for each of these two alignments: a single-lift of 2,000 feet; a two-lift of 1,000 feet each; and, a three-lift of about 670 feet each.

Thorough study eliminated the three-lift system. Construction of the number of forebay dams and pumping plants near earthquake fault zones at higher mountain elevations, (which that system would have required) was not considered desirable from an engineering and geological point of view.

The Department then concentrated studies on the two remaining systems using six alternative schemes for lifting water up the mountains. Two were schemes for a single-lift system and four were schemes for two-lift possibilities. One of the single-lift schemes included surface penstocks; the other, underground penstocks that would be placed in inclined tunnels constructed up the Ridge route of the mountainside. The four two-lift schemes each required a forebay reservoir at some point approximately halfway up the mountainside. Three of the two-lift schemes would have required a reservoir in the general area of Pastoria Creek and the fourth, a reservoir adjacent to the Ridge alignment.

Pump Model Testing. The contract between the Department and DMJM, in association with the Swiss firm of Motor-Colombus, was for a research and model testing program for

high head pumping plants. This program was to determine and analyze the feasibility, reliability, and efficiency factors for each lift system.

Major emphasis was placed on a model analysis of a single-stage pump to serve in a three-lift system, a two-stage pump to serve in a two-lift system, and a four-stage pump to serve in a single-lift system. The two-stage and four-stage pump models were built and tested by European firms (Voith of Heidenhem, Germany, and Sulzer Brothers of Wintherthur, Switzerland) having long experience in high head pump design and manufacture. A single-stage pump model was built and tested in the Los Angeles plant of the Byron Jackson Company. (A centrifugal, single-stage pump consists of an impeller, or rotor with an intake at the center, so arranged that when rotated it will discharge water by centrifugal force into a casing which surrounds the impeller. A multi-stage pump is one which has two or more impellers in a single casing, one impeller discharging into the next, and so on.)

These pumps models were the largest ever made, using about one-in-five ratio of model to prototype size. While the models were being built and prepared for laboratory testing, DMJM researched the literature of the pump industry and checked the statistical performance of all pumps throughout the world of a size comparable to those under study.

Results of the studies indicated that construction of any of the desired pumps was feasible. The highest individual pump efficiency was the two-stage pump for a two-lift system, according to DMJM findings. However, the four-stage pump showed only a small difference in efficiency, not great enough to support a system decision on pump efficiency alone. The difference disappears when considering the efficiency of the overall system, from the bottom to the top of the total lift.

## Application of Results

The economics of the different pump lift schemes were examined and reviewed by Department engineers and members of both the Tehachapi Crossing Consulting Board and the Consulting Board of Earthquake Analysis, groups of nationally eminent engineers, geologists and seismologists.

Early in April 1965, the Consulting Board of Earthquake Analysis, after considering the advantages and faults of the Pastoria Creek route and the Ridge route, advised the

Chief Engineer[61]/ that it favored the Ridge route -- which has good rock for the entire 2,000-foot rise.

The Tehachapi Crossing Consulting Board met early in May 1965 to consider the reports of the Department staff, the Earthquake Board, and a separate report prepared by the Bechtel Corporation of Los Angeles,[62]/ which had been employed by The Metropolitan Water District of Southern California to make an independent analysis and appraisal of the crossing.

At the conclusion of its deliberations, the Tehachapi Crossing Consulting Board advised the Chief Engineer[63]/ that it favored the single-lift pumping system of the Tehachapis along the Ridge route with four-stage pumps and underground penstocks. The Board based its decision on a conservative approach to the civil engineering problems, stating that it would be unsound to build an intermediate plant halfway up the Tehachapis because it would be subject to severe seismic damage in the event of movement along the San Andreas Fault, or one of the related faults in the area.

The Board also concurred that there is only a small difference in operating efficiency between the different pumps available; that there is no question of the capability of the pump manufacturing industry to provide the high head four-stage pumps required for the single-lift; that the single-lift scheme would be less costly, by $7 million; and that the single-lift plan had other benefits, such as a simplified control system, reducing the probability of human error in operations and the number of employees required for operation and maintenance activities.

The Department's Chief Engineer, after full examination of the epic study on the Tehachapi Pump Lift System, approved the implementation of a single-lift pumping concept using four-stage, single-flow pumps. This decision permits design to proceed on schedule to meet the project objective of providing initial water deliveries to Southern California in 1971.

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61/ Letter report from the Consulting Board for Earthquake Analysis to Department of Water Resources Chief Engineer Alfred R. Golze', April 8, 1965.

62/ "Report on Ridge Location Pump Systems, Single-Lift and Two-Lift for the Tehachapi Crossing of the California State Water Project for The Metropolitan Water District of Southern California", The Bechtel Corporation, July 1965.

63/ Letter report from the Tehachapi Crossing Consulting Board to Department of Water Resources Chief Engineer Alfred R. Golze', May 8, 1965.

According to the Chief Engineer, in advising the Director of his decision on August 18, 1965:

> "It is the objective of the Department to provide the most dependable pump lift system at the Tehachapi. The best interest of the water users and the Department demand it. It is clear that the most dependable system is that which has the greatest reliability and is the safest. The single-lift (four-stage pump) system is demonstrated by the factual data in the referenced support material to exceed the two-lift in both reliability and safety. It is also the cheapest, approximately $7,000,000 less than the two-lift system".64/

## Preconsolidation

Land subsidence is familiar to California engineers and geologists and to the residents of the western San Joaquin Valley. There are two prevalent types of subsidence -- "shallow" and "deep" -- so named to indicate generally the soil stratum undergoing consolidation, causing subsidence of the overlying land.

### Shallow Subsidence

The California Aqueduct, hugging the western periphery of the San Joaquin Valley floor on its way to Southern California, cuts across the alluvial fans and mudflows debouching from the eastern slopes of the Coast Range. The soils contained in these areas of fans and flows tend to consolidate when saturated with water for prolonged periods -- a condition producing shallow subsidence.

While some research on these areas has been carried on by engineers, geologists and technicians of the California Division of Highways, the Bureau of Reclamation, and others, the Department has provided the leadership and performed the major part of the required field and laboratory studies.

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64/ Department of Water Resources Memorandum, Alfred R. Golze' to William E. Warne, "Tehachapi Pump Lift System", August 18, 1965.

Areas susceptible to shallow subsidence contain fine-grain, loose-packed soils, occurring in concentrations rather than in uniform distribution throughout the entire soil mass. Rainfall in the areas is typically low, three or four inches a year, most of it coming from infrequent storms during the winter months. Quick drying of the mud-flows, followed by an extensive drying period, produces a porous soil mass cemented together by clay particles. Such soil is stable under natural conditions but, when saturated, crumbles and settles. The ground water table throughout most of this area is more than 200 feet below the ground surface.

Differential settlement of the ground, brought about when water is applied to the land, has created many problems in the area.

The irrigation of fields has required costly re-leveling of those fields. Roadways and irrigation canals are often damaged to the point of becoming inoperative. Oil and gas pipelines throughout the area require continual maintenance and are patrolled by airplane to locate any damage quickly.

Unless properly treated prior to construction, shallow subsidence could make the California Aqueduct inoperative. Untreated, the settlement would cause the completed Aqueduct to experience breaches in embankments, excessive water losses, damage to adjacent properties, destruction of canal linings and structures, and changes in hydraulic characteristics of the facility.

## Deep Subsidence

Deep subsidence also occurs over large areas in the San Joaquin Valley. It could adversely alter canal gradients so as to reduce conveyance capacities. Studies made by the Department of alternate alignments indicated that it was not practical to bypass all deep subsidence areas in constructing the Aqueduct. The Aqueduct, therefore, will cross two areas of known deep subsidence in the San Joaquin Valley. The first lies along the western edge of the Valley, in Fresno County, in a narrow band, 16 miles wide and 90 miles long. The second lies at the southern end of the Valley and covers approximately 475 square miles.

The disturbance of the subsurface equilibrium in the western San Joaquin Valley, resulting from man's activities, is largely responsible for the deep subsidence problem.

Ground water for irrigation purposes is being extracted faster than it can be replenished. This has resulted in a constant lowering of the water table, which increases the effective overburden load on the underlying soils. The increased loading consolidates these soils and results in the subsidence of the land surface. Another contribution to this condition is the commercial removal of subsurface deposits of gas and oil.

The importing of surface water via the California Aqueduct, and control of the ground water supply, should bring about the cessation of the overdrafting of ground water basins and the resulting deep subsidence.

## Research Program

The Department realized early in the planning phase for the Aqueduct that the net result of construction without pretreatment, in areas susceptible to shallow subsidence, would be excessive operation and maintenance costs and intermittent disruption of project water deliveries. It was also determined, in contrast, that little could be done in regard to preconstruction corrective measures for deep subsidence.

The Department commenced a two-phase research program in 1958 to delineate the extent of shallow subsidence through which the Aqueduct would pass and to develop preconsolidation techniques to combat the adverse effects of such subsidence.

Small Test Plot Phase. The Department began a small test plot phase of the research program in October 1958.

To delimit areas susceptible to shallow subsidence, a soil sampling and testing program was begun at locations spaced approximately every five miles along the general alignment of the Aqueduct, from south of Los Banos to south of Wheeler Ridge, covering a distance of more than 200 miles. Forty-nine small subsidence test plots for prolonged water application were installed at these locations.

A typical alignment test plot consisted of an open section of eight-foot diameter corrugated metal pipe embedded in the soil. Five holes of varying depth were drilled inside the pipe and packed with gravel to increase the infiltration of the applied water into the soil. Each of the test plots was referenced with a system of surface and subsurface bench marks.

Water was supplied by tank truck daily for continuous ponding at most of the test plots. Equipment breakdown occasionally disrupted water service; therefore, neoprene tanks were set up adjacent to a few of the test plots in order to provide a more nearly continuous water supply.

Subsidence or swelling was observed a few hours after initial water application. Cracking usually did not become evident until after the test plot had been in operation for a number of days. The first cracks to appear usually were located a few feet from the edge of the tank and were generally circumferential. As subsidence progressed, these cracks would gradually widen to a few inches and then the soil block adjacent to the tank would drop. This resulted in the typical concentric stair-stepped cavity as subsidence progressed.

Results of the delineation study along the Aqueduct alignment indicated several areas of shallow subsidence, with magnitudes ranging from less than one foot to approximately eleven feet. The larger magnitudes of shallow subsidence occurred in the vicinity of Mendota Test Site and in the area south of the Buena Vista Pumping Plant.

Prototype Canal Sections. The second phase of the research program was conducted at the 240-acre Mendota Test Site, some 70 miles west of Fresno, about one-half mile east of the California Aqueduct alignment.

The general objectives of this phase were to develop effective design and preconstruction techniques and specifically to determine: (1) an economical consolidation method; (2) an estimate of the time required for consolidation; and, (3) the effectiveness of consolidation techniques through construction of a prototype canal section.

Consolidation by application of water, at the surface or through infiltration wells, was considered the most economical as to time and cost.

Four large test plots were operated at the test site in the development of an economical consolidation method. The plots utilized different methods -- a simple pond, a ditch, and infiltration wells. Three of the plots were placed along a line so that a prototype canal section could be subsequently constructed through them.

The prototype canal was constructed in a trapezoidal shape, 1,400 feet long and 26 feet deep, with an average

compacted embankment height of 12 feet. One-half of the canal was lined with a four-inch thick unreinforced concrete lining and the other half with a heavy compacted earth lining. A 14-foot overlap of concrete lining and heavy compacted earth lining was included in the design to reduce the effects of one lining on the other during the initial ponding period.

After 90 days of operation, the areas that were preconsolidated prior to construction of the prototype canal were in excellent condition, in both the concrete and earth-lined sections.

The concrete lining and adjacent embankments were badly cracked in the areas that had not been preconsolidated. After 130 days of operation, the earth-lined section showed signs of distress in the noncompacted area and, shortly thereafter, collapsed.

## Application of Results

The research program has proven preconsolidation to be a prudent practice before actual construction of the California Aqueduct begins. The program has shown that preconsolidation, by ponding and saturation, would permit construction of an aqueduct which will be relatively free of settlement in areas of shallow subsidence.

Twenty of the 78 miles of the Aqueduct alignment, determined by the program to require preconsolidation, lie in the San Luis division, being constructed by the Bureau of Reclamation. Three miles lie along the route of the Coastal Branch; the remainder is in the South San Joaquin division.

Preconsolidation has been completed for the Coastal Branch and is expected to be completed in 1967 for the South San Joaquin division.

Approximately 100,000 acre-feet of water will be applied through ponds equipped with infiltration wells. The ponds vary in width from 150 to 250 feet. The average pond is 500 feet long. Water will be supplied to these ponds for an average of six months, with a drying period of one year before actual construction of the Aqueduct begins.

## Aqueduct Automated Monitoring and Control System

Push-button control of the Project's 691 miles of aqueducts will begin field-testing in late 1966, using the 42-mile completed main line of the South Bay Aqueduct as a pilot model for the entire Project.

The automated system, in a research and development status since 1961, would control the velocity and volume of water throughout the Project's aqueducts -- accomplishing in moments what would ordinarily take "ditch riders" days to do.

The need for automated operation initially was dictated by special operational requirements and the unique physical characteristics of the State Water Project. The 444-mile main line of the California Aqueduct creates a particular problem in customer service, since it would take a single particle of water about 10 days to travel that distance.

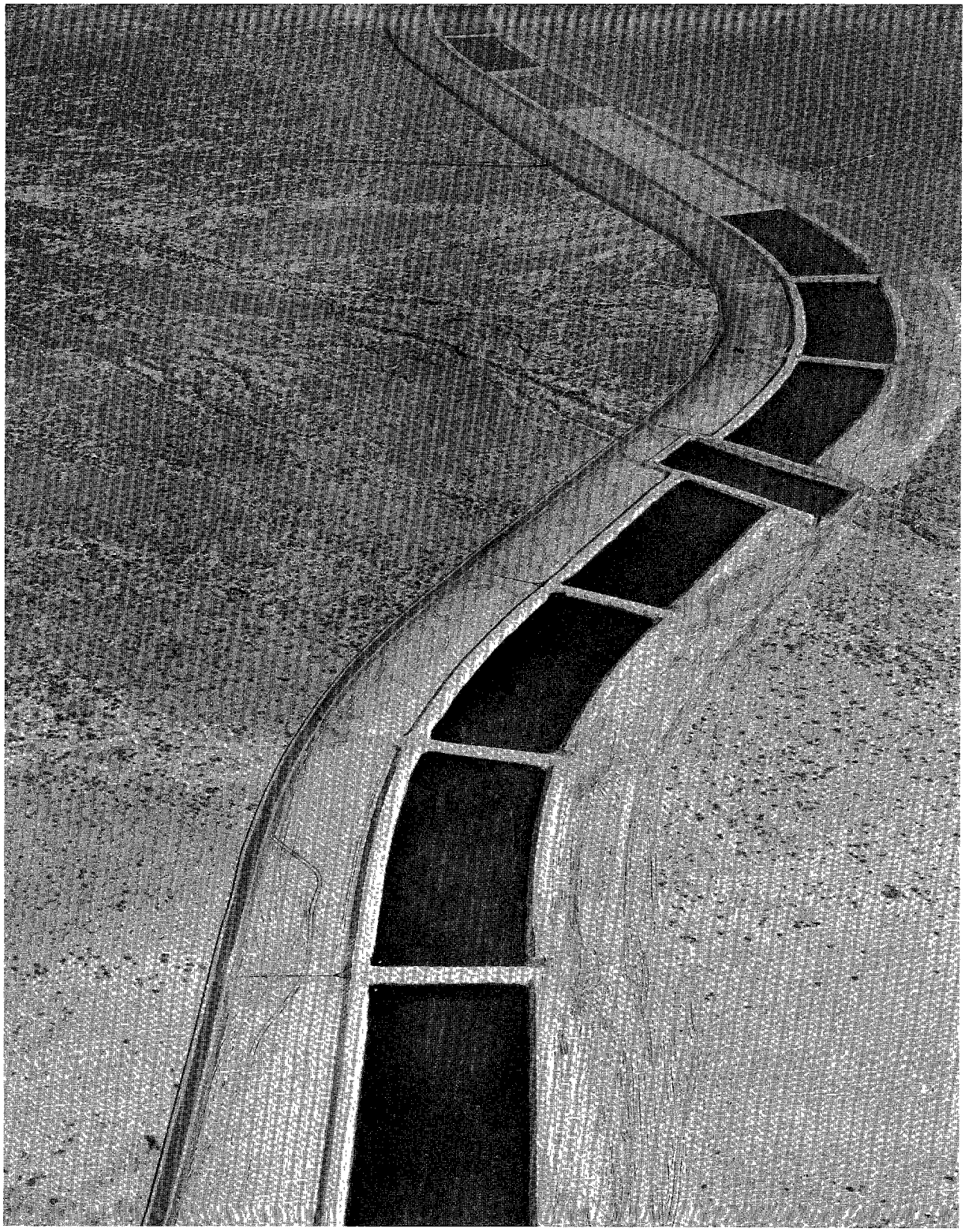
The Aqueduct crosses several major earthquake faults, and generally traverses seismically active areas which might necessitate rapid shutdown. Over half the water transported through the Aqueduct is for municipal and industrial purposes which require operation throughout the year with a minimum of outages and delivery of high quality water. The only facility provided for regulating the water enroute through the Aqueduct is the San Luis reservoir. Canals and other open-channel sections constitute about 90 percent of the length of the main line of the California Aqueduct. There are no wasteways for spilling excess flows, such as are found on the older, large canal systems.

The above factors combine to establish a requirement for a very high degree of control over water movement. The highest degree of control over moving water is obtained when water is confined in a pipe system, such as in the plumbing of a home.

Important characteristics of a pipe system are that the water can be turned on or off rapidly, and the flow can be varied. Relating this type of operation to the State Water Project would require that the water flowing in the open channels of the California Aqueduct be started or stopped and also varied from low flow to maximum flow in a short period of time -- in the case of the Aqueduct, in about one hour. Research studies, made by the Department and its consultants, have shown that this requirement can be met under the "Controlled Volume" method 65/ of aqueduct operation. This method requires simultaneous, or nearly simultaneous, operation of pumping plants and check structures. Remote control of the Aqueduct pumping plants and check structures, using computers from a control center, or several control centers, has been deemed the best possible way of managing such an operation.

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65/ See pages 92 and 93, Bulletin No. 132-65



Preconsolidation ponds along California Aqueduct alignment in the South San Joaquin division in Fresno County. Note infiltration wells in dry pond areas at top of the picture.

Research Program

Investigation of an automated control system to operate the State Water Project was authorized in April 1961 and, by 1962, a Department report66/ had recommended a four-phase development plan on the control system for the entire Project:

I. Automation Pilot Model

II. Preliminary System Design and Performance Specifications

III. Final System Design and Procurement Specifications

IV. Equipment Procurement and System Implementation

Phase I of the program applies only to the South Bay Aqueduct, as a test model in the preliminary research and development phase. The other three phases will cover the design and construction of a control system for the entire State Water Project.

The California Aqueduct features are being designed for automated operation which could range from remote control of canal checks and pumping plants to remote computer control of all aqueduct facilities.

In order to develop data from which to formulate a control system plan for the entire project, the Automation Pilot Model will provide:

1. Random access to any facility at any time, involving selection at operator's discretion rather than sequential selection through all facilities.

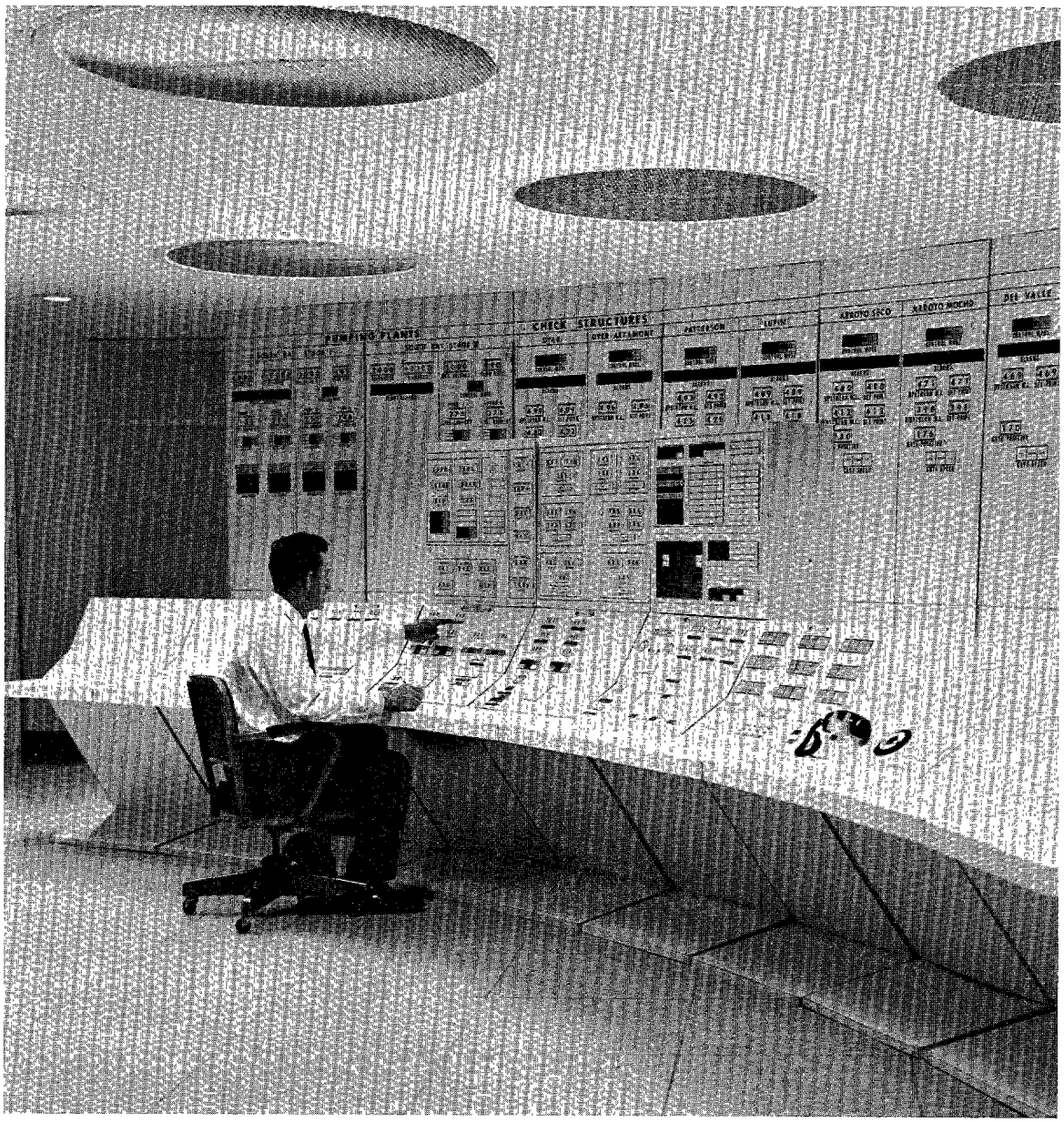
2. No limit to operation of control computer.

3. Capacity capable of transferring commands and information at precision speed compatible with operational requirements.

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66/ Department of Water Resources Automation Steering Committee, "Control System for State Water Facilities", July 1962.

4. Digital equipment for (a) control system model for facilities from South Bay Pumping Plant through Vallecitos turnout (b) control center in Sacramento and (c) control center in South Bay Pumping Plant.




Mock-up model of the consoles and displays in the Sacramento Control Center at the Resources Building for initial automated monitoring and control of the South Bay Aqueduct.

The South Bay model, which will be in full operation from April 1967 to April 1969, will meet water delivery schedules along the South Bay Aqueduct (as well as research and development flows) through the equipment installed on 21 features of the Aqueduct.

Two control centers will be installed; one located in the South Bay Pumping Plant, the other in Sacramento. Both the Sacramento and the South Bay Control Centers will have the capability to control remotely each of the 21 features of the South Bay Aqueduct. The Sacramento Control Center will have a computer installation with on-line computer control capability.

Two independent systems of communication will be used in the model system, and each gate will have a standby generator to supply adequate power. Research has shown two separate communications systems are essential for protection against outages.

A contract, awarded by the Department on December 8, 1965, to Aerojet-General Corporation of El Monte, California, will cover installation of the Automation Pilot Model. Other contracts will link this control system to a computer at the Department's headquarters building in Sacramento.

## Application of Results

When the automated control system for the entire State Water Project is completed, four operators on the 16th floor of the Resources Building in Sacramento will be able to monitor computer consoles automatically providing, with regard to the operation of project facilities:

1. Improved sensing control
2. Greater reliability
3. Analysis of recordings
4. Multiple use of data
5. Coordination
6. Adjustment of water delivery

Computers will eventually exercise remote control over the Project's 24 pumping plants, consuming 13 billion kilowatt-hours of energy per year; nine powerplants, with an annual output of 6,233 million kilowatt-hours of energy; the control of releases from 19 dams and reservoirs; and, the remote operation of check gates and turnouts along 481 miles of aqueduct canal.

# CHAPTER IV. CONSTRUCTION OF THE STATE WATER PROJECT

The center of gravity in State Water Project construction activities has moved steadily southward in the past 12 months, toward the eventual termini at Castaic and Perris reservoirs in Southern California. Coordinated efforts in design, rights-of-way acquisition, and relocation activities have resulted in contract awards for construction now under way from Grizzly Valley Dam in the north to Castaic Dam in the south.

## Design

During 1965, the Department completed plans and specifications for 48 construction and procurement contracts subsequently awarded for the Project. Work was well advanced on 39 additional contracts, scheduled for advertising in 1966. The Bureau of Reclamation completed plans and specifications for 16 additional construction and procurement contracts, subsequently awarded in 1965, for work on the joint-use facilities in the San Luis division.

Plans and specifications were issued during the past year for several major contracts in the Oroville Area, including those for the Oroville Dam Spillway, Thermalito Forebay and Afterbay, and Oroville reservoir clearing. A major design effort was completed late in 1965 with the advertising for bids on the construction of Del Valle Dam, a feature of the South Bay Aqueduct. Along the California Aqueduct, major design work has been completed in the North San Joaquin division, with the exception of Clifton Court Forebay, which was recently added to the Aqueduct, as noted in Chapter II. The Department's major design effort is currently centered on facilities located from Kettleman City south.

## Rights-of-Way and Relocations

Expenditures for real property for the State Water Project during 1965 totaled $10.4 million, about 19 percent of the estimated total cost of real estate for the entire Project. Expenditures for land through the year 1965 amounted to $24.2 million, constituting approximately 44 percent of the total required.

The totals mentioned above exclude major acquisitions of the Pacific Gas and Electric Company's Big Bend

Powerplant, and the Georgia-Pacific Corporation's Feather River Railway, together with associated lands. These transactions involved a total of about $26.5 million, as noted in Chapter II.

During 1965, title was acquired to 412 parcels, or tracts of land, involving 19,445 acres. Acquisitions for the Project through the end of 1965 totaled 1,412 parcels. About 29 percent of the 4,455 parcels estimated to be required for those project facilities with established construction schedules have been acquired, as shown in the following tabulation:

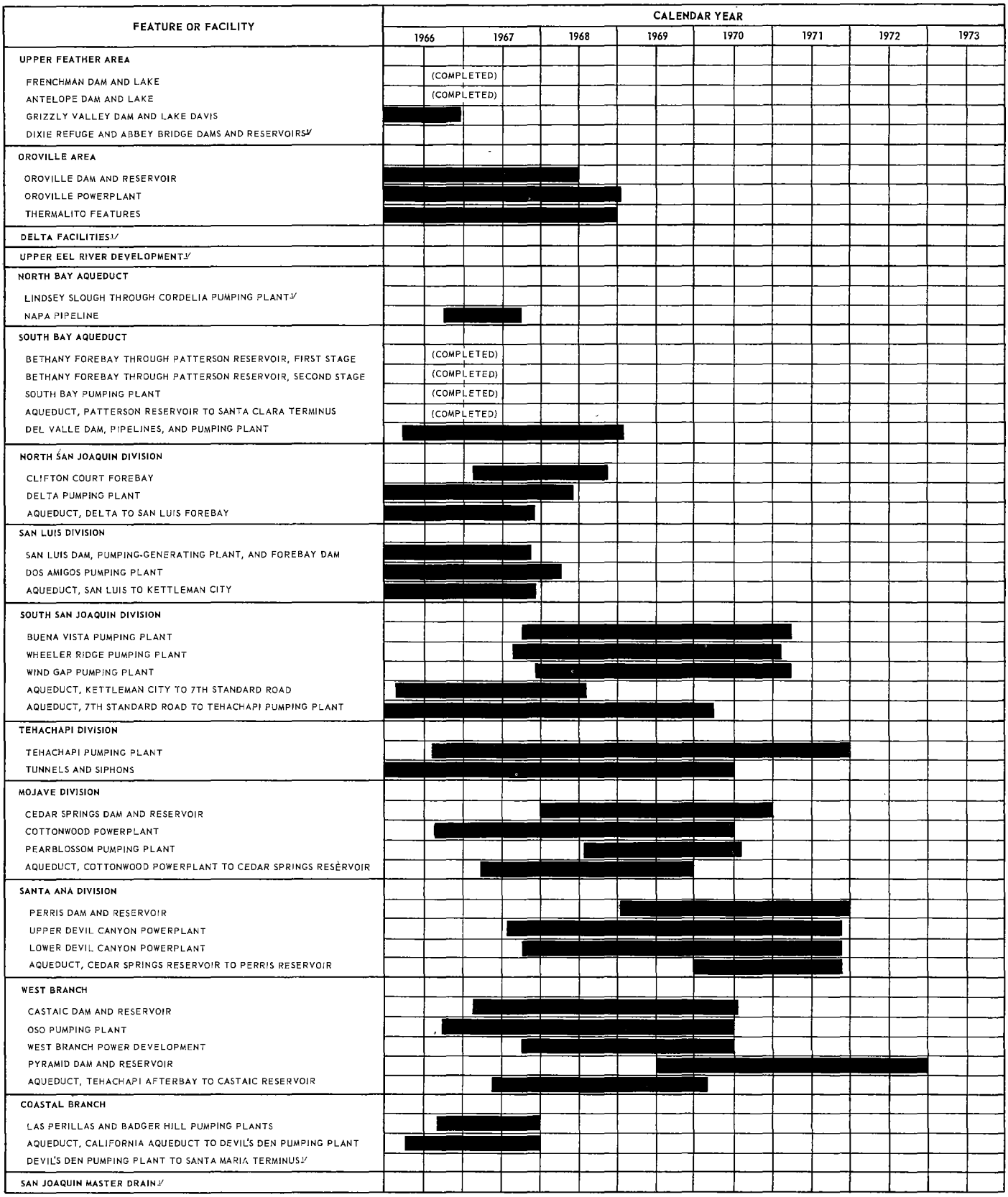
| Project Facilities Definitely Scheduled | Estimated Parcels Required | Parcels Acquired in 1965 | Parcels Acquired through 1965 |
|---|---|---|---|
| Upper Feather Area | 25 | 1 | 14 |
| Oroville Area | 896 | 94 | 548 |
| North Bay Aqueduct | 177 | 0 | 0 |
| South Bay Aqueduct | 194 | 20 | 82 |
| California Aqueduct | | | |
| North San Joaquin division | 167 | 58 | 108 |
| San Luis division | 24 | 8 | 15 |
| South San Joaquin division | 607 | 175 | 278 |
| Tehachapi division | 13 | 0 | 0 |
| West Branch | 275 | 20 | 34 |
| Coastal Branch | 368 | 0 | 0 |
| Mojave and Santa Ana divisions | 1,709 | 36 | 333 |
| TOTALS, Scheduled Facilities | 4,455 | 412 | 1,412 |

During 1965, 351 condemnation actions were initiated through the California Water Commission and filed in appropriate Superior Courts. As a result of these actions, 686 parcels were made available during the year, through orders for possession, in order to meet construction deadlines. One hundred and sixteen agreements, in the amount of $18,169,000, were executed during 1965 for relocation of oil, gas and water pipelines, electric transmission and distribution lines, communication lines, major railroads, State highways, and county roads.

## Construction

A generalized construction schedule for the State Water Project is shown, graphically, on Figure 1. Definite

# STATE WATER PROJECT
## GENERALIZED CONSTRUCTION SCHEDULE




1/ CONSTRUCTION SCHEDULE NOT YET ESTABLISHED

schedules have not been established for certain features of the Delta Facilities, the San Joaquin Master Drain, the Upper Eel River Development, Abbey Bridge and Dixie Refuge Units in the Upper Feather Area, the North Bay Aqueduct east of Cordelia Pumping Plant, and the Coastal Branch division downstream from Devil's Den Pumping Plant. Construction schedules for these features have been assumed for the cost analyses of this report.

Three hundred and twenty major contracts worth $1,660,000,000, are estimated to be required for construction of facilities with established schedules. This number includes the Bureau of Reclamation's current program for the joint-use facilities of the San Luis division. Table 1 presents a summary of all Department construction contracts and of the major Bureau of Reclamation construction contracts which were completed or under way as of April 1, 1966. As of that date, 93 contracts valued at $152,000,000 had been completed, and 112 contracts valued at $607,000,000 were in progress.

The tabulation below presents important measures of physical construction progress for the entire State Water Project through calendar years 1963, 1964, and 1965. These figures do not include quantities under contracts for relocations of facilities.

| Total Through Calendar Year | Cubic Yards Excavation | Cubic Yards Embankment | Cubic Yards Concrete |
|---|---|---|---|
| 1963 | 34,617,000 | 19,783,000 | 522,000 |
| 1964 | 81,084,000 | 65,452,000 | 906,000 |
| 1965 | 162,697,000 | 116,219,000 | 1,628,000 |

The construction activities of the State Water Project occur in certain areas which may contain artifacts or other evidences of early man which are of archaeological significance. A program administered by the Division of Beaches and Parks is in progress to locate and excavate sites of probable value, prior to disturbance by construction work or to inundation by reservoirs.

During 1965, surveys to locate sites for future excavation were conducted in the Oroville reservoir area (where 100 sites were identified), at San Luis reservoir, Castaic reservoir, and Little Panoche Creek detention reservoir. Test excavation was continued at a site along the southwest margin of the Buena Vista Lakebed. Discoveries at this site indicate a date for man's occupation in this area

of possibly greater than 7,000 years. Further survey and excavation work is scheduled for 1966, as a continuation of the program to complete archaeological exploration ahead of construction.

All following sections briefly describe the status of construction activities as of April 1, 1966, for features of the State Water Project having established construction schedules. The project features are generally portrayed on Plate I, and are concisely described in Appendix C.

## Upper Feather Area

The Upper Feather division consists of Frenchman and Antelope Dams and Lakes, Grizzly Valley Dam and Lake Davis, and Abbey Bridge and Dixie Refuge Dams and reservoirs. All are located in Plumas County.

Frenchman Dam was completed in 1961; Antelope Dam, in 1964.

Grizzly Valley Dam, which forms Lake Davis, the largest of the five reservoirs contemplated in the Upper Feather Area, is currently under construction and is about 40 percent complete. The Dam is scheduled to be completed in 1966. During the 1965 construction season, the Division of Safety of Dams made 14 construction inspections of Grizzly Valley Dam and related work, pursuant to Division 3 of the Water Code.

Abbey Bridge and Dixie Refuge Dams and reservoirs have not been definitely scheduled for construction at this time. For purposes of the analyses of this report, it is assumed that the construction of these features will be completed in 1970 and 1971, respectively.

## Oroville Area

The major project facilities of the Oroville Area, located in Butte County, include the third largest embankment dam in the world, the largest underground powerplant in the United States, and an off-stream system near the suburb of Thermalito which will regulate power releases and permit a pump-back operation to maximize on-peak power generation.

Construction of Oroville Dam, located four miles northeast of the City of Oroville, began in 1962, and is about 50 percent complete. When completed, in 1967, Oroville Dam will contain about 80,000,000 cubic yards of embankment.

The Dam embankment is presently being placed at a rate of nearly two million cubic yards a month, with 40,000,000 cubic yards, or one-half of the total volume required for the Dam, having been placed by February 1966. The mandatory elevation, for placing the embankment of 575 feet by April 1, 1966, was met on schedule. The current rate of embankment placement will insure meeting the next elevation target, 700 feet, by November 15, 1966. This elevation, though the Dam will be incomplete, would allow the safe passage of flood waters during the 1966-67 winter season, with closure of one of the two diversion tunnels.

The clearing of timber and underbrush from the Oroville reservoir site is about 55 percent complete. Select areas will not be cleared, in consideration of better opportunities for recreation and enhancement of fish habitats.

The construction of the Oroville spillway, located in a saddle on the right abutment of Oroville Dam, commenced in mid-1965 and is about 15 percent complete.

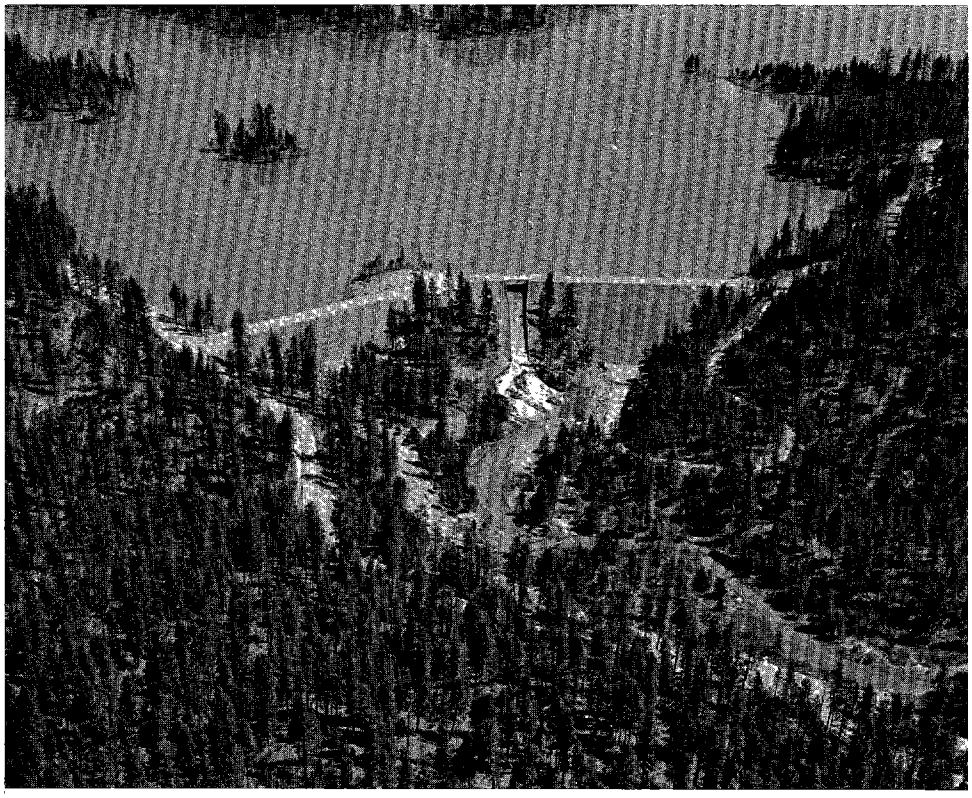
The underground Oroville Powerplant is designed for pumped storage operation and will have six generating units, three of which will be reversible. The last of the six generating units will be installed by the spring of 1969.

Construction of the powerplant is now 67 percent complete. About 90 percent of the total 267,000 cubic yards of required excavation is complete. The excavation is essentially complete for the large machine hall which will be 69 feet wide, 136 feet high, and 550 feet long. The major part of the remaining excavation is in the draft tubes, penstock branches, and penstock tunnels.

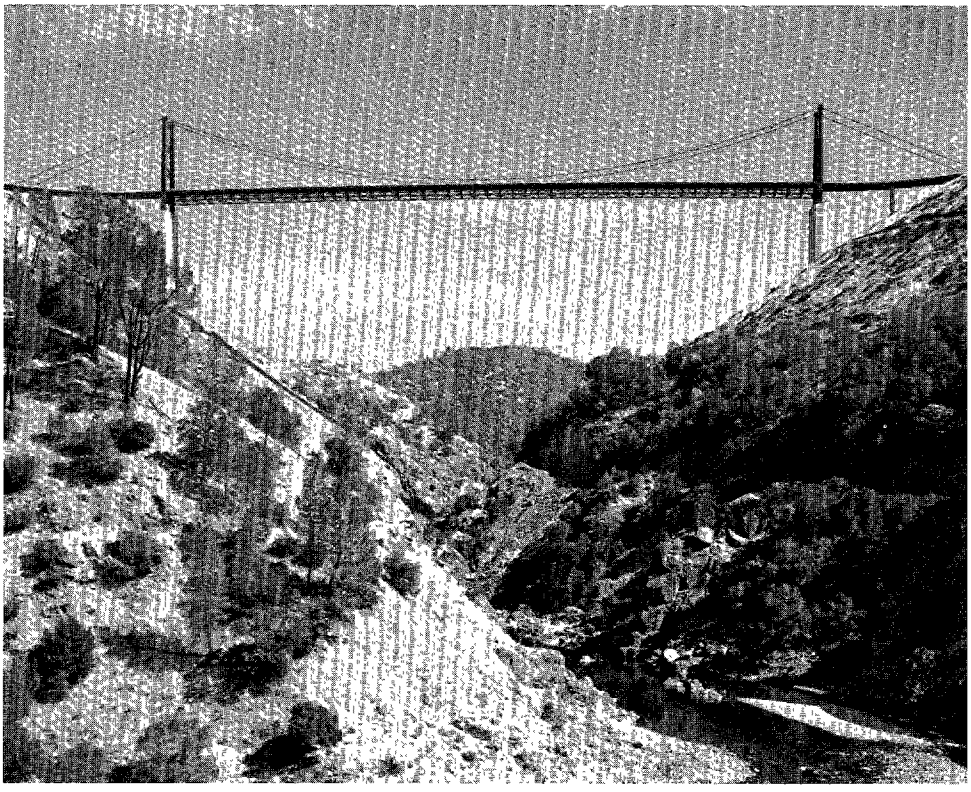
Work on the powerplant contract was stopped from October 5, 1965, to October 25, 1965, during a strike by the Boilermakers Union. The contractor did not resume excavation for the machine hall and draft tubes until November 15, 1965. Completion of the initial powerplant contract has been delayed by about nine months.

Construction of two auxiliary earthfill dams at low points on the periphery of Oroville reservoir is scheduled to commence late in 1966.

All of the Thermalito features are under construction. The Thermalito Diversion Dam, located immediately northeast of the City of Oroville on the Feather River, is nearing completion. The Thermalito Powerplant is about 35 percent complete. Construction of the Thermalito Forebay, Afterbay, and Power Canal was recently initiated under separate contracts.



ANTELOPE DAM AND LAKE
(Upper Feather Area)



THE BIDWELL BAR BRIDGE
(Oroville Area)

The Feather River Fish Hatchery, construction of which is scheduled to commence in 1966, will be located on the right bank of the Feather River. The primary purpose of the hatchery will be to maintain the existing salmon and steelhead runs by serving as a substitute for the spawning areas disturbed by project construction.

The Bidwell Bar Bridge over the Middle Fork of the Feather River, the nation's highest highway suspension bridge, was completed in 1965. The portion of the Oroville-Quincy Road relocation connecting the Forbestown Road with the bridge was also completed. The remainder of the Oroville-Quincy Road relocation has commenced, under the administration of Butte County, and is about 30 percent complete.

Contracts for the B. Abbott Goldberg Bridge[67/] over the South Fork of the Feather River, and the connecting Oroville-Feather Falls Road relocation, were awarded in the fall of 1965, and construction is under way.

Inspections of three dams under construction in the Oroville division were made by the Division of Safety of Dams, pursuant to Division 3 of the Water Code. During 1965, 20 inspections were made at Oroville Dam, nine at Thermalito Diversion Dam, and 17 at Thermalito Forebay Dam.

## North Bay Aqueduct

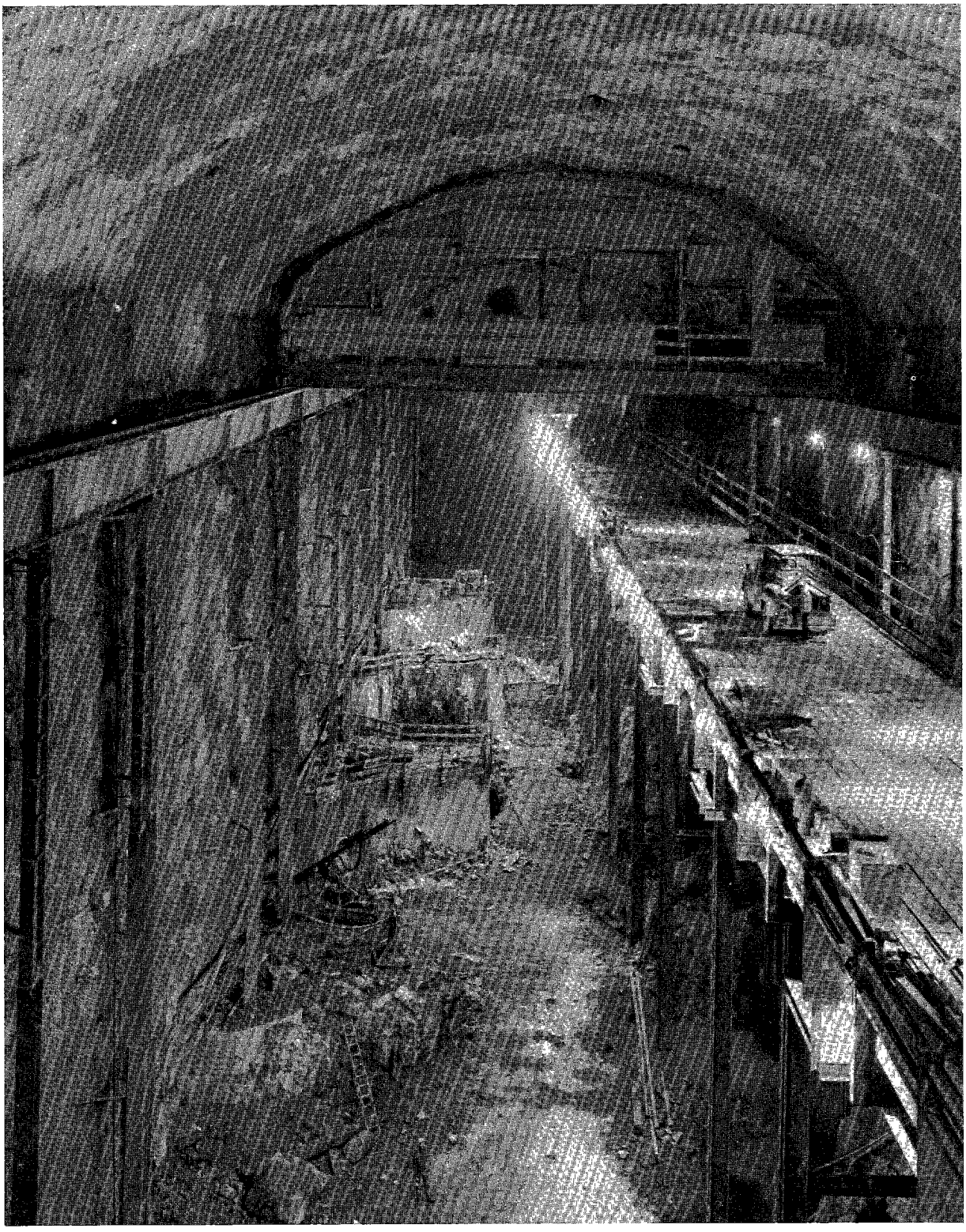
The North Bay Aqueduct will include the works necessary to divert water from the Sacramento-San Joaquin Delta and convey it some 30 miles, across parts of Solano and Napa Counties, to a small terminal reservoir near the proposed water treatment plant of the City of Napa, located at the west end of Jameson Canyon in Napa Valley.

Deliveries of water from the North Bay Aqueduct to Napa County will commence in 1968 from an interim supply obtained from the Bureau of Reclamation's Solano Project, near Cordelia. The Department will begin construction in 1966 on an interim pumping plant and pipeline to convey Bureau water to the terminal reservoir in Napa County.

The Aqueduct east of Cordelia will be constructed to permit the diversion of project water from the Delta in

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67/ Department of Water Resources Project Nomenclature Order No. 8, dated April 13, 1966.



Machine hall construction at Oroville Powerplant
(Oroville Area)

1980. However, this date may be advanced if mutually agreed upon by Solano and Napa Counties.

South Bay Aqueduct

The South Bay Aqueduct includes those facilities necessary to convey water from Bethany reservoir on the California Aqueduct, through Alameda and Santa Clara Counties, to the vicinity of Penitencia Creek on the east side of the Santa Clara Valley near San Jose.

The main line of the South Bay Aqueduct was completed in 1965. The Del Valle Dam construction contract was awarded early in 1966. The construction contract for Del Valle Pumping Plant, which will pump water either from the main line into Del Valle reservoir or vice versa, and the connecting two-mile Del Valle Pipeline, will be advertised in mid-1967. The relocation of the county road around Del Valle reservoir will be completed in 1966.

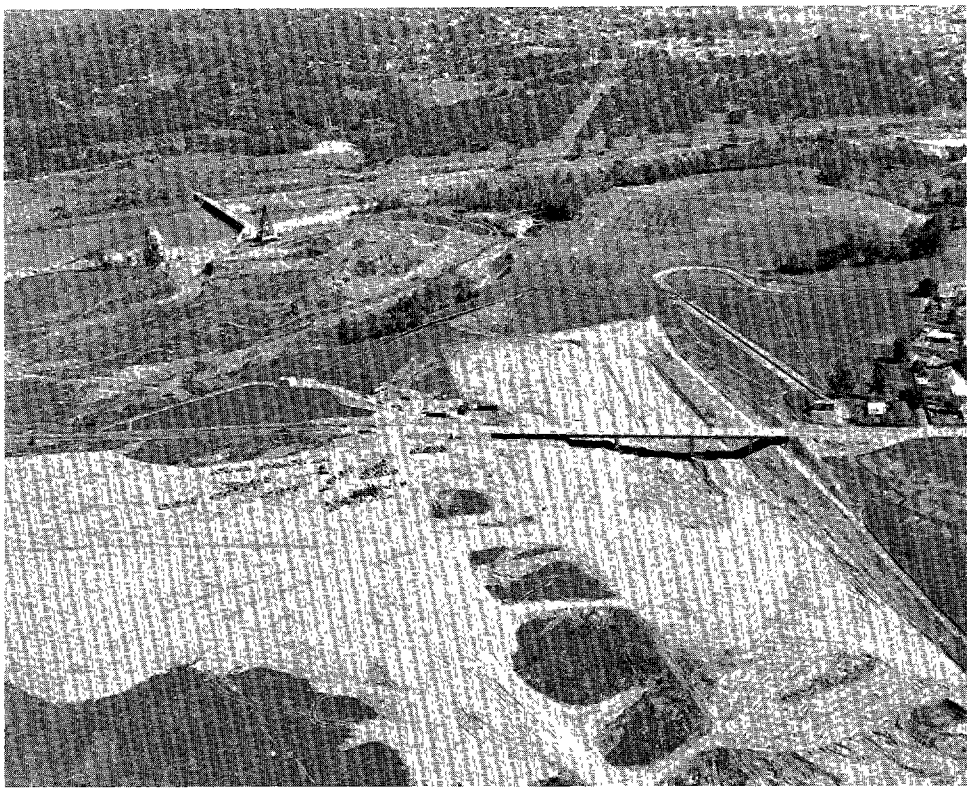
The first of several contracts for the South Bay Aqueduct Control System Model is under way. When the second contract is completed in 1967, the entire length of the Aqueduct can be monitored and computer-controlled from the Sacramento Control Center. The model will provide design information for the control system to be used on the California Aqueduct and also will give personnel experience in operating such a system.

California Aqueduct

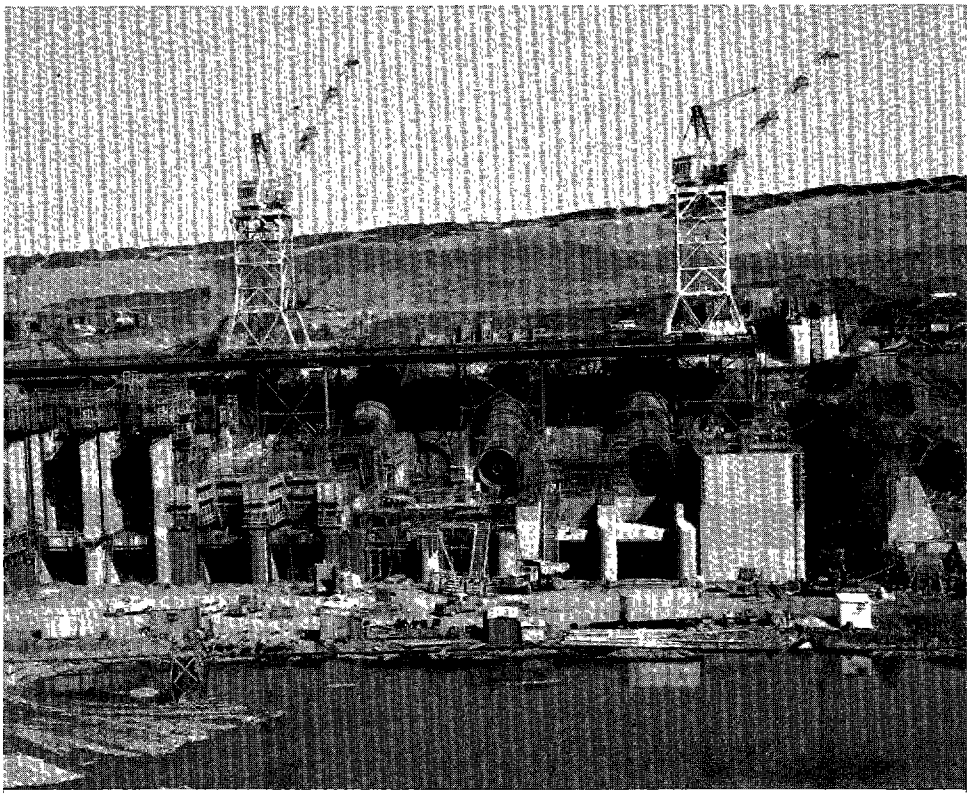
The construction activities on the California Aqueduct are summarized in the following sections by the North San Joaquin, San Luis, South San Joaquin, Tehachapi, Mojave, and Santa Ana divisions of the 444-mile "main line", and by the West and Coastal Branches.

The North San Joaquin Division extends 67 miles from the Sacramento-San Joaquin Delta to the San Luis Forebay and includes the Clifton Court Forebay, the Delta Pumping Plant. and Bethany reservoir.

The construction contract for Clifton Court Forebay will be advertised early in 1967. The initial stage of Bethany reservoir was completed in 1961 and will be extended laterally beginning in 1966. Dikes will be constructed south of the existing dam, and the reservoir created thereby connected to the existing Bethany reservoir by an interconnecting channel.



Thermalito Power Canal being excavated under Highway 40 Alternate bridge, which was previously constructed using natural ground to support formwork. (Oroville Area)



THERMALITO POWERPLANT
(Oroville Area)

The initial construction contract for the Delta Pumping Plant is now 80 percent complete. The first of 11 pump units will be operational by December 1966, and will pump project water to Bethany reservoir to supply the South Bay Aqueduct. The second unit will be operational by March 1967, with the next three units installed by January 1968, when the initial delivery of water down the California Aqueduct to Kern County is scheduled. Two more units will be installed later in 1968, and the final four units by 1975.

All 62 miles of concrete-lined canal in the North San Joaquin division are under construction. Four contracts are involved, and are from 20 to 70 percent complete. The Intake channel between Clifton Court Forebay and the Delta Pumping Plant is about 60 percent complete from the Forebay to Byron Road, and has already been completed from the road to the Pumping Plant. Work on Phase I of the Delta Operations and Maintenance Yard is complete, and Phase II is about 30 percent complete.

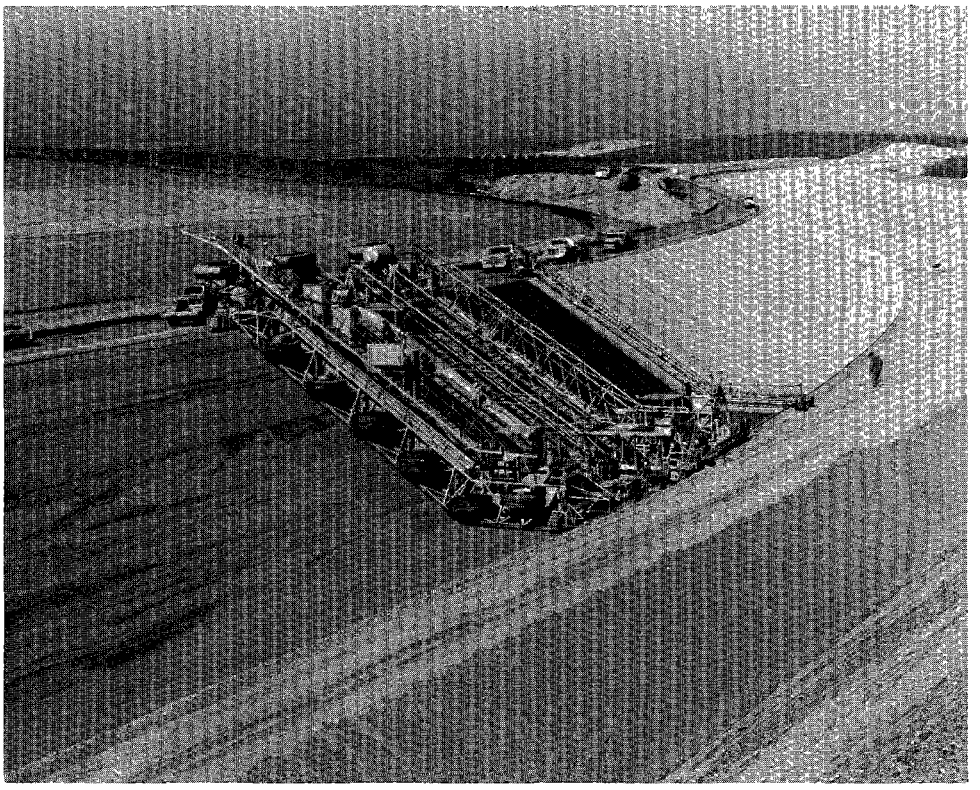
The San Luis Division contains the state-federal joint-use facilities which are being designed and constructed by the Bureau of Reclamation. Included in this division of the California Aqueduct are San Luis Forebay, Pumping-Generating Plant, Dam and reservoir; Los Banos Creek Dam and reservoir; Little Panoche Creek Detention Dam and reservoir; Dos Amigos Pumping Plant; and about 101 miles of canal.

The contract covering the construction of San Luis Dam, Pumping-Generating Plant, and Forebay Dam is 80 percent complete. San Luis Forebay is scheduled for completion in 1967.

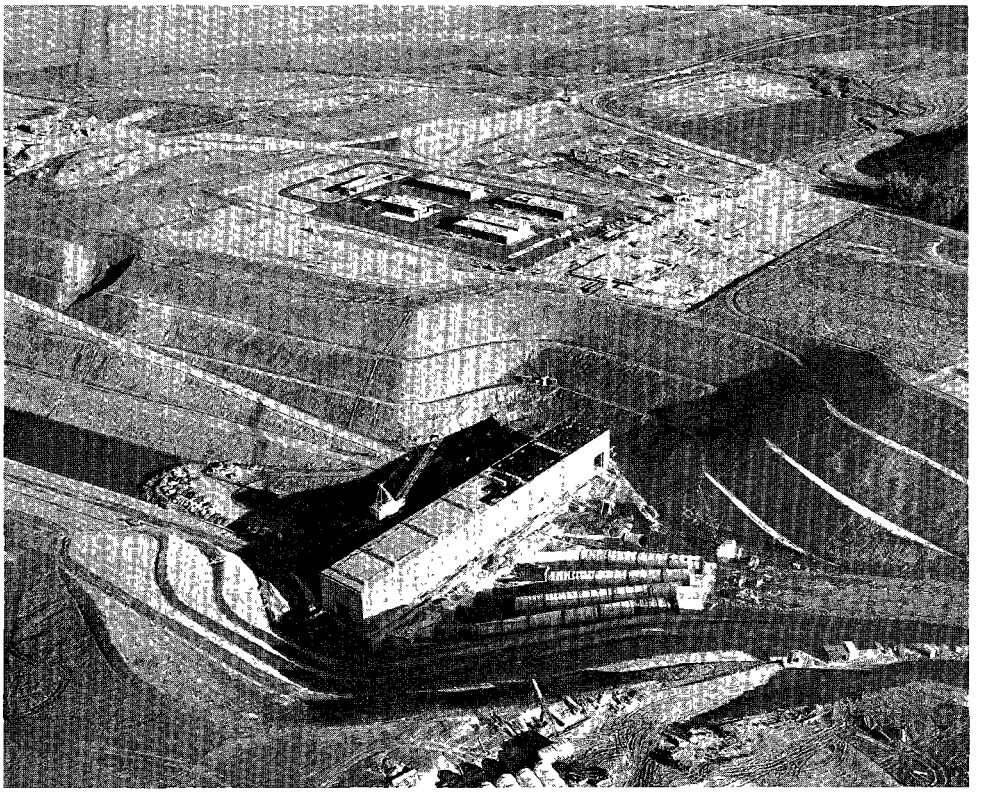
The San Luis Dam will require 77,000,000 cubic yards of embankment, 58,300,000 cubic yards of which were in place at the end of 1965.

The San Luis Pumping-Generating Plant structure is essentially complete. The first three of eight reversible units will be operable in the fall of 1966, and the remaining five units will be individually placed into service at 90-day intervals thereafter. The entire plant is to be completed by January 1968.

The 18 miles of concrete-lined canal between San Luis Forebay and Dos Amigos Pumping Plant are complete, and all other canal reaches are under construction.



CANAL SLIP-FORM PAVING TRAIN
(North San Joaquin Division)



DELTA PUMPING PLANT
(North San Joaquin Division)

The structure of Dos Amigos Pumping Plant is essentially complete. The first of six pump units is to be operational in the spring of 1967, and the final unit, early in 1968.

Flood detention reservoirs on Los Banos and Little Panoche Creeks will reduce peak flood flows that otherwise would endanger the Aqueduct. Los Banos Creek Detention Dam was completed in January 1966. Little Panoche Creek Detention Dam is about 50 percent complete.

The South San Joaquin Division extends from Kettleman City to the Tehachapi Pumping Plant. Features of the division include the Buena Vista, Wheeler Ridge, and Wind Gap Pumping Plants and about 120 miles of canal.

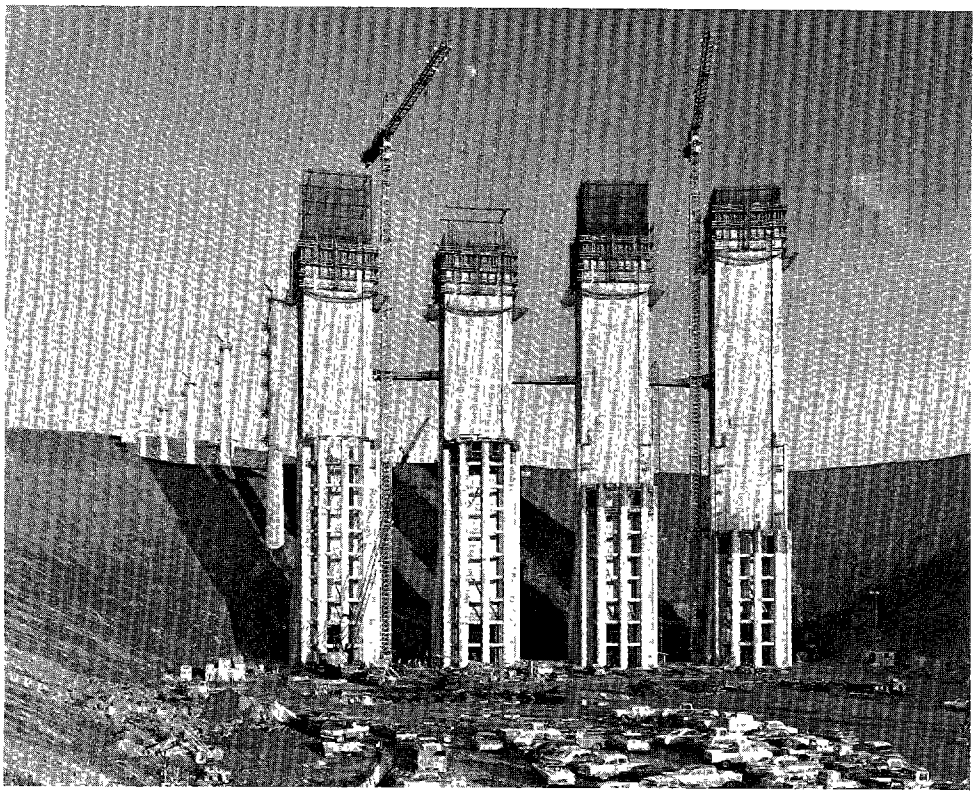
All major contracts covering the construction of preconsolidation ponds are completed in the South San Joaquin division. Department personnel operate and maintain the ponds during the six-month period that water is applied. Water for this purpose is being obtained from state-owned wells and from local agencies.

Contracts are under way for the first 45 miles of canal, from Kettleman City to Seventh Standard Road, and are scheduled to be completed by August 1968. The contract for the 12-mile reach from Kettleman City to Avenal Gap was awarded in January 1966. The contract for the canal from Avenal Gap to Seventh Standard Road is about 10 percent complete. Construction south of Seventh Standard Road is scheduled so that water deliveries to the southern portion of Kern County can be made in 1970.

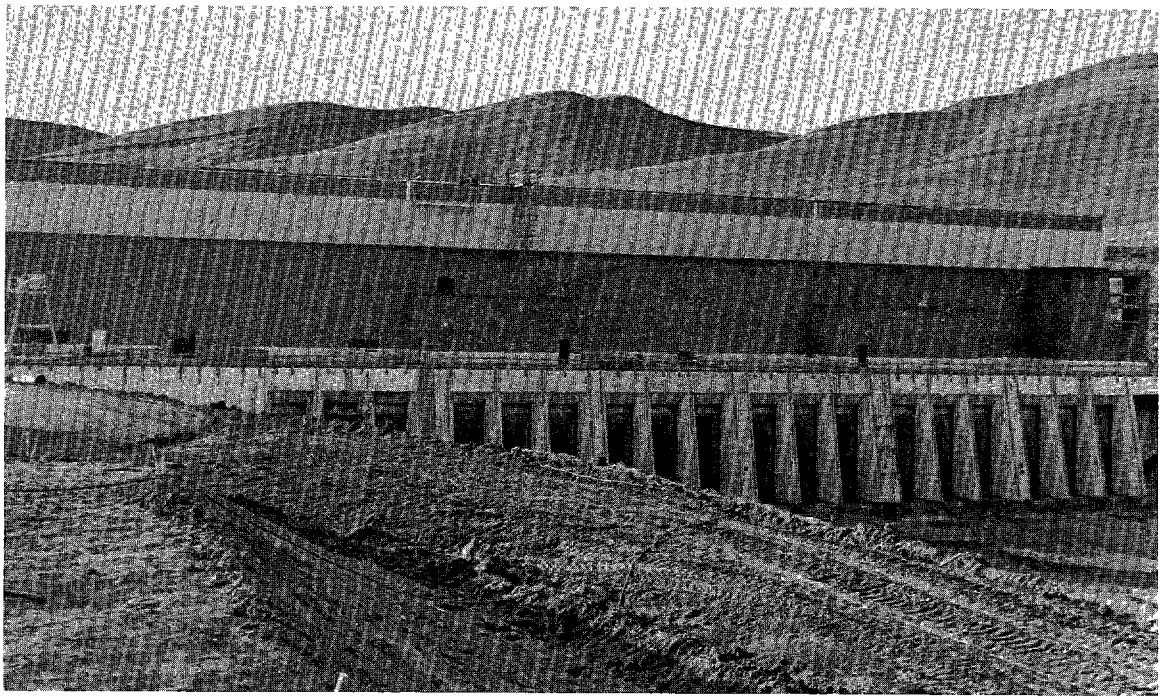
The construction of the Buena Vista Pumping Plant, with 10 pump units; the Wheeler Ridge Pumping Plant, with nine pump units; and the Wind Gap Pumping Plant, also with nine pump units, is scheduled to commence in the latter part of 1967. The construction of the intake channel for the Buena Vista Pumping Plant began in 1965, while those for the Wheeler Ridge and Wind Gap Pumping Plants will be started in 1966.

The Tehachapi Division extends about 12 miles through the Tehachapi Mountains and includes the Tehachapi Pumping Plant, a series of four tunnels, the Tehachapi Afterbay, and connecting pipelines.

The Tehachapi Pumping Plant will ultimately contain 14 pump units, the first of which will be operational



Construction work on intake structure, San Luis Reservoir. (San Luis Division)



DOS AMIGOS PUMPING PLANT
(San Luis Division)

in the latter part of 1970. A contract for excavation of the intake channel will be advertised in 1966, and a contract for the procurement of pumps will be advertised in 1967.

Construction of the Carley V. Porter Tunnel, the longest and most southerly of the Tehachapi tunnels, began in November 1965, and is scheduled for completion in 1969. Excavation of the tunnel's south portal was completed in 1965, under a separate contract. Construction will commence on Tunnels Nos. 1, 2, and 3 in 1966. Other features are scheduled so that initial water deliveries may be made to Southern California in 1971.

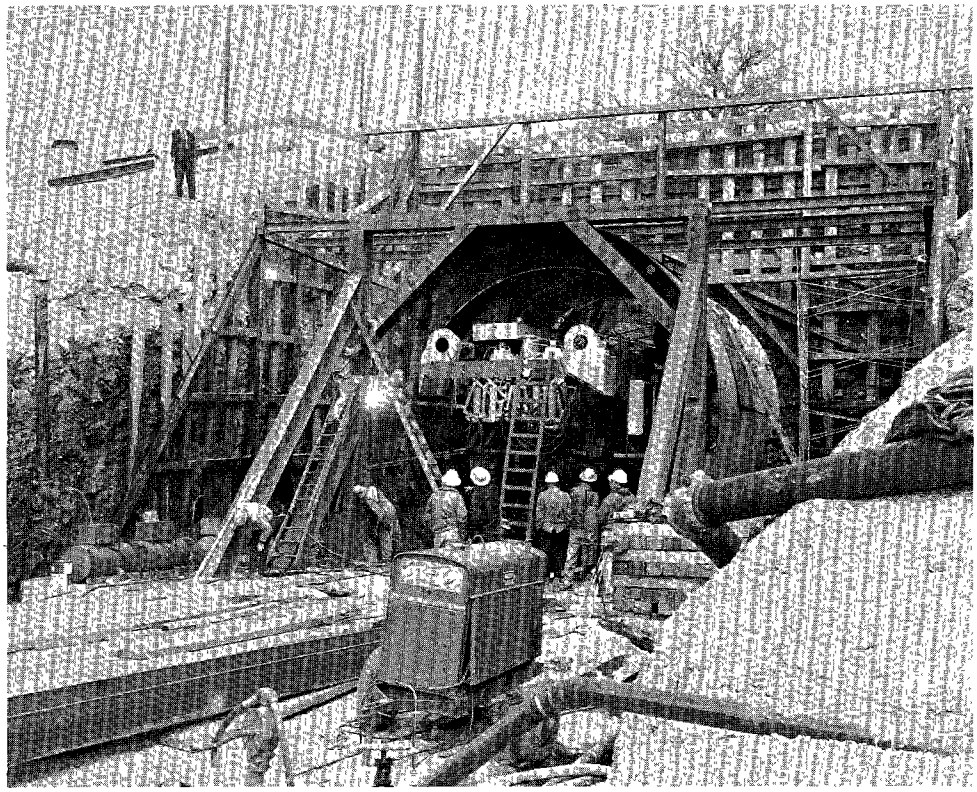
The Mojave Division extends from the Tehachapi Afterbay through Cedar Springs reservoir. Other features of the division include Cottonwood Powerplant, Pearblossom Pumping Plant, and about 106 miles of canal and pipeline.

Construction by the Department has been limited to one contract for an aqueduct embankment across Neenach Wash. This contract was completed in 1966. A second embankment at Anaverde Creek is scheduled for construction this year. The Division of Highways is administering a contract for aqueduct crossings of Antelope Valley Freeway and Barrel Springs Road, which is about 95 percent complete. Site development is scheduled to begin in 1966 for Cottonwood Powerplant and Pearblossom Pumping Plant. All features of the division are scheduled so that water deliveries may be made in 1972.

The Santa Ana Division extends about 33 miles from Cedar Springs reservoir through Perris reservoir. Power will be generated, en route, at Upper and Lower Devil Canyon Powerplants. Construction has not as yet commenced in this division, but is scheduled to permit initial deliveries from Perris reservoir in 1972.

The West Branch extends from the Tehachapi Afterbay to Castaic reservoir. Principal features of the Branch include Oso Pumping Plant, Quail Lake, Pyramid Powerplant, Pyramid Dam and reservoir, Castaic Powerplant, Castaic Dam and reservoir, and about 21 miles of pipeline, canal, and tunnel.

Excavation of the foundation exploration trench for Castaic Dam was completed in 1965. A contract for construction of the Castaic Dam diversion tunnel was awarded in March 1966. The tunnel, scheduled for completion by October 1967, will divert the flow of two creeks around the damsite



Erection of tunnel driving shield at south portal of the Carley V. Porter Tunnel.
(Tehachapi Division)



Canal excavation near Twisselman Road
(South San Joaquin Division)

during construction of the dam, which will begin in 1967. Contracts scheduled to commence in 1966 include Quail aqueduct embankment, Angeles Tunnel, and site developments at Oso Pumping Plant and Castaic Powerplant. Construction of the Pyramid Powerplant will commence in the early part of 1967.

The Coastal Branch extends about 100 miles from the main California Aqueduct, near Avenal Gap in the San Joaquin Valley, to a terminus at the Santa Maria River, forming a portion of the San Luis Obispo-Santa Barbara County line. Principal features include the Las Perillas, Badger Hill, Devil's Den, Sawtooth, and Polonio Pumping Plants; the San Luis Obispo Powerplant; about 20 miles of canal; and about 80 miles of pipeline. The easternmost segment of the Coastal Branch, from the main line of the California Aqueduct to the intake of Devil's Den Pumping Plant, has been designated the "Coastal Stub Aqueduct".

Construction of the Coastal Stub is scheduled to commence in 1966, to permit project water deliveries to agricultural areas in the vicinity of Devil's Den in 1968. Construction of the reaches downstream from the Coastal Stub is tentatively scheduled to commence in 1975, to permit project water deliveries to Central Coastal areas in 1980. However, these dates may be advanced, or deferred, depending upon the desires of water supply contractors in the Central Coastal area.

The Las Perillas and Badger Hill Pumping Plants will lift water from the main line of the California Aqueduct for delivery from the Coastal Stub. Construction will begin on these plants in 1966. A contract for preconsolidation ponds along about three miles of the alignment was completed in February 1966. The contract for construction of the 14 miles of canal included in the Coastal Stub also was awarded in February 1966.

# CHAPTER V. WATER SUPPLY

This chapter contains a summary of developments from April 1, 1965, to April 1, 1966, regarding water rights for the State Water Project, and a brief discussion of basic water supply studies currently in progress.

## Water Rights

Water rights activities during the past year included proceedings to obtain permits already under application before the State Water Rights Board and negotiations on agreements to acquire or define existing rights.

### Applications for the State Water Project

Descriptions of water rights applications, covering project diversions from the Feather River at Oroville and from the Sacramento-San Joaquin Delta, and the Department's efforts to complete those applications, were presented in previous bulletins of this series. Notices for the eight applications involved were advertised by the State Water Rights Board on April 2, 1965. During the 60-day protest period which followed, the Board received a total of 110 protests, representing a considerably greater number of individual water users and/or water rights holders along the Feather River and in the Delta.

The State Water Rights Board will hold hearings on the Department's applications, pursuant to Division 2 of the Water Code. In preparation for the Board hearings, the Department has been collaborating with the Bureau of Reclamation in developing studies to demonstrate that the State Water Project can be operated without interfering with prior vested rights claimed by the protestants.

These joint studies cover the historical period 1924-1954 and chiefly concern the irrigation months of April through October. Examinations of streamflow records during that period already show an apparent sufficiency to satisfy local water rights during the months of November through March of each studied year, except for critically dry years. Comparisons between historic water supply and present water uses indicate that entitled rights in quantity would not have always been utilized. In such specific cases, an analysis was made to determine what reasonable amount of water was, or might have been, diverted.

Preliminary results of the joint studies indicate July and August (of the historic period) to be the most consistent months in which a substantial amount of unappropriated water was not available for appropriation in the Delta and at Oroville Dam. In addition, some years also showed the months of June and September without unappropriated water available for diversion. From these results, it is possible that the State Water Rights Board will consider special diversion terms for water appropriations in the Delta and Oroville areas during the months of June, July, August and September.

The portion of these studies pertaining to the Central Valley Basin has been limited to the major streams that materially affect conditions in the Delta. In future studies, additional streams would be included to prepare a more complete picture of the basin and to test and compare the effect of total system supplies and rights with interim results. No attempt has been made to evaluate the effects of any vested or inchoate water rights that may exist above the foothill gaging stations, except on the Feather River where water rights were considered up to Lake Almanor. Only those water rights situated below the gaging stations, or as described above, were used in the preliminary studies.

Completion of these studies is anticipated within the current year. Findings will be presented as evidence at the State Water Rights Board hearings on the Department's water rights applications.

Applications for water rights for Grizzly Valley Dam and Lake Davis are still pending before the State Water Rights Board.

## Negotiation of Water Rights Agreements

Water rights negotiations are continuing with local water users downstream from Grizzly Valley Dam on Big Grizzly Creek. The Department has undertaken a measurement study to determine various diversions of water in the area by riparian owners.

As a result of the protests received on the eight applications covering project diversions at Oroville and from the Delta, the Department expanded its negotiation activities in completing agreements which would define the water rights of protestants, as well as the residual supply available to the Project.

The Pacific Gas and Electric Company, diverting Feather River flows through the Western Canal, and the Joint Water Districts Board, diverting through the Sutter-Butte Canal, have first priority appropriative rights to the flow of the Feather River below Oroville, and account for approximately 93 percent of the present water used for irrigation from the Feather River. These two agencies will be supplied directly from the Thermalito Afterbay under project operating conditions.

Meetings with representatives of the Pacific Gas and Electric Company are currently being conducted at about three-week intervals to negotiate a firm agreement.

Negotiations were initiated in April 1960 with the Joint Water Districts Board, but were recessed during the hearings before the State Water Rights Board on the Richvale Irrigation District's Middle Fork Project. Negotiations were resumed in 1964 and have been expanded during 1965 to include all water users and/or water rights holders along the Feather River below Oroville, of which there are about 52 in number.

The Department is continuing negotiations with the Bureau of Reclamation and the groups representing local interests in the Delta: the Sacramento River and Delta Water Association, representing the majority of the water users in Sacramento, Yolo, and Solano Counties; the San Joaquin Water Rights Committee, representing the water users of San Joaquin County; and the Negotiating Committee for Contra Costa County's Water Requirements, representing local interests in Contra Costa County.

Negotiations among the Department, the Bureau, and the first two of the above-named local groups have been very successful to date. In November 1965, a "Delta Water Quality Criteria" agreement68/ was signed with the representatives of these two local groups. The agreement set forth a minimum Delta water quality environment to be assured through joint project operation. The local interests have initiated drafting of legislation, to be presented in the next General Session of the State Legislature, which would authorize the formation of a Delta-wide district with which the Bureau and the State could contract.

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68/ "Delta Water Quality Criteria" agreement between Sacramento River and Delta Water Association, San Joaquin Water Rights Committee, Department of Water Resources, and U. S. Bureau of Reclamation, dated November 19, 1965.

No significant progress has been made to date in joint negotiations with Contra Costa County.

## Protests on Applications of Others

The application filed by the City of Napa on March 25, 1964, to appropriate water from the Delta, was noted in last year's bulletin. The Department protested the application on the basis that unappropriated waters are not available in such quantities, and at such times, so that a dependable supply could be obtained by the City.

In March 1966, the City entered into a contract with the Napa County Flood Control and Water Conservation District for a substitute supply from the North Bay Aqueduct and, in April, withdrew its water rights application.

The City of Napa electorate voted about 4 to 1, in April 1966, authorizing the issuance of $5,750,000 in general obligation bonds for construction of a water treatment plant and distribution facilities. This completed the physical and contractual arrangements necessary for the City of Napa to make use of North Bay Aqueduct water, except for execution of a contract among the County of Solano, the County of Napa, and the Department for an interim supply from the Bureau of Reclamation's Solano Project. Terms of this contract have been agreed upon by the three agencies.

## Estimates of Future Water Supplies

Project water demands will be met by the initial project conservation facilities which release water conserved in Oroville reservoir and divert surplus waters from the Sacramento-San Joaquin Delta. Future urban and agricultural developments in the drainage area tributary to the Delta are expected to reduce these surplus flows gradually. The Department is projecting the extent of future upstream depletions, in order to plan and schedule the future construction of additional project conservation facilities.

This program is a part of the joint studies being undertaken by the Department and the Bureau of Reclamation to develop a mutually agreed-upon estimate of the effect of upstream development on Delta outflows. The basic water supply study will be used by both agencies for planning, water rights applications, and coordinated operation studies.

Although the current general approach is similar to that previously made (in that estimates of historical runoff are modified by projected changes in water utilization for projected future levels of development), several significant changes and refinements have been developed. These include: the division of the Delta tributary area into 38 subareas for purposes of analysis, compared to 18 subareas used previously; the accounting for the consumptive use of native vegetation on lands which undergo agricultural or urban development; and, a more realistic approach regarding the use of ground water and its effects on inflow to the Delta.

Preliminary indications from these studies are that depletions in the available supply, due to future upstream developments, will be no greater than previously estimated. The project staging analysis presented in the Department's Bulletin No. 160-66, "Implementation of The California Water Plan", is based upon future conditions as indicated by these preliminary studies.

Completion of the joint depletion studies is expected during the current calendar year, with results available for water supply and project yield analyses to be presented in Bulletin No. 132-67. Pending completion of these studies, this edition of Bulletin No. 132 uses the same water supply values as were presented in Bulletin No. 132-65.

# CHAPTER VI. ENTITLEMENTS TO PROJECT WATER

This chapter briefly describes the status of the water contracting program as of April 1, 1966, and summarizes the annual entitlements to project water for each of the contracting agencies as of that date. These annual entitlements collectively form the basis for the analyses which are described in the following chapters and which lead to the updated financing program for the State Water Project.

## The Water Contracting Program

The guidelines for the water contracting program for the State Water Project were established by the Contracting Principles[69/] adopted and announced by Governor Brown on January 20, 1960.

### Initial Contracting Period

The program was initiated during the spring of 1960, with the commencement of negotiations with The Metropolitan Water District of Southern California. When the initial contracting period ended on December 31, 1963, long-term contracts had been executed with 30 local agencies throughout the State, committing 3,468,000 acre-feet of the original "minimum project yield" of 4,000,000 acre-feet annually. The "minimum project yield" is a contractual term which constitutes the limit of the total maximum annual entitlements for all contracting agencies.

### Option Period

Each of the 30 contracting agencies had an option on a proportionate share of the 532,000 acre-feet of the minimum project yield remaining uncommitted as of December 31, 1963, if it could be demonstrated that the additional water could be put to beneficial use within a reasonable period of time. However, the June 1963 United States Supreme Court decision in the case of Arizona v. California redefined the rights to the waters of the Colorado River. The Department

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69/See Department of Water Resources Bulletin No. 132-63, "The California State Water Project in 1963", dated April 1963 (pages 149-155).

then prudently decided to propose an increase of the minimum project yield so as to provide an additional 500,000 acre-feet, annually, to The Metropolitan Water District of Southern California (including Metropolitan's 270,000 acre-foot pro rata share of the original project yield remaining uncommitted), to help compensate for a certain loss due to the court decision. The necessary actions were taken to gain approval to increase the annual minimum project yield by 230,000 acre-feet by September 30, 1964--the end of the option period.

Options were eventually exercised by 18 of the contracting agencies (other than Metropolitan) increasing their entitlements to project water by 462,800 acre-feet. This amount, together with the additional 500,000 acre-feet provided Metropolitan, left 29,300 acre-feet of the enlarged minimum project yield uncommitted.

## Additional Contracts

During the initial contracting period ending December 31, 1963, and the option period ending September 30, 1964, the 30 contracting agencies had specific rights to increase their maximum annual entitlements to project water. The State is not prevented from executing additional contracts after September 30, 1964, however. One additional contract was executed in 1965. The Oak Flat Water District in western Stanislaus County became the thirty-first contracting agency, with a maximum annual entitlement of 5,700 acre-feet. This action reduced the uncommitted portion of the enlarged minimum project yield to 23,600 acre-feet as of April 1, 1965, as shown in last year's report.

## Current Status

As of April 1, 1966, the number of contracting agencies had been reduced to 30, the portion of the minimum project yield remaining uncommitted had been reduced to 8,600 acre-feet, and the remaining amount had been assigned to two potential contracting agencies, pending completion of current negotiations.

One of the previous separate contracting agencies was absorbed when Amendment No. 3 to the water supply contract between the State and The Metropolitan Water District of Southern California was signed with the District and the City of West Covina in August 1965. This amendment terminated the City's separate water supply contract with the State and assigned its 11,500 acre-foot maximum annual entitlement and

repayment obligations to Metropolitan. The amendment provisions became effective November 29, 1965, when the Department was officially notified that the service area of the City had been annexed to, and was a part of, Metropolitan.

Amendment No. 3 to the water supply contract between the State and the Upper Santa Clara Valley Water Agency was executed on January 24, 1966. This action increased the Agency's maximum annual entitlement from 26,500 acre-feet to 41,500 acre-feet. Recent developments within the Agency's service area indicated that the projected growth of demands for project water had been significantly underestimated during the negotiation of the original contract, executed on April 30, 1963. Action on this contract thus reduced the uncommitted remainder of the minimum project yield from 23,600 acre-feet to 8,600 acre-feet.

Negotiations are now under way with two potential contracting agencies: the Big Bear Municipal Water District in San Bernardino County, for a maximum annual entitlement of 4,600 acre-feet; and Kings County, for a maximum annual entitlement of 4,000 acre-feet. Project water in both of these instances would be beneficially used for recreational purposes and would involve exchange arrangements with local water agencies to facilitate service from the California Aqueduct.

## Water Contract Administration Activities

As of April 1, 1966, a total of 52 amendments had been signed, modifying the provisions of the originally executed water supply contracts. The most significant of these was the so-called "option amendment". This amendment provided for the enlargement of the annual minimum project yield to 4,230,000 acre-feet, the surcharge credit program, the surplus water program for agricultural and ground water replenishment purposes,70/ and increases in maximum annual entitlements for those agencies which had elected to exercise their option for additional water. Each of the original 30 contracting agencies has executed this amendment; the last, the Alameda County Water District, on September 23, 1965.

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70/For an explanation of the "surcharge credit program" and the "surplus water program" for agricultural and ground water replenishment purposes, see Department of Water Resources Bulletin No. 132-64, "The California State Water Project in 1964", dated June 1964 (pages 19-23).

Descriptive data concerning the agencies which presently have contracts with the State for a water supply from the State Water Project, as well as the two agencies with which contracts are now being negotiated, are presented in Table 2. The general location of these 32 agencies, together with the actual or assigned maximum annual entitlement of each, is indicated on Figure 2. As shown thereon, these agencies are distributed throughout most of the State. The boundaries of the water service agencies to which project water will be supplied presently encompass over 24 percent of the State's land area, 61 percent of the State's assessed valuation, and 66 percent of the State's population.

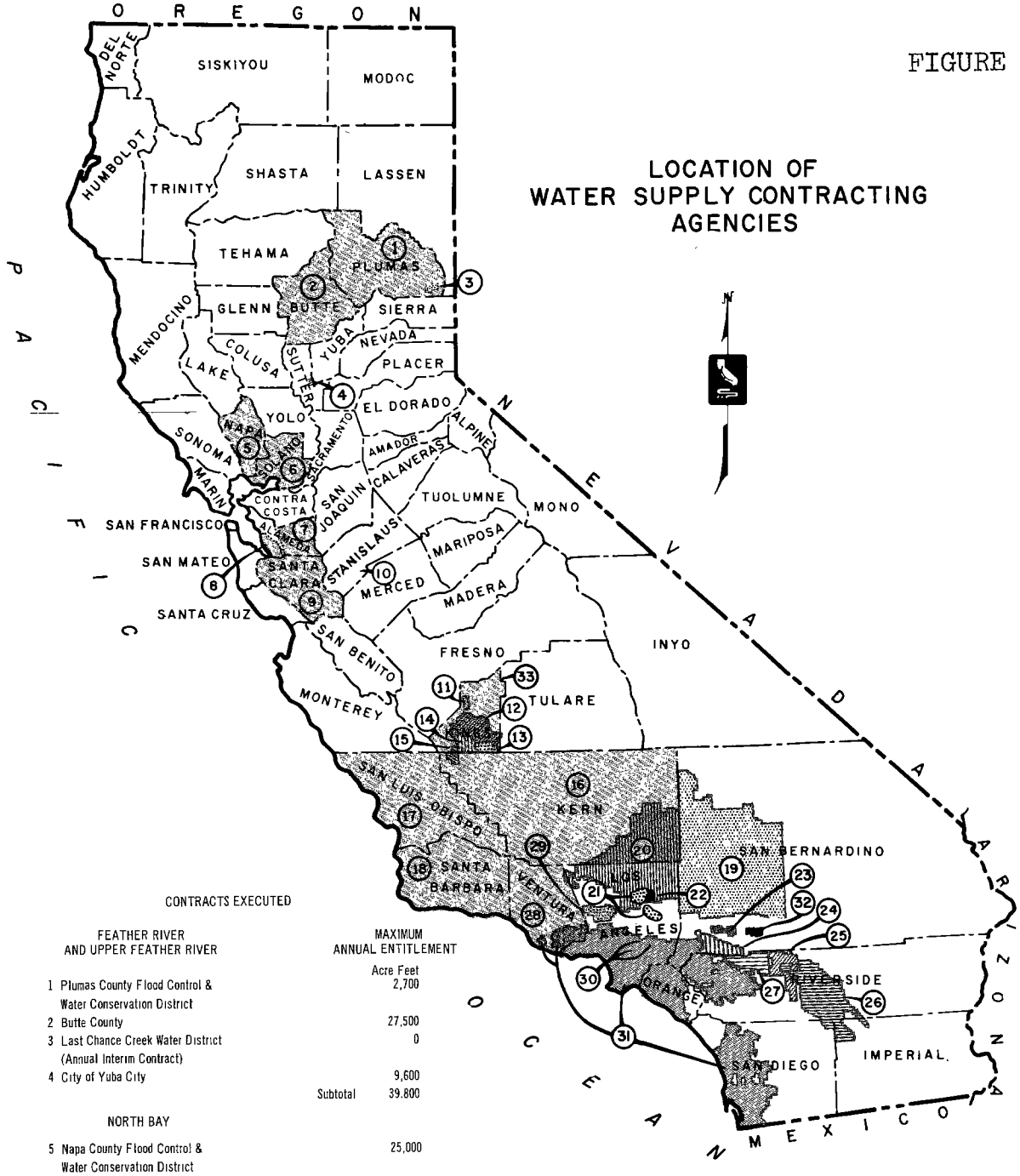
Twenty-five reports[71] of the Department's Bulletin No. 119 series have been completed and released to date. These reports document the factors leading to the contract, and substantiate the economic justification and financial feasibility of a project water supply for each respective agency.

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| [71]/Bulletin No. 119- | Entitled "Feasibility of Serving the (name of agency) from the State Water Project" | Dated |
|---|---|---|
| un-numbered | Antelope Valley-East Kern Water Agency | January 1962 |
| 1 | Desert Water Agency | November 1962 |
| 2 | San Gorgonio Pass Water Agency | February 1963 |
| 3 | Coachella Valley County Water District | May 1963 |
| 4 | Palmdale Irrigation District | May 1963 |
| 5 | Solano County Flood Control and Water Conservation District | November 1964 |
| 6 | San Gabriel Valley Municipal Water District | May 1964 |
| 7 | San Luis Obispo County Flood Control and Water Conservation District | August 1964 |
| 8 | Kern County Water Agency | September 1963 |
| 9 | Napa County Flood Control and Water Conservation District | February 1965 |
| 10 | Hacienda Water District | October 1964 |
| 11 | Tulare Lake Basin Water Storage District | May 1965 |
| 12 | Mojave Water Agency | December 1965 |
| 13 | Devil's Den Water District | February 1965 |
| 14 | Dudley Ridge Water District | August 1964 |
| 15 | Oak Flat Water District | December 1965 |
| 16 | Plumas County Flood Control and Water Conservation District | May 1965 |
| 17 | Ventura County Flood Control District | July 1965 |
| 18 | Upper Santa Clara Valley Water Agency | August 1964 |
| 19 | Crestline-Lake Arrowhead Water Agency | February 1965 |
| 20 | Littlerock Creek Irrigation District | December 1965 |
| 21 | Santa Barbara County Flood Control and Water Conservation District | September 1963 |
| 22 | City of Yuba City | September 1964 |
| 23 | Butte County | April 1966 |
| 25 | Empire West Side Irrigation District | February 1965 |

FIGURE 2

# LOCATION OF WATER SUPPLY CONTRACTING AGENCIES




CONTRACTS EXECUTED

| | MAXIMUM ANNUAL ENTITLEMENT |
|---|---|
| FEATHER RIVER AND UPPER FEATHER RIVER | Acre Feet |
| 1 Plumas County Flood Control & Water Conservation District | 2,700 |
| 2 Butte County | 27,500 |
| 3 Last Chance Creek Water District (Annual Interim Contract) | 0 |
| 4 City of Yuba City | 9,600 |
| Subtotal | 39,800 |
| NORTH BAY | |
| 5 Napa County Flood Control & Water Conservation District | 25,000 |
| 6 Solano County Flood Control & Water Conservation District | 42,000 |
| Subtotal | 67,000 |
| SOUTH BAY | |
| 7 Alameda County Flood Control & Water Conservation District-Zone 7 | 46,000 |
| 8 Alameda County Water District | 42,000 |
| 9 Santa Clara County Flood Control & Water District | 100,000 |
| Subtotal | 188,000 |
| SAN JOAQUIN VALLEY | |
| 10 Oak Flat Water District | 5,700 |
| 11 Empire West Side Irrigation District | 3,000 |
| 12 Tulare Lake Basin Water Storage District | 110,000 |
| 13 Hacienda Water District | 8,500 |
| 14 Dudley Ridge Water District | 57,700 |
| 15 Devils Den Water District | 12,700 |
| 16 Kern County Water Agency | 1,153,400 |
| Subtotal | 1,351,000 |
| CENTRAL COASTAL | |
| 17 San Luis Obispo County Flood Control & Water Conservation District | 25,000 |
| 18 Santa Barbara County Flood Control & Water Conservation District | 57,700 |
| Subtotal | 82,700 |

| SOUTHERN CALIFORNIA | MAXIMUM ANNUAL ENTITLEMENT |
|---|---|
| | Acre Feet |
| 19 Mojave Water Agency | 50,800 |
| 20 Antelope Valley-East Kern Water Agency | 138,400 |
| 21 Palmdale Irrigation District | 17,300 |
| 22 Littlerock Creek Irrigation District | 2,300 |
| 23 Crestline-Lake Arrowhead Water Agency | 5,800 |
| 24 San Bernardino Valley Municipal Water District | 98,000 |
| 25 Desert Water Agency | 38,100 |
| 26 Coachella Valley County Water District | 23,100 |
| 27 San Gorgonio Pass Water Agency | 17,300 |
| 28 Ventura County Flood Control District | 20,000 |
| 29 Upper Santa Clara Valley Water Agency | 41,500 |
| 30 San Gabriel Valley Municipal Water District | 28,800 |
| 31 The Metropolitan Water District of Southern California | 2,011,500 |
| Subtotal | 2,492,900 |
| Total | 4,221,400 |
| CONTRACTS UNDER NEGOTIATION | |
| 32 Big Bear Municipal Water District | 4,600 |
| 33 Kings County | 4,000 |
| Total | 8,600 |
| Grand Total | 4,230,000 |

## Distribution of Minimum Project Yield

The cost estimates and operation studies for the analyses described in this report had to be commenced during January 1965. Therefore, these analyses consider 4,221,400 acre-feet of the minimum project yield to be contracted, and the remaining 8,600 acre-feet, for which contracts are now being negotiated, to be "assigned". Table 3 presents a summary of the resulting distribution of the minimum project yield among major service areas of the project, and compares the distribution with those assumed for Bulletins Nos. 132-63, 132-64, and 132-65.

## Annual Entitlements to Project Water

"Table A" of each water supply contract sets forth the agency's annual entitlements to project water for each year of the term of the contract. Years are identified in numerical sequence starting with the number 1, rather than by calendar years. Article 6(a) of each contract indicates the estimated year of initial project water deliveries, and further specifies that, if there is a change in this estimate, the State shall notify the agency. Pursuant to this provision, contractors served from the West Branch of the California Aqueduct have been notified that the estimated year of initial delivery has been revised to 1971, rather than 1972 as shown in their original contracts. Likewise, the Plumas County Flood Control and Water Conservation District has been notified that initial deliveries from Lake Davis are now estimated to commence in 1968, rather than 1967.

Table 4 shows the annual entitlements of each contractor for the term of its contract. The data therein is based on Table A of each contract and the estimated year of initial project water delivery as shown in Article 6(a), or as subsequently revised.

As shown in Table 4, there is considerable variation in the year in which contractors will receive initial deliveries of project water. Most will first receive project water during the period 1968 - 1972, but three contractors will receive it prior to this period and five contractors will receive it after 1972.

With one exception, the contracts provide for a development period. During this period, entitlements are increased each year until the maximum annual entitlement is

reached. Table 4 shows that most contractors will first receive their maximum annual entitlement in 1990. Exceptions for certain contractors are noted in the following tabulation:

| Water supply contractor | :Year in which maximum : entitlement reached |
|---|---|
| Plumas County Flood Control and Water Conservation District | 2016 |
| Alameda County Flood Control and Water Conservation District, Zone 7 | 1997 |
| Alameda County Water District | 1994 |
| Santa Clara County Flood Control and Water District | 1994 |
| Devil's Den Water District | 1977 |
| Empire West Side Irrigation District | 1968 |
| Antelope Valley-East Kern Water Agency | 1991 |
| San Bernardino Valley Municipal Water District | 1991 |
| The Metropolitan Water District of Southern California | 1989 |

The agencies have been diligently involved, during the past year, in establishing internal programs to guarantee the timely acceptance and utilization of the annual entitlements specified in each respective contract. Considerable activities in the fields of finance, design, and construction must be completed prior to the time deliveries of project water can actually commence for most agencies. Included in these activities are the fixing of exact turnout locations, the planning, designing, and obtaining of rights-of-way, and the construction of agency facilities between project aqueducts and the ultimate users within an agency's service area. In most cases, multimillion dollar expenditures and several years' time may be required to finance and complete the required works for an agency or its users downstream from the project facilities.

# CHAPTER VII. PROJECT WATER YIELD

The "minimum project yield" of 4,230,000 acre-feet per year, referred to in previous chapters, represents the aggregate of the maximum annual entitlements of agencies which have contracted for a water supply from the State Water Project under the "Standard Provisions for Water Supply Contract". The required gross yield of project conservation facilities must also provide water required for special water supply contracts; water consumed for project purposes other than water supply; and, water lost incidental to the normal operation of the project facilities. This gross yield is considered, herein, to be equivalent to the project demands on the Delta Pool, discussed subsequently in this chapter.

The yield capabilities of the conservation facilities of the State Water Project are determined by the relationships among project demands, available water supplies, and the operational characteristics and capabilities of the facilities.

The potential yield of the facilities will not be static, and will gradually decrease as the upstream depletions (described in Chapter V) continue to reduce the supply available at the Delta. The yield will be increased, periodically, as project conservation facilities are added to the State Water Resources Development System, so that the yield capability will always be greater than project demands. Therefore, the yield capability of such facilities will exceed the project demands by varying annual amounts. This excess yield capability, together with any available transportation capability in project aqueducts, will be utilized to supply additional water (surplus water) to users on an interim basis.

The operation studies and estimates of yield described in this chapter are preliminary evaluations for the purpose of estimating the costs of an additional project conservation facility required to augment water supplies at the Delta in meeting demands of the State Water Project. These cost estimates are described in Chapter X and are used for the financial analyses in Chapter XII.

Some of the data for, and the results of, these operation studies are summarized in Table 5. The left side of the tabulation presents the project water demands on the Delta Pool. The supplies to be made available for these demands are shown on the right side. This information is briefly discussed in the following sections.

## Project Water Demands

The total annual water demands of the State Water Project, exclusive of surplus water which may be sold to agencies on an interim basis, are summarized in Table 5 and include:

1. The annual entitlements of water supply contractors which, for years of full project development, total the "minimum project yield".

2. The annual quantities which may be consumptively used as cooling water by a state-operated nuclear powerplant, if located along the California Aqueduct, under consideration as a project power source.

3. The annual quantities consumptively used for the project purposes of recreation and fish and wildlife enhancement.

4. The annual quantities needed during construction or required to bring water surfaces in project facilities to operational levels.

5. The annual quantities consumed, or otherwise lost, incidental to the normal operation of project facilities.

These demands are described in more detail in the following sections.

### Annual Entitlements

The annual entitlements of contractors, set forth in the water supply contracts, have been described in Chapter VI. These annual quantities are summarized in Table 5 for major project service areas.

### Nuclear Powerplant Cooling Water

Table 5 also contains an allowance for cooling water that would be required for a nuclear powerplant located at the Tehachapi Pumping Plant. It is estimated that water consumed in a condenser cooling system of the evaporative type for a pressurized or boiling water reactor plant, such as is now available, would amount to 35,000 acre-feet annually for a plant capacity of about 1,150,000

kilowatts. This is the assumed capacity of the nuclear power plant after installation of the second of two 575,000 kilowatt units. The first unit would require one-half that amount.

The Department is also considering other sites in Southern California, adjacent to the ocean. These investigations are described in Chapter VIII.

## Water Requirements for Recreation and Fish and Wildlife Enhancement

Annual quantities of water to be consumed in specific recreation and fish and wildlife enhancement facilities under full project development have been estimated. A total usage of 45,500 acre-feet per year is considered in the analyses of this report for future developments to be located along the California Aqueduct south of Kettleman City. Of this value, 25,500 acre-feet would be for facilities in the South San Joaquin division and 20,000 acre-feet would be for those located in Southern California. The quantities of water used in connection with specific recreation and fish and wildlife enhancement facilities adjacent to project conservation reservoirs probably would be small and, therefore, are neglected herein.

## Water Quantities Involved in Construction

Water is utilized during construction for (1) aqueduct preconsolidation; (2) testing of aqueduct sections and electrical-mechanical equipment; and, (3) bringing aqueduct and reservoir water surfaces to operational levels.

The Department is providing water for the preconsolidation of aqueduct foundations from nonproject sources, including ground water from state-owned wells, and the supplies of local water agencies and private corporations. The compensation arrangements in certain contracts include payment, in kind, by delivery of project water. Such replacement supplies will be derived from surplus water and are not included in Table 5.

Water utilized for testing purposes will not be consumed and will be available for bringing water surface elevations in downstream facilities to operational levels.

The estimated annual quantities of water required to create operational levels in facilities, which are included in the demands shown in Table 5, are summarized in the following tabulation. These include water for the

initial filling of the aqueducts, San Luis reservoir, and the terminal reservoirs located in Southern California. For Del Valle reservoir, water to fill dead storage space only is included.

(in acre-feet)

| Calendar year | Aqueducts | Del Valle reservoir | San Luis reservoir | Southern California reservoirs[a] | Total |
|---|---|---|---|---|---|
| 1967 | 300 | | | | 300 |
| 1968 | 38,800 | | 350,000 | | 388,800 |
| 1969 | 6,600 | 10,000 | 750,000 | | 766,600 |
| 1970 | 8,200 | | | 36,000 | 44,200 |
| 1971 | 5,500 | | | 100,500 | 106,000 |
| 1972 | | | | 270,000 | 270,000 |
| 1973 | | | | 238,800 | 238,800 |
| 1974 | | | | 116,100 | 116,100 |
| . | | | | | |
| . | | | | | |
| . | | | | | |
| 1980 | 300 | | | | 300 |
| Totals | 59,700 | 10,000 | 1,100,000 | 761,400 | 1,931,100 |

a/ Includes Castaic, Pyramid, Cedar Springs, and Perris reservoirs.

The operating costs associated with transportation of water for the above purposes will be included in the capital costs of the respective facilities.

## Losses Incidental to Operation

Operational losses in the project conservation and transportation facilities located below the Delta will average about 260,330 acre-feet by the year 1990. Water losses in conservation facilities will consist primarily of evaporation from water surfaces, while losses in transportation facilities will consist of canal seepage and evaporation. Evaporation losses were estimated largely from evaporation records, and seepage losses were evaluated from operational experience of the Bureau of Reclamation and others.

The following tabulation summarizes the average annual losses included in Table 5 for the major facilities of the State Water Project located below the Delta.

| Facility | Estimated annual operational losses, in acre-feet |
|---|---|
| Reservoirs: | |
| Del Valle | 3,500 |
| San Luis | 34,000[a] |
| Pyramid | 6,900 |
| Castaic | 16,100 |
| Cedar Springs | 8,600 |
| Perris | 9,800 |
| Subtotal | 78,900 |
| Canals: | |
| North Bay Aqueduct | 1,400 |
| South Bay Aqueduct | 1,230 |
| California Aqueduct | 178,800[a] |
| Subtotal | 181,430 |
| TOTALS | 260,330 |

a/ Includes only assumed State's share of losses in the San Luis division.

Estimates of the total annual quantities of water to be conveyed through each pumping plant, corresponding to the quantities in Table 5, are contained in Appendix B.

## Surplus Water

The aggregate yield capability of the initial and additional project conservation facilities will be greater than the annual project water demands by varying amounts, as pointed out at the beginning of this chapter.

The additional supply provided by surplus yield capability will be sold during the project development period (i.e. prior to about 1990) to the extent that the aqueduct capacity required to convey such surplus quantities is not needed for the delivery of firm annual entitlements. However, there are limitations to the full use of aqueduct capacities during these years because of the staged installation of

pumping units and because of the minimum onpeak mode of aqueduct operation. In the San Joaquin Valley, however, significant amounts of aqueduct and pumping capacity would be available during the winter months since the total capability of the system, for a given year, would be sufficient to convey the peak summer demands for agricultural water in each year. The magnitude of such surplus conveyance capacity is reduced along the aqueduct as agricultural deliveries are made within the San Joaquin Valley. Very little surplus capacity would be available in the aqueduct reaches south of the Tehachapi Pumping Plant since the Southern California entitlements are conveyed at essentially uniform annual flow.

The water supply contracts provide for the sale and delivery of surplus water under two separate programs.

The standard contract provisions, in Article 21, provide that water which is available in addition to that required to meet project entitlements may be sold at prices which will return to the State the largest net revenues practicable, and at the minimum, revenues equal to the variable operation, maintenance, power, and replacement costs incurred in delivery. No restrictions are placed upon the use of such water, nor upon the agencies which may contract to purchase such water. However, the delivery of surplus water shall not interfere with delivery of entitlements to project water, nor shall surplus water serve as a lower cost substitute for entitlements to project water. Contracts, pursuant to Article 21, shall be made for periods not to exceed one year.

The surplus water program added to the special provisions of the water supply contract with the Kern County Water Agency, and to all contracts executed thereafter, and by amendment to those contracts executed prior to that time, provides for a preferential sale of an additional supply for certain of the Project's water supply contractors. Although it maintains in effect the provisions of Article 21, this program specifies that surplus water shall be offered for sale for agricultural or ground water replenishment purposes of the project's water supply contractors before being offered for other uses and for other agencies. Furthermore, the procedure for distributing the available supply among contractors requesting water under this program is specified in some detail.

Surplus water available for sale at Dos Amigos Pumping Plant is to be divided among the three principal service areas on the following basis: Southern California, 29 percent; San Joaquin Valley, 69 percent; and Central Coastal area, 2 percent. The annual distribution to individual contractors within each major area is to be based upon the ratio of each contractor's quantity of entitlement water, put to agricultural or ground water replenishment use (during the preceding three years), to the amount so used during the same period by all contractors requesting surplus water. Water so allocated, which is not required or which cannot be delivered, will be offered to other contractors for agricultural or ground water replenishment use.

The delivery of surplus water under either program must be limited, so that it will not adversely affect the reliability or increase the cost of delivering annual entitlements. Thus, the sale of surplus water shall result in neither increased capital costs by reason of accelerated installation of project features, nor in increased operating costs because of a more expensive method of utilizing operable features. The scheduling of construction and operation must be based fundamentally upon the delivery of annual entitlements. Therefore, the projected demands of the State Water Project shown in Table 5 exclude estimates of surplus water deliveries.

## Project Operation Studies

As indicated in Chapter V, current joint studies between the Department and the Bureau of Reclamation could result in substantial revision of the water supply used in the coordinated operation studies. Inasmuch as these studies are still under way, this edition of Bulletin No. 132 uses the same water supply, operation studies, and yield estimates which were presented in Bulletin No. 132-65.

The results of these operation studies, in the form of yields of the initial project conservation facilities, are depicted in Table 5. Column 9 indicates the portions of the demands on the Delta Pool that are susceptible to being supplied from the initial project conservation facilities. The values in that column show that, beginning in 1986, the yield of the initial facilities is inadequate to meet the demands. Therefore, in 1986 an additional project conservation facility would have to be operational in order to meet the growing demands for water from the Project and to overcome the gradual diminution of yield of initial project conservation facilities, due to depletions of water supplies

available at the Delta. In order to meet only the demands for water from the State Water Project, it would be necessary for this additional facility to have an annual yield capability of about 891,000 acre-feet, as shown for the year 2035 at the bottom of Column 10.

It was assumed for the cost and financial analyses in this bulletin that an additional project conservation facility would be built by the State to supply this 891,000 acre-feet. This was done to forecast the outcome of the financial program for the "closed" State Water Project with the financing presently available under the Burns-Porter and Central Valley Project Acts. This additional facility was assumed to be the Upper Eel River Development, which could be sized so as to yield approximately that quantity of water.

Future estimates regarding the timing and sizing of additional and supplemental conservation facilities will be based upon staging plans to meet statewide water demands and other information developed by the Department's Coordinated Statewide Planning Program. Information presented in the Department's Bulletin No. 160-66, "Implementation of The California Water Plan", indicates that the need for the first additional conservation facility, based upon water supply considerations alone, may not occur as early as the 1986 date shown herein. The studies for Bulletin No. 160-66 were based on a preliminary result of the joint water supply studies mentioned above.

Prior to the scheduled publication of the next edition of this Bulletin (No. 132-67), it is believed that sufficient refinements will have been achieved in these water supply and operation studies to reflect any necessary modifications in the scheduled timing of construction, and in the required size for the additional project conservation facility.

# CHAPTER VIII. PLANS FOR PROJECT OPERATION AND MAINTENANCE

The implementation of large-scale operation and maintenance activities for the water and power facilities of the State Water Project are described in this chapter. Hydroelectric power production and marketing and source of power for project pumping also are discussed. This information is utilized in estimating operation and maintenance costs for Chapter X and project revenues for Chapter XI.

## Activation of Operation and Maintenance

Frenchman and Antelope Dams and Lakes and the main line of the South Bay Aqueduct already are operational. Operation and maintenance activities for these facilities during calendar year 1965 are described in Chapter IX. Activation of operation and maintenance for the other facilities of the Project is still in the future. Operation is scheduled to start in December 1966 for the Delta and Dos Amigos Pumping Plants and in January 1967 for the San Luis Pumping-Generating Plant. The other plants along the California Aqueduct will be tested and operated, in order, until the total main line to terminal reservoirs in Southern California is operational in 1972. The closure of the second of the diversion tunnels which convey Feather River flows around the Oroville Dam embankment, is presently scheduled for October 1967. The dependable generation of Oroville-Thermalito power will commence in the spring of 1968, if average water conditions are experienced following tunnel closure.

One of the most significant actions taken during the previous year, in preparation for large-scale operations, was the employment of the firm of Burns and Roe, Inc.,72/ as consultant to the Department, to establish a system of operations and maintenance for the State Water Project.

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72/ On October 28, 1965, the Department accepted a proposal of Burns and Roe, Inc., an engineering firm of Santa Monica, California, in association with North American Aviation, Inc., of Downey, California, and Price Waterhouse & Co., of Los Angeles, California, in competition with five others received by the Department, in response to invitations issued to 20 firms. A contract was executed on January 13, 1966. Work under the contract will be completed in mid-1968. Costs are estimated at $1,800,000.

Presently, the Department has about 60 employees engaged in project operation and maintenance activities. The strength of this staff must grow to almost 1,000 by 1972. The assistance to be provided by the consultants will permit the Department to employ and develop its operations and maintenance support personnel in an orderly manner, while using the consultant's personnel to handle the peak workload during the next two years in the following preoperational tasks confronting the Department:

1. Preparation of operation and maintenance manuals for project facilities.

2. Preparation and assistance in the implementation of the initial training program for field operation and maintenance personnel.

3. Development of systems for inventory management and property accounting for project facilities.

4. Development of standard operating procedures, including maintenance management plans, for individual facilities and for the Project as a whole.

5. Formulation of the breakdown maintenance plan and the testing and calibration requirements for project facilities.

6. Integration of operations research studies into analyses of project operation and maintenance.

7. Formulation of an overall management system for operation and maintenance of the State Water Project.

Operation and Maintenance Organization

An office report[73/] was prepared in November 1965, which describes, in detail, the organizational structure and the functional responsibilities of Department offices located

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73/Department of Water Resources, Office of the Assistant Chief Engineer, Area Management, "Report on Organization and Manpower Requirements for Operation and Maintenance of the State Water Project", November 1965.

in Sacramento, the districts, and newly developed zones, with respect to operation and maintenance activities for the State Water Project. The report sets forth the classifications and projected requirements of personnel during the buildup of both the field operation and maintenance forces and the engineering support personnel. Data contained therein is being used as the basis for establishing classifications, hiring schedules, budgeting, and training programs for operation and maintenance personnel.

The operation and maintenance organization comprises:

1. Basic field operating and maintenance groups, organized into six zones: Oroville, Delta Facilities, Delta, San Luis, South San Joaquin, and Fairmont.

2. The Project Operations Control Center in Sacramento.

3. Engineering support located in the Department's district offices.

4. Overall engineering support for the Project located in Sacramento.

Three of the six operation and maintenance zones have been established, as noted in last year's bulletin, and their areas of responsibility identified: Oroville, Delta, and San Luis. A Zone Chief, the key man in the future day-to-day operation of the Project, has been hired for each of these zones.74/

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74/ William T. Kritikos, appointed Chief of the Delta Zone August 16, 1965, has spent 18 years with the East Bay Municipal Utility District as Superintendent of Mechanical and Electrical Maintenance, assistant Regional Engineer, and assistant Civil Engineer for that District.
Philip F. Johns, Chief of the Oroville Zone as of July 6, 1965, was employed from 1957 to 1963 by Uhl, Hall and Rich, engineers for the New York State Power Authority, on the construction of the Niagara and St. Lawrence Power Projects. Previous to that time, he had worked for the Bureau of Reclamation for 10 years in the operation and maintenance field.
Jack E. Arnold, named Chief of the San Luis Zone August 6, 1965, was chief operator on the St. Lawrence Power Project for the New York State Power Authority for more than three years. His background in powerhouse operation dates from 1947, when he was employed at the Kerckhoff Powerhouse on the San Joaquin River in Fresno County.

The Oroville Zone includes project facilities located in the Upper Feather River and Oroville Areas.

The Delta Zone includes the North San Joaquin division of the California Aqueduct, the South Bay Aqueduct and the North Bay Aqueduct.

The San Luis Zone includes all of the San Luis division of the California Aqueduct. In addition, this Zone's responsibility for remote operation of the California Aqueduct will extend to the Buena Vista Pumping Plant in the South San Joaquin division, and to all plants of the Coastal Branch.

## Special Studies

The Department is presently making surveys of weed infestations in and near project facilities to determine the potential problem areas. Studies are also being conducted to determine the types of equipment available and suited to the Department's weed control needs.

Action is also being taken in the areas of the control system, electrical mechanical equipment testing, and project water quality management.

Control System. The various project facilities will be initially operated by remote control from zone control centers. Work on the control systems has started for three zones: Oroville, Delta, and San Luis. The remote system of control was explained in last year's bulletin. Project operation from these control centers will be scheduled, dispatched and coordinated from the Project Operations Control Center located in Sacramento.

The basic remote control system ultimately may be integrated into a project-wide, automated control system having central computer control capability.

The configuration of the basic remote control system and the extent to which central computer capability will be implemented are being investigated under a program which utilizes an Automation Pilot Model installed on the South Bay Aqueduct. Further details on the Automated Control System are contained in Chapter III of this bulletin.

Equipment Testing Program. A program of electrical and mechanical testing of project equipment is being established.

This includes not only the periodic testing associated with regular preventive maintenance, but also the detecting of impending failures and diagnosing of troubles. The need for a power standards laboratory for the Project is also being appraised. Such a laboratory would assure the accuracy of meter readings and, as a corollary to the test program, would insure that successive measurements and tests are comparable. The engineering consultant, Burns and Roe, Inc., will assist the Department in establishing this program.

Water Quality. Planning for the water quality phases of project operation is being conducted within the framework of an established program.75/ The first phase of a study which will forecast the probable quality of delivered project water is under way and will be completed in 1967.

An investigation to determine the biological monitoring requirements of the Project will be initiated this year. Dr. Clair Sawyer, specialist in biological-chemical aspects of operation and maintenance of large water projects, has been retained to assist in this study.

The Department has joined an existing three-agency program to develop methods for control of biological pests in canals and reservoirs that will not diminish the beneficial uses of water. This is a cooperative effort by the Bureau of Reclamation, the United States Department of Agriculture, the University of California, and the Department of Water Resources.

## Project Electric Power Production and Supply

The State Water Project will generate 6,233,000,000 kilowatt-hours of energy, but will consume 13,074,000,000 kilowatts, during each year of full project operation. The total installed capacity of project powerplants will be about 1,500,000 kilowatts, while the aggregate demand of project pumping plants will be about 2,700,000 kilowatts, including capacity required for the Oroville-Thermalito pump-back operation.

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75/ Department of Water Resources, "Program for the Development of an Operations Plan for Water Quality Control for the State Water Project", May 1965.

Hydroelectric Power Production

Power will be generated in the Oroville-Thermalito power facilities, in San Luis Pumping-Generating Plant, and in power recovery plants located at drops along the California Aqueduct.

The combined Oroville-Thermalito dependable capacity is estimated to be 710,000 kilowatts, or more, with average and minimum (dry-year) energy outputs estimated at 42 and 34 percent capacity factors, respectively. Operation studies indicate that the combined average energy generation, under water supply conditions experienced during the 61-year period of record (1902 through 1962), would have been about 2,846,000 kilowatt-hours annually and that both plants would have required an average of about 469,000,000 kilowatt-hours annually for the pumpback operation.

The installed capacities and average annual energy output during years of full project operation of the San Luis Pumping-Generating Plant and of the power recovery plants along the California Aqueduct are shown in the following tabulation:

| Powerplants of the California Aqueduct | Installed generating capacity, in kilowatts | Annual energy generation, in millions of kilowatt-hours[b] |
|---|---|---|
| San Luis | 222,000[a] | 118 |
| Cottonwood | 14,000 | 113 |
| Upper Devil Canyon | 74,000 | 530 |
| Lower Devil Canyon | 49,000 | 351 |
| Pyramid | 158,000 | 943 |
| Castaic | 214,000 | 1,284 |
| San Luis Obispo | 6,000 | 48 |
| Total | 737,000 | 3,387 |

a/ Estimated State's share of San Luis Pumping-Generating Plant, based on capacity installed pursuant to the Bureau of Reclamation's specifications DS-5825 and DS-6040.
b/ For period when the California Aqueduct is operating at full capacity, commencing in the year 1991.

The estimated generation during each year prior to full operating conditions, for each of the powerplants of the California Aqueduct, together with the combined annual generation of Oroville-Thermalito, is shown in Table 6.

## Disposition of Project Power

Negotiations are now under way for the sale of the entire output of the Oroville-Thermalito power facilities, under a long-term contract, following submittal of a tentative proposal by the California Power Pool Companies on October 11, 1965.

The tentative proposal marks the first time a basis has been developed for sale of the entire Oroville-Thermalito production. The proposed arrangement contemplates a tentative offer to guarantee an annual payment of $14,100,000 based on the firm availability of not less than 710,000 kilowatts of dependable peaking capacity, and on a net energy output, after pumpback, of 1,700,000,000 kilowatt-hours each year. Provision for an arrangement to "carry over" annual energy deficiencies to succeeding years is also proposed.

It appears that the Companies' tentative proposal is based on the same unit rates offered for 400,000 kilowatts by the Pacific Gas and Electric Company in its tentative proposal of April 26, 1965, described in last year's bulletin. These unit values are $13.65 per kilowatt-year for dependable capacity and 2.59 mills per kilowatt-hour for net energy generation.

The State solicited applications for Oroville-Thermalito power in December 1964, at rates of $17.16 per kilowatt-year and 3 mills per kilowatt-hour. Taking into account the advantages of hydroelectric generation over steam electric generation for peaking power, the rates derived from the Companies' tentative offer appear to be low.

It has been assumed for the analyses contained in this bulletin, that the entire 710,000 kilowatts of Oroville-Thermalito power will be sold to private utilities, generally in accordance with the tentative proposal of October 11, 1965, but using a higher value which reflects the inherent advantages of hydroelectric generation as acknowledged by most recognized authorities. The analyses herein consider the value of alternative steam electric capacity to be about 10 percent less than the value of an equivalent amount of hydroelectric capacity. The unit power values for Oroville-Thermalito generation have, in these analyses, been adjusted

to a load center near the San Francisco Bay area and reflect charges from a steam electric plant location to the load center, with allowances for transmission losses.

The possibilities of Oroville-Thermalito power sales to agencies other than the private utilities are also being studied by the Department. One possible sale is to the Bay Area Rapid Transit District (BART), which has indicated interest in purchasing up to 120,000 kilowatts of project power at about a 31 percent load factor.

The State's share of energy generated at the San Luis Pumping-Generating Plant, and at other powerplants along the California Aqueduct and its branches, is assumed to be used to offset the requirements of project pumping plants, to reduce the power and energy purchased from other sources.

## Power Requirements for Project Pumping

The State Water Project has been designed to deliver contractors' maximum annual entitlements across the Tehachapis on a continuous flow basis. Therefore, excess aqueduct capacity will be available during the years of buildup in water demand. The availability of excess aqueduct capacity permits flexibility in the operation of project pumping plants, within limits established by hydraulic criteria for operation of the aqueduct. In the early years of operation, pumping may be done on either an essentially continuous basis at a relatively uniform rate, or the amount of continuous pumping may be reduced and pumping done at a higher rate during the times when the area power load is at a minimum; that is, during the offpeak hours which would approximate 50 percent of the time. The latter method is referred to as the minimum onpeak method of aqueduct operation.

The estimated annual power demands for the Delta Pumping Plant and the San Luis Pumping-Generating Plant are based on operation studies referred to in Chapter VII. Annual demands of other pumping plants were estimated on the basis of the buildup of water deliveries, operational losses, and other allowances also discussed in that chapter.

The estimated annual project energy requirements by individual pumping plants are shown in Table 7. These requirements include the pumping energy for the Oroville-Thermalito and San Luis Pumping-Generating Plant operations as well as for aqueduct pumping. The energy requirements

for San Luis pumping are the Department's current estimates of the State's share of the total energy required. The significant increases in power requirements in 1968 and 1971 reflect the start of water deliveries first to the San Joaquin Valley and then to Southern California in those years.

## Sources of Power for Pumping

The project energy requirements shown on Table 7 are more than double the total energy generation shown in Table 6, and are assumed to be met, only in small part, by project generation. In the year 1968, prior to the time that Oroville-Thermalito power will be available on a dependable basis, part of the generation may be utilized to meet project pumping requirements.

Power from several additional sources will be utilized in various amounts and combinations at different times, depending upon costs, availability, and project pumping requirements. These sources include: the California electric utilities; firm Canadian Entitlement power; surplus energy from the Bonneville Power Administration; the Central Valley Project; and a nuclear powerplant to be constructed in the future.

Contracts covering the first three sources are under negotiation and are discussed in another section of this chapter.

Central Valley Project. The Department, as a preference agency, has obtained allocations of federal Central Valley Project power totaling 19,900 kilowatts, which is now being used for pumping water for the South Bay Aqueduct and for preconsolidation of the South San Joaquin division of the California Aqueduct alignment prior to construction. The federal power allocations are subject to withdrawal or termination for several reasons. Additional allocations have been requested, but no commitments of additional power have been obtained.

Central Valley Project power service to the State began in June 1962. By the end of December 1965, a total of 75,055,241 kilowatt-hours had been used at a total charge of $357,367 and an average cost of 4.76 mills per kilowatt-hour.

Pacific Gas and Electric Company distributes Central Valley Project power for both the South Bay Aqueduct pumping and for the temporary State preconsolidation water

pumping installations in the South San Joaquin division, approximately 30 miles south of Bakersfield. There are a total of 21 delivery points where power service has been so distributed. Arrangements are being made for service at about 100 additional points, such as at canal check structures and at points requiring cathodic protection.

State-owned Nuclear Powerplant. Studies of the Fluor Corporation, Ltd., of Los Angeles,76/ conclude that a plan involving a state-owned nuclear powerplant would provide the least expensive power for the Project, as pointed out in Chapter II.

The Department is now considering building a plant of the pressurized or boiling water reactor type, such as those now commercially available, or cooperating with one or more of the California utilities to construct such a plant.

A contract with the California electric utility companies would provide for the State's construction of its own thermal generating plant on five years' notice, if such construction is determined by the State to be economically advantageous. The Department will investigate other types of nuclear converters and powerplants, at once, in order to obtain power for the project at the lowest cost.

Site studies for a nuclear powerplant are currently under way at the following five alternative locations: Cayucos, in San Luis Obispo County; Oxnard, in Ventura County; Sycamore Canyon, in Ventura County; Corral Canyon, in Los Angeles County; and Tehachapi, in Kern County. Subsurface exploration has already been completed at the Tehachapi site and is beginning at the Cayucos site. These studies are expected to be completed in July 1966.

A schedule for construction of a nuclear powerplant has been developed, the first phase of which includes the negotiation of a contract with a utility for integration of the plant with the utility's system and for the sale to the utility of the surplus power generated by the plant. Subsequently, an architect-engineer will be retained, an application for a construction permit will be filed, and contracts will be entered into for design and construction of the plant.

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76/ See page 18, footnote 24.

For purposes of estimating power costs for this bulletin, it has been assumed that a state-owned nuclear powerplant will be constructed at the Tehachapi site, consisting of two 575,000 kilowatt units. The first unit is assumed to be in operation about January 1974, with the second unit to be installed as required to meet project loads.

## Power Contracts

Contracts for power supplies will assure the Department of an adequate and economical supply of all power needed for pumping water for the State Water Project.

Negotiations conducted by the Department during the past 12 months have resulted in agreement on almost all points of difference involving four major power contracts which will provide an assured power supply for project pumping.

The four contracts, which are being put in final form preparatory to signing, are (1) a Supply contract with four California utilities, the "Suppliers",77/ to furnish power for the project supplementary to other sources; (2) a contract with three California companies,78/ for transmission over the Extra High Voltage Pacific Northwest-Pacific Southwest Intertie to delivery points in California of Northwest power purchased by the State; (3) an agreement with the Cities of Seattle and Tacoma, Washington, and the Puget Sound Power and Light Company for assignment to the State of up to 300,000 kilowatts of firm Canadian Entitlement power; and, (4) a contract with the Bonneville Power Administration providing for the sale to the State of surplus energy and surplus peaking capacity, which may be available on the federal Columbia River power system from time to time.

Supply Contract. Under the proposed supply contract, the utilities will supply pumping energy at 3 mills per kilowatt-hour and onpeak capacity at $17.00 per kilowatt per year, these rates to be firm through 1982 and subject to adjustment thereafter, on five years' notice. The rates will apply to the amounts of capacity scheduled for, and the energy delivered to, project pumping and generating plants,

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77/ See page 18, footnotes 25 and 26.
78/ Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas and Electric Company.

increased for specified transmission losses. The power purchased from the Suppliers will supplement the supply available to the Department from project power recovery plants, from the federal Central Valley Project, the Pacific Northwest, and other possible future sources such as a state-owned nuclear powerplant.

Delivery points for power purchased from the Suppliers as well as for other power available to the State, for which the Suppliers provide transmission service, are generally at the location of the project pumping plants and power recovery plants. The State will pay fixed annual charges, building up to about $1,200,000 per year in 1980, for the transmission service.

The State may terminate the contract (to construct a thermal powerplant, nuclear or other) upon giving advance notice to proceed. Both parties then have one year in which to negotiate an agreement for transmission, standby, operation and maintenance, sale of surplus output and integration with the Suppliers' systems. If agreement is not reached, and the Department notifies the Suppliers of its intention to proceed with construction, either of the parties could terminate the contract upon five years' notice if such notice is given within six months after the notice of intention to proceed.

The State agrees to operate project pumping plants and to pump at the San Luis Pumping-Generating Plant during offpeak periods, to the extent practicable.

The proposed contract will be for an indefinite term, and may be terminated by either party's giving five years' written notice to the other on or after March 31, 1978, unless terminated earlier as provided.

Intertie Contract. Under the proposed Pacific Northwest Intertie contract, the three companies will provide firm transmission capacity to the State, up to 300,000 kilowatts. The State will pay at the rate of $3.35 per kilowatt per year for service between the Oregon-California border and Table Mountain, Tesla or Los Banos Substations, and $1.65 per kilowatt per year between Tesla Substation and Midway Substation or Grapevine Supply Point.

The State may reduce its transmission service, on five years' notice, on or after April 1, 1978, to not less than 150,000 kilowatts, and may terminate such service on or after April 1, 1983.

The Companies will provide transmission service for Northwest dump energy to the extent excess transmission capacity is available at a rate of 1/2 mill per kilowatt-hour to Tesla, and 3/4 mill per kilowatt-hour to Grapevine Supply Point.

The Companies will purchase the State's Northwest firm power, or Canadian Entitlement power obtained by the State, in advance of its needs.

"Banking" provisions are included by which the Companies will take and pay for Canadian Entitlement power, in excess of the State's requirements in the early years, and sell amounts banked to the State during the period April 1, 1968, to March 31, 1983.

The proposed Intertie contract will continue until January 1, 2005, subject to the State's right to terminate.

Canadian Entitlement Power Contracts. The proposed assignments and agreements to be made separately between the State and the Cities of Seattle and Tacoma, Washington, and Puget Sound Power and Light Company are included in a series of agreements relating to disposition of firm power benefits to Canada resulting from cooperative development of the water resources of the Columbia River Basin.

Each of these Northwest entities will assign to the State a portion of its rights and obligations under its agreement for purchase of Canadian Entitlement power. The maximum assignment to the State will be 300,000 kilowatts of Canadian Entitlement power through March 31, 1978, and 150,000 kilowatts through March 31, 1983.

The cost at the Oregon-California border is estimated to be about $6.86 per kilowatt-year for capacity and 2.56 mills per kilowatt-hour for energy, exclusive of taxes, if any, levied by the States of Washington, Oregon, Idaho, or Montana, or their subdivisions. If such an obligation is imposed on the State, it may terminate its purchase of Canadian Entitlement power, on five years' notice.

Bonneville Power Administration Surplus Power Contract. The proposed power sales contract between the State and the Bonneville Power Administration provides for sale by the Administration to the State of surplus energy, surplus peaking capacity and provisional energy.

Surplus energy available for use outside the Pacific Northwest shall be offered, first, to the State and other public agencies in Arizona, California, and Nevada. Surplus energy is to be made available to the State at the Oregon-California border, on a nonfirm basis, for 2 mills per kilowatt-hour. Surplus peaking capacity, also to be made available at the Oregon-California border, will be charged at $9 per kilowatt per contract year, or $5 per kilowatt per contract season. Peaking energy delivered to the State may be required to be returned or, if return is not required, will be paid for by the State at 2 mills per kilowatt-hour. This contract will be effective for 20 years.

# CHAPTER IX. PROJECT OPERATIONS AND MAINTENANCE

This chapter summarizes the actual operations and maintenance of the State Water Project for calendar year 1965.

Monthly reports on project operations and maintenance were initiated on January 1, 1965, and were published throughout the year. Daily operations are summarized in the monthly reports.

Project facilities in operation during 1965 were Frenchman and Antelope Dams and Lakes, in the Upper Feather River Area, and the main line of the South Bay Aqueduct.

## Frenchman Dam and Lake

Frenchman Dam and Lake, with a maximum storage capacity of 55,417 acre-feet, is operated by the Department to supply irrigation water to the Last Chance Creek Water District and to enhance recreation opportunities in the vicinity of the Lake and along the downstream channel of Little Last Chance Creek.

The Department of Parks and Recreation has overall responsibility for the operation and maintenance of specific recreation features located adjacent to the Lake. This responsibility has been delegated to Plumas County. Actual operation of the recreation features is conducted by the United States Forest Service under an agreement with the County. Operation costs of the specific recreation features are paid from user fees, supplemented by reimbursements from Plumas County.

Frenchman Lake received an estimated 474,000 visitor-day use by fishermen, campers and other recreationists during the 1965 recreation season, May to November.

### Water Operations

During 1965, the water surface was maintained above the minimum recreation pool established for the Lake at an elevation of 5,560 feet above sea level, 28 feet below the spillway crest, and containing 21,400 acre-feet. The 34,000 acre-feet of storage space, between the minimum recreation pool and the dam spillway, was operated to provide regulated irrigation and fishery releases.

An interim water delivery contract with the Last Chance Creek Water District, providing for water deliveries during 1965, was executed March 30, 1965. Under this contract, $14,000 was paid to the State by the District for regulation and delivery of 12,000 acre-feet of water, including the quantity necessary to satisfy the District's rights to the natural flows of Little Last Chance Creek, on a schedule furnished by the District. The interim contract is the third in a series executed with the District since March 1963.

Frenchman Lake contained 38,685 acre-feet of water in storage at the beginning of 1965. Inflow to the Lake totaled 44,302 acre-feet during the year. The Lake filled April 14, 1965, and water passed over the spillway until June 11, 1965, wasting an estimated 17,375 acre-feet. Regulated releases for the year totaled 13,633 acre-feet. Annual evaporation and seepage losses were estimated to be 4,971 acre-feet. Storage at the end of 1965 was 47,008 acre-feet.

Table 8 presents a summary of the monthly operation of Frenchman Lake for 1965.

No unusual water quality conditions were observed during the year.

General Maintenance

Maintenance activities conducted in 1965 included: (1) caulking of leaking contraction joints in the spillway lining; (2) repairing erosion of the energy dissipator by installing angle iron on the sill; (3) backfilling with quarry rock eroded areas around the ends of the training walls of the spillway; and, (4) installing reference points and bench marks for monitoring settlement of the dam embankment.

Frenchman Dam was inspected April 16, 1965, by the Department's Division of Safety of Dams, pursuant to Division 3 of the Water Code. The Dam was deemed to be in satisfactory condition and safe for continued use.

## Antelope Dam and Lake

Antelope Lake, with a maximum storage capacity of 22,513 acre-feet, is operated by the Department to enhance recreational opportunities in the vicinity of the Lake and along the downstream channel of Indian Creek.

The Department executed a contract on March 12, 1965, with the Division of Beaches and Parks of the Department of Parks and Recreation, assigning possession and control of recreation lands at Antelope Lake to the Division, so that the area might be operated and maintained as part of the State Park System. Responsibility for the operation and maintenance activities of the area was later reassigned, by agreement, directly to the United States Forest Service.

Antelope Lake received an estimated 25,800 visitor-day use by fishermen, campers, and other recreationists during the 1965 recreation season, May to November. Construction of initial recreation features at the Lake was completed late in the fall of 1965 and these betterments were not available for use during most of the regular season.

## Water Operations

Antelope Lake contained 17,137 acre-feet storage at the beginning of 1965. Inflow to the Lake totaled 61,825 acre-feet during the year. The Lake filled January 25, 1965, and water passed over the spillway through August, wasting an estimated 49,671 acre-feet. Regulated releases from the Lake to satisfy downstream water right entitlements and minimum stream flows for fish populations totaled 10,388 acre-feet. Annual evaporation and seepage losses were estimated to be 2,747 acre-feet. Storage at the end of 1965 was 16,156 acre-feet.

An agreement established in 1964 between the Pacific Gas and Electric Company and the Department, in recognition of rights for downstream projects owned and operated by the Company, was fulfilled with the release of 4,400 acre-feet during 1965.

Table 9 presents monthly operation data for Antelope Lake for 1965.

## Water Quality

A very turbid stratum in the lower elevations of the Lake was observed in 1965. This suspension of colloidal silts was apparently caused by the erosion of soils in the upstream channels during periods of high inflow. The rather high percentage of oxygen-demanding organic matter in the suspended silts caused a temporary loss of dissolved oxygen. However, the oxygen deficiency noted in last year's report, apparently caused by the decomposition of organic material

submerged during the initial filling of the Lake, was considerably improved. No kills of fish were noted within the Lake in 1965.

A temporary siphon over the spillway of Antelope Dam was installed and used in 1965 to skim and discharge water of acceptable quality for downstream fishery and recreational use from the upper elevations of the Lake. The high turbidity in the lower elevations of the Lake, noted above, prevented the use of the permanent outlet works for these purposes. The siphon was removed in the fall of 1965.

General Maintenance

Evidence of localized seepage was noted during 1965 on the downstream face of the dam.

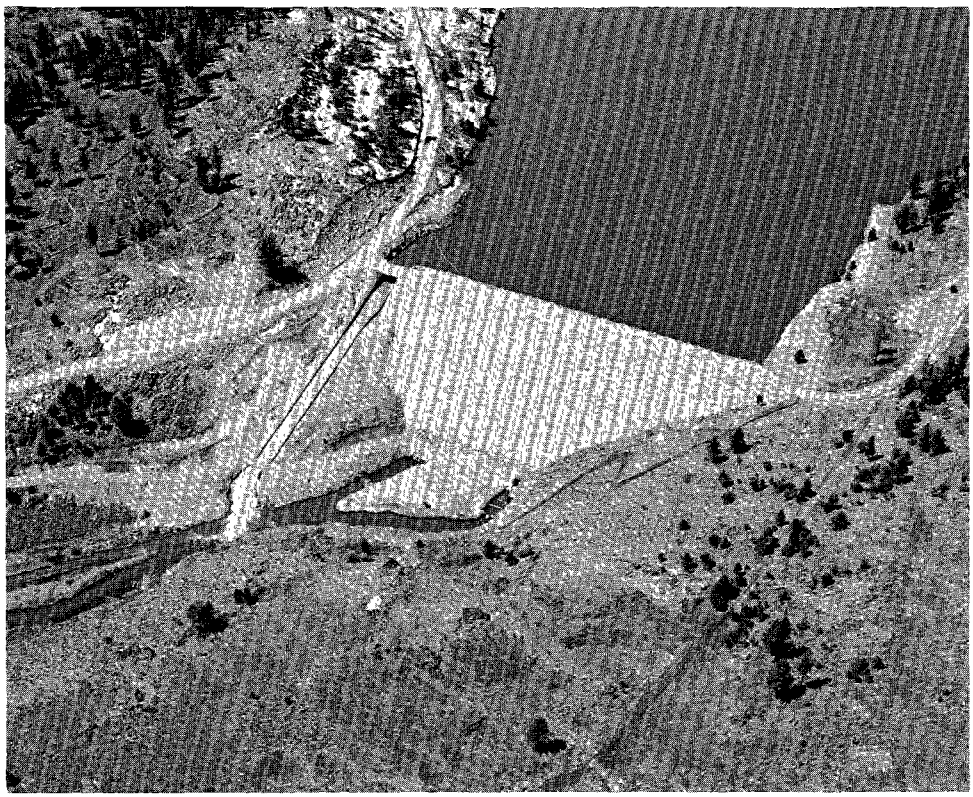
In August, 13 exploratory and internal drainage wells were drilled. Piezometers were installed in each well to measure, periodically, the depth to water. Reference points and bench marks were established to provide a means for checking the stability of the embankment.

Nine inspections and embankment investigations of Antelope Dam were conducted during 1965 by the Department's Division of Safety of Dams, pursuant to Division 3 of the Water Code: on January 12, July 7, August 27, August 30, September 3, September 5, September 6, September 24, and October 8.

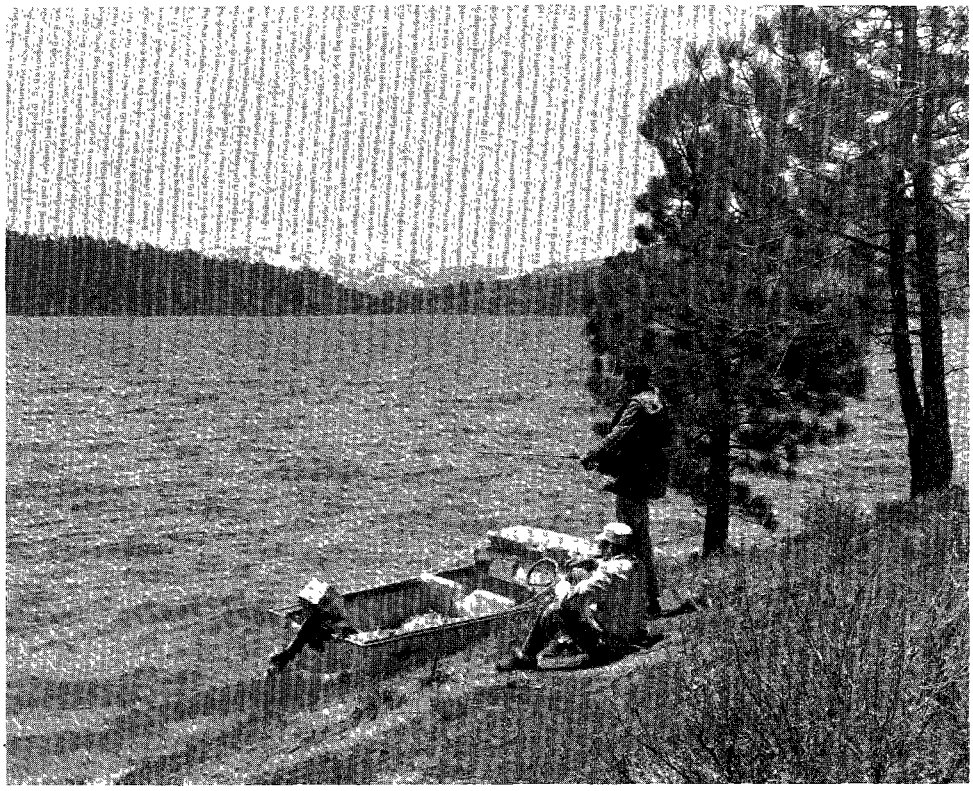
The exploratory drilling in 1965 disclosed that saturation within the embankment is about normal and the embankment is stable. Monitoring of the observation wells is continuing, to determine whether any remedial work is needed. The dam is judged safe for full use.

## South Bay Aqueduct

The South Bay Aqueduct is operated by the Department to provide supplemental water supplies to agencies located in Alameda and Santa Clara Counties. Del Valle reservoir, a multiple-purpose feature of the Aqueduct to be completed in 1968, will be operated for flood control, recreation, local water conservation and regulation of Aqueduct deliveries.



Water spilling from Frenchman Lake.



Fishermen on the shore of Antelope Lake

## Water Operations

The delivery of water through the Aqueduct was extended from Patterson Reservoir to the Santa Clara terminal facilities in June 1965. Initial water deliveries were made during the year at the Wente, Vallecitos and Santa Clara turnouts.

The water supply for the South Bay Aqueduct, during 1965, was purchased from the Bureau of Reclamation under terms of a contract executed in 1963. A total of 35,985 acre-feet of water, measured at the turnout from the Delta-Mendota Canal, was purchased during 1965.

Deliveries from the South Bay Aqueduct were made to the Alameda County Flood Control and Water Conservation District (Zone 7), Alameda County Water District, and Santa Clara County Flood Control and Water Conservation District in the amounts of 2,605, 16,407, and 15,014 acre-feet, respectively. Other deliveries include 93 acre-feet for use by the construction contractors and for the initial filling of completed sections of the Aqueduct.

Deliveries to the Alameda County Flood Control and Water Conservation District were made as follows: 82 acre-feet at Bethany reservoir; 555 acre-feet at Altamont turnout; 1,830 acre-feet at Patterson turnout; and 138 acre-feet at Wente turnout.

Deliveries to Alameda County Water District were made at Altamont turnout and Vallecitos turnout in the amounts of 15,280 and 1,127 acre-feet, respectively.

Deliveries to Santa Clara County Flood Control and Water District were measured at the meter upstream of the Santa Clara terminal facilities.

## Power Operations

Power operations for the State Water Project during 1965 were limited to the South Bay and Interim Pumping Plants. Installation of two additional 45 cubic feet per second units during 1965 (Pumps Nos. 8 and 9) increased the total installed pumping capacity of the South Bay Pumping Plant to 195 cubic feet per second. The Department continued to purchase power from the Bureau of Reclamation at the Tracy Switchyard and to transmit it to the plants via the Pacific Gas and Electric Company System. Energy use during the year amounted to

28,177,340 kilowatt hours; the peak demand was 9,100 kilowatts; and, the power cost totaled $138,003.57, for an average rate of 4.90 mills per kilowatt hour.

Table 10 summarizes the monthly operations of the South Bay Aqueduct for 1965.

## Water Quality

Surveillance of the quality of water in the South Bay Aqueduct during 1965 included: (1) continuous monitoring for mineral quality; (2) surveillance of growth and occurrency of biological pests; (3) temporary monitoring to determine the variations in turbidity and suspended solids; and (4) special monitoring during chemical treatments for aquatic weed control.

The electrical conductivity of the South Bay Aqueduct's water supply was continuously recorded at the South Bay Pumping Plant.

Water samples for mineral analysis were collected monthly at the South Bay Pumping Plant, at the Altamont turnout, near Patterson Reservoir, near the Del Valle Siphon, and near the Santa Clara terminal facilities.

Biweekly samples were collected at the following points to determine occurrence and growth of phytoplankton and zooplankton in the Aqueduct: the Interim Pumping Plant, the South Bay Pumping Plant, between the pumping plant and Patterson Reservoir, near Patterson Reservoir, and near the Del Valle Siphon.

Total nitrogen and phosphate content were estimated from water samples collected biweekly at the South Bay Pumping Plant and near Patterson Reservoir. Field tests were conducted on these samples for temperature, pH, dissolved oxygen, and electrical conductivity.

Asiatic clam densities, biovolume and biomass were sampled monthly at five stations in the Interim Intake canal and three stations in Bethany Forebay. Clam densities were monitored periodically at one station in the Livermore canal.

Weighted monthly average concentrations of total dissolved solids, total hardness, chlorides, and sulfates of water pumped at South Bay Pumping Plant are presented in Table 11. The table also includes values for boron and percent sodium derived from analyses of monthly random samples at the plant.

## General Maintenance

Dragline operations to remove silt and clam deposits in the Interim Intake canal were conducted in May 1965 and in November 1965. Results showed deposits averaging over two feet in depth had reduced the channel conveyance capacity below that required for the delivery of water.

A short portion of the canal developed excessive seepage in November 1965. Emergency repairs were made under an agreement with a general contractor in the area. Repairs were effected by overexcavating about 300 feet of canal section and replacing it with compacted impervious material.

Three applications of copper sulfate were made to control aquatic weeds and algae in the South Bay Aqueduct. The first application was made at the turnout from the Delta-Mendota Canal on April 19, 1965. After the treated water reached the Interim Pumping Plant, pumping was stopped to retain the copper within the unlined canal reach. A second application was made on July 26, 1965. This time, the copper sulfate was introduced into the back-surge pool at the head of Dyer Canal. No deliveries were made from the canal until the treated water had become diluted to extremely low levels. A final application of copper sulfate was made on November 2, 1965, at the back-surge pool of Dyer Canal. Again, no deliveries were made from the canal until the treated water was diluted to an extremely low level. No measurable copper residual was found at the Santa Clara terminal facilities after these treatments. Algae and broad-leafed aquatic weeds present in the aqueduct were killed. Narrow-leaf aquatic weeds were not affected.

## Plant Maintenance

Bulletin No. 132-64 reported, on page 153, that a review by a Department board of investigation on major mechanical and electrical difficulties reported at the South Bay Pumping Plant had necessitated extensive repairs of Pumps Nos. 1 and 2. The matter was taken up with the manufacturer and, as a result of the ensuing negotiations, the manufacturer agreed to do the following:

1. Remove the motors and pumps.

2. Completely check the motors and do any corrective work necessary to place them in a new condition.

3. Redesign and rebuild the pump columns to prevent deflection in operation (runout).

4. Replace bent, cracked, or worn shafting.

5. Do any necessary work on the bowls and impellers to put the pumps in new condition.

6. Reinstall and test the units in the South Bay Pumping Plant.

All parts for rehabilitating Pump No. 1 were delivered to the Department in June 1965. Removal of the pump unit for repairs was deferred until the aqueduct was shut down for the winter season, commencing December 11, 1965. The pump unit had been operating satisfactorily, with only normal maintenance, since the overhaul which immediately followed the shaft failure in 1963.

Reinstallation of Pump No. 2 was completed June 24, 1965. An excessive runout was noted during tests following reinstallation, but was reduced to acceptable limits by adjusting the shaft coupling. Another excessive runout was noticed in early September. Considerable deflection of the base plate upon start-up was noted in August, and a dial indicator registered excessive deflection. (A lesser deflection was found on Pump No. 1, but was still of significant magnitude).

During the winter shutdown of the Aqueduct, the manufacturer removed both Pumps Nos. 1 and 2 for repair. All work covered by the aforementioned agreement was completed. Stiffener beams were placed on the base plate to reduce deflection to allowable limits. The pump units were reinstalled in the plant, the motors placed on their bases, and the pump units tested.

Early in July 1965, the lower guide bearing froze on recently installed Pump No. 8. This caused uplift of the rotating parts, but resulted in only slight damage to the motor thrust bearing plate which was easily repaired. The pump was moved to the manufacturer's plant where a new guide bearing was installed. Considerable wear was noted on the wearing rings, and it was decided to replace the bronze wearing rings with new rings of stainless steel at a cost of $2,180.

Pumps Nos. 8 and 9 operated satisfactorily until early September, when excessive deflection of the base plate was noted. The greatest deflection naturally occurred with the discharge valve closed, and many measurements were taken to determine the bulging effect caused by the hydrostatic pressure on the lower side of the base plate. This situation has been corrected by the manufacturer.

To date, the other installed pump units of the South Bay Pumping Plant (Pumps Nos. 3 and 4) have operated very satisfactorily and have required only normal maintenance.

The pump units of the Interim Pumping Plant have operated well, with only routine maintenance. However, during acceptance tests in October 1965, excessive vibration was noted in the motor of Pump No. 3. The manufacturer has been advised and is studying the problem.

The troubles experienced on the pump units of the South Bay Pumping Plant, other than Pumps Nos. 1 and 2, have been about normal for this type of installation. A great deal was learned from the difficulties experienced on Pumps Nos. 1 and 2, and tighter specifications have been issued for subsequent purchases. Manufacturers are required to furnish detail shop drawings for approval, thereby enabling the Department to check individual parts for material, strength and finish, and permitting plant inspectors to determine whether those items are satisfactory before assembly. A quality control program is required of the vendor, and carefully enforced by the plant inspectors. No substitutions are permitted without approval, and additional tests and certificates confirming material quality are required. Prequalification of bidders has been tightened.

Results of these actions are already in evidence by better designs, better plant control, and better delivered equipment. While the initial costs of the pump units will undoubtedly increase because of these actions, long-term savings will be realized in reduced repairs and maintenance costs during the life of the Project.

# CHAPTER X. PROJECT COSTS

This chapter discusses the capital and annual operating costs which are expected to be incurred for project facilities during the project repayment period. The costs shown herein as having been incurred through calendar year 1965 are from the accounting records of the Department, summarized in Appendix A. Expenditures shown for calendar year 1966, and for years through the remainder of the project repayment period, are estimates.

This chapter also presents the allocation of facility costs among the purposes of water supply, power generation, flood control, drainage benefit, recreation, and fish and wildlife enhancement. The allocation percentages utilized herein for most facilities are those developed in the Department's Bulletin No. 153-66, "Allocations of Costs Among Purposes of the California State Water Project", dated January 1966.

This chapter further distributes the allocated facility costs among State Utility, State Nonutility, and Federal Programs. These programs include costs which are (1) reimbursable by project contractors, (2) nonreimbursable by project contractors, and (3) recoverable from Federal agencies, respectively. Costs of State Utility Programs are those reimbursable under water supply contracts and include the State's share of costs allocated to the purposes of water supply and power generation, as reduced by Oroville-Thermalito power revenues. State Utility costs also include those reimbursable under assumed future drainage contracts. Costs of State Nonutility Programs include the costs of the Davis-Grunsky Program, herein conservatively assumed to be totally nonreimbursable; the State's share of the costs allocated to the purposes of recreation and fish and wildlife enhancement; and, miscellaneous nonreimbursable costs such as those incurred for features subsequently deleted from the Project. Federal Programs generally include those costs allocated to the purpose of flood control and the federal share of costs to be incurred by the State for joint-use facilities.

This chapter concludes with the development of the estimated capital costs of the State Water Project which must be financed.

## Bases for Estimated Costs of Features Not Yet Sized

Portions of the State Water Project have not been finally located and sized, though major construction of the Project as a whole is well under way. These portions include:

1. Abbey Bridge and Dixie Refuge Dams and reservoirs in the Upper Feather Area.

2. The Upper Eel River Development.

3. The North Bay Aqueduct east of the Cordelia Pumping Plant.

4. The Delta Facilities.

5. The means of complementing conveyance capacity in the San Luis division of the California Aqueduct.

6. The California Aqueduct downstream from the junction of the West Branch.

7. The Coastal Branch of the California Aqueduct downstream from the intake to the Devil's Den Pumping Plant.

8. The San Joaquin Master Drain.

The bases for cost estimates utilized herein for Abbey Bridge and Dixie Refuge Dams and reservoirs, the Upper Eel River Development, North Bay Aqueduct east of the Cordelia Pumping Plant, and the Coastal Branch of the California Aqueduct downstream from the intake to the Devil's Den Pumping Plant are as generally described in Appendix C. The basic capacities and alignments contained therein for these project features are the same as those shown in last year's bulletin.

The assumptions made for the analyses in this bulletin, in regard to estimated costs of the other features listed above, are described in the following sections.

### Delta Facilities

The Peripheral Canal has been designated as the project facility to transfer water across the Sacramento-San Joaquin Delta.79/ The facility will consist of a canal about 43 miles long that will divert water from the Sacramento River near Hood, convey it past the western extremities

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79/ See page 21, footnote 32.

of the City of Stockton, and terminate at intake facilities to the Tracy Pumping Plant of the federal Central Valley Project and at the Clifton Court Forebay of the California Aqueduct. The Canal and appurtenances are still in the advance planning phase and alignment studies are under way, as described in Chapter II.

The costs shown in last year's bulletin for the Delta Facilities were based upon those components involving the function of nonfederal water supply (the "Peripheral Canal Facilities" and "Western Delta Agricultural Facilities") as shown in Table 5 of the Interagency Delta Committee Report, "Plan of Development, Sacramento-San Joaquin Delta", dated January 1965.

Since the release of the Interagency Delta Committee Report, the Department and the Bureau of Reclamation have been engaged in negotiating a memorandum of understanding so that the Peripheral Canal could serve both the federal Central Valley Project and the State Water Project.

A letter[80/] from the Bureau of Reclamation sets forth a basis for an anticipatory agreement for federal-state cooperation in the location, design, construction, operation and financing of the joint-use facility. Included in the letter were two charts showing a tentative cost allocation and cost sharing proposal for capital and annual operating costs, respectively. This letter represents the latest information available concerning the estimated obligations to the State for the Peripheral Canal and is utilized as a basis for the cost estimates in this bulletin. Though the Department generally agrees with the estimated capital costs summarized in the Bureau's letter, it feels the actual operating costs may be greater than indicated in the letter. For this reason, the estimated annual operating costs included in the analyses in this bulletin for the State's share of the Peripheral Canal are greater than those shown in the Bureau's letter, by the amount of estimated power and energy costs which would be required to pump project water at the head of the Canal.

## Complementary Conveyance Capacity in the San Luis Division

The San Luis Agreement[81/] provides 7,100 cubic feet

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80/ Letter from Robert J. Pafford, Jr., Regional Director, Region II, Bureau of Reclamation, to William E. Warne, Director of Water Resources, December 20, 1965.

81/ "Agreement Between the United States of America and the Department of Water Resources of the State of California for the Construction and Operation of the Joint-Use Facilities of the San Luis Unit", December 30, 1961.

feet per second as the State's share of the conveyance capacity at the head of the joint-use facilities of the California Aqueduct. The project demands described in Chapter VII would require a capacity for the State Water Project of about 8,093 cubic feet per second at that point, under the planned mode of aqueduct operation. The insufficiency of capacity, amounting to 993 cubic feet per second, would not be experienced until late in the 1980's when annual demands approach maximum values.

This bulletin considers that the required additional capacity will be provided as part of a future transportation facility designed, primarily, to meet growth of water demands in the southern portions of the State after 1990. An estimate of these future requirements and an indication of possible routes of supply are reported on page 99 of the Department's Bulletin No. 160-66:

> "Additional water supplies to be delivered via conveyance facilities not yet identified will also be needed in the San Joaquin Valley, Central Coastal, and Southern California areas beginning in the 1990's. Current studies indicate that by 2020, the Central Coastal and South Coastal areas will require some 490,000 and 1,200,000 acre-feet per year, respectively. The additional requirement within the San Joaquin Valley might be met most favorably through enlargement of the proposed second phase of the East Side Division of the Central Valley Project. There may also be the need for additional transportation facilities on the west side of the valley". 82/

The Department has requested 83/ that an opportunity be provided, through the authorizing legislation, for the State to participate in the East Side Division of the Central Valley Project in accordance with plans to be developed in the years ahead.

Definite proposals have not been developed, as yet, for complementing the present deficiency in conveyance capacity of the San Luis division. The proportionate share of the costs of a future facility which would provide the complement will depend upon the location and total capacity of

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82/ See page 3, footnote 1.
83/ Letter to Robert J. Pafford, Regional Director, Region 2, U. S. Bureau of Reclamation, by William E. Warne, Director, Department of Water Resources, November 10, 1965.

that facility and attendant economies of scale. For the analyses in this bulletin, it is assumed that the supplemental transportation facility would be located adjacent and parallel to the San Luis division and would be of approximately the same scale.

## California Aqueduct Downstream from the West Branch Junction

The design capacities for reaches of the California Aqueduct from the Delta to the junction of the West Branch have been established. Construction of these reaches is either completed or under way. Construction has not fully commenced further south, other than that covering exploratory and site preparation work, and the diversion tunnel for Castaic Dam.

The capacities of most reaches of the California Aqueduct below the West Branch junction are subject to change as of April 1, 1966, due to requests submitted by some of the contracting agencies in the area and to a pending agreement with the City of Los Angeles.

The Department prepared, and transmitted to the water supply contractors in Southern California, a preliminary report[84/] proposing final reach capacities for the California Aqueduct downstream from the junction of the West Branch. These capacities have been used as the bases of cost estimates used in this bulletin for this area. Certain of the contractors subsequently requested changes in the location of their points of delivery from the Aqueduct and/or requested changes in the maximum monthly delivery capacities to be provided.

The execution of a cooperative power development agreement with the City of Los Angeles[85/] would also create changes because such an agreement would affect the design capacity of the Angeles Tunnel on the West Branch.

## San Joaquin Master Drain

The Master Drain, described in Appendix C, is designed to meet needs for agricultural waste water disposal in the entire San Joaquin Valley. The facility would be

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84/ See page 25, footnote 45.
85/ See page 27, footnote 48.

constructed in three stages. The first stage would extend from Antioch Bridge to Kettleman City and is scheduled to receive waste waters commencing in 1969 and 1970. The second stage would extend from Kettleman City to the southern terminus of the Drain, in the vicinity of Buena Vista Lakebed. This stage would be constructed in the late 1970's. The third stage would not be required until the late 1980's and would consist of an enlargement of the first stage to its final capacity.

Last year's bulletin pointed out that basic agreement between the State and the Bureau of Reclamation had been reached on the sharing of construction and operation costs of the first stage of the Master Drain. The Federal Government would contribute about 60 percent of the construction costs of that stage, for the conveyance of waste waters from the San Luis service area. Construction of the first stage as a joint-use facility will result in an estimated total joint saving of at least $18,000,000, on a present worth basis.

It appears prudent that the construction of the first stage should proceed on schedule to realize its economic benefits as a joint-use facility. However, the eventual construction of the last two stages will depend upon whether or not repayment contracts are secured. For this reason, only the costs of the first stage are included for the purposes of the analyses in this bulletin. The costs of the second and third stages will be included in future bulletins of this series if, and when, contracts covering repayment are executed.

The Department is firmly convinced that a Valley-wide master district provides the most equitable means by which the Master Drain could serve the needs of the San Joaquin Valley, and by which repayment of its reimbursable costs could be secured. Considerable time and effort will be required before a master district can be formed, in view of the large area and the large number of people within its boundaries.

## Changes in Estimated Capital Costs

The capital costs of the State Water Project were shown in last year's bulletin to be about $2,559,200,000. The capital costs of project facilities are currently estimated to total about $2,530,400. The following tabulation presents a summary of the major changes which cause the overall decrease in the order of $28,800,000:

| Item | Change in total estimated capital costs, in millions of dollars: Increase | : Decrease |
|---|---|---|
| Change in bases for reflecting the estimated costs of the Delta Facilities: | | |
| 1. Assumed construction of the facilities by the Bureau of Reclamation, with the State contributing its share of costs, rather than vice versa. | | 70.7[a/] |
| 2. Assumed State's share of costs as shown in the Bureau's letter dated December 20, 1965, rather than the "nonfederal" share shown in the Interagency Delta Committee Report. | | 28.4 |
| Subtotal | | 99.1 |
| Cost of features not fully reflected in previous bulletins: | | |
| 1. Monitor and control system | 30.0 | |
| 2. Clifton Court Forebay | 10.3 | |
| 3. Access roads (Upper Feather Area) | 1.3 | |
| Subtotal | 41.6 | |
| Cost of features previously reflected but deleted in this bulletin: | | |
| 1. Second and third stages, San Joaquin Master Drain | | 49.7 |
| Change in estimated costs for remaining facilities and features of the Project: | | |
| 1. Surveys and engineering studies | 5.3 | |
| 2. Rights-of-way acquisitions | 33.0 | |
| 3. Design and construction | 30.1 | |
| 4. Preoperating expense | 10.0 | |
| Subtotal | 78.4 | |
| TOTAL CHANGE, Bulletin No. 132-65 to Bulletin No. 132-66: | | 28.8 |

a/ The net costs to the State are unaffected by this change. Federal contributions decrease a corresponding amount and offset the reduction in the Project's capital costs. Federal contributions are included in the category of "miscellaneous receipts", which can either be applied directly to reduce capital expenditures by the State or to payments on Water Bond service.

The most significant change in the estimated capital costs of the Project would appear to be the $99,100,000 reduction due to the shift in bases for reflecting the costs of the Delta Facilities. Last year's bulletin included the costs of physical components involving the function of "nonfederal water supply" as shown in the Interagency Delta Committee Report. That approach assumed the Department would act as the constructing agency for those components. This year's bulletin reflects the "State's share" shown in the Bureau of Reclamation's letter of December 20, 1965, and assumes that the Bureau would act as the constructing agency. However, $70,700,000 of the total reduction does not constitute a change in the net costs to the Project, but rather a shift in how the federal share of costs for the Delta Facilities is treated in the financial analysis for the Project, as explained in Note (a) of the preceeding tabulation.

This year's bulletin shows an addition of about $41,600,000 for the costs of features not fully reflected in previous estimates. Most of the increase is for the Monitoring and Control System, for which only planning costs have previously been included, and the Clifton Court Forebay, for which only a partial estimate of the costs were previously included within the estimate for the Delta Facilities.

The costs of the second and third stages of the San Joaquin Master Drain, which were reflected in last year's bulletin but deleted herein, amount to about $49,700,000.

The bulk of the remaining changes, amounting to about an additional $78,400,000 results from changing estimates of construction costs and associated costs of design, rights-of-way acquisitions, relocations, construction, supervision, and construction contingencies. This increase cannot be traced to any one aspect (such as an inflationary trend in construction prices), and constitutes about 3 percent of the total estimated costs of the Project, well within acceptable limits for cost estimation accuracy. These changes are shown in Table 12, by project facilities and features.

## Composition of Capital Costs

The capital costs of a project facility constitute all expenditures incurred for the facility between the date when authorized for construction and the date when an operational status is attained.

A facility will generally be considered operational on January 1 of the year following the year in which physical

construction of the facility is completed. However, capital costs also include the initial costs of additional electromechanical units of pumping and power recovery plants, or additional barrels of pipelines and penstocks, which may be installed within the operational period.

Table 13 summarizes the annual capital expenditures for the State Water Project by the major classifications of cost items. These expenditures exclude annual interest charges (i.e., "interest during construction"). As of the end of the calendar year 1965, costs of about $532,562,000 had been incurred. The composition of the estimated remaining costs of about $1,997,824,000 is shown in that table and is described in the following sections.

## Surveys and Engineering Studies

The portions of the State Water Project which are still in the formulation phase require additional studies prior to the preparation of final designs. The estimates of future capital expenditures for the project include about $13,762,000 to cover the expense of surveys and engineering studies.

## Design, Rights-of-Way, and Construction

The specific items included in the cost classifications of design, rights-of-way acquisitions and relocations, and construction have been described in previous bulletins of this series.

Construction costs of works currently under contract are based on bid data. For work to be done under future contracts, construction costs in this bulletin are based upon preliminary designs and upon unit prices generally prevailing in January 1966. In both cases, allowances are included for contingencies during the construction period which generally range between 15 and 20 percent.

Table 13 shows these categories of future capital costs under the three major classifications. Estimated costs are: design, $51,712,000; rights-of-way acquisitions and relocations, $110,232,000; and construction, $1,598,055,000; totaling $1,759,999,000.

## Local Impact Aid

Pursuant to the Byrne Act,[86] payments are made to local governments for the temporarily increased municipal costs directly attributable to the influx of construction workers. Such payments are now being made to the Cities of Oroville and Los Banos. The estimated future costs of this type total about $955,000.

## Preoperating Expense

Costs of an operational nature, which are incurred prior to completion of the construction of the various project features, are included in the capital costs of such features. These capitalized costs are of the following two types and amounts, and are more fully described in the section entitled "Composition of Operating Costs":

1. General operating costs, which are incurred for the Project as a whole; $31,466,000.

2. Direct operating costs, which are incurred for a particular facility to insure its being operational at the end of construction activities; $19,962,000.

## Local Projects Loans and Grants

The Burns-Porter Act reserved $130,000,000 for assistance to local water development facilities under the Davis-Grunsky Program. In addition, a sum of $1,419,000 was utilized for the Program from funds appropriated prior to passage of the Burns-Porter Act. Approximately $20,024,000 had been expended by the end of 1965. The estimated future annual disbursements for the Program are shown on Table 13.

## State Contributions for the San Luis Division

The San Luis division of the California Aqueduct is a joint-use facility being constructed by the Bureau of Reclamation, and financed in part by the State. In accordance with the federal-state agreement of December 30, 1961, the

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86/ Part 7 (commencing with Section 12950) of Division 6 of the Water Code.

Bureau of Reclamation will pay 45 percent and the State will pay 55 percent of the construction costs. The joint costs to be shared are specified as only those costs incurred after July 1, 1959. The total cost of the joint-use facilities is estimated to be about $308,003,000, of which about $169,402,000 will be paid by the State. It is estimated that the State will have to pay about $60,285,000 in 1966 and subsequent years, accounting for moneys already advanced, and for credits received through 1965.

## Composition of Operating Costs

All actual and estimated costs of an operational nature are summarized for the State Water Project in Table 14. The bases for these costs are described under the subheadings that follow. Such costs, when incurred for features after they are transferred from a construction to an operational status, are considered herein to be annual operating costs. The actual and estimated annual operating costs for the State Water Project, summarized in the last two columns of Table 14, exclude those "Preoperating Expenses" previously described.

### General Operating Costs

General operating costs are for various programs, concerning the operation and maintenance of the State Water Project as a whole, which are not directly assignable to any specific facility or aqueduct reach. Such programs include the following:

1. Water supply contract negotiation and administration.

2. Power contract negotiation and administration.

3. Financing and repayment studies for the project.

4. Formulation of operation and maintenance management criteria.

5. Operational studies to prepare project operation plans.

6. Special continuing investigations and activities concerning the Project, such as obtaining water rights, data collection and analysis, and report preparation.

Costs of insurance required under revenue bond financing, and of administering the Federal Power Commission License, specifically assigned to the Oroville-Thermalito power facilities, are included in Table 14 as general operating costs for purposes of presentation. The two items are not related to categories of direct operating costs discussed under the following subheadings of this section. These costs are estimated to be about $209,000 annually.

General operating costs are estimated to level off at about $7,551,000 annually under conditions of substantially full project utilization.

## Salaries and Expenses

This category includes the costs for personnel directly involved in operating and maintaining the various features of the State Water Project. The annual costs shown in Table 14 are based on estimates of the required personnel at field locations, except those needed for certain of the facilities currently under formulation. For the latter facilities, the estimated annual costs for operation and maintenance personnel are based on approximate percentages applied to the total capital costs of each facility.

Salary ranges for operation and maintenance personnel have been tentatively estimated on the bases of analyses of job requirements and comparisons with salaries of existing state civil service classifications. The estimated costs reflect salaries at the top of the pay grades assumed. Basic salary costs have been increased by an allowance of 70 percent to cover expenses of supervision and administration, retirement contributions, standard personnel allowances such as travel expenses, and other indirect charges.

As shown in Table 14, the estimated annual costs of salaries and expenses reach a level of about $2,964,000 for operating personnel and $6,695,000 for maintenance personnel.

## Equipment, Materials, and Supplies

This category includes the costs of equipment, materials, and supplies required for the annual maintenance of the State Water Project.

These costs are assumed to be a function of installed capacities for electro-mechanical units, and of

maintenance personnel requirements, for reservoirs and aqueducts. Estimated quantities and costs are based on Bureau of Reclamation experience.

Under full operation of the facilities, these costs will total about $1,682,000 per year.

## Cost of Pumping Power and Value of Recovery Generation

Table 14 shows the estimated annual power costs for project pumping plants, and annual values of recovery generation for powerplants located on the California Aqueduct. The costs and values shown do not include the costs of pump-back energy, or the value of generation, for the Oroville-Thermalito power facilities. The value of the net generation of Oroville-Thermalito power is considered herein as a project revenue, and not as a factor reducing the annual operating costs of the Project.

The costs of project power requirement reflects the use of all sources discussed in Chapter VIII, except project recovery generation. Priority of use was given to the lower cost sources, to the extent of their availability. After the required amounts of capacity and energy from each source had been determined, the unit costs of each respective source were applied resulting in the total annual costs shown in Column 5 of Table 14.

The values of recovery generation, shown in column 6 of Table 14, represent the reduction in the above annual power costs which would result when project recovery generation is used as an offset to the project power requirement and assigned the value of the other source which otherwise would have been used.

The estimated costs for project power requirement are about $39,542,000 annually, under conditions of full project operation. This represents about 85 percent of the total annual operating costs of the Project.

## Replacement Costs

This category reflects the costs of replacing those physical items (such as pumps, generators, and structures), which are expected to wear out before the end of the project repayment period. Estimates of required replacement costs are based upon recent studies by the Bureau of Reclamation. The costs shown in Column 7 of Table 14 represent annual

deposits to a replacement reserve fund which, when accumulated at 3.5 percent annual interest, will provide sufficient moneys to replace each item at the end of its estimated useful life, based on present cost levels.

Although the annual rate of 3.5 percent is below the current interest yield on the fund in which the replacement reserve is invested, it has been selected as reasonably representative of the average rate that may be realized over the years that the reserve is being accumulated.

The Department intends to periodically review the adequacy of both the above interest rate and the replacement cost assumptions. Required deposits are currently estimated to total $1,837,000 during years of full project operation.

## Allocations of Costs

The contracts for a water supply from the State Water Project provide that the contractors will repay, with interest, those costs of the project conservation and transportation facilities which are reimbursable, as determined by the State. This provision requires allocations of costs of project facilities (1) between project conservation facilities and project transportation facilities and (2) between reimbursable and nonreimbursable project purposes. Relative to the latter, costs allocated to water supply, drainage benefit, and power generation are reimbursable by the project contractors for these respective services. Flood control is considered to be a nonreimbursable purpose, the costs of which will be borne primarily by the Federal Government. Costs allocable to the purposes of recreation and fish and wildlife enhancement are nonreimbursable by project contractors under the Davis-Dolwig Act.87/

### Cost Allocation Percentages

Presented in this section are descriptions of the cost allocation percentages determined for the allocation of project costs between conservation and transportation facilities and among purposes of the project. The application of these percentages to determine allocated capital and operating costs of the Project are discussed in subsequent sections.

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87/ Sections 11900 through 11925 of the Water Code.

Allocations between Conservation and Transportation Facilities. The water supply contracts provide that the costs of aqueduct reaches from the Delta through San Luis reservoir are to be allocated between project conservation facilities and project transportation facilities by the "Proportionate Use of Facilities Method". San Luis reservoir is herein considered to be a project conservation facility. The assumptions as to the measures of use for this allocation were described on pages 176 and 177 of Bulletin No. 132-64. The percentages given in that report have been revised to reflect subsequent changes in water transportation requirements. The derivations of the new percentages are shown in the following tabulation:

| Reach of California Aqueduct | Measure of use, in cubic feet per second | | | Proportionate use, in percent | | |
|---|---|---|---|---|---|---|
| | Water conservation | Water transportation | Total | Water conservation | Water transportation | Total |
| Delta through Bethany reservoir | 1,887 | 8,413 | 10,300 | 18.3 | 81.7 | 100.0 |
| Bethany reservoir to San Luis Forebay | 1,885 | 8,115 | 10,000 | 18.9 | 81.1 | 100.0 |
| San Luis Forebay to Dos Amigos Pumping Plant[a/] | 11,000 | 13,100 | 24,100 | 45.6 | 54.4 | 100.0 |

a/ Since this entire reach acts as a forebay to both the San Luis Pumping-Generating Plant (conservation) and the Dos Amigos Pumping Plant (transportation), the capacities of these plants are considered to be measures of the proportionate use of the reach between water conservation and water transportation, respectively.

Allocations Among Project Purposes. The percentages for allocating the multiple-purpose costs of project facilities, used in this report, are developed in the Department's Bulletin No. 153-66, "Allocations of Costs Among Purposes of the California State Water Project", dated January 1966. The percentages derived therein are for those project facilities which

are completed, under construction, or on which construction is scheduled to commence during fiscal year 1966-67.

The project facilities for which allocations have not as yet been made include Abbey Bridge and Dixie Refuge Dams and reservoirs of the Upper Feather Area, the Delta Facilities, and the Upper Eel River Development. It was assumed for this report, that 100 percent of the multiple-purpose costs of these facilities, except the Delta Facilities, would be allocated to the primary purpose for which each facility is to be constructed. The allocation of the Delta Facilities is based upon the allocated costs shown in the Bureau of Reclamation's letter dated December 20, 1965.

The cost allocation percentages determined in the Bulletin No. 153 series are applicable to the capital costs and to the minimum operating costs of the multiple-purpose features of each facility covered. Minimum operating costs, as differentiated from variable operating costs, constitute those that are incurred in an amount which neither depends upon, nor varies with, the amounts of water delivered. Variable operating costs are allocated annually among project purposes in proportion to the actual annual deliveries made to the respective purposes.

## Allocation of Capital Costs

The allocations of actual and projected capital costs for multiple-purpose facilities of the State Water Project are shown in Table 15. Also shown are the portions of the specific costs of features used solely for particular purposes which are financed by project funds.

The specific costs for the purposes of recreation and fish and wildlife enhancement (abbreviated in the column headings as "R&F&WE"), include only those for lands, easements, and rights-of-way purchased concurrently with multiple-purpose project lands in order to decrease total land costs.

The total costs of specific recreation and fish and wildlife enhancement features, including those financed by project funds, will aggregate more than $142,000,000 based on the following partial estimates summarized in Bulletin No. 153-66:

| Facilities covered in Bulletin No. 153-66 | Costs of specific recreation and fish and wildlife enhancement features | |
|---|---|---|
| | Initial installations[a] | Continuing installations[b] |
| Upper Feather Area: | | |
| Frenchman Dam and Lake | $ 1,710,000 | $ 829,000 |
| Antelope Dam and Lake | 450,000 | 1,103,000 |
| Grizzly Valley Dam and Lake Davis | 1,760,000 | 2,483,000 |
| Oroville Area | 19,738,000 | 36,953,000 |
| California Aqueduct | 57,232,000 | 14,640,000 |
| South Bay Aqueduct | 3,050,000 | 2,521,000 |
| Total | $83,940,000 | $58,529,000 |

a/ Sufficient to accommodate the growth in estimated visitor-use during the initial 10-year period of operation.
b/ Sufficient to accommodate the continuing growth in estimated visitor-use subsequent to the initial 10-year period of operation.

The costs of boat ramps, parking lots, and camp sites, included in the above values, are financed by the State General Fund under the provisions of the Davis-Dolwig Act. Such costs are not accounted for by the Department and are not covered in the project financial analyses in this bulletin. The magnitudes of appropriations by the Legislature to date to cover such costs, as well as multiple-purpose operating costs allocated to recreation and fish and wildlife enhancement, are shown in the following tabulation:

| Fiscal year | Legislative Appropriations from the State General Fund for the Davis-Dolwig Program | | | |
|---|---|---|---|---|
| | Specific costs | | Multiple-purpose operating costs | Total |
| | Recreation planning | Capital outlay | | |
| | (in thousands of dollars) | | | |
| 1962-63 | 96 | 488 | 10 | 594 |
| 1963-64 | 119 | 689 | 10 | 818 |
| 1964-65 | 209 | 1,126 | 9 | 1,344 |
| 1965-66 | 198 | 2,553 | 38 | 2,789 |
| Totals | 622 | 4,856 | 67 | 5,545 |

The columns of Table 15 under the heading "unspecified purposes", include certain unassigned costs and costs of the Davis-Grunsky Program. Unassigned costs include costs incurred for features which were deleted from the Project after the expenditures were made, such as for the reaches of the North Bay Aqueduct beyond the Napa turnout and for the Doolan branch of the South Bay Aqueduct. Local projects receiving loans or grants under the Davis-Grunsky Act may be constructed for a number of purposes. Costs of a local project allocated to recreation and fish and wildlife enhancement may be covered by grants which are nonreimbursable by the project construction agency, while the remaining project costs may be reimbursable under the loan provisions of the Act. Only a small portion of the project funds reserved for local projects has been committed to date, and the total estimated costs of the Davis-Grunsky Program are conservatively considered herein to be nonreimbursable.

## Allocation of Operating Costs

The classification of actual and projected operating costs of the State Water Project into the two component categories of minimum and variable costs and the allocation of such costs among project purposes are shown on Table 16.

The items of costs included in the minimum and variable categories of operating costs are described in Appendix B. Also shown in that appendix are the bases for the allocation of annual variable operating costs between the purposes of (1) water supply and (2) recreation and fish and wildlife enhancement.

## Separation of Costs into Programs

It was mentioned in the introduction to this chapter that the costs of the State Water Project are divided into (1) State Utility Programs, (2) State Nonutility Programs, and (3) Federal Programs. Tables 17 and 18 present the estimated capital costs and operating costs of the project grouped under these three programs. The costs included in each program and related matters are described under the following headings.

### State Utility Programs

The costs of State Utility Programs shown in Tables 17 and 18 include the following:

1. The total costs of project conservation facilities allocated to purposes of water supply and power generation. To determine costs which are reimbursable by the water supply contractors under the Delta Water Charge, these costs must further be reduced by the revenues derived from the sale or other disposal of Oroville-Thermalito power generation.

2. The total costs of project transportation facilities allocated to water supply, less the appropriate operating costs of the San Luis division which will be borne by the Federal Government. These net costs are reimbursable by the water supply contractors under the Transportation Charge.

3. The costs of the first stage of the San Joaquin Master Drain allocated to the purpose of drainage benefit, less the share of such costs to be borne by the Federal Government. These costs will be reimbursable under future drainage contracts.

### State Nonutility Programs

The costs of State Nonutility Programs listed in Tables 17 and 18 include the following:

1. The total costs of "unspecified purposes", including currently unassigned project costs and the costs of the Davis-Grunsky Program.

2. The total costs allocated to the purposes of recreation and fish and wildlife enhancement.

Federal Programs

The costs of Federal Programs given in Tables 17 and 18 include the following portions of expenditures from project funds:

1. The total costs allocated to the purpose of flood control.

2. The portion of the costs allocated to water supply and drainage benefit excluded from State Utility Programs.

The bases for determination of the costs referred to under item 2 above are discussed under the following subheadings.

San Luis Division. In accordance with the federal-state agreement regarding construction and operation of the San Luis Unit of the Central Valley Project, the State will operate the joint-use facilities of that unit and the Federal Government will contribute its share of operating costs.

The formulae for the allocation of annual operating costs are currently being negotiated with the Bureau of Reclamation. Based upon the trend of current negotiations, operating costs other than pumping power and energy would be allocated 55 percent to the State and 45 percent to the United States. Pumping power and energy are assumed, in this bulletin, to be provided by each agency for its own requirements.

San Joaquin Drainage Facilities. The first stage of the San Joaquin Master Drain would convey agricultural waste waters from the federal San Luis service area as well as from other areas located north of Kettleman City.

Negotiations with the Bureau of Reclamation are substantially complete on the sharing of costs of the first stage. In accordance with the draft of the proposed agreement, it is assumed that the State will pay 40 percent and the United States 60 percent of the capital costs of the first stage incurred after July 1, 1964, and that the United States will pay $220,000 of the total costs incurred by the State prior to July 1, 1964. It is also assumed that the State will pay 33 percent and the United States 67 percent of the annual operating costs of the first stage.

## Total Costs to be Financed

Table 19 summarizes the annual capital expenditures of the State Water Project which must be financed by project funds.

A recapitulation of the total annual costs for each of the major facilities of the State Water Project is shown in Columns 1 through 10 of Table 19. The upper values in these columns indicate costs financed from sources made available prior to the effective date of the Burns-Porter Act, and the lower values indicate costs financed or to be financed by project funds subsequent to that effective date.

## Capital Costs Credited with Receipts

Receipts accrue from the sale or other disposal of rights-of-way purchased for features subsequently deleted from the Project and from the rental of rights-of-way. These receipts are credited to the capital costs of the facility concerned in accordance with the Department's accounting procedures.

The required financing for the credited costs has previously been provided. In order to determine the total expenditures to be financed, the amounts of costs which have been so credited must be added to the capital costs of the project facilities. Such costs are shown in Column 12 of Table 19 to total $2,864,000.

## Costs Financed from Funds Provided Prior to the Burns-Porter Act

The total costs of the State Water Project financed from funds provided prior to the effective date of the Burns-Porter Act are shown in the upper portion of Column 13 of Table 19 to total about $100,275,000. The funds utilized to finance this amount are summarized in the following tabulation:

| | |
|---|---|
| General Fund | $ 11,495,000 |
| California Water Fund | 87,518,000 |
| Local Projects Assistance Fund | 1,262,000 |
| Total, from funds provided prior to the Burns-Porter Act | $100,275,000 |

Costs to be Financed from Funds Provided Subsequent to the Burns-Porter Act

The annual capital expenditures which are currently estimated to require financing by project funds are shown in the lower portion of Column 13 of Table 19 to total about $2,433,082,000.

# CHAPTER XI. MISCELLANEOUS RECEIPTS AND PROJECT REVENUES

This chapter describes the total estimated receipts and revenues to be realized for the State Water Project. The annual receipts and revenues through calendar year 1965 are derived from the accounting records of the Department and are summarized in Appendix A. Those for calendar year 1966, and thereafter, are estimated from the costs developed in Chapter X. Estimated in this chapter are the annual net values of project revenues, over and above project operating costs and Oroville-Thermalito power revenues reserved for the coverage of revenue bonds. These net values will be available for meeting service on general obligation bonds and are basic to the financial analysis developed in Chapter XII.

First presented in the following sections is a general description of the interest rates and repayment periods applicable to the estimates contained herein. Second, a discussion of the receipts to be realized from State Utility, State Nonutility and Federal Programs. Finally, estimated project revenues to be derived from State Utility Programs under the payment provisions of water supply, drainage, and power contracts are described.

## Project Interest Rates

Article 1(r) of the "Standard Provisions for Water Supply Contract" specifies that the "project interest rate" shall mean the weighted average of interest rates paid by the State on bonds issued under the Burns-Porter Act, without regard to any premiums received on the sale thereof.

Under the Department's present method, the project interest rate is determined by the ratio of the total interest cost to the total "dollar-years" of Water Bonds issued to date, expressed as a percentage. The project interest rate is currently 3.573 percent per annum, determined by the following data on Water Bond issues through Series "E":

| Water Bonds issued to date | Dollar-years[a/] | Total interest cost |
|---|---|---|
| | (in thousands of dollars) | |
| $50,000,000 Bond Anticipation Notes dated December 1, 1963, due June 15, 1964. | 26,944 | 531 |
| $100,000,000 Series "A" Water Bonds dated March 1, 1964, due September 1, 1973-2013. | 3,402,000 | 119,750 |
| $50,000,000 Series "B" Water Bonds dated May 1, 1964, due May 1, 1974-2014. | 1,726,000 | 60,985 |
| $100,000,000 Series "C" Water Bonds dated November 1, 1964, due November 1, 1974-2014. | 3,452,000 | 123,764 |
| $100,000,000 Series "D" Water Bonds dated March 1, 1965, due March 1, 1975-2015. | 3,497,900 | 122,403 |
| $100,000,000 Series "E" Water Bonds dated December 1, 1965, due December 1, 1975-2015. | 3,497,900 | 130,029 |
| TOTALS through Series "E" | 15,602,744 | 557,462 |

a/ A dollar-year is a unit equivalent to one dollar of principal amount outstanding for one year.

The annual statements of charges to water supply contractors for payment in 1967, partially substantiated in Appendix B, are based on the project interest rate of 3.573 percent, pursuant to the water supply contracts. The statements for each year thereafter will include adjustments, as necessary, to account for subsequent changes in the project

interest rate. It is assumed that the project interest rate will increase in the future, to a certain extent.

For financial planning purposes, and for the reasons stated in Chapter XII, project interest rate of 3.700 percent is assumed in calculating the revenues expected to be received during the entire project repayment period. This rate was also assumed in the corresponding analyses contained in last year's bulletin.

## Project Repayment Period

Article 1(t) of the standard contract provisions specifies that the "project repayment period" is the period beginning on January 1, 1961, and extending until all bonds secured by the pledge of revenues under the Burns-Porter Act have been repaid. Since the maximum term of such bonds is 50 years, the project repayment period will end no later than 50 years after the last bonds are issued.

It was assumed, for the determination of available revenues in this chapter, that the final sale of Water Bonds will occur in 1983, which is the last year in which proceeds from the sale of general obligation bonds is utilized in the financial analysis described in Chapter XII. It was also assumed that final repayment of those bonds will occur 50 years thereafter. The project repayment period will extend through the year 2032, under this premise.

It was assumed, for the detailed repayment tables developed in Appendix B, that the project repayment period will extend at least to the year 2039, fifty years after the last year of construction shown in this bulletin. This assumption recognizes the difficulty of accurately predicting when the last year of repayment of general obligation bonds, issued under the Burns-Porter Act, will occur. This assumption also ties the term of repayment to Article 24(c) of the water supply contracts, which provides that the annual capital costs of the project transportation facilities allocated to each contractor shall be repaid in not more than 50 equal annual installments of principal and interest. Previous repayment tables supplied to the contractors have been based upon this assumption. If, under future financial analyses, it is determined that the project repayment period will terminate before 2039, the amortization period for allocated transportation capital costs during the later years of the construction period will be adjusted so as to match the actual project repayment period.

## Miscellaneous Receipts

Miscellaneous receipts include the following items for each major classification of program:

1. State Utility Programs; the annual advances by water supply contractors for excess peaking capacity requested in reaches of the project transportation facilities.

2. State Nonutility Programs; appropriations provided by the Legislature, including those under the procedures of Assembly Bill No. 12.

3. Federal Programs; the annual reimbursements to be provided for the costs allocated to the purpose of flood control and for the federal share of the costs allocated to water supply and drainage benefit.

Miscellaneous receipts also include sales and rentals of rights-of-way, which were described in Chapter X, and other minor reimbursements credited to capital costs.

## State Utility Programs

The standard contract provisions provide that the State shall not contract to deliver, in any month of any year, a total amount of project water greater than 11 percent of each contractor's annual entitlement put to municipal use, and 18 percent of each contractor's annual entitlement put to agricultural use. These percentages may be increased for a particular contractor by contract amendment, providing the contractor advances funds to cover costs of enlarging the reaches involved. The amounts of such advances are determined pursuant to Article 24(d) of the contracts.

Article 24(d) also provides that the difference between the estimated costs of the reaches, had excess capacity not been provided, and the actual total costs of the reaches, will be allocated to the contractor requesting such excess capacity as a final adjusted cost. Since the formula for advance of funds will normally require advance of a greater sum than the adjusted cost, the difference will be credited to the contractor's account.

Amendment No. 2 to the water supply contract with The Metropolitan Water District of Southern California,

executed in February 1965, was described in last year's bulletin. Under this amendment, excess capacity will be provided for the District as follows:

1. In each reach of the California Aqueduct from Kettleman City to the junction of the West Branch, 238 cubic feet per second; and,

2. In each reach of the West Branch of the California Aqueduct, exclusive of regulatory storage reservoirs, from the junction of the West Branch to Castaic reservoir, 809 cubic feet per second.

The Department was notified[88/] of action taken by the Board of Directors of the Antelope Valley-East Kern Water Agency, modifying the Agency's previous request for aqueduct turnout locations and capacities, and requesting the initiation of negotiations for amendments to the Agency's water supply contract necessitated thereby. This request would result in five cubic feet per second of excess capacity for the Agency in the West Branch of the California Aqueduct, from the junction to a point near the Aqueduct's crossing of State Route 138. The requested negotiations are currently under way. The analyses in this bulletin, which began about January 1, 1966, are based upon a previous request from the Agency which would have resulted in 40 cubic feet per second of excess capacity for this portion of the Aqueduct. The five cubic feet per second figure presumably will be utilized in the analyses in next year's bulletin.

The calculation of the gross annual advances and allocated costs for the excess capacities included for The Metropolitan Water District of Southern California, and assumed herein for the Antelope Valley-East Kern Water Agency, is shown in Appendix B. These values are summarized by Aqueduct division in Table 20. The last column of Table 20 presents a summary of the calculation and the application of credits for the estimated amounts of advances in excess of allocated costs. Overall credits to the two contractors' accounts would accrue as shown by the negative values of that column. These credits, totaling about $32,700,000, are herein applied to the water supply charges of the two contractors in 1971, and would reduce that year's revenues from State Utility Programs by a like amount.

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88/ Letter to Mr. James J. Doody, Southern District Director, Department of Water Resources, from Mr. Wallace G. Spinarski, Assistant Manager, Antelope Valley-East Kern Water Agency, February 2, 1966.

State Nonutility Programs

Legislative appropriations are contemplated which will cover the costs allocated to the project purposes of recreation and fish and wildlife enhancement included in State Nonutility Programs. These costs are shown in Tables 17 and 18, for capital and operating costs, respectively.

Reimbursement of the operating costs of multiple-purpose features allocated to these purposes will be from the State General Fund under the provisions of the Davis-Dolwig Act. Such reimbursements have been included annually as items in the Department's budgets and have been appropriated by the Legislature.

Reimbursement of the capital costs of multiple-purpose features allocated to these purposes and reimbursement of expenditures for recreational lands acquired with Project Funds are herein assumed to occur in the manner provided by Assembly Bill No. 12 of the 1966 First Extraordinary Session. This enacted bill, which was described in Chapter II, will permit the Department to draw upon the portion of the State's share of tidelands oil and dry gas revenue to be deposited annually in the Central Valley Water Project Construction Fund for coverage of such costs, to the extent the Legislature approves such allocations and expenditures. The magnitude of the annual deposit will be $5,000,000 under the new law.

Such miscellaneous receipts are assumed to accrue to the Project commencing in calendar year 1966. Legislative approval of the multiple-purpose allocations, and of the expenditures from Project Funds for acquiring recreational lands, made by the Department to date is not expected until the 1967 session. It is herein assumed that the annual deposits for 1966 and 1967 would be available to the Project in 1967 and that the annual deposits thereafter would be utilized during the year in which made. The portion of the capital costs allocated to recreation and fish and wildlife enhancement are shown in Table 17 to total about $106,787,000 Reimbursement of this amount, and interest thereon at the future project interest rate of 3.7 percent, would be completed in calendar year 2000 with annual deposits of $5,000,000. This reimbursement schedule is developed in Column 3 of Table 21.

Federal Programs

The total reimbursements to the Project from Federal Programs are shown in Table 22. These annual contributions

would cover the capital and operating costs of Federal Programs shown in Tables 17 and 18. The agreement with the Federal Government for the reimbursement of costs of Oroville Dam and reservoir allocated to flood control, and a proposed similar agreement for Del Valle Dam and reservoir, provide for the payment of estimated future annual operating costs on a capitalized basis, along with payments for capital costs. The federal contributions for these two features are briefly described under the subheadings that follow:

Oroville Dam and Reservoir. The Federal Government agreed to contribute toward the total costs of the Oroville division, allocable to the project purpose of flood control, an amount equal to 22 percent of the actual capital costs of the dam and reservoir, exclusive of the Oroville-Thermalito power facilities, not to exceed $85,000,000.89/ Federal administrative costs and interest on the federal investment during construction are to be deducted from this value to obtain the maximum net contribution. Reimbursements to date under the contract amount to $39,750,000. It is presently estimated that the total reimbursement, which includes the capitalized value of annual operating costs allocable to the purpose of flood control, will be about $67,670,000.

Del Valle Dam and Reservoir. A federal contribution for the costs of Del Valle Dam and reservoir allocated to flood control has been authorized.90/ A draft of contract with the Corps of Engineers has been prepared.91/ The contract draft provides for a contribution equal to 30.7 percent of the actual capital costs of the Dam and reservoir, including federal administrative costs during construction, but not to exceed $4,080,000. In addition, $776,000 would be contributed for the capitalized value of annual operating costs allocable to flood control. The maximum total federal reimbursement, under the provisions of the contract draft, would be $4,856,000.

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89/ Contract No. DA-04-167-CIVENG-62-56, DWR 152012, March 8, 1962.

90/ Section 203 of the Flood Control Act of 1962, 76 Stat. 1173, authorizes a contribution substantially in accordance with the plans, and subject to the conditions set forth in the report, of the Chief of Engineers in Senate Document 128, 87th Congress, Second Session.

91/ No. DA-04-203-CIVENG-66-195.

The capital costs allocable to flood control, based upon the above-mentioned 30.7 percent applied to the latest estimates of costs for Del Valle Dam and reservoir as shown herein, would be $7,331,000. Thus, the total contribution which would cover all estimated costs allocable to flood control, including the $776,000 for capitalized operating costs, would be $8,107,000.

It was stated in last year's bulletin that the Department had asked the Corps of Engineers to review the present limitation in the hope that it could be raised to reflect more recent cost estimates. The San Francisco District of the Corps of Engineers subsequently notified the Department92/ that the existing legislation authorizing the federal participation specifically limits the federal contribution to $4,080,000 for construction; that there is no authority to modify the monetary limit; and, that it is not appropriate for the Corps of Engineers to initiate action on additional legislation by the Congress.

The Director of Water Resources, on March 3, 1966, approved a program93/ whereby the Department will seek the assistance of local congressional representatives in obtaining legislation to eventually increase the ceiling on federal participation, but to conclude negotiations with the San Francisco District, Corps of Engineers, with the objective of executing a satisfactory contract for a federal flood control contribution within existing statutory limits.

Miscellaneous receipts totalling $8,107,000, which would cover all estimated costs presently allocable to flood control, are included herein for Del Valle Dam and reservoir. There are reasonable expectations that the full amount allocable to flood control will eventually be reimbursed to the Project.

Miscellaneous Receipts Available for Project Financing

The total miscellaneous receipts which will be available to assist in financing the project are summarized

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92/ Letter to Mr. William E. Warne, Director, Department of Water Resources, from Lt. Colonel Robert H. Allan, District Engineer, San Francisco District, Corps of Engineers, February 1, 1966.

93/ Department of Water Resources Memorandum by Mr. C. A. McCullough to Messrs. John R. Teerink, Alfred R. Golze', and William E. Warne, entitled "Program for Del Valle Dam and Reservoir", March 1, 1966.

in Table 26, which is described in Chapter XII. That tabulation supports the financial analysis presented therein, and develops the respective annual use of such receipts for (1) coverage of general obligation bond service, and (2) direct application to capital expenditures. The miscellaneous receipts in Table 26 include only reimbursements for capital costs, and for those annual operating costs which are recovered on a capitalized basis. The treatment in this bulletin of operating costs repaid on an annual basis is described in the following paragraphs.

The only operating costs associated with State Nonutility Programs are those allocated to the purposes of recreation and fish and wildlife enhancement. As stated heretofore, these costs are being paid directly from the State General Fund under the procedures of the Davis-Dolwig Act. Thus, they are excluded from the financial analysis described in Chapter XII.

The operating costs associated with Federal Programs, which are allocated to the purposes of water supply and drainage, are herein assumed to be paid on an annual basis. Since these annual receipts will directly offset annual operating costs, they are likewise excluded from the financial analysis.

## Project Revenues

The total estimated revenues to be realized from State Utility Programs are summarized in Table 23 and include those under existing and assumed water supply, power, and drainage contracts.

Water supply contracts will return, with interest, the State's share of the costs of facilities which are reimbursable by water supply contractors under two separate water charges: (1) the Delta Water Charge, which will return costs of project conservation facilities allocated to water supply and power generation, less Oroville-Thermalito power revenues; and, (2) the Transportation Charge, which will return costs of project transportation facilities allocated to water supply.

Contracts assumed herein covering the sale of Oroville-Thermalito power will return to the State, with interest, those costs allocated to power generation and the portion of the water supply costs credited with power revenues in the determination of the Delta Water Charges.

Drainage contracts assumed herein will return, with interest, the State's share of the costs of the first stage of the San Joaquin Master Drain.

Water Supply and Oroville-Thermalito Power

Water supply contracts, executed or under negotiation, cover about 99 percent of the total capital costs, included in State Utility Programs, which are allocated to water supply. As stated above, the costs and revenues associated with Oroville-Thermalito power, as well as the water supply costs, are used in the calculation of Delta Water Charges. Considering water supply and Oroville-Thermalito power as one program of the State Utility, water supply contracts cover about 88 percent of the associated capital costs.

Oroville-Thermalito Power Revenues. The annual revenues94/ estimated to be realized under the future contract, or contracts, covering the sale of power and net energy generation of the Oroville-Thermalito power facilities are shown in Table 23. These total revenues are reflected in the calculation of Delta Water Charges and include revenues which may be reserved for coverage of revenue bonds.

Delta Water Charges for Financial Analysis. Article 22(c) of the water supply contracts provides that the Delta Water Charge for each contractor shall be determined as the product of the entity's annual entitlement (for the capital cost and minimum operation, maintenance, power and replacement components) or actual deliveries of project water (for the variable component) and the applicable Delta Water Rate for each component. It also provides that, through December 31, 1969, the Delta Water Rate will be $3.50 per acre-foot, without regard to components. The computation, thereafter, of the Rate for each component of the Charge is specified by a formula, also set forth in Article 22(c). For purposes of this bulletin, the formula for computing Delta Water Rates may be paraphrased as follows:

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94/ See page 95.

1. The present worths, at the future project interest rate, of all appropriate costs which have been incurred, and which are estimated to be incurred, for the entire project repayment period; plus

2. The present worths, at the future project interest rate, of all power revenues which have been realized, and which are estimated to be realized, for the project repayment period; minus

3. The present worths, at the future project interest rate, of all actual revenues received to date under the appropriate component; the above quantities all divided by

4. The present worths, at the future project interest rate, of the annual entitlements to be delivered during the remaining portion of the project repayment period.

The computations of future Delta Water Rates, for the analyses in this bulletin, treat the annual quantities of cooling water, estimated to be required by a nuclear powerplant located at the Tehachapi Pumping Plant, in a similar manner as annual entitlements to project water. These analyses consider that the operating agency of the powerplant would bear a share of the costs of project conservation facilities matching that of an entity contracting for a corresponding water supply under the standard contract provisions. The revenues which would be realized from the charges paid by the operating agency are also accounted for in these analyses. If one of the coastal powerplant sites located in Southern California were selected, instead of the Tehachapi site, ocean water would be used for condenser cooling. In this eventuality, the Delta Water Rates calculated herein would be about $0.05 per acre-foot higher than shown, subsequent to 1969.

The computations of the components of the Delta Water Rates applicable for the project repayment period after 1969, which were used to derive the revenues shown in Table 23, are summarized in the following tabulation:

| Item | Capital cost component rate | Operation, Maintenance, power, and replacement component rates | | Total, Delta Water Rate |
|---|---|---|---|---|
| | | Minimum | Variable | |
| Present worth of costs, power revenues and charges at 3.7 percent interest (in millions of dollars): | | | | |
| Total cost of project conservation facilities under State Utility Programs allocated to water supply and to Oroville-Thermalito power for the entire project repayment period.[a] | 772.36 | 40.23 | 1.93 | 814.52 |
| Oroville-Thermalito power revenues for the entire project repayment period.[a] | -391.92 | -0.00 | -0.00 | -391.92 |
| Delta Water Charges through 1969 ($3.50 per acre-foot applied to present worths of entitlements through 1969). | - 1.87 | -0.00 | -0.00 | - 1.87 |
| Net Values | 378.57 | 40.23 | 1.93 | 420.73 |
| Present worth of annual entitlements from 1970 through remainder of project repayment period[a] (in millions of acre-feet). | 65.89 | 65.89 | 65.89 | 65.89 |
| Unit Delta Water Charges (Above net values divided by present worth of remaining entitlements, in dollars per acre-foot). | 5.75 | 0.61 | 0.03 | 6.39 |

a/ Considering the project repayment period to end in calendar year 2034.

The above calculations assume that:

1. The fixed rate of $3.50 per acre-foot of annual entitlement through 1969 consists entirely of the capital cost component.

2. The net revenues to be derived from the sale or other disposal of electrical energy, in excess of the costs allocable to power generation, will be credited entirely to the capital cost component.

The estimated rates will repay the reimbursable costs of the initial project conservation facilities and additional project conservation facilities included in the State Utility Programs analyzed in this bulletin. The facilities involved would have sufficient capacity to satisfy the project repayment period, with anticipated continuing depletions of flow in the Delta watershed. These rates reflect the necessity of presenting a complete integral or "closed" project for the purposes of the financial analysis of Chapter XII. The conservation facilities of the State Water Resources Development System are thus assumed to develop only the yield required for the present State Water Project.

The State Water Resources Development System is, of course, dynamic and will continue to grow after the present State Water Project can no longer satisfy the demands for supplemental water supplies subsequent to 1990. The continuing implementation of conservation facilities to meet the supplemental demands under an expanding System is reflected in the structure of the Delta Water Charge. Article 22(g) of the water supply contracts provides that, upon the construction of supplemental conservation facilities, the Delta Water Charge will be adjusted, as necessary, to recover the costs of such facilities. It further provides that the new rates will be paid by both contractors for supplemental water and contractors supplied by the present minimum project yield. These might be termed "open" Delta Water Rates. A presentation of illustrative "open" Delta Water Rates was included in Bulletin No. 132-65, pages 147 through 150, and is not repeated herein.

Transportation Charges. Revenues under the Transportation Charge are computed in detail, in Appendix B, for substantiation of the annual statements of charges to water supply contractors. That appendix performs the following functions.

1. It shows annual capital, minimum operating, and variable operating costs allocated to water supply for each reach of the project transportation facilities.

2. It sets forth the detailed criteria and factors utilized to distribute these costs among water supply contractors.

3. It performs the above distribution.

4. It compiles comprehensive repayment schedules pursuant to the applicable standard and special provisions of each water supply contract in accordance with the project costs and other conditions set forth in this bulletin, including the current project interest rate of 3.573 percent per annum, without regard to actual prior payments made. Adjustments for actual payments are contained in the data accompanying the statements of charges to each contractor.

Table 23 summarizes the annual values of actual or estimated revenues from the Transportation Charge. It corresponds with the data developed in Appendix B, with the following exceptions:

1. Payments received through calendar year 1965, and payments to be received under outstanding statements for 1966 (billed in June 1965) and for 1967 (billed in June 1966) were shown as the revenues realized for these years.

2. The future project interest rate of 3.7 percent per annum, rather than the current project interest rate of 3.573 percent, was utilized.

3. Overpayments or underpayments indicated for all years through 1967, with relation to charges computed on the basis of annual costs shown in Chapter X, were accumulated at 3.7 percent per annum and algebraically added to the estimated payments for 1968.

4. Transportation Charges were terminated in the year 2032, fifty years after the last general obligation bond issue indicated in the financial analysis of Chapter XII, rather than in the year 2039, which would be fifty years after the last construction cost of the project transportation facilities is estimated to occur.

It should be noted that the operating cost components of the Transportation Charge, shown in Table 23, are less than the estimated total operating costs of the water transportation facilities, allocated to water supply, shown included for State Utility Programs in Table 18. The difference between these values comprises the operating costs associated with assumed future contractors which are borne by the Project.

## Drainage

The repayment structure of the drainage program of the State Utility has not as yet been established. It is arbitrarily assumed for the drainage revenues shown in Table 23 that:

1. A repayment contract would be executed with a master drainage district in the San Joaquin Valley in 1967.

2. The repayment provisions of the contract, or contracts, would correspond with those set forth in Article 24(c) of water supply contracts for the amortization of allocated capital costs, whereby each year's capital cost is repaid to the State in 50 equal annual installments of principal and interest at the project interest rate.

3. The first payment by the district would commence in 1969, for the San Joaquin Master Drain.

These assumptions generally correspond with those utilized in last year's bulletin. However, these assumptions are applied to only the costs of the first stage of the Master Drain rather than to all three stages as considered in Bulletin No. 132-65.

## Net Operating Revenues

The total estimated evenues remaining after defraying the operating costs included in the State Utility Programs are shown in Table 24. These net operating revenues must be further reduced for certain considerations to derive the revenues available for coverage of annual service on the general obligation bonds issued to finance the Project. These considerations are described in the following paragraphs.

## Net Credits from Advances for Requested Excess Capacity

The estimated net credits from advances to be made by water supply contractors for excess capacity, over-and-above the allocated costs of such capacity, are herein applied to the capital cost components which would otherwise be required from the contractors under the Transportation Charge. The amounts and the timing of application of these credits are shown by the negative values in the last column of Table 20.

## Revenues Applied to Capital Expenditures

Minor amounts of project revenues have, in the past, been applied directly to capital expenditures. These total about $108,000. In this analysis, they are deducted from the revenues available for coverage of bond service.

## Net Operating Revenues Reserved for Coverage of Revenue Bonds

The financing program described in Chapter XII uses $210,000,000 of revenue bond proceeds for the construction of the Oroville-Thermalito power facilities, to be covered by a contract, or contracts, for the sale of at least 710,000 kilowatts dependable capacity of Oroville-Thermalito power. All of the net operating revenues associated with the Oroville-Thermalito power are herein deducted from the net operating revenues of the Project, to compute the portion available for coverage of general obligation bond service.

## Operating Costs of Federal Programs Allocated to Flood Control

The operating costs of Federal Programs allocated to flood control are recovered by the State on a capitalized basis, as previously described in this chapter. These receipts are treated in the financial program as available for coverage of general obligation bond service. Therefore, the annual operating costs covered by such receipts must be paid from project revenues and are herein deducted from the net operating revenues of the Project.

# CHAPTER XII. PROJECT FINANCING

This chapter discusses the financial program for the State Water Project, based on current estimates of capital expenditures and revenues. The program has been developed in close cooperation with the Department's financial consultants, Dillon, Read & Co. Inc.

## General Discussion

The financial program is based on the principles of the Burns-Porter Act, which became effective November 8, 1960, and the Governor's Contracting Principles relating to the water supply provided by the State Water Project, which were announced January 20, 1960. The sale of securities under the program was delayed by litigation which was decided by the California Supreme Court in 1963.95/ The Court upheld the authority to issue the securities and also upheld the Department's position as to other relevant matters.

The financial analysis contained in this chapter projects the manner in which the State Water Project is expected to be financed, and its costs repaid, on the basis of the Department's estimates and assumptions at the time of preparation of this report. Estimates of project costs continue to be refined and made more precise as activity in design, construction, water supply contracts, power negotiation, and related matters progresses toward the completion date.

The figures shown in the various tables in this section and the financial analysis contained herein are based principally on the following tables included in the bulletin and reference is made to them for more detailed information:

## Tables


| | |
|---|---|
| 19 | Summary of Annual Capital Expenditures |
| 24 | Net Operating Revenues Available for Coverage of General Obligation Bond Service |


95/ Metropolitan Water District v Marquardt, 59 Cal. 2d 159, 28 Cal. Rptr. 724, 379 Pac. 2d 28 (February 21, 1963); Warne v Harkness, 60 Cal. 2d 579, 35 Cal. Rptr. 601, 387 Pac. 2d 377 (December 12, 1963).

25 Financial Analysis for Water Bonds - June 1966

26 Miscellaneous Receipts and the Expenditures Thereof

27 Analysis of Offset Bonds

28 Service on Actual and Projected General Obligation Bonds

29 State of California Water Bonds - Schedule of Maturities, Amounts and Coupons

30 Redemption Premiums for State of California Water Bonds

## Capital Expenditures to be Financed

The total capital cost of the State Water Project, including appropriate contingency allowances, is estimated at $2,533,357,000, of which $535,533,000 had been expended through 1965 leaving $1,997,824,000 to be expended during the period 1966-1989. These amounts exclude interest during construction and expenditures to be made by the Federal Government for facilities used jointly with the State. It is also possible that a nuclear generating plant will be constructed to supply pumping power. If such a facility is constructed and financed by revenue bonds, it would not affect the financial analysis. Such a facility would be a self-liquidating project.

The total capital cost set forth above reflects a net decrease of about $28,800,000 as compared with the total capital cost shown in Bulletin No. 132-65. For detailed information regarding this decrease, and to project costs in general, reference is made to Chapter X.

The tabulation on the following page gives a breakdown of the total estimated cost by major project facilities. Annual capital expenditures are shown graphically on Figure 3.

| Project facilities | Actual through 1965 | Projected 1966-1989 | Total |
|---|---|---|---|
| | (in millions of dollars) | | |
| Project Conservation Facilities: | | | |
| Upper Feather division | 10 | 12 | 22 |
| Oroville division (including Oroville-Thermalito power facilities) | 240 | 238 | 478 |
| Delta Facilities | 6 | 49 | 55 |
| Upper Eel River Development | 1 | 226 | 227 |
| California Aqueduct (conservation portion) | 77 | 50 | 127 |
| Total, Project Conservation Facilities | 334 | 575 | 909 |
| Project Transportation Facilities: | | | |
| California Aqueduct (transportation portion) | 141 | 1,225 | 1,366 |
| North Bay Aqueduct | - | 10 | 10 |
| South Bay Aqueduct | 34 | 25 | 59 |
| Total, Project Transportation Facilities | 175 | 1,260 | 1,435 |
| Other Project Facilities | | | |
| San Joaquin Drainage Facilities | 3 | 51 | 54 |
| Local Projects (Davis-Grunsky Program) | 20 | 112 | 132 |
| Miscellaneous | 3 | 0 | 3 |
| Total, Other Project Facilities | 26 | 163 | 189 |
| TOTAL, STATE WATER PROJECT | 535 | 1,998 | 2,533 |

The State Water Project, as now designed, will provide a firm supply of 4,230,000 acre-feet of water annually to the end of the project repayment period, estimated to be about the year 2032. It has been assumed in this bulletin that the demand for project water would reach this amount by about 1990. The Department has always recognized, however, that the State's water program must be considered as a continuing one; that there may be an acceleration of demands; and that, in any case, the demand for water after 1990 will continue to grow beyond 4,230,000 acre-feet.

As and when it becomes necessary to enlarge the State Water Project, the Department can consider various alternative means of financing, or a combination of some or all of them. The alternative means of financing to be considered for a future enlargement of the State Water Project could include a more extended use of any or all of the supplemental sources of funds being used for, or potentially available for, the 4,230,000 acre-foot project, including: state appropriations, federal reimbursements, advances by water supply contractors, revenue bonds and general obligation bonds issued under a supplemental bond act.

## Sources of Funds for Construction

The sources of funds under the financial program are the following:

1. General Obligation Bonds - "Water Bonds". The major part of the financing will be accomplished by the sale of General Obligation Bonds of the State. The Burns-Porter Act authorizes the issuance of $1,750,000,000 of these bonds for the State Water Project, of which $1,300,000,000 remain unsold.

2. California Water Fund. It is estimated that about $372,321,000 of the moneys required to construct the State Water Project will be provided out of the California Water Fund. Approximately $150,458,000 of such moneys had been expended by the end of 1965. The Burns-Porter Act contains an appropriation of these moneys for the construction of the State Water Project, subject to the right of the Legislature to reappropriate California Water Fund moneys for other purposes, which right has been exercised as to a portion of the Fund.

3. Revenue Bonds. The Department of Water Resources expects to issue revenue bonds to be supported by the power revenues of the Oroville-Thermalito power facilities. Such issue is estimated to provide about $210,000,000 of construction funds. These bonds are authorized by the provision of the Water Code governing the Central Valley Project, the provisions of which were incorporated in the Burns-Porter Act. The Department's authority to issue these bonds was upheld in the decision of the California Supreme Court in 1963.

4. Miscellaneous Receipts. Most of the remaining moneys required for the construction of the State Water Project are being provided from the following sources: certain state appropriations made available prior to the effective date of the Burns-Porter Act and future appropriations assumed to be made available in the

# ANNUAL CAPITAL EXPENDITURES

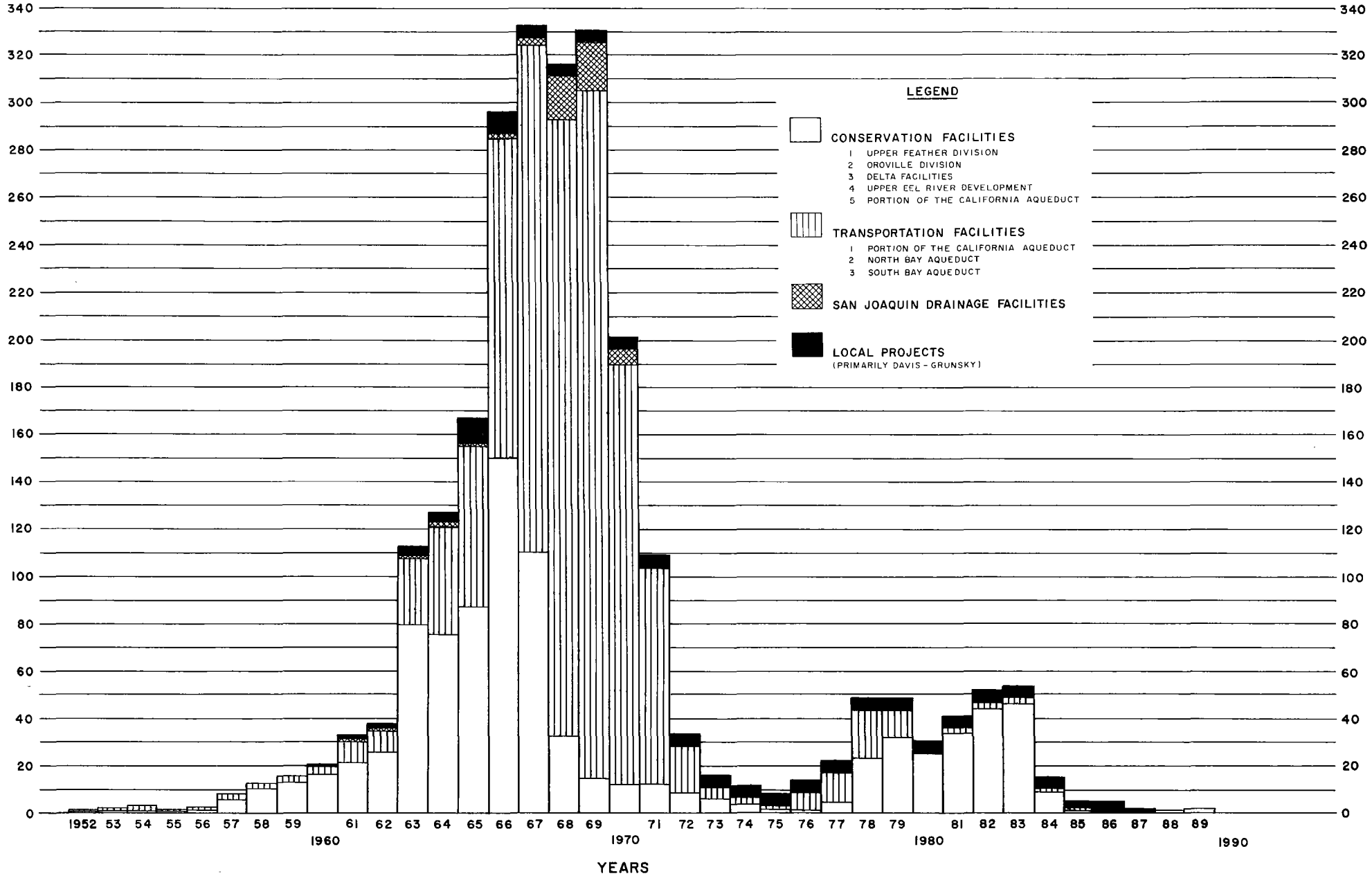



FIGURE 3

manner provided in Assembly Bill No. 12; federal reimbursements for project costs allocated to flood control and for a share of the costs of certain facilities constructed by the State and to be used jointly by the federal Central Valley Project and the State Water Project; advance payments by water supply contractors for excess delivery capability; and, proceeds of rights-of-way sales and rentals, the costs for acquisition of which are included in capital expenditures for the Project.

## Summary of Financing

The source and amount of funds assumed to be applied to the capital expenditures required for the State Water Project are shown in the following summary, and graphically on Figure 4:

| Item | Actual through 1965 | Projected 1966-1989 | Total |
|---|---|---|---|
| | (in millions of dollars) | | |
| General obligation bonds proceeds | 450 | 1,247 | 1,697 |
| Revenue bond proceeds | 0 | 210 | 210 |
| California Water Fund | 150 | 222 | 372 |
| Subtotal | 600 | 1,679 | 2,279 |
| Miscellaneous receipts: | | | |
| State appropriations and federal reimbursements[a/] | 100 | 99 | 199 |
| Advance payments for excess delivery capacity | 0 | 55 | 55 |
| Total miscellaneous receipts[b/] | 100 | 154 | 254 |
| Total funds applied to capital expenditures | 700 | 1,833 | 2,533 |
| Plus (minus) carryover of temporary excess of unexpended bond proceeds. | (165) | 165 | - |
| Total capital expenditures | 535 | 1,998 | 2,533 |

a/ Consists solely of state appropriations for the period through 1965.

b/ Represents the balance of miscellaneous receipts which are not applied to payment of general obligation bond service, as shown in the next section.

## Payment of General Obligation Bond Service

The financial analysis shows that the projected net operating revenues, together with certain other moneys available

# FINANCING OF CAPITAL EXPENDITURES

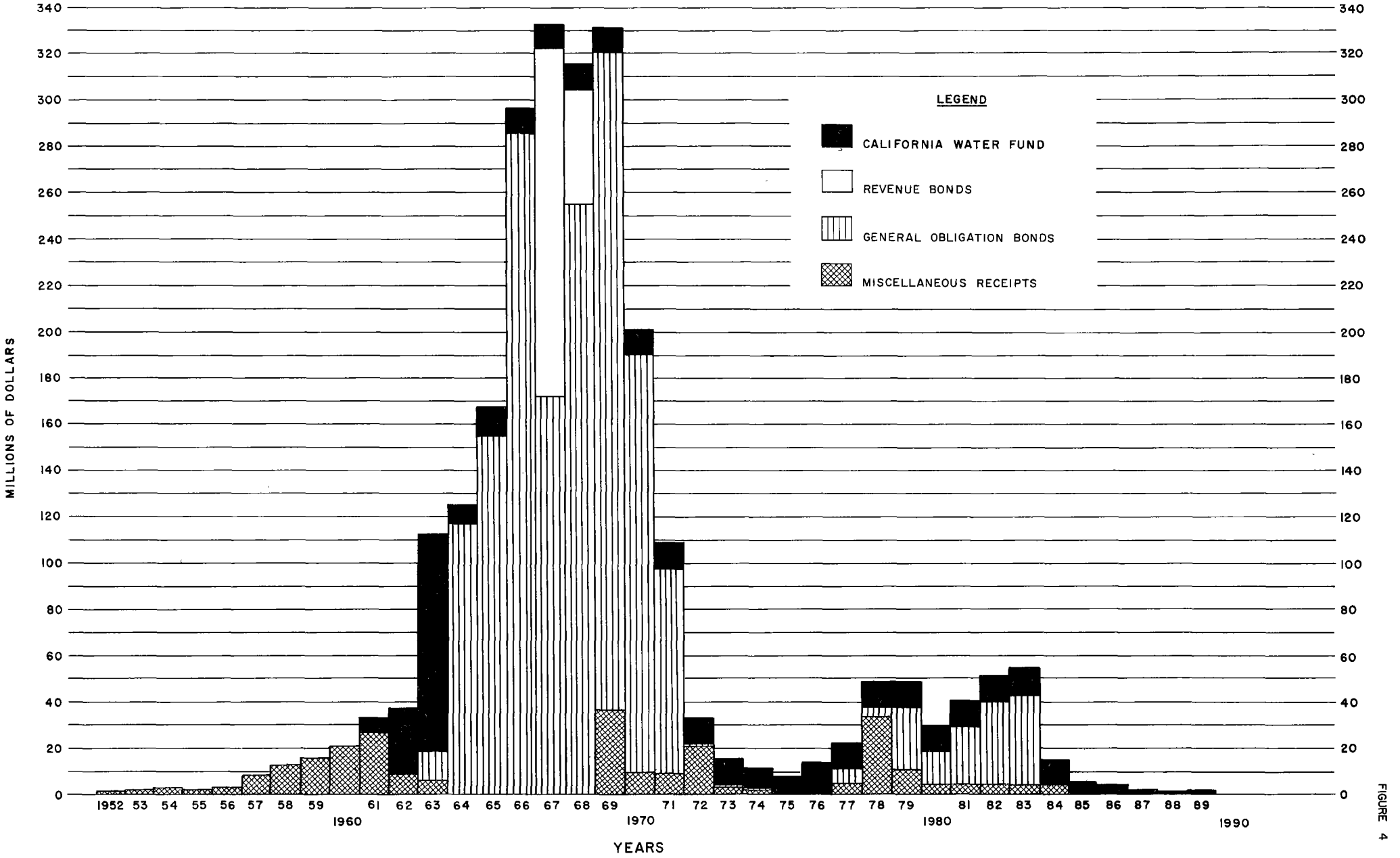



FIGURE 4

for general obligation bond service, are sufficient at all times to take care of the entire general obligation bond service, thus avoiding recourse to the General Fund for this purpose. It also shows a substantial remainder, following the completion of the construction period, of net operating revenues after providing for bond service.

The financial analysis of the application of net operating revenues and other receipts to bond service and the application of the balance is shown in the following table.

| Period | Net operating revenues | Miscellaneous receipts applied to bond service[a/] | Water deduct: Bond service | Balance of net operating revenues: Paid to California Water Fund | Balance of net operating revenues: Available for construction[b/] |
|---|---|---|---|---|---|
| | (in millions of dollars) | | | | |
| 6 years 1960-65 | 10 | 8 | 18 | 0 | 0 |
| 5 years 1966-70 | 125 | 63 | 188 | 0 | 0 |
| 5 years 1971-75 | 265 | 43 | 308 | 0 | 0 |
| 5 years 1976-80 | 348 | 14 | 362 | 0 | 0 |
| 5 years 1981-85 | 394 | 4 | 394 | 4 | 0 |
| 5 years 1986-90 | 425 | 0 | 400 | 25 | 0 |
| 10 years 1991-20 | 876 | 0 | 810 | 66 | 0 |
| 10 years 2001-10 | 876 | 0 | 811 | 65 | 0 |
| 10 years 2011-20 | 744 | 0 | 533 | 211 | 0 |
| 10 years 2021-30 | 343 | 0 | 68 | 1 | 274 |
| 4 years 2031-34 | 64 | 0 | 5 | 0 | 59 |
| TOTALS | 4,470 | 132 | 3,897 | 372 | 333 |

a/ The miscellaneous receipts shown represent the amount required, together with net operating revenues, to cover bond service. The balance of miscellaneous receipts has been applied to capital costs.

b/ Under the Burns-Porter Act, any net revenues remaining after reimbursement of the California Water Fund become available for construction of additional facilities of the State Water Resources Development System.

## Burns-Porter Financing

The funds available to the State under the Burns-Porter Act consist of the proceeds of Water Bonds in the aggregate principal amount of $1,750,000,000, together with certain California Water Fund moneys which are derived from payments to the State of oil and gas royalties and bonuses under certain tidelands leases. The Water Bonds are general obligations of the State, and the payment of interest and principal on such bonds are secured by the pledge of the full faith and credit of the State. In addition, the net revenues of the Project, with certain exceptions, are pledged to support the Water Bonds.

The revenues which are pledged by the Burns-Porter Act to the payment of the Water Bonds constitute solely the portion of the revenues which is allocable to the facilities, or portions thereof, constructed out of funds provided by such Act, namely, proceeds of such bonds and California Water Fund moneys. Thus, if additional general obligation bonds are issued under a supplemental bond act to finance the completion of construction or the enlargement of the Project, they can also be serviced out of those net revenues of the Project which are allocated to the facilities, or portion of facilities, financed by such additional bonds.

Currently, $11,000,000 annually is being made available from the California Water Fund for project construction, and this amount is used in the projections. This is the amount which is provided in the 1966-67 State budget and in Chapter 138, of California Statutes, 1964 First Extraordinary Session, relative to the disposition of tideland revenues.

## Revenue Bond Financing

Funds available to the Department for financing capital expenditures, in addition to Burns-Porter Act financing, include the proceeds of revenue bonds issuable under the Central Valley Project Act. In line with the California Supreme Court's decision in 1963, revenues allocable to the facilities financed by revenue bonds can be pledged for such bonds.

The Department presently estimates that revenue bonds proposed to be issued under the financial program will provide proceeds for construction of approximately $210,000,000, equivalent to the cost of the Oroville division allocated to the purpose of generating 710,000 kilowatts of firm power, and will be secured by the pledge of the revenues from the sale of this power. The assumed figure excludes proceeds to be used for the payment of interest during construction. As required by law, the amount of revenue bond issue will provide for such interest

to a date one year following the estimated completion date, for operating expenses during one year following completion, and repayment to the State, with interest, of amounts heretofore appropriated and expended on the facilities.

As negotiations with the potential power purchasers were still in progress at the time of the preparation of this report, the amount of proceeds from revenue bonds is subject to revision.

As the revenue bonds proposed to be issued under the financial program will be supported by power revenues, neither the service on these bonds nor the revenues from such sale are shown in the financial analysis.

The issue of revenue bonds for Oroville is assumed for purposes of this report to be early 1967. The revenue bonds, as planned, will mature over a period of not exceeding 50 years from their date, with fixed retirements in the form of serial maturities and sinking fund payments, calculated to produce approximately level annual bond service.

The security for the revenue bonds would be a power contract or contracts covering the sale of Oroville-Thermalito power, extending over the period to final maturity of the bonds. Under the Central Valley Project Act, a power contract made with other than a state agency must be cancellable by the Department upon five years' notice, if and when the State or any financially responsible stage agency makes application for the power, but only if the applicant entered into a contract whereby the Department receives total revenues at least equal to that which it would have received under the original contract.

## Miscellaneous Receipts

### Federal Reimbursements

The estimated costs of Oroville and Del Valle Dams and reservoirs which are allocable to the purpose of flood control, assumed to be a responsibility of the Federal Government, would justify a federal contribution of $75,774,000. The San Joaquin Drainage Facilities are assumed to be constructed by the State and to be jointly used by the federal Central Valley Project. The federal share of the capital costs of these facilities is estimated to be $31,599,000.

The federal reimbursement for Oroville Dam and reservoir, although subject to revision as to the total amount and

to congressional appropriations, from time to time, of the unreimbursed balance, are covered by agreement between the Department and the Corps of Engineers. The amounts of the other federal reimbursements are based on tentative agreements and on discussions with the concerned federal agencies.

## State Appropriations

Capital expenditures covered by state appropriations made available to the State Water Project, prior to the effective date of the Burns-Porter Act, total about $100,275,000.

In addition to the $11,000,000 annually available to the California Water Fund from tideland oil and gas revenues, appropriations by the State of an additional $5,000,000 annually from such revenues are provided for in Assembly Bill 12, passed during the 1966 First Extraordinary Session and signed by Governor Brown. This appropriation will be used to reimburse the Department for capital costs previously incurred for multiple-purpose features allocated to the purposes of recreation and fish and wildlife enhancement, and for purchases of recreational land.

These costs are estimated to total $106,787,000. The annual appropriation which would fully reimburse such costs to the Department, together with appropriate interest charges, would extend until the year 2000 and would total $173,689,000. About $78,963,000 of the total amount are excluded from the financial analysis since this amount could not be utilized to cover capital expenditures under the existing construction schedule. The unused amount would be available for construction of additional facilities, however.

## Advance Payments from Contractors

Certain of the Project's water supply contractors, notably The Metropolitan Water District of Southern California, have requested capacity in the project transportation facilities which would permit delivery rates in excess of those to be provided by the State for other contractors. The requesting contractors must advance to the State the additional capital costs associated with excess capacity prior to construction of the facilities. The net advances so required are estimated to be $54,981,000, with credits resulting therefrom applied to the annual water charges to be paid by the requesting contractors.

The estimated total amount of miscellaneous receipts available for financing the Project are shown in the table on page 163.

## Offset Bonds

Under the Burns-Porter Act, as and when California Water Fund moneys are expended for the construction of the initial "State Water Facilities", the amount of unissued Water Bonds available for construction of these facilities is reduced in the amount of these California Water Fund expenditures. The "State Water Facilities" are defined in the Act and constitute those facilities comprising the State Water Project exclusive of the Upper Eel River Development. A corresponding amount of Water Bonds is reserved for additional facilities, which include the Upper Eel River Development. The bonds so reserved are frequently referred to as "Offset Bonds". This reservation of Water Bonds for additional facilities operates at the time the California Water Fund expenditures are made.

The effect of this provision is to limit the total of Water Bond proceeds and of California Water Fund moneys expended for the construction of the State Water Facilities to the sum of (1) $1,750,000,000, plus (2) the amount of any California Water Fund moneys so expended after the combined expenditure of $1,750,000,000 from these two sources.

The effect of the offset provision is illustrated in the table that follows. No Water Bonds are issued for the State Water Facilities after 1971, by which time $1,535,000,000 of these bonds will have been issued for that purpose. The balance of the cost of the State Water Facilities is expected to be met by California Water Fund moneys, revenue bonds, and miscellaneous receipts.

| Source | State Water Facilities | | | Additional Facilities (Upper Eel River Development) | Total State Water Project |
|---|---|---|---|---|---|
| | Through mid-1971 | Mid-1971 -1989 | Total | | |
| | (in millions of dollars) | | | | |
| Water Bonds | 1,535 | 0 | 1,535 | 162[a] | 1,697 |
| California Water Fund | 215[b] | 140 | 355 | 17 | 372 |
| Subtotal | 1,750 | 140 | 1,890 | 179 | 2,069 |
| Revenue bonds | 210 | 0 | 210 | 0 | 210 |
| Miscellaneous receipts | 146 | 60 | 206 | 48 | 254 |
| TOTAL | 2,106 | 200 | 2,306 | 227 | 2,533 |

a/ There remain some $53,000,000 of authorized by unissued Water Bonds (Offset Bonds), which are available for still further additional facilities but not for State Water Facilities as defined in the Burns-Porter Act.

b/ These expenditures reserve Offset Bonds.

| Source | Actual through 1965 | Projected 1966-1989 | Total |
|---|---|---|---|
| | (in millions of dollars) | | |
| Federal reimbursements: | | | |
| Oroville Dam and reservoir-flood control | 35 | 33 | 68 |
| Del Valle Dam and reservoir-flood control | - | 8 | 8 |
| San Joaquin Master Drain-drainage benefit | - | 32 | 32 |
| Total federal reimbursements | 35 | 73 | 108 |
| State appropriations: | | | |
| Various facilities - recreation and fish and wildlife enhancement (total through 2000) | 0 | 174 | 174 |
| Less: portion excluded available for construction of future facilities | 0 | 79 | 79 |
| Total use of appropriations made prior to the Burns-Porter Act | 100 | 0 | 100 |
| Total state appropriations | 100 | 95 | 195 |
| Advance payments from contractors | 0 | 55 | 55 |
| Rights-of-way sales and rentals | 3 | 0 | 3 |
| Estimated interest earned on receipts | 3 | 22 | 25 |
| TOTAL MISCELLANEOUS RECEIPTS | 141 | 245 | 386 |
| Applied to: Capital costs | 100 | 154 | 254 |
| Bond service | 9 | 123 | 132 |
| Plus (minus) carry-over of unused amounts | 32 | (32) | - |
| Total | 141 | 245 | 386 |

## Past Sales of Securities under the Financial Program

The first issue of securities under the financial program consisted of $50,000,000 of bond anticipation notes, sold on November 1, 1963 at an interest cost of 1.96492 percent. Since then, $450,000,000 in Water Bonds have been sold as tabulated below:

| Series | Amount, in millions of dollars | Date of sale | Net interest cost, in percent | Maturity dates |
|---|---|---|---|---|
| A | 100 | 2/18/64 | 3.520 | 9/1/73-2013 |
| B | 50 | 5/ 5/64 | 3.533 | 5/1/74-2014 |
| C | 100 | 10/ 7/64 | 3.585 | 11/1/74-2014 |
| D | 100 | 2/16/65 | 3.499 | 3/1/75-2015 |
| E | 100 | 11/23/65 | 3.717 | 12/1/75-2015 |

Tables 29 and 30 set forth, respectively, the maturities and coupon rates of the outstanding Water Bond issues and the redemption provisions thereof. Although the Burns-Porter Act contains no provision for refunding the bonds, they could be refunded under a supplemental bond act as to one or more series.

## Pattern of General Obligation Bond Service

The Burns-Porter Act provides that each issue of the Water Bonds must commence to mature not later than 10 years after issuance, with a final maturity not later than 50 years after issuance. The rate structure is intended to amortize the State's recoverable capital investment over the project repayment period, generally 50 years from the date of the investment. A bond service pattern which conforms to the revenue pattern is obtained by providing no maturity until the tenth year after issuance, with maturities scheduled so as to produce approximately level annual service for the last 41 years. It has been assumed in this report that future Water Bond issues will be sold at a net interest cost of 3.75 percent.

## Scheduling of Water Bond Sales

About 83 percent of the authorized Water Bonds are expected to be sold before the end of 1970.

The financial analysis provides for annual issues of from $170,000,000 to $230,000,000 during the 1966-70 period. Water Bonds totaling $200,000 were sold in 1965. A schedule of bond sales in such quantities will have to be reviewed in the light of market conditions prevailing from time to time. The annual amounts of Water Bond issues will necessarily vary, in practice, from the pattern set up in the financial program. The issues will have to be fitted in with the State's overall financial requirements in a planned marketing procedure; and, from time to time, the Department may again avail itself of the flexibility provided through the issuance of bond anticipation notes.

The Department and the State Treasurer have consulted and cooperated in planning the timing and amounts of Water Bond sales, in the interest of orderly marketing of all state general obligation bonds. Water Bonds will have to be sold in advance of actual construction in order to maintain a prudent level of working capital. Sales may be further advanced to fit in with the needs of the State for other financing. This will provide a backlog of unexpended bond proceeds, the investment of which at short term will produce interest income approximately offsetting the interest cost involved in selling the bonds in advance of actual requirements.

## Rate Structure

The Department has adopted a rate concept under which the rates charged for water will amortize, with interest, all reimbursable costs incurred after a facility's authorization which are properly chargeable to the construction of and the furnishing of equipment for the facilities. The weighted average interest rate on the Water Bonds issued for the Project, including bond anticipation notes, is taken as the interest rate allowed to the State. The costs include the expenditures financed by state appropriations prior to the effective date of the Burns-Porter Act, together with interest thereon.

Details of the rate structure used by the Department, and the application, are set forth in Chapter XI of this bulletin.

## Revenues Calculated from Rate Structure

The application of the conservation and transportation charges provided under the rate structure produces the annual

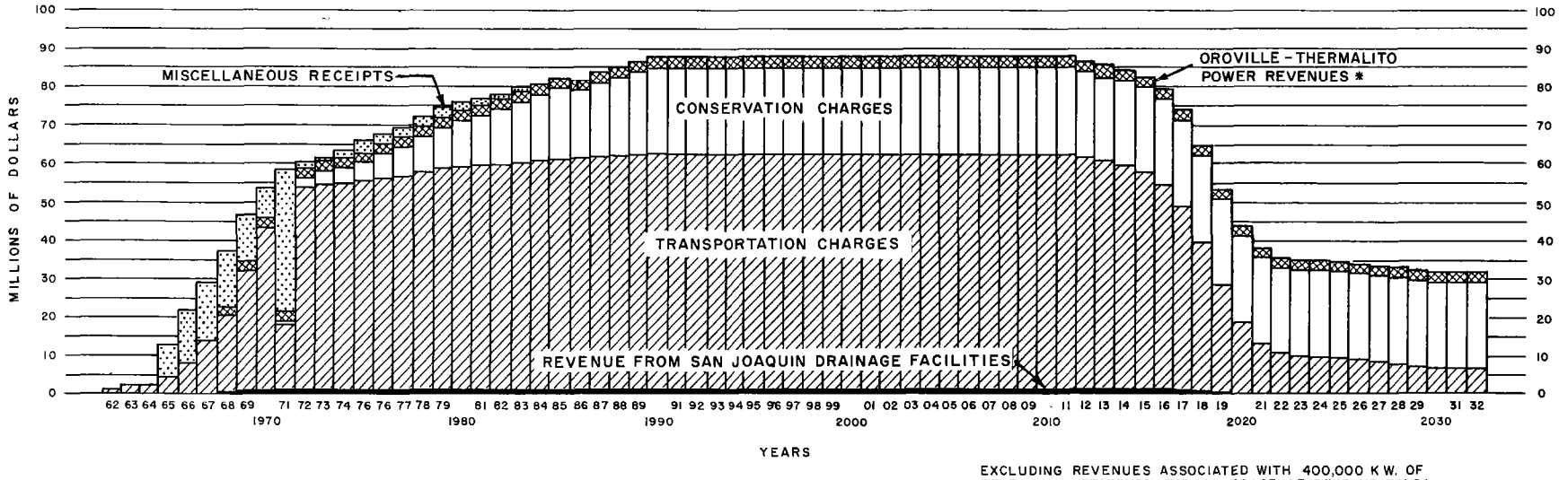
operation revenues shown in the table below. The table also shows the Department's estimate of annual expenses and the resulting net operating revenues. Annual net operating revenues, and the application thereof, are shown graphically on Figure 5.

| Period | Operating revenues | Operation, maintenance power and replacement expenses | Net operating revenues |
|---|---|---|---|
| | (in millions of dollars) | | |
| 6 years, 1960-65 | 10 | - | 10 |
| 5 years, 1966-70 | 147 | 22 | 125 |
| 5 years, 1971-75 | 401 | 136 | 265 |
| 5 years, 1976-80 | 476 | 128 | 348 |
| 5 years, 1981-85 | 559 | 165 | 394 |
| 5 years, 1986-90 | 616 | 191 | 425 |
| 10 years, 1991-2000 | 1,280 | 404 | 876 |
| 10 years, 2001-10 | 1,280 | 404 | 876 |
| 10 years, 2011-20 | 1,148 | 404 | 744 |
| 10 years, 2021-30 | 747 | 404 | 343 |
| 4 years, 2031-34 | 145 | 81 | 64 |
| Total | 6,809 | 2,339 | 4,470 |

The calculation of future revenues uses an assumed project interest rate of 3.70 percent. This rate is derived on the assumption that future Water Bond issues will be sold at a net interest cost of 3.75 percent, which compares with an average of about 3.57 percent for the outstanding Water Bonds. The assumed project interest rate of 3.70 percent is a weighted average of the actual interest cost on outstanding bond issues and the assumed interest cost of 3.75 percent on future issues.

The foregoing discussion of revenues has excluded from consideration any future recoveries under the Davis-Grunsky Program of loans and grants for local projects. Under

# NET OPERATING REVENUES




EXCLUDING REVENUES ASSOCIATED WITH 400,000 K W. OF GENERATION RESERVED FOR COVERAGE OF REVENUE BONDS

# APPLICATION OF NET OPERATING REVENUES

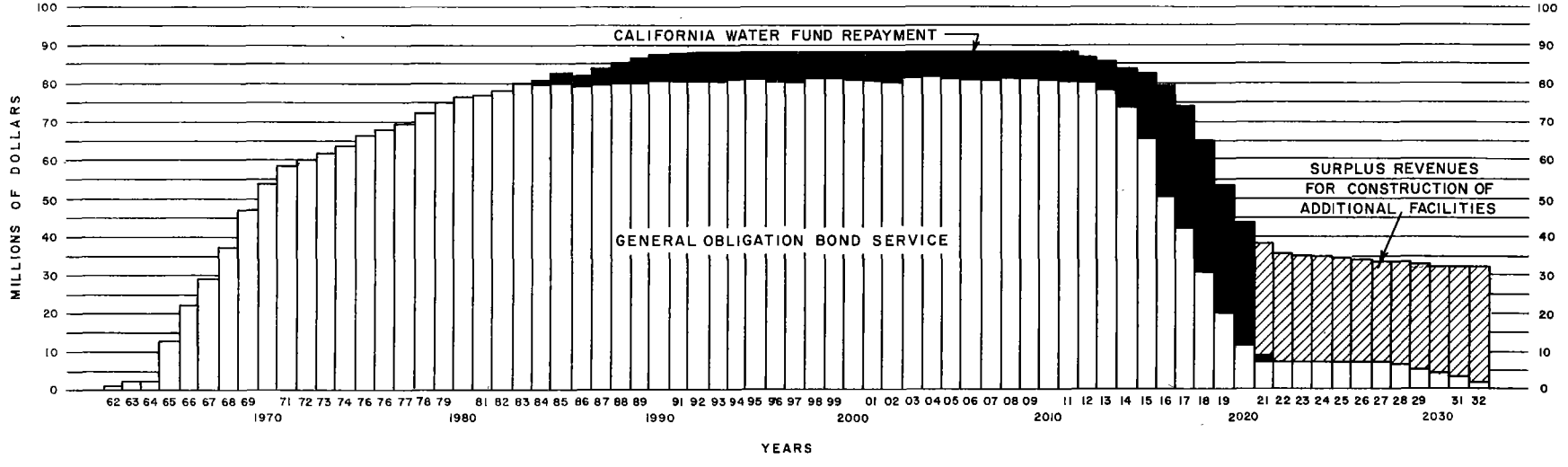



FIGURE 5

the Burns-Porter Act, $130,000,000 is set aside exclusively for this program. Each Davis-Grunsky loan is specific as to the borrowing agency's loan service and repayment obligation. The total amount of loans to be made under the program and the amortization schedule on which the State will recover such loans cannot be determined at this time. For these reasons, no payments of interest or principal on loans made under the Davis-Grunsky Program are included in the projections herein.

Estimated operation, maintenance, power and replacement expenses exclude the amounts of such expenses allocated to recreation and fish and wildlife enhancement or attributable to the Federal Government's share of the cost of operation of joint facilities, i.e., the San Luis Facilities, Delta Facilities, and San Joaquin Drainage Facilities. These amounts are assumed to be reimbursed to the State Water Project. It is assumed that the state appropriations are to be made out of the General Fund, pursuant to the Davis-Dolwig Act, and the federal reimbursements made on the basis of proposed agreements which are under discussion with the Federal Government.

When water deliveries reach the minimum project yield of 4,230,000 acre-feet annually in about 1990, the percentage breakdown of operating revenues among the principal water supply contractors of the Project is expected to be as follows:

| Water supply contractor | Project conservation facilities | Project transportation facilities |
|---|---|---|
| | (in percent) | |
| The Metropolitan Water District of Southern California | 47 | 63 |
| Kern County Water Agency | 27 | 10 |
| Antelope Valley-East Kern Water Agency | 3 | 5 |
| San Bernardino Valley Municipal Water District | 2 | 4 |
| Other 28 water supply contractors[a/] | 20 | 17 |
| Future contractors | 1 | 1 |
| | 100 | 100 |

a/ Includes two agencies with which current negotiations are expected to result in executed contracts.

# TABLES

## I thru 30

TABLE 1

CONSTRUCTION CONTRACTS
AS OF APRIL 1, 1966

| CONTRACT | | CONTRACTOR | | | | |
|---|---|---|---|---|---|---|
| | UPPER FEATHER AREA | | | | | |
| 59-19 | Frenchman Dam & reservoir | Isbell Construction Company<br>Reno, Nevada | 1,725,827 | Sep. 15, 1959 | Oct. 18, 1961 | 100 |
| 62-04 | Frenchman Dam - Road Relocations | Isbell Construction Company<br>Reno, Nevada | 258,293 | Jul. 21, 1962 | Nov. 16, 1962 | 100 |
| 62-20 | Antelope Valley Dam & reservoir | Norman I. Fidel, Inc. and Granite Construction Company<br>Eureka, California | 2,908,774* | Aug. 28, 1962 | Jul. 28, 1964 | 100 |
| 63-14 | Recreation Access Road near Frenchman reservoir | A. Teichert & Son, Inc.<br>Sacramento, California | 384,904 | Sep. 20, 1963 | Jul. 7, 1964 | 100 |
| 64-22 | Grizzly Valley Dam & Lake Davis | Pascal and Ludwig<br>Upland, California | 1,833,131* | Oct. 20, 1964 | | 40 |
| 65-20 | Frenchman Reservoir Access Road | Stroco Construction Company<br>Santa Rosa, California | 429,210* | Jun. 6, 1965 | | 46 |
| | Area Total | | 7,541,139 | | | 82 |
| | OROVILLE AREA | | | | | |
| 57-3TC-38Y | U.S. 40A, Wicks Corner to Jarbo Gap | McCammon-Underlich<br>San Diego, California | 8,546,738 | Jun. 1957 | Dec. 16, 1960 | 100 |
| Agreement No. 351653 | Poe Siding (Administered by W.P.R.R.) | Morrison-Knudsen Company<br>Oroville, California | 508,588* | Dec. 1, 1961 | Dec. 7, 1962 | 100 |
| 57-03 | Western Pacific R.R. - Tunnels Nos. 4 & 5 | Peter Kiewit Sons' Company<br>Omaha, Nebraska | 10,417,600 | May 24, 1957 | Dec. 30, 1960 | 100 |
| 57-13 | Western Pacific R.R. - North Fork Bridge | Pacific Bridge Company<br>Alameda, California | 1,580,940 | Feb. 10, 1958 | Jun. 29, 1960 | 100 |
| 58-01 | Western Pacific R.R. - Feather River Bridge | John C. Gist<br>Sacramento, California | 1,293,159 | Apr. 29, 1958 | Mar. 16, 1960 | 100 |
| 59-16 | Western Pacific R.R. - Tunnels Nos. 2 & 3 | Gordon H. Ball, Gordon H. Ball, Inc., and Ball & Simpson<br>Danville, California | 6,236,000 | Aug. 11, 1959 | Sep. 8, 1961 | 100 |
| 60-07 | Western Pacific R.R. - Tunnel No. 1 | Frazier-Davis Construction Company<br>St. Louis, Missouri | 1,951,632 | Aug. 1, 1960 | Nov. 3, 1961 | 100 |
| 60-08 | Western Pacific R.R. - Grading | Gordon H. Ball, Gordon H. Ball, Inc., and Ball & Simpson<br>Danville, California | 4,043,180 | Sep. 15, 1960 | Apr. 20, 1962 | 100 |
| 60-14TC16-Y | U.S. 40A - West Branch Bridge | Stolte & Morrison-Knudsen<br>Oakland, California | 8,620,000 | Nov. 10, 1959 | Feb. 20, 1962 | 100 |
| 60-21 | Western Pacific R.R. - Western Union Telegraph Line Relocation | Coopman Electric Company<br>San Francisco, California | 262,352 | Oct. 28, 1960 | Aug. 2, 1962 | 100 |
| 61-05 | Diversion Tunnel No. 1 | Frazier-Davis Construction Company<br>St. Louis, Missouri | 6,193,683* | Aug. 18, 1961 | Jan. 16, 1964 | 100 |
| 61-15 | Palermo Outlet Works | Morrison-Knudsen Company<br>Oroville, California | 801,118 | Nov. 16, 1961 | May 7, 1963 | 100 |
| 61-17 | Western Pacific R.R. - Section Headquarters | El Rey Builders, Inc.<br>Van Nuys, California | 168,324 | Dec. 11, 1961 | Jul. 13, 1962 | 100 |
| 61-21 | Waterproofing North Fork and Feather River Bridges | Sacramento Roofing & Insulation Company, Inc.<br>Sacramento, California | 16,658 | Jan. 3, 1962 | Mar. 30, 1962 | 100 |
| 62-01 | Feather River Hatchery - Interim Facilities | Frazier-Davis Construction Company<br>St. Louis, Missouri | | | | 100 |
| 62-3T3C26 | U.S. 40A - Oroville to Wicks Corner | Harms Bros. and Lord & Bishop, Inc.<br>Sacramento, California | 3,741,510* | Jan. 4, 1962 | Jan. 16, 1964 | 100 |
| 63-3T13C1 | U.S. 40A - Approaches & Surfacing West Branch Bridge | Baldwin Construction Company<br>Marysville, California | 222,241 | Mar. 22, 1962 | Sep. 26, 1962 | 100 |
| 62-05 | Oroville Dam, Diversion Tunnel No. 2, & Thermalito Diversion Dam | Oro Dam Constructors<br>Oroville, California | 120,863,333* | Aug. 13, 1962 | | 78 |
| 62-11 | Oroville Seismograph Station | El Rey Builders, Inc.<br>Van Nuys, California | 39,469 | Jul. 23, 1962 | Oct. 26, 1962 | 100 |
| 62-13 | Left Abutment Access Road | Piombo Construction Company<br>San Carlos, California | 549,400 | Jul. 14, 1962 | Apr. 9, 1963 | 100 |
| 62-27 | Oroville Construction Headquarters | A. Teichert & Son, Inc.<br>Sacramento, California | 938,000* | Nov. 16, 1962 | Oct. 25, 1963 | 100 |
| 62-30 | Middle Fork Bridge | Bethlehem Steel Company<br>San Francisco, California | 4,436,104* | Feb. 11, 1963 | Aug. 24, 1965 | 100 |
| 63-04 | Employee Housing | Nomellini Construction Company<br>Stockton, California | 618,543 | Jul. 9, 1963 | May 13, 1964 | 100 |
| 63-05 | Turbines & Pump Turbines - Oroville Powerplant | Allis-Chalmers Mfg. Company<br>York, Pennsylvania | 7,238,791* | | | 59 |
| 63-06 | Oroville Powerplant - Initial Contract | McNamara Corp. and G. A. Fuller Company<br>Burlingame, California | 18,366,780* | Jun. 24, 1963 | | 66 |

*Bid amount.

TABLE 1 (Continued)

CONSTRUCTION CONTRACTS
AS OF APRIL 1, 1966



| SPECIFICATION NUMBER | CONTRACT | CONTRACTOR | TOTAL COST (in dollars) | DATE STARTED | DATE COMPLETED | PERCENT COMPLETE APRIL 1, 1966 |
|---|---|---|---|---|---|---|
| | OROVILLE AREA (Continued) | | | | | |
| 63-11 | Modification & Repairs to Powers Canal | Baldwin Construction Company<br>Marysville, California | 24,262 | Mar. 28, 1963 | Jun. 17, 1963 | 100 |
| 63-35 | Oroville to Quincy County Road - Forbestown Road to Middle Fork Bridge | Piombo Construction Company<br>San Carlos, California | 1,521,868 | Jan. 3, 1964 | Sep. 8, 1965 | 100 |
| 63-38 | Construction Overlook Modifications | A. Teichert & Son, Inc.<br>Sacramento, California | 114,280 | Dec. 18, 1963 | May 15, 1964 | 100 |
| 63-36 | Powers Canal Repair & Added Construction | Harms Bros.<br>Sacramento, California | 65,984 | Dec. 20, 1963 | Mar. 10, 1964 | 100 |
| 63-39 | Thermalito Powerplant Pump Turbines, Kapland Turbine and Governors | Allis-Chalmers Mfg. Co.<br>York, Pennsylvania | 3,766,785* | Feb. 25, 1964 | | 50 |
| 64-13 | Oroville Powerplant 114-inch Spherical Valves | Baldwin-Lima-Hamilton Corp.<br>Philadelphia, Pa. | 2,259,760* | Mar. 27, 1964 | | 69 |
| 64-17 | Pioneer Cemetery and Grave Relocations | Frank P. Donovan<br>Sacramento, California | 67,714 | Jun. 11, 1964 | Sep. 2, 1964 | 100 |
| 64-19 | Oroville Powerplant Bridge Cranes | Star Iron & Steel Company<br>Tacoma, Washington | 299,950 | Jun. 26, 1964 | Jun. 25, 1965 | 100 |
| 64-16 | Oroville Powerplant Generators and Motor Generators | Westinghouse Electric Corp.<br>Sacramento, California | 6,427,899* | Jul. 3, 1964 | | 4 |
| 64-25 | Thermalito Diversion Dam Slide Gates | Rodney Hunt Machine Co.<br>Farmingham, Mass. | 20,876* | Jun. 29, 1964 | Nov. 27, 1964 | 100 |
| 64-26 | Thermalito Diversion Dam Fixed Dispersion Cone Valve | Willamette Iron & Steel Co.<br>Portland, Ore. | 24,418* | Jun. 25, 1964 | | 95 |
| 64-30 | Headquarters & Employee Housing Landscaping | Frank M. Smith<br>Eureka, California | 40,982 | Jul. 24, 1964 | Oct. 15, 1964 | 100 |
| 64-44 | Bidwell Bar Emergency Crossing | Frank P. Donovan<br>Santa Maria, California | 31,189 | Sep. 28, 1964 | Nov. 24, 1964 | 100 |
| 64-31 | Thermalito Power Canal Relocations | Osborn Construction Company<br>Redding, California | 963,647 | Oct. 30, 1964 | Nov. 1, 1965 | 100 |
| 64-37 | Thermalito Powerplant | Guy F. Atkinson Company<br>So. San Francisco, California | 15,248,037* | Dec. 4, 1964 | | 36 |
| 64-43 | Thermalito Diversion Dam Radial Gates & Hoists | Berkeley Steel Construction Co., Inc.<br>Berkeley, California | 751,400* | Dec. 11, 1964 | | 99 |
| 64-51 | Temporary Access Road - Middle Fork Bridge to Existing County Road | Crooks Brothers Construction Co.<br>Fair Oaks, California | 327,904* | Dec. 3, 1964 | Jun. 16, 1965 | 100 |
| 65-02 | Furnish and Install One Generator and Three Motor Generators - Thermalito Powerplant | Allis-Chalmers Manufacturing Co.<br>Milwaukee, Wisconsin | 2,150,000* | Jun. 3, 1965 | | 1 |
| 65-05 | Clearing Oroville Reservoir site | C. J. Langenfelder and Son, Inc.<br>Baltimore, Maryland | 3,515,970* | Apr. 12, 1965 | | 55 |
| 65-09 | Oroville Dam Spillway | Oro Pacific Constructors and George Farnsworth Construction Corp.<br>Oroville, California | 12,249,850* | Jun. 25, 1965 | | 17 |
| 65-10 | Procurement - Oroville Generator Switchgear | Westinghouse Electric Corp.<br>Sacramento, California | 347,754* | May 55, 1965 | | 8 |
| 65-11 | Procurement - Trashracks, Supports and Control Shutters - Oroville Powerplant | Michel and Pfeffer Iron Works, Inc.<br>So. San Francisco, California | 1,961,870* | Apr. 30, 1965 | | 51 |
| 65-14 | Procurement - Oroville Powerplant Governors | Baldwin-Lima-Hamilton<br>Philadelphia, Pennsylvania | 415,294* | May 21, 1965 | | 9 |
| 65-23 | Oroville-Feather Falls Road Relocation | O. K. Mittry and Sons<br>Gardena, California | 2,347,401* | Dec. 23, 1965 | | 5 |
| 65-25 | Procurement - Control Switchyard Oroville Powerplant | Westinghouse Electric Corp.<br>Sacramento, California | 307,334* | Aug. 4, 1965 | | 6 |
| 65-26 | South Fork Bridge | Rothchild, Raffin, and Weirick and Piombo Construction Company<br>San Carlos, California | 2,733,236* | Aug. 10, 1965 | | 15 |
| 65-27 | Thermalito Forebay and Afterbay | Guy F. Atkinson Company<br>So. San Francisco, California | 14,452,680* | Oct. 25, 1965 | | 3 |
| 65-31 | Procurement - Oroville Powerplant Transformers | Maloney Electric Company<br>St. Louis, Missouri | 1,434,990* | Aug. 25, 1965 | | 4 |
| 65-34 | Procurement - Thermalito Powerplant Power Transformers | Westinghouse Electric Company<br>Sacramento, California | 536,631* | Aug. 19, 1965 | | 5 |
| 65-37 | Thermalito Power Canal | Morrison-Knudsen Company<br>Southgate, California | 5,549,348* | Oct. 7, 1965 | | 7 |
| Butte County 27561-65-1 | Oro Quincy Road Relocation | Piombo Construction Company<br>San Carlos, California | 4,363,254* | May 11, 1965 | | 27 |
| 65-38 | Procurement - High Voltage Circuit Breakers, Oroville Powerplant | General Electric Company<br>Sacramento, California | 924,790* | Dec. 29, 1965 | | 1 |

*Bid amount.

TABLE 1 (Continued)

CONSTRUCTION CONTRACTS
AS OF APRIL 1, 1966



| SPECIFICATION NUMBER | CONTRACT | CONTRACTOR | TOTAL COST (in dollars) | DATE STARTED | DATE COMPLETED | PERCENT COMPLETE APRIL 1, 1966 |
|---|---|---|---|---|---|---|
| | OROVILLE AREA (Continued) | | | | | |
| 65-44 | Log Scaling Station, Oroville Forbes Forbestown Road | Dair A. Tandy Oroville, California | 7,777* | Jan. 8, 1966 | Feb. 14, 1966 | 100 |
| 65-46 | Procurement - Thermalito Afterbay Gates - Hoists and Standby Generators | Rodney Hunt Machine Company Farmington, Mass. | 227,613* | Dec. 28, 1965 | | 0 |
| 65-47 | Thermalito Diversion Dam Electrical Installation | Abbett Electric Corp. San Francisco, California | 103,963* | Jan. 12, 1966 | | 2 |
| 65-52 | Penstock Intake Completion - Oroville Powerplant | Yuba Consolidated Industries, Inc. Benecia, California | 4,429,816* | Jan. 25, 1966 | | 3 |
| 65-57 | Procurement - Secondary Unit Sub-station, Station Service, Thermalito Powerplant | Golden Gate Switchboard Company San Francisco, California | 77,000* | Feb. 8, 1966 | | 0 |
| 65-58 | Procurement - 13.8 kv Generator, Switchgear and Bus, Thermalito Powerplant | Allis-Chalmers Mfg. Co. York, Penn. | 2,150,000* | May 7, 1965 | | 1 |
| 65-59 | Oroville Construction Overlook Relocation | Baldwin Contracting Co., Inc. Marysville, California | 123,887* | Jan. 19, 1966 | | 3 |
| 66-05 | Procurement - Bulkhead Gates for Diversion Tunnel No. 1 | Berkeley Steel Company Berkeley, California | 67,000* | Jan. 28, 1966 | | 0 |
| | AREA TOTAL | | 301,185,282 | | | 65 |
| | SOUTH BAY AQUEDUCT | | | | | |
| 59-22 | Interim Canal, Forebay Pumping Plant & Bethany Dam** | O. K. Mittry & Sons Gardena, California | 876,339 | Nov. 25, 1959 | Mar. 9, 1961 | 100 |
| 60-01 | South Bay Pumping Plant | Fred J. Early, Jr., Company, Inc. Torrance, California | 869,157 | May 226, 1960 | May 23, 1962 | 100 |
| 60-14 | Pumping Units - South Bay & Forebay Pumping Plants | Fairbanks-Morse & Company Sacramento, California | 101,324 | Sep. 9, 1960 | Aug. 7, 1962 | 100 |
| 60-15 | Surge Tank to Patterson Reservoir | Case-Hood Whittier, California | 3,204,072 | Nov. 15, 1960 | Aug. 8, 1962 | 100 |
| 62-08 | Asphalt Lining - Interim Canal | Capital Roofing Company, Sacramento, California | 38,703 | Mar. 19, 1962 | Apr. 9, 1962 | 100 |
| 62-12 | Alameda Division Canal | McGuire & Hester Oakland, California | 1,420,018 | Aug. 7, 1962 | Aug. 27, 1963 | 100 |
| 62-15 | Mortar Lining - Interim Canal | Sacramento Gunite Company Sacramento, California | 9,902 | Jun. 1, 1962 | Jun. 8, 1962 | 100 |
| 62-35 | Project Maintenance Headquarters | Red Feather Construction Company Hayward, California | 38,104 | Jan. 22, 1963 | Jun. 14, 1963 | 100 |
| 63-02 | Instrumentation & Control | Darrel E. Jordon Fullerton, California | 57,149 | May 27, 1963 | May 15, 1964 | 100 |
| 63-03 | La Costa & Mission Tunnels | Peter Kiewit Sons' Company Omaha, Nebraska | 3,082,458 | Apr. 9, 1963 | Aug. 18, 1964 | 100 |
| 63-12 | Forebay Pump Procurement | Fairbanks-Morse & Company Sacramento, California | 21,048* | Apr. 11, 1963 | Mar. 31, 1966 | 100 |
| 63-13 | South Bay Pump Procurement | Peerless Pump Division Sacramento, California | 108,300* | Apr. 11, 1963 | Dec. 17, 1964 | 100 |
| 63-15 | Installation of Additional Pump Units-South Bay & Forebay Pumping Plants | Fred J. Early, Jr., Company, Inc. Torrance, California | 88,222 | Jul. 25, 1963 | Jun. 15, 1964 | 100 |
| 63-16 | Del Valle & Sunol Pipelines | U. S. Steel Corporation So. San Francisco, California | 4,200,332 | Jul. 10, 1963 | Mar. 22, 1965 | 100 |
| 63-24 | Floor Surfacing - South Bay Pumping Plant | Kivah Corporation Sacramento, California | 4,546 | Aug. 22, 1963 | Sep. 19, 1963 | 100 |
| 63-31 | Patterson Reservoir Repair | McGuire & Hester Oakland, California | 24,865 | Aug. 24, 1963 | Sep. 23, 1963 | 100 |
| 63-33 | Pump Units Nos. 8 & 9 - South Bay Pumping Plant | Johnston Pump Company Pasadena, California | 129,021* | Oct. 24, 1963 | | 99 |
| 63-34 | South Bay Pumping Plant - 2nd Stage | S & Q Construction Company So. San Francisco, California | 632,926 | Oct. 22, 1963 | Aug. 31, 1965 | 100 |
| 63-40 | 30-Inch Discharge Valves - South Bay Pumping Plant - 2nd Stage | Chapman Valve Mfg. Company Emeryville, California | 52,921* | Feb. 25, 1964 | Apr. 1965 | 100 |
| 63-41 | South Bay Pumping Plant to Dyer Canal-- 2nd Stage | Green Construction Company and Winton Bros. Company San Mateo, California | 1,306,265 | Jan. 23, 1964 | Aug. 10, 1965 | 100 |
| 64-03 | Dyer Canal Check Structure | Roen Construction Company Danville, California | 30,018 | Feb. 28, 1964 | Dec. 14, 1964 | 100 |
| 64-04 | Niles & Santa Clara Division Pipeline | Kaiser Steel Corp. Oakland, California | 4,070,660* | Apr. 9, 1964 | Jun. 8, 1965 | 100 |
| 64-24 | Santa Clara Terminal Facilities | McGuire and Hester Oakland, California | 1,111,111* | Jun. 17, 1964 | Jul. 2, 1965 | 100 |
| 64-49 | Modification of Patterson Reservoir | A. Teichert & Son, Inc. Sacramento, California | 75,872 | Dec. 4, 1964 | Aug. 10, 1965 | 100 |

*Bid amount.
**Feature of the California Aqueduct.

TABLE 1 (Continued)

CONSTRUCTION CONTRACTS
AS OF APRIL 1, 1966



| SPECIFICATION NUMBER | CONTRACT | CONTRACTOR | TOTAL COST (in dollars) | DATE STARTED | DATE COMPLETED | PERCENT COMPLETE APRIL 1, 1966 |
|---|---|---|---|---|---|---|
| | SOUTH BAY AQUEDUCT (Continued) | | | | | |
| 64-53 | Grout Sealing Mission Tunnel | The Prepakt Concrete Company Cleveland, Ohio | 35,147 | Jan. 11, 1965 | Mar. 5, 1965 | 100 |
| 65-17 | Del Valle reservoir - County Road Relocation Mines Road to Naftzger Ranch Ranch | L. Stevens and L. Stevens, Inc. Stockton, California | 1,256,439* | Jun. 21, 1965 | | 45 |
| 65-18 | Procurement - Sunol Pipeline Blowoff Valve | Underground Construction Co. San Leandro, California | 28,700* | Sep. 2, 1965 | Mar. 8, 1966 | 100 |
| 65-22 | Furnish and Install 20-inch Hollow Cone Valve - Sunol Pipeline | Yuba Manufacturing Division Benicia, California | 14,300* | Sep. 2, 1965 | | 50 |
| 65-33 | South Bay Aqueduct - Control System | Aerojet-General, Corp. Sacramento, California | 772,460* | Jan. 5, 1966 | | 3 |
| 65-49 | Highway 50 Tunnel Extension | Halbach & Flynn Castro Valley, California | 88,696* | Jan. 4, 1966 | | 31 |
| 65-54 | Electrical Modification to South Bay Pumping Plant | C. W. Roen Construction Co. Danville, California | 28,195* | Dec. 29, 1965 | | 76 |
| 66-01 | Del Valle Dam and reservoir | Green & Winston Bros. Construction Co. San Mateo, California | 16,577,802* | Mar. 28, 1966 | | 0 |
| | TOTAL SOUTH BAY AQUEDUCT | | 40,355,072 | | | 55 |
| | NORTH SAN JOAQUIN DIVISION, CALIFORNIA AQUEDUCT | | | | | |
| 63-01 | 1st Stage Construction, Sta. 2500 to Sta. 3000 | Eugene Luhr Company and Elmer G. Wendt Rio Vista, California | 885,469 | Feb. 8, 1963 | Dec. 5, 1963 | 100 |
| 63-21 | Delta Seismograph Station | Chas. I. Cunningham Company Oakdale, California | 2,999 | Oct. 5, 1963 | Jan. 3, 1964 | 100 |
| 63-22 | Intake Channel - Sta. 85+00 to Sta. 174+50 | Peter Kiewit Sons' Company Omaha, Nebraska | 5,955,761 | Jul. 27, 1963 | Oct. 26, 1964 | 100 |
| 63-28 | 1st Stage Construction, Sta. 175 to Sta. 655 | Morrison-Knudsen Company Southgate, California | 1,962,933 | Sep. 6, 1963 | Nov. 20, 1964 | 100 |
| 64-02 | Aqueduct - Del Puerto Canyon Road to Orestimba Creek | Western Contracting Corp. Sioux City, Iowa | 7,775,441* | May 11, 1964 | | 70 |
| 64-10 | Delta Pumping Plant - Pumps | Newport News Shipbuilding and Drydock Company Newport News, Va. | 1,621,365* | Jun. 30, 1964 | | 51 |
| 64-20 | Delta Pumping Plant Bridge Crane | American Crane and Hoist Corp. Downey, California | 90,000* | Aug. 11, 1964 | Feb. 8, 1966 | 100 |
| 64-08 | Delta Operation and Maintenance Facilities Phase I | Baldwin - Warren Co., Inc. San Francisco, California | 1,164,251 | Aug. 12, 1964 | Jan. 7, 1966 | 100 |
| 64-09 | Delta Pumping Plant - Initial Contract | Guy F. Atkinson Company So. San Francisco, California | 6,332,053* | Aug. 25, 1964 | | 81 |
| 64-28 | Aqueduct - Orestimba Creek to San Luis Forebay | Western Constructing Corp. Sioux City, Iowa | 12,694,128* | Sep. 3, 1964 | | 40 |
| 64-48 | Procurement - Discharge Valves | Westinghouse Electric Corp. Sacramento, California | 1,070,000* | May 24, 1965 | | 8 |
| 65-06 | Aqueduct - Delta Pumping Plant to Chrisman Road | Wunderlich Company Palo Alto, California | 11,145,712* | Jun. 3, 1965 | | 30 |
| 65-07 | Intake Channel, Station 0+00 to 85+00 | Piombo Construction Co. San Carlos, California | 2,448,718* | May 3, 1965 | | 59 |
| 65-08 | Aqueduct - Chrisman Road to Del Puerto Canyon Road | Western Contracting Corp. Sioux City, Iowa | 12,390,374* | May 20, 1965 | | 19 |
| 65-12 | Motors - Delta Pumping Plant | General Electric Company San Francisco, California | 3,045,394* | May 17, 1965 | | 1 |
| 65-32 | Procurement - Power Transformers For Delta Pumping Plant | General Electric Company Sacramento, California | 438,949* | Aug. 11, 1965 | | 7 |
| 65-35 | Procurement - Power Circuit Breakers For Delta Pumping Plant | Westinghouse Electric Corp. Sacramento, California | 75,255* | Aug. 25, 1965 | | 5 |
| 65-39 | Delta Operation and Maintenance Facilities, Phase II | Baldwin-Warren Company San Francisco, California | 1,258,697* | Oct. 28, 1965 | | 29 |
| 65-40 | Delta Pumping Plant Switchgear and Station Service | General Electric Company Sacramento, California | 508,682* | Sep. 13, 1965 | | 6 |
| 14-089604 | Bridges - Patterson Pass and U.S. Highway 50 | Gallagher and Burke (State Share) Oakland, California | 522,115 | Apr. 21, 1965 | | 80 |
| 65-41 | Delta Pumping Plant - Completion | Baldwin-Warren Company San Francisco, California | 2,865,616 | Feb. 7, 1966 | | 1 |
| | DIVISION TOTAL | | 74,253,912 | | | 47 |

*Bid amount.

TABLE 1 (Continued)

CONSTRUCTION CONTRACTS
AS OF APRIL 1, 1966



| SPECIFICATION NUMBER | CONTRACT | CONTRACTOR | TOTAL COST (in dollars) | DATE STARTED | DATE COMPLETED | PERCENT COMPLETE APRIL 1, 1966 |
|---|---|---|---|---|---|---|
| | SAN LUIS DIVISION, CALIFORNIA AQUEDUCT (Major U.S.B.R. Contracts) | | | | | |
| DC-5818 | Detour of State Highway Route 152 | James H. Harrison<br>San Ardo, California | 450,984 | Aug. 13, 1962 | Feb. 9, 1963 | 100 |
| DC-5821 | Preconsolidation - Reach 2 | Wilmoth Construction Company<br>Frenso, California | 273,746 | Oct. 24, 1962 | Jan. 22, 1963 | 100 |
| DS-5825 | Pump-Turbines - San Luis Pumping-Generating Plant | Hitachi, New York, Ltd.<br>New York, New York | 3,221,813* | Nov. 20, 1962 | | 85 |
| 64-10T13C1 | Relocation of State Highway Route 152 (Administered by California Division of Highways) | McNamara & Mannix<br>Burlingame, California | 12,803,466 | Jan. 25, 1963 | | 100 |
| DC-5862 | Preconsolidation - Reach 3 | Eugene Luhr Co. and Elmer G. Wendt<br>Rio Vista, California | 1,230,027 | Feb. 8, 1963 | Nov. 1963 | 100 |
| DC-5855 | San Luis Dam, Pumping-Generating Plant and Forebay Dam | Morrison-Knudsen Company, Utah Construction & Mining Company, and Brown & Root<br>Southgate, California | 85,926,608* | Feb. 4, 1963 | | 83 |
| DS-5890 | Pumps - Mile 18 Pumping Plant (Dos Amigos Pumping Plant) | English Electric Company<br>New York, New York | 2,039,250* | Jun. 10, 1963 | | 88 |
| DC-5900 | San Luis Canal - Reach 1 | Guy F. Atkinson Company<br>San Francisco, California | 19,100,000 | Jun. 5, 1963 | Dec. 9, 1965 | 100 |
| DC-5977 | San Luis Canal - Reach 2 | Morrison-Knudsen Company and Utah Construction & Mining Company<br>Southgate, California | 11,946,556* | Aug. 30, 1963 | | 56 |
| DC-5982 | Mile 18 Pumping Plant (Dos Amigos Pumping Plant) | Stolte, Sundt & Santa Fe<br>Oakland, California | 8,972,555* | Sep. 18, 1963 | | 95 |
| DC-6080 | Los Banos Creek Detention Dam | Guy F. Atkinson Co.<br>San Francisco, California | 3,556,954* | May 19, 1964 | Apr. 19, 1966 | 100 |
| DC-6148 | San Luis Canal - Reach 3 | Peter Kiewit Sons' Company<br>Omaha, Nebraska | 24,175,380* | Dec. 5, 1964 | | 18 |
| DS-6137 | Transformers for Mile 18 Pumping Plant (Dos Amigos Pumping Plant) and San Luis Pumping-Generating Plant | General Electric Company<br>Pittsfield, Mass. | 1,345,716* | Aug. 27, 1964 | | 43 |
| DS-6180 | Synchronou Motors - Dos Amigos Pumping Plant | A.S.E.A. Electric Co.<br>San Francisco, California | 3,080,725* | Feb. 4, 1965 | | 4 |
| DC-6266 | Little Panoche Creek Detention Dam | Darkenwald Construction Co. and Morrison-Knudsen Co.<br>Sacramento, California | 2,263,989* | May 6, 1965 | | 53 |
| DC-6255 | Dos Amigos Pumping Plant Contract Completion | Gunther and Shirley Co. and E.V. Lane Corp.<br>Sherman Oaks, California | 2,832,607* | Jun. 10, 1965 | | 10 |
| DC-6280 | San Luis Canal - Reach 4 | Granite Construction Co. and Gordon H. Ball Enterprises<br>Watsonville, California | 6,416,436* | Jul. 7, 1965 | | 21 |
| DC-6344 | San Luis Canal - Reach 5 | Granite Construction Co. and Gordon H. Ball Enterprises<br>Watsonville, California | 15,608,556* | Nov. 17, 1965 | | 1 |
| | DIVISION TOTALS, STATE SHARE<br>FEDERAL SHARE<br>TOTAL | 112,884,952<br>92,360,416 | 205,245,368 | | | 67 |
| | SOUTH SAN JOAQUIN DIVISION, CALIFORNIA AQUEDUCT | | | | | |
| 63-18 | Drilling & Developing Two 16-inch Water Wells | Midway Drilling & Pump Company<br>Saticoy, California | 152,008 | Jun. 24, 1963 | Dec. 16, 1963 | 100 |
| 63-32 | Preconsolidation Features - Standard Oil Co. Rd. to Grapevine Cr. (Mi. 284 to Mi. 289) | Pascal & Ludwig<br>Upland, California | 635,092 | Nov. 8, 1963 | Apr. 19, 1965 | 100 |
| 64-36 | Pumps, Motors and Structures for Water Wells | Pylon, Inc.<br>Compton, California | 175,957 | Jul. 30, 1964 | Sep. 22, 1965 | 100 |
| 64-21 | Preconsolidation Features - Wheeler Ridge Pumping Plant to Standard Oil Co. Rd. (Mi. 279 to Mi. 284) | William H. Schallock<br>Bakersfield, California | 796,403 | Jun. 22, 1964 | Apr. 19, 1965 | 100 |
| 64-41 | Preconsolidation Features Lerdo Highway to Tupman Road (Mi. 217 to Mi. 238) | Peter Kiewit Sons' Company<br>Arcadia, California | 2,213,629* | Nov. 18, 1964 | Nov. 26, 1965 | 100 |
| 64-46 | Preconsolidation Features Buena Vista Pumping Plant to Wheeler Ridge Pumping Plant (Mi. 256 to Mi. 279) | Eugene Luhr & Company and Hood Corp. and Hood Construction Co.<br>West Sacramento, California | 3,910,386* | Jan. 2, 1965 | Jan. 2, 1966 | 100 |
| 65-16 | Preconsolidation Features - Arroyo Pino Vicinity South San Joaquin | W. M. Lyles Company<br>Avenal, California | 16,972 | May 17, 1965 | Jun. 18, 1965 | 100 |
| 65-28 | Aqueduct - Avenal Gap to 7th Standard Road (Mile 187 - Mile 221) | Gordon H. Ball Enterprises and Granite Construction Company<br>Watsonville, California | 20,883,720* | Jul. 24, 1965 | | 11 |
| 65-36 | Buena Vista Pumping Plant Intake Channel | Griffith Company<br>Los Angeles, California | 3,447,228* | Sep. 28, 1965 | | 26 |

*Bid amount.

TABLE 1 (Continued)

CONSTRUCTION CONTRACTS
AS OF APRIL 1, 1966



| SPECIFICATION NUMBER | CONTRACT | CONTRACTOR | TOTAL COST (in dollars) | DATE STARTED | DATE COMPLETED | PERCENT COMPLETE APRIL 1, 1966 |
|---|---|---|---|---|---|---|
| | SOUTH SAN JOAQUIN DIVISION, CALIFORNIA AQUEDUCT (Continued) | | | | | |
| A-153431 | Preconsolidation Water Agreement | Buena Vista Associates, Inc. San Francisco, California | 2,525,301* | Oct. 1964 | | 63 |
| A-153430 | Preconsolidation Water Agreement | Kern County Canal & Water Co. Bakersfield, California. | 972,360* | Jul. 1, 1965 | | 22 |
| A-153697 | Preconsolidation Water Agreement | Buena Vista Water Storage District Buttonwillow, California | 522,192* | Jul. 1, 1965 | | 29 |
| A-354021 | Preconsolidation Water Agreement | Western Oilfield Supply Company Bakersfield, California | 27,101* | Jun. 1965 | | 100 |
| 66-03 | Aqueduct - Kettleman City to Avenal Gap | Gordon H. Ball and Granite Construction Co. Watsonville, California | 9,108,350* | Feb. 17, 1966 | | 0 |
| 66-11 | Intake Channels - Wheeler Ridge and Wind Gap Pumping Plants | Gordon H. Ball Enterprises and Altfillish-Fulton Co. Danville, California | 4,575,273* | | | 0 |
| 66-12 | Preconsolidation - Sunset R. R. to Maricopa Highway | W. H. Schallock Bakersfield, California | 565,410* | | | 0 |
| | DIVISION TOTAL | | 50,527,382 | | | 26 |
| | TEHACHAPI DIVISION, CALIFORNIA AQUEDUCT | | | | | |
| 63-19 | Tehachapi Access Roads | W. H. Schallock Bakersfield, California | 572,306 | Jul. 9, 1963 | Jun. 17, 1964 | 100 |
| 64-34 | Carley V. Porter Tunnel, Phase I | J. F. Shea Co., Inc. Redding, California | 1,353,382 | Jul. 22, 1964 | Jun. 8, 1965 | 100 |
| 65-04 | South Portal - Carley V. Porter Tunnel | A. A. Baxter Corp. El Cajon, California | 659,715 | Mar. 29, 1965 | Nov. 29, 1965 | 100 |
| 65-29 | Carley V. Porter Tunnel | Dravo Corp., Guy F. Atkinson and S. J. Groves and Sons San Francisco, California | 33,788,800* | Sep. 7, 1965 | | 5 |
| 65-56 | Tehachapi Lift Adit to Discharge Line Tunnels | Gates & Fox Co., Inc. Placerville, California | 591,707* | Jan. 31, 1966 | | 48 |
| | DIVISION TOTAL | | 36,965,910 | | | 12 |
| | MOJAVE DIVISION, CALIFORNIA AQUEDUCT | | | | | |
| 65-01 | Neenach Aqueduct Embankment | M. J. Bevanda Company North Hollywood, California | 224,225* | Jun. 22, 1965 | Mar. 8, 1966 | 100 |
| | DIVISION TOTAL | | 224,225 | | | 100 |
| | WEST BRANCH, CALIFORNIA AQUEDUCT | | | | | |
| 65-42 | Castaic Dam Foundation Trench | Tomei Construction Co. Manhattan Beach, California | 412,269 | Aug. 11, 1965 | Dec. 21, 1965 | 100 |
| 66-16 | Castaic Dam Diversion Tunnel | Peter Kiewit Sons' Company Omaha, Nebraska | 8,580,940* | | | 0 |
| | DIVISION TOTAL | | 8,993,209 | | | 5 |
| | COASTAL BRANCH, CALIFORNIA AQUEDUCT | | | | | |
| 65-55 | Preconsolidation - Devil's Den Vicinity | Eugene Luhr & Co. | 81,288* | Dec. 22, 1965 | Feb. 25, 1966 | 100 |
| 66-04 | Aqueduct - Mile 0 to Mile 14.8 | Fredrickson Watson Construction Co. Oakland, California | 3,674,659* | Mar. 22, 1966 | | 0 |
| | COASTAL BRANCH TOTAL | | 3,755,947 | | | 2 |
| | TOTAL CONTRACTS AS OF APRIL 1, 1966 | | | | | |
| | STATE SHARE | 636,687,030 | | | | 55 |
| | FEDERAL SHARE | 92,360,416 | | | | 67 |
| | TOTAL | | 729,047,446 | | | 57 |

*Bid amount.

TABLE 2

GENERAL DATA
RELATING TO WATER SUPPLY CONTRACTORS

| AGENCY | LOCATION (County) | OFFICE (City) | PREDOMINANT TYPE OF WATER SERVICE | MAXIMUM ANNUAL ENTITLEMENT (Acre-feet) | DATE EXECUTED | GROSS AREA AS OF JULY 1, 1965 (Acres) | ASSESSED VALUATION (1964-65) | ESTIMATED POPULATION (July 1, 1965) |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Feather River Area | | | | | | | | |
| City of Yuba City | Sutter | Yuba City | Urban | 8,300<br>1,300 | Dec 30, 1963<br>Sep. 28, 1964 | 2,100 | $ 33,813,000 | 13,300 |
| County of Butte | Butte | Oroville | Urban | 27,500 | Dec. 26, 1963 | 1,075,600 | 220,800,000 | 98,300 |
| Plumas County Flood Control and Water Conservation District | Plumas | Quincy | Urban | 2,700 | Dec. 26, 1963 | 1,636,000[1/] | 78,438,000[1/] | 12,300[1/] |
| North Bay Area | | | | | | | | |
| Napa County Flood Control and Water Conservation District | Napa | Napa | Urban | 25,000 | Dec. 19, 1963 | 500,500 | 105,442,000 | 75,700 |
| Solano County Flood Control and Water Conservation District | Solano | Fairfield | Urban | 42,000 | Dec. 26, 1963 | 529,300 | 222,686,000 | 164,700 |
| South Bay Area | | | | | | | | |
| Alameda County Flood Control and Water Conservation District, Zone 7 | Alameda | Hayward | Urban | 40,000<br>6,000 | Nov. 20, 1961<br>Dec. 30, 1963 | 272,000 | 77,200,000 | 44,000 |
| Alameda County Water District | Alameda | Fremont | Urban | 42,000 | Nov. 29, 1961 | 60,000 | 196,683,000 | 110,000 |
| Santa Clara County Flood Control and Water District | Santa Clara | San Jose | Urban | 88,000<br>12,000 | Nov. 20, 1961<br>Dec. 30, 1963 | 849,300 | 1,819,075,000 | 883,000 |
| San Joaquin Valley | | | | | | | | |
| Devil's Den Water District | Kings & Kern | Fresno | Agricultural | 11,000<br>1,700 | Dec. 20, 1963<br>Sep. 28, 1964 | 8,700 | 194,900 | Less than 100 |
| Dudley Ridge Water District | Kings | Corcoran | Agricultural | 50,000<br>7,700 | Dec. 13, 1963<br>Sep. 28, 1964 | 29,900 | 296,100 | Less than 50 |
| Empire West Side Irrigation District | Kings | Lemoore | Agricultural | 3,000 | Dec. 30, 1963 | 7,700 | 757,000 | Less than 100 |
| Hacienda Water District | Kings | Corcoran | Agricultural | 8,500 | Dec. 20, 1963 | 15,300 | 177,000 | Less than 50 |
| Kern County Water Agency | Kern | Bakersfield | Agricultural | 1,000,000<br>153,400 | Nov. 15, 1963<br>Sep. 28, 1964 | 4,379,300[4/] | 772,986,700[4/] | 304,400[4/] |
| Oak Flat Water District | Stanislaus | Westley | Agricultural | 5,700 | Mar. 23, 1965 | 2,200 | 148,600 | Less than 50 |
| Tulare Lake Basin Water Storage District | Kings & Tulare | Corcoran | Agricultural | 90,000<br>20,000 | Dec. 20, 1963<br>Dec. 30, 1963 | 193,000 | 8,500,000 | Less than 50 |
| Central Coastal Area | | | | | | | | |
| San Luis Obispo County Flood Control and Water Conservation District | San Luis Obispo | San Luis Obispo | Urban | 25,000 | Feb. 26, 1963 | 2,128,600 | 233,337,000 | 100,600 |
| Santa Barbara County Flood Control and Water Conservation District | Santa Barbara | Santa Barbara | Urban | 50,000<br>7,700 | Feb. 26, 1963<br>Jan. 26, 1965 | 1,756,800 | 523,585,000 | 243,100 |
| Southern California | | | | | | | | |
| Antelope Valley-East Kern Water Agency | Los Angeles, Kern & Ventura | Lancaster | Urban | 120,000<br>18,400 | Sep. 20, 1962<br>Sep. 22, 1964 | 1,506,200 | 151,045,400 | 92,200 |
| Coachella Valley County Water District | Riverside, Imperial & San Diego | Coachella | Urban | 20,000<br>3,100 | Mar. 29, 1963<br>Sep. 28, 1964 | 617,000 | 165,193,000 | 53,000 |
| Crestline-Lake Arrowhead Water Agency | San Bernardino | Crestline | Urban | 5,000<br>800 | Jun. 22, 1963<br>Sep. 28, 1964 | 45,700 | 23,371,400 | 8,000 |
| Desert Water Agency | Riverside | Palm Springs | Urban | 33,000<br>5,100 | Oct. 17, 1962<br>Oct. 2, 1964 | 165,000 | 101,367,300 | 24,400 |
| Littlerock Creek Irrigation District | Los Angeles | Littlerock | Urban | 2,000<br>300 | Jun. 22, 1963<br>Sep. 28, 1964 | 11,300 | 2,630,000 | 1,300 |
| Mojave Water Agency | San Bernardino | Victorville | Urban | 44,000<br>6,800 | Jun. 22, 1963<br>Sep 28, 1964 | 3,050,000 | 164,000,000 | 71,500 |
| Palmdale Irrigation District | Los Angeles | Palmdale | Urban | 15,000<br>2,300 | Feb. 2, 1963<br>Sep. 28, 1964 | 73,000 | 21,000,000 | 20,400 |
| San Bernardino Valley Municipal Water District | San Bernardino | San Bernardino | Urban | 85,000<br>13,000 | Dec. 30, 1960<br>Sep. 28, 1964 | 150,000 | 430,643,400 | 280,000 |
| San Gabriel Valley Municipal Water District | Los Angeles | Alhambra | Urban | 25,000<br>3,800 | Nov. 3, 1962<br>Sep. 28, 1964 | 16,000 | 259,631,200 | 150,000 |
| San Gorgonio Pass Water Agency | Riverside | Beaumont | Urban | 15,000<br>2,300 | Nov. 16, 1962<br>Jan. 19, 1965 | 131,000 | 42,113,300 | 28,000 |
| The Metropolitan Water District of Southern California | Los Angeles, San Diego, Riverside, San Bernardino, Orange, & Ventura | Los Angeles | Urban | 1,500,000<br>500,000<br>11,500 | Nov. 4, 1960<br>Sep. 28, 1964<br>Aug. 4, 1965 | 2,880,000 | 17,758,000,000 | 9,398,400 |
| Upper Santa Clara Valley Water Agency | Los Angeles | Newhall | Urban | 23,000<br>3,500<br>15,000 | Apr. 30, 1963<br>Dec. 22, 1964<br>Jan. 24, 1966 | 86,700 | 56,368,700 | 27,000 |
| Ventura County Flood Control District | Ventura | Ventura | Urban | 20,000 | Dec. 2, 1963 | 961,000[2/ 3/] | 423,480,900[2/] | 169,400[2/] |
| Contracts Under Negotiation | | | | | | | | |
| Kings County | Kings | Hanford | Recreation | 4,000 | | 893,000 | 146,855,000 | 67,000 |
| Big Bear Municipal Water District | San Bernardino | Big Bear Lake | Recreation | 4,600 | | 53,000 | 17,881,600 | 3,700 |
| TOTALS FOR AGENCY AREAS | | | | 4,230,000 | | 24,085,200 | $ 24,057,609,500 | 12,444,100 |
| Percent of State Total in Agency Areas | | | | | | 24% | 61% | 66% |
| TOTALS FOR STATE | | | | | | 101,314,000 | $ 39,464,011,000 | 18,756,000 |

1/ Excluding Last Chance Creek Water District.
2/ The following values have been deleted from the Ventura County Flood Control District: Area, 212,000 acres; Population, 160,000; Assessed Valuation, $241,027,000; as they have been included in The Metropolitan Water District of Southern California service area.
3/ 6,000 acres of Ventura County Flood Control District have been annexed to the Antelope Valley-East Kern Water Agency service area.
4/ The following values have been deleted from the Kern County Water Agency: Area, 850,720 acres; Population, 25,000; Assessed Valuation, $43,118,300; as they have been included in the Antelope Valley-East Kern Water Agency service area.

TABLE 3

DISTRIBUTION OF MINIMUM PROJECT YIELD

(in acre-feet)

| AREA | MAXIMUM ANNUAL ENTITLEMENTS | | | | CHANGE IN ENTITLEMENT FROM BULLETIN NO. 132-65 |
|---|---|---|---|---|---|
| | BULLETIN NO. 132-63 (Assumed) | BULLETIN NO. 132-64 (Assumed) | BULLETIN NO. 132-65 (Actual) | THIS ANALYSIS (Actual) | |
| | (1) | (2) | (3) | (4) | (5) |
| Feather River | 275,000 | 38,500 | 39,800 | 39,800 | 0 |
| North Bay | 150,000 | 73,000 | 67,000 | 67,000 | 0 |
| South Bay | 210,000 | 194,000 | 188,000 | 188,000 | 0 |
| San Joaquin Valley | 1,475,000 | 1,362,500 | 1,345,300 | 1,355,000 1/ | (+) 9,700 |
| Central Coastal | 75,000 | 75,000 | 82,700 | 82,700 | 0 |
| Southern California | 1,800,000 | 2,257,000 | 2,477,900 | 2,497,500 1/ | (+) 19,600 |
| TOTAL DISTRIBUTED | 3,985,000 | 4,000,000 | 4,200,700 | 4,230,000 | (+) 29,300 |
| Unassigned | 15,000 | 0 | 29,300 | 0 | (-) 29,300 |
| TOTAL, MINIMUM PROJECT YIELD | 4,000,000 | 4,000,000 | 4,230,000 | 4,230,000 | 0 |

1/ Includes 4,000 acre-feet for the San Joaquin Valley and 4,600 acre feet for Southern California under contracts currently being negotiated.

TABLE 4

ANNUAL ENTITLEMENTS TO PROJECT WATER[1]

(in acre-feet)



| CALENDAR YEAR | FEATHER RIVER AREA | | | | NORTH BAY AREA | | | SOUTH BAY AREA[2] | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | CITY OF YUBA CITY | COUNTY OF BUTTE | PLUMAS COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | TOTAL | NAPA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT[3] | SOLANO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | TOTAL | ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT ZONE 7 | ALAMEDA COUNTY WATER DISTRICT | SANTA CLARA COUNTY FLOOD CONTROL AND WATER DISTRICT | TOTAL |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 494 | 8,412 | 0 | 8,906 |
| 63 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,731 | 10,914 | 0 | 12,645 |
| 64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,673 | 19,238 | 0 | 20,911 |
| 65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,605 | 16,407 | 15,014 | 34,026 |
| 66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,200 | 19,120 | 37,610 | 60,930 |
| 67 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,000 | 14,300 | 50,600 | 68,900 |
| 68 | 0 | 300 | 250 | 550 | 0 | 0 | 0 | 7,500 | 15,000 | 88,000 | 110,500 |
| 69 | 0 | 350 | 270 | 620 | 0 | 0 | 0 | 8,800 | 15,500 | 88,000 | 112,300 |
| 1970 | 0 | 400 | 300 | 700 | 0 | 0 | 0 | 10,000 | 16,200 | 88,000 | 114,200 |
| 71 | 0 | 450 | 440 | 890 | 0 | 0 | 0 | 11,200 | 17,000 | 88,000 | 116,200 |
| 72 | 0 | 500 | 470 | 970 | 0 | 0 | 0 | 12,400 | 17,900 | 88,000 | 118,300 |
| 73 | 0 | 600 | 500 | 1,100 | 0 | 0 | 0 | 13,600 | 18,800 | 88,000 | 120,400 |
| 74 | 0 | 700 | 530 | 1,230 | 0 | 0 | 0 | 14,800 | 19,600 | 88,000 | 122,400 |
| 75 | 0 | 1,050 | 560 | 1,610 | 0 | 0 | 0 | 16,000 | 20,500 | 88,000 | 124,500 |
| 76 | 0 | 1,400 | 590 | 1,990 | 0 | 0 | 0 | 17,200 | 21,300 | 88,000 | 126,500 |
| 77 | 0 | 1,800 | 620 | 2,420 | 0 | 0 | 0 | 18,400 | 22,200 | 88,000 | 128,600 |
| 78 | 0 | 2,200 | 650 | 2,850 | 0 | 0 | 0 | 19,600 | 23,100 | 88,000 | 130,700 |
| 79 | 0 | 2,600 | 680 | 3,280 | 0 | 0 | 0 | 20,800 | 23,900 | 88,000 | 132,700 |
| 1980 | 0 | 4,000 | 710 | 4,710 | 12,500 | 6,750 | 19,250 | 22,000 | 24,800 | 88,000 | 134,800 |
| 81 | 4,200 | 5,450 | 740 | 10,390 | 13,750 | 8,000 | 21,750 | 23,000 | 26,000 | 88,000 | 137,000 |
| 82 | 4,600 | 6,900 | 770 | 12,270 | 15,000 | 9,400 | 24,400 | 24,000 | 27,200 | 88,000 | 139,200 |
| 83 | 5,050 | 8,350 | 800 | 14,200 | 16,250 | 10,800 | 27,050 | 25,000 | 28,400 | 88,000 | 141,400 |
| 84 | 5,500 | 9,800 | 830 | 16,130 | 17,500 | 12,100 | 29,600 | 26,000 | 29,600 | 88,000 | 143,600 |
| 85 | 5,950 | 12,250 | 860 | 19,060 | 18,750 | 14,000 | 32,750 | 27,000 | 30,800 | 88,000 | 145,800 |
| 86 | 6,600 | 14,700 | 890 | 22,190 | 20,000 | 16,500 | 36,500 | 28,000 | 32,100 | 88,000 | 148,100 |
| 87 | 7,300 | 17,150 | 920 | 25,370 | 21,250 | 20,000 | 41,250 | 29,000 | 33,300 | 88,000 | 150,300 |
| 88 | 8,000 | 20,600 | 960 | 29,560 | 22,500 | 27,000 | 49,500 | 30,000 | 34,500 | 88,000 | 152,500 |
| 89 | 8,800 | 24,050 | 1,000 | 33,850 | 23,750 | 34,500 | 58,250 | 31,000 | 35,700 | 90,000 | 156,700 |
| 1990 | 9,600 | 27,500 | 1,040 | 38,140 | 25,000 | 42,000 | 67,000 | 32,000 | 36,900 | 92,000 | 160,900 |
| 91 | 9,600 | 27,500 | 1,080 | 38,180 | 25,000 | 42,000 | 67,000 | 34,000 | 38,400 | 94,000 | 166,400 |
| 92 | 9,600 | 27,500 | 1,120 | 38,220 | 25,000 | 42,000 | 67,000 | 36,000 | 39,900 | 96,000 | 171,900 |
| 93 | 9,600 | 27,500 | 1,160 | 38,260 | 25,000 | 42,000 | 67,000 | 38,000 | 41,400 | 98,000 | 177,400 |
| 94 | 9,600 | 27,500 | 1,200 | 38,300 | 25,000 | 42,000 | 67,000 | 40,000 | 42,000 | 100,000 | 182,000 |
| 95 | 9,600 | 27,500 | 1,250 | 38,350 | 25,000 | 42,000 | 67,000 | 42,000 | 42,000 | 100,000 | 184,000 |
| 96 | 9,600 | 27,500 | 1,300 | 38,400 | 25,000 | 42,000 | 67,000 | 44,000 | 42,000 | 100,000 | 186,000 |
| 97 | 9,600 | 27,500 | 1,350 | 38,450 | 25,000 | 42,000 | 67,000 | 46,000 | 42,000 | 100,000 | 188,000 |
| 98 | 9,600 | 27,500 | 1,400 | 38,500 | 25,000 | 42,000 | 67,000 | 46,000 | 42,000 | 100,000 | 188,000 |
| 99 | 9,600 | 27,500 | 1,450 | 38,550 | 25,000 | 42,000 | 67,000 | 46,000 | 42,000 | 100,000 | 188,000 |
| 2000 | 9,600 | 27,500 | 1,510 | 38,610 | 25,000 | 42,000 | 67,000 | 46,000 | 42,000 | 100,000 | 188,000 |
| 01 | 9,600 | 27,500 | 1,570 | 38,670 | 25,000 | 42,000 | 67,000 | 46,000 | 42,000 | 100,000 | 188,000 |
| 02 | 9,600 | 27,500 | 1,630 | 38,730 | 25,000 | 42,000 | 67,000 | 46,000 | 42,000 | 100,000 | 188,000 |
| 03 | 9,600 | 27,500 | 1,690 | 38,790 | 25,000 | 42,000 | 67,000 | 46,000 | 42,000 | 100,000 | 188,000 |
| 04 | 9,600 | 27,500 | 1,750 | 38,850 | 25,000 | 42,000 | 67,000 | 46,000 | 42,000 | 100,000 | 188,000 |
| 05 | 9,600 | 27,500 | 1,810 | 38,910 | 25,000 | 42,000 | 67,000 | 46,000 | 42,000 | 100,000 | 188,000 |
| 06 | 9,600 | 27,500 | 1,880 | 38,980 | 25,000 | 42,000 | 67,000 | 46,000 | 42,000 | 100,000 | 188,000 |
| 07 | 9,600 | 27,500 | 1,950 | 39,050 | 25,000 | 42,000 | 67,000 | 46,000 | 42,000 | 100,000 | 188,000 |
| 08 | 9,600 | 27,500 | 2,020 | 39,120 | 25,000 | 42,000 | 67,000 | 46,000 | 42,000 | 100,000 | 188,000 |
| 09 | 9,600 | 27,500 | 2,090 | 39,190 | 25,000 | 42,000 | 67,000 | 46,000 | 42,000 | 100,000 | 188,000 |
| 2010 | 9,600 | 27,500 | 2,160 | 39,260 | 25,000 | 42,000 | 67,000 | 46,000 | 42,000 | 100,000 | 188,000 |
| 11 | 9,600 | 27,500 | 2,240 | 39,340 | 25,000 | 42,000 | 67,000 | 46,000 | 42,000 | 100,000 | 188,000 |
| 12 | 9,600 | 27,500 | 2,320 | 39,420 | 25,000 | 42,000 | 67,000 | 46,000 | 42,000 | 100,000 | 188,000 |
| 13 | 9,600 | 27,500 | 2,410 | 39,510 | 25,000 | 42,000 | 67,000 | 46,000 | 42,000 | 100,000 | 188,000 |
| 14 | 9,600 | 27,500 | 2,500 | 39,600 | 25,000 | 42,000 | 67,000 | 46,000 | 42,000 | 100,000 | 188,000 |
| 15 | 9,600 | 27,500 | 2,600 | 39,700 | 25,000 | 42,000 | 67,000 | 46,000 | 42,000 | 100,000 | 188,000 |
| 2016[4] | 9,600 | 27,500 | 2,700 | 39,800 | 25,000 | 42,000 | 67,000 | 46,000 | 42,000 | 100,000 | 188,000 |

1/ From Tables A and Articles 6(a) of executed and proposed water supply contracts as of April 1, 1966.

2/ It is currently estimated that the entitlements shown for the South Bay area will be supplied by nonproject water through 1966. Actual delivery quantities are shown for 1962, 1963, 1964, and 1965. Quantities shown for 1966 are those requested by the contractors and approved by the Department pursuant to Article 12(a) of water supply contracts.

3/ Districts' Table A quantities exclude those during the period 1968-1979 which assumed to be supplied by nonproject water.

4/ And each year thereafter for the remainder of the project repayment period.

TABLE 4 (Continued)

ANNUAL ENTITLEMENTS TO PROJECT WATER[1/]

(in acre-feet)



| CALENDAR YEAR | SAN JOAQUIN VALLEY AREA | | | | | | | | | CENTRAL COASTAL AREA | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DEVIL'S DEN WATER DISTRICT | DUDLEY RIDGE WATER DISTRICT | EMPIRE WEST SIDE IRRIGATION DISTRICT | HACIENDA WATER DISTRICT | KERN COUNTY WATER AGENCY | KINGS COUNTY (Assumed) | OAK FLAT WATER DISTRICT | TULARE LAKE BASIN WATER STORAGE DISTRICT | TOTAL | SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | SANTA BARBARA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | TOTAL |
| | (12) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) | (21) | (22) | (23) |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 63 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 67 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 68 | 3,700 | 11,500 | 3,000 | 1,300 | 87,000 | 1,600 | 2,300 | 26,900 | 137,300 | 0 | 0 | 0 |
| 69 | 4,700 | 13,600 | 3,000 | 1,600 | 95,700 | 1,800 | 2,500 | 29,300 | 152,200 | 0 | 0 | 0 |
| 1970 | 5,700 | 15,700 | 3,000 | 2,000 | 145,100 | 2,100 | 2,600 | 31,800 | 208,000 | 0 | 0 | 0 |
| 71 | 6,700 | 17,900 | 3,000 | 2,300 | 190,300 | 2,300 | 2,800 | 34,200 | 259,500 | 0 | 0 | 0 |
| 72 | 7,700 | 20,000 | 3,000 | 2,600 | 270,700 | 2,600 | 2,900 | 36,700 | 346,200 | 0 | 0 | 0 |
| 73 | 8,700 | 22,000 | 3,000 | 2,900 | 310,500 | 2,800 | 3,100 | 39,100 | 392,100 | 0 | 0 | 0 |
| 74 | 9,700 | 24,100 | 3,000 | 3,300 | 347,000 | 3,000 | 3,200 | 43,000 | 436,300 | 0 | 0 | 0 |
| 75 | 10,700 | 26,200 | 3,000 | 3,600 | 385,500 | 3,300 | 3,400 | 46,900 | 482,600 | 0 | 0 | 0 |
| 76 | 11,700 | 28,300 | 3,000 | 3,900 | 432,800 | 3,500 | 3,500 | 50,800 | 537,500 | 0 | 0 | 0 |
| 77 | 12,700 | 30,400 | 3,000 | 4,200 | 483,600 | 3,800 | 3,700 | 54,800 | 596,200 | 0 | 0 | 0 |
| 78 | 12,700 | 32,500 | 3,000 | 4,600 | 534,300 | 4,000 | 3,900 | 58,700 | 653,700 | 0 | 0 | 0 |
| 79 | 12,700 | 34,600 | 3,000 | 4,900 | 583,900 | 4,000 | 4,000 | 62,600 | 709,700 | 0 | 0 | 0 |
| 1980 | 12,700 | 36,700 | 3,000 | 5,200 | 634,500 | 4,000 | 4,200 | 66,500 | 766,800 | 1,000 | 1,200 | 2,200 |
| 81 | 12,700 | 38,800 | 3,000 | 5,600 | 691,400 | 4,000 | 4,300 | 70,400 | 830,200 | 1,000 | 2,300 | 3,300 |
| 82 | 12,700 | 41,000 | 3,000 | 5,900 | 745,300 | 4,000 | 4,500 | 74,300 | 890,700 | 2,000 | 4,600 | 6,600 |
| 83 | 12,700 | 42,900 | 3,000 | 6,200 | 805,100 | 4,000 | 4,600 | 78,200 | 956,700 | 3,000 | 6,900 | 9,900 |
| 84 | 12,700 | 45,100 | 3,000 | 6,500 | 860,600 | 4,000 | 4,800 | 82,100 | 1,018,800 | 4,500 | 10,400 | 14,900 |
| 85 | 12,700 | 47,200 | 3,000 | 6,900 | 915,000 | 4,000 | 4,900 | 86,000 | 1,079,700 | 7,500 | 17,300 | 24,800 |
| 86 | 12,700 | 49,300 | 3,000 | 7,200 | 968,200 | 4,000 | 5,100 | 90,000 | 1,139,500 | 10,000 | 23,100 | 33,100 |
| 87 | 12,700 | 51,400 | 3,000 | 7,500 | 1,023,500 | 4,000 | 5,200 | 93,900 | 1,201,200 | 12,500 | 28,800 | 41,300 |
| 88 | 12,700 | 53,500 | 3,000 | 7,800 | 1,074,600 | 4,000 | 5,400 | 97,800 | 1,258,800 | 15,500 | 35,800 | 51,300 |
| 89 | 12,700 | 55,600 | 3,000 | 8,200 | 1,112,300 | 4,000 | 5,600 | 101,700 | 1,303,100 | 20,000 | 46,100 | 66,100 |
| 1990 | 12,700 | 57,700 | 3,000 | 8,500 | 1,153,400 | 4,000 | 5,700 | 110,000 | 1,355,000 | 25,000 | 57,700 | 82,700 |
| 91 | 12,700 | 57,700 | 3,000 | 8,500 | 1,153,400 | 4,000 | 5,700 | 110,000 | 1,355,000 | 25,000 | 57,700 | 82,700 |
| 92 | 12,700 | 57,700 | 3,000 | 8,500 | 1,153,400 | 4,000 | 5,700 | 110,000 | 1,355,000 | 25,000 | 57,700 | 82,700 |
| 93 | 12,700 | 57,700 | 3,000 | 8,500 | 1,153,400 | 4,000 | 5,700 | 110,000 | 1,355,000 | 25,000 | 57,700 | 82,700 |
| 94 | 12,700 | 57,700 | 3,000 | 8,500 | 1,153,400 | 4,000 | 5,700 | 110,000 | 1,355,000 | 25,000 | 57,700 | 82,700 |
| 95 | 12,700 | 57,700 | 3,000 | 8,500 | 1,153,400 | 4,000 | 5,700 | 110,000 | 1,355,000 | 25,000 | 57,700 | 82,700 |
| 96 | 12,700 | 57,700 | 3,000 | 8,500 | 1,153,400 | 4,000 | 5,700 | 110,000 | 1,355,000 | 25,000 | 57,700 | 82,700 |
| 97 | 12,700 | 57,700 | 3,000 | 8,500 | 1,153,400 | 4,000 | 5,700 | 110,000 | 1,355,000 | 25,000 | 57,700 | 82,700 |
| 98 | 12,700 | 57,700 | 3,000 | 8,500 | 1,153,400 | 4,000 | 5,700 | 110,000 | 1,355,000 | 25,000 | 57,700 | 82,700 |
| 99 | 12,700 | 57,700 | 3,000 | 8,500 | 1,153,400 | 4,000 | 5,700 | 110,000 | 1,355,000 | 25,000 | 57,700 | 82,700 |
| 2000 | 12,700 | 57,700 | 3,000 | 8,500 | 1,153,400 | 4,000 | 5,700 | 110,000 | 1,355,000 | 25,000 | 57,700 | 82,700 |
| 01 | 12,700 | 57,700 | 3,000 | 8,500 | 1,153,400 | 4,000 | 5,700 | 110,000 | 1,355,000 | 25,000 | 57,700 | 82,700 |
| 02 | 12,700 | 57,700 | 3,000 | 8,500 | 1,153,400 | 4,000 | 5,700 | 110,000 | 1,355,000 | 25,000 | 57,700 | 82,700 |
| 03 | 12,700 | 57,700 | 3,000 | 8,500 | 1,153,400 | 4,000 | 5,700 | 110,000 | 1,355,000 | 25,000 | 57,700 | 82,700 |
| 04 | 12,700 | 57,700 | 3,000 | 8,500 | 1,153,400 | 4,000 | 5,700 | 110,000 | 1,355,000 | 25,000 | 57,700 | 82,700 |
| 05 | 12,700 | 57,700 | 3,000 | 8,500 | 1,153,400 | 4,000 | 5,700 | 110,000 | 1,355,000 | 25,000 | 57,700 | 82,700 |
| 06 | 12,700 | 57,700 | 3,000 | 8,500 | 1,153,400 | 4,000 | 5,700 | 110,000 | 1,355,000 | 25,000 | 57,700 | 82,700 |
| 07 | 12,700 | 57,700 | 3,000 | 8,500 | 1,153,400 | 4,000 | 5,700 | 110,000 | 1,355,000 | 25,000 | 57,700 | 82,700 |
| 08 | 12,700 | 57,700 | 3,000 | 8,500 | 1,153,400 | 4,000 | 5,700 | 110,000 | 1,355,000 | 25,000 | 57,700 | 82,700 |
| 09 | 12,700 | 57,700 | 3,000 | 8,500 | 1,153,400 | 4,000 | 5,700 | 110,000 | 1,355,000 | 25,000 | 57,700 | 82,700 |
| 2010 | 12,700 | 57,700 | 3,000 | 8,500 | 1,153,400 | 4,000 | 5,700 | 110,000 | 1,355,000 | 25,000 | 57,700 | 82,700 |
| 11 | 12,700 | 57,700 | 3,000 | 8,500 | 1,153,400 | 4,000 | 5,700 | 110,000 | 1,355,000 | 25,000 | 57,700 | 82,700 |
| 12 | 12,700 | 57,700 | 3,000 | 8,500 | 1,153,400 | 4,000 | 5,700 | 110,000 | 1,355,000 | 25,000 | 57,700 | 82,700 |
| 13 | 12,700 | 57,700 | 3,000 | 8,500 | 1,153,400 | 4,000 | 5,700 | 110,000 | 1,355,000 | 25,000 | 57,700 | 82,700 |
| 14 | 12,700 | 57,700 | 3,000 | 8,500 | 1,153,400 | 4,000 | 5,700 | 110,000 | 1,355,000 | 25,000 | 57,700 | 82,700 |
| 15 | 12,700 | 57,700 | 3,000 | 8,500 | 1,153,400 | 4,000 | 5,700 | 110,000 | 1,355,000 | 25,000 | 57,700 | 82,700 |
| 2016[2/] | 12,700 | 57,700 | 3,000 | 8,500 | 1,153,400 | 4,000 | 5,700 | 110,000 | 1,355,000 | 25,000 | 57,700 | 82,700 |

1/ From Tables A and Articles 6(a) of executed and proposed water supply contracts as of April 1, 1966.
2/ And each year thereafter for the remainder of the project repayment period.



TABLE 4 (Continued)

TABLE 4 (Continued)

ANNUAL ENTITLEMENTS TO PROJECT WATER[1/]

(in acre-feet)



| CALENDAR YEAR | SOUTHERN CALIFORNIA AREA | | | | | | | | | | | | | | | TOTAL STATE WATER PROJECT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ANTELOPE VALLEY-EAST KERN WATER AGENCY | BIG BEAR MUNICIPAL WATER DISTRICT (Assumed) | COACHELLA VALLEY COUNTY WATER DISTRICT | CRESTLINE-LAKE ARROWHEAD WATER AGENCY | DESERT WATER AGENCY | LITTLEROCK CREEK IRRIGATION DISTRICT | MOJAVE WATER AGENCY | PALMDALE IRRIGATION DISTRICT | SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | SAN GORGONIO PASS WATER AGENCY | THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | UPPER SANTA CLARA VALLEY WATER AGENCY | VENTURA COUNTY FLOOD CONTROL DISTRICT | TOTAL | |
| | (24) | (25) | (26) | (27) | (28) | (29) | (30) | (31) | (32) | (33) | (34) | (35) | (36) | (37) | (38) | (39) |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8,906 |
| 63 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12,645 |
| 64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20,911 |
| 65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34,026 |
| 66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60,930 |
| 67 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 68,900 |
| 68 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 248,350 |
| 69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 265,120 |
| 1970 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 322,900 |
| 71 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 254,200 | 1,600 | 0 | 255,800 | 632,390 |
| 72 | 20,000 | 4,600 | 5,200 | 580 | 8,000 | 170 | 8,400 | 1,620 | 45,541 | 10,600 | 1,000 | 354,600 | 3,700 | 0 | 464,011 | 929,481 |
| 73 | 25,000 | 4,600 | 5,800 | 870 | 9,000 | 290 | 10,700 | 2,940 | 47,559 | 11,500 | 1,700 | 454,900 | 5,700 | 0 | 580,559 | 1,094,159 |
| 74 | 30,000 | 4,600 | 6,400 | 1,160 | 10,000 | 400 | 13,100 | 4,260 | 49,806 | 12,300 | 2,400 | 555,200 | 7,500 | 0 | 697,126 | 1,257,056 |
| 75 | 35,000 | 4,600 | 7,000 | 1,450 | 11,000 | 520 | 15,400 | 5,580 | 51,826 | 13,100 | 3,100 | 655,600 | 9,500 | 0 | 813,676 | 1,422,386 |
| 76 | 44,000 | 4,600 | 7,600 | 1,740 | 12,000 | 640 | 17,800 | 6,900 | 53,842 | 14,000 | 3,800 | 755,900 | 11,400 | 0 | 934,222 | 1,600,212 |
| 77 | 50,000 | 4,600 | 8,421 | 2,030 | 13,000 | 730 | 20,200 | 8,220 | 55,860 | 14,800 | 4,500 | 856,300 | 13,400 | 0 | 1,052,061 | 1,779,281 |
| 78 | 57,000 | 4,600 | 9,242 | 2,320 | 14,000 | 920 | 22,500 | 9,340 | 57,878 | 15,700 | 5,200 | 956,600 | 15,300 | 0 | 1,170,600 | 1,957,850 |
| 79 | 63,000 | 4,600 | 10,063 | 2,610 | 15,000 | 1,040 | 24,900 | 10,260 | 60,010 | 16,600 | 5,900 | 1,057,000 | 17,700 | 0 | 1,288,683 | 2,134,363 |
| 1980 | 69,200 | 4,600 | 10,884 | 2,900 | 17,000 | 1,150 | 27,200 | 11,180 | 61,913 | 17,400 | 6,800 | 1,157,300 | 20,100 | 1,000 | 1,408,627 | 2,336,387 |
| 81 | 75,000 | 4,600 | 12,105 | 3,190 | 19,000 | 1,270 | 29,600 | 11,700 | 64,161 | 18,300 | 7,800 | 1,257,600 | 22,100 | 2,000 | 1,528,426 | 2,531,066 |
| 82 | 81,300 | 4,600 | 13,326 | 3,480 | 21,000 | 1,380 | 31,900 | 12,320 | 64,161 | 19,100 | 8,800 | 1,358,000 | 24,600 | 3,000 | 1,646,967 | 2,720,137 |
| 83 | 87,700 | 4,600 | 14,547 | 3,770 | 23,000 | 1,500 | 34,300 | 12,940 | 64,161 | 19,900 | 9,800 | 1,458,300 | 26,900 | 4,000 | 1,765,418 | 2,914,668 |
| 84 | 94,000 | 4,600 | 15,768 | 4,060 | 25,000 | 1,610 | 36,700 | 13,560 | 64,161 | 20,700 | 10,800 | 1,558,700 | 29,100 | 5,000 | 1,883,759 | 3,106,789 |
| 85 | 100,400 | 4,600 | 16,989 | 4,350 | 27,000 | 1,730 | 39,000 | 14,180 | 64,161 | 21,800 | 11,800 | 1,659,300 | 30,900 | 6,000 | 2,002,210 | 3,304,320 |
| 86 | 106,700 | 4,600 | 18,210 | 4,640 | 29,000 | 1,840 | 41,400 | 14,800 | 66,179 | 23,200 | 12,900 | 1,759,800 | 32,900 | 8,000 | 2,124,169 | 3,503,559 |
| 87 | 113,000 | 4,600 | 19,431 | 4,930 | 31,500 | 1,960 | 43,700 | 15,420 | 72,462 | 24,600 | 14,000 | 1,860,400 | 35,300 | 10,000 | 2,251,303 | 3,710,723 |
| 88 | 119,400 | 4,600 | 20,652 | 5,220 | 34,000 | 2,070 | 46,000 | 16,040 | 78,745 | 26,000 | 15,100 | 1,961,000 | 37,400 | 13,000 | 2,379,227 | 3,920,887 |
| 89 | 125,700 | 4,600 | 21,873 | 5,510 | 36,500 | 2,190 | 48,500 | 16,660 | 84,915 | 27,400 | 16,200 | 2,011,500 | 39,300 | 16,000 | 2,456,848 | 4,074,848 |
| 1990 | 132,100 | 4,600 | 23,100 | 5,800 | 38,100 | 2,300 | 50,800 | 17,300 | 91,198 | 28,800 | 17,300 | 2,011,500 | 41,500 | 20,000 | 2,484,398 | 4,188,138 |
| 91 | 138,400 | 4,600 | 23,100 | 5,800 | 38,100 | 2,300 | 50,800 | 17,300 | 98,000 | 28,800 | 17,300 | 2,011,500 | 41,500 | 20,000 | 2,497,500 | 4,206,780 |
| 92 | 138,400 | 4,600 | 23,100 | 5,800 | 38,100 | 2,300 | 50,800 | 17,300 | 98,000 | 28,800 | 17,300 | 2,011,500 | 41,500 | 20,000 | 2,497,500 | 4,212,320 |
| 93 | 138,400 | 4,600 | 23,100 | 5,800 | 38,100 | 2,300 | 50,800 | 17,300 | 98,000 | 28,800 | 17,300 | 2,011,500 | 41,500 | 20,000 | 2,497,500 | 4,217,860 |
| 94 | 138,400 | 4,600 | 23,100 | 5,800 | 38,100 | 2,300 | 50,800 | 17,300 | 98,000 | 28,800 | 17,300 | 2,011,500 | 41,500 | 20,000 | 2,497,500 | 4,222,500 |
| 95 | 138,400 | 4,600 | 23,100 | 5,800 | 38,100 | 2,300 | 50,800 | 17,300 | 98,000 | 28,800 | 17,300 | 2,011,500 | 41,500 | 20,000 | 2,497,500 | 4,224,550 |
| 96 | 138,400 | 4,600 | 23,100 | 5,800 | 38,100 | 2,300 | 50,800 | 17,300 | 98,000 | 28,800 | 17,300 | 2,011,500 | 41,500 | 20,000 | 2,497,500 | 4,226,600 |
| 97 | 138,400 | 4,600 | 23,100 | 5,800 | 38,100 | 2,300 | 50,800 | 17,300 | 98,000 | 28,800 | 17,300 | 2,011,500 | 41,500 | 20,000 | 2,497,500 | 4,228,650 |
| 98 | 138,400 | 4 600 | 23,100 | 5,800 | 38,100 | 2,300 | 50,800 | 17,300 | 98,000 | 28,800 | 17,300 | 2,011,500 | 41,500 | 20,000 | 2,497,500 | 4,228,700 |
| 99 | 138,400 | 4,600 | 23,100 | 5,800 | 38,100 | 2,300 | 50,800 | 17,300 | 98,000 | 28,800 | 17,300 | 2,011,500 | 41,500 | 20,000 | 2,497,500 | 4,228,750 |
| 2000 | 138,400 | 4,600 | 23,100 | 5,800 | 38,100 | 2,300 | 50,800 | 17,300 | 98,000 | 28,800 | 17,300 | 2,011,500 | 41,500 | 20,000 | 2,497,500 | 4,228,810 |
| 01 | 138,400 | 4,600 | 23,100 | 5,800 | 38,100 | 2,300 | 50,800 | 17,300 | 98,000 | 28,800 | 17,300 | 2,011,500 | 41,500 | 20,000 | 2,497,500 | 4,228,870 |
| 02 | 138,400 | 4,600 | 23,100 | 5,800 | 38,100 | 2,300 | 50,800 | 17,300 | 98,000 | 28,800 | 17,300 | 2,011,500 | 41,500 | 20,000 | 2,497,500 | 4,228,930 |
| 03 | 138,400 | 4,600 | 23,100 | 5,800 | 38,100 | 2,300 | 50,800 | 17,300 | 98,000 | 28,800 | 17,300 | 2,011,500 | 41,500 | 20,000 | 2,497,500 | 4,228,990 |
| 04 | 138,400 | 4,600 | 23,100 | 5,800 | 38,100 | 2,300 | 50,800 | 17,300 | 98,000 | 28,800 | 17,300 | 2,011,500 | 41,500 | 20,000 | 2,497,500 | 4,229,050 |
| 05 | 138,400 | 4,600 | 23,100 | 5,800 | 38,100 | 2,300 | 50,800 | 17,300 | 98,000 | 28,800 | 17,300 | 2,011,500 | 41,500 | 20,000 | 2,497,500 | 4,229,110 |
| 06 | 138,400 | 4,600 | 23,100 | 5,800 | 38,100 | 2,300 | 50,800 | 17,300 | 98,000 | 28,800 | 17,300 | 2,011,500 | 41,500 | 20,000 | 2,497,500 | 4,229,180 |
| 07 | 138,400 | 4,600 | 23,100 | 5,800 | 38,100 | 2,300 | 50,800 | 17,300 | 98,000 | 28,800 | 17,300 | 2,011,500 | 41,500 | 20,000 | 2,497,500 | 4,229,250 |
| 08 | 138,400 | 4,600 | 23,100 | 5,800 | 38,100 | 2,300 | 50,800 | 17,300 | 98,000 | 28,800 | 17,300 | 2,011,500 | 41,500 | 20,000 | 2,497,500 | 4,229,320 |
| 09 | 138,400 | 4,600 | 23,100 | 5,800 | 38,100 | 2,300 | 50,800 | 17,300 | 98,000 | 28,800 | 17,300 | 2,011,500 | 41,500 | 20,000 | 2,497,500 | 4,229,390 |
| 2010 | 138,400 | 4,600 | 23,100 | 5,800 | 38,100 | 2,300 | 50,800 | 17,300 | 98,000 | 28,800 | 17,300 | 2,011,500 | 41,500 | 20,000 | 2,497,500 | 4,229,460 |
| 11 | 138,400 | 4,600 | 23,100 | 5,800 | 38,100 | 2,300 | 50,800 | 17,300 | 98,000 | 28,800 | 17,300 | 2,011,500 | 41,500 | 20,000 | 2,497,500 | 4,229,540 |
| 12 | 138,400 | 4,600 | 23,100 | 5,800 | 38,100 | 2,300 | 50,800 | 17,300 | 98,000 | 28,800 | 17,300 | 2,011,500 | 41,500 | 20,000 | 2,497,500 | 4,229,620 |
| 13 | 138,400 | 4,600 | 23,100 | 5,800 | 38,100 | 2,300 | 50,800 | 17,300 | 98,000 | 28,800 | 17,300 | 2,011,500 | 41,500 | 20,000 | 2,497,500 | 4,229,710 |
| 14 | 138,400 | 4,600 | 23,100 | 5,800 | 38,100 | 2,300 | 50,800 | 17,300 | 98,000 | 28,800 | 17,300 | 2,011,500 | 41,500 | 20,000 | 2,497,500 | 4,229,800 |
| 15 | 138,400 | 4,600 | 23,100 | 5,800 | 38,100 | 2,300 | 50,800 | 17,300 | 98,000 | 28,800 | 17,300 | 2,011,500 | 41,500 | 20,000 | 2,497,500 | 4,229,900 |
| 2016[2/] | 138,400 | 4,600 | 23,100 | 5,800 | 38,100 | 2,300 | 50,800 | 17,300 | 98,000 | 28,800 | 17,300 | 2,011,500 | 41,500 | 20,000 | 2,497,500 | 4,230,000 |

1/ From Tables A and Articles 6(a) of executed and proposed water supply contracts as of April 1, 1966.
2/ And each year thereafter for the remainder of the project repayment period.

TABLE 5

PROJECT WATER DEMANDS AND WATER SUPPLIES
AT THE DELTA

(in acre-feet)

| CALENDAR YEAR | DEMANDS ON DELTA POOL (STATE ONLY) | | | | | | | SUPPLIED FROM THE DELTA POOL | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | ANNUAL ENTITLEMENTS TO PROJECT WATER | | | | | OTHER WATER[1] | TOTAL | PURCHASED BUREAU WATER[2] | INITIAL CONSERVATION FACILITIES[3] | ADDITIONAL CONSERVATION FACILITIES[4] | TOTAL |
| | FEATHER RIVER AREA | NORTH BAY AQUEDUCT | SOUTH BAY AQUEDUCT | CALIFORNIA AQUEDUCT | TOTAL | | | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) |
| 1962 | 0 | 0 | 8,906 | 0 | 8,906 | 798 | 9,704 | 9,704 | 0 | 0 | 9,704 |
| 63 | 0 | 0 | 12,645 | 0 | 12,645 | 567 | 13,212 | 13,212 | 0 | 0 | 13,212 |
| 64 | 0 | 0 | 20,911 | 0 | 20,911 | 832 | 21,743 | 21,743 | 0 | 0 | 21,743 |
| 65 | 0 | 0 | 34,026 | 0 | 34,026 | 1,959 | 35,985 | 35,985 | 0 | 0 | 35,985 |
| 66 | 0 | 0 | 60,930 | 0 | 60,930 | 1,820 | 62,750 | 62,750 | 0 | 0 | 62,750 |
| 67 | 0 | 0 | 68,900 | 0 | 68,900 | 2,230 | 71,130 | 0 | 71,130 | 0 | 71,130 |
| 68 | 550 | 0 | 110,500 | 137,300 | 248,350 | 539,037 | 787,387 | 0 | 787,387 | 0 | 787,387 |
| 69 | 620 | 0 | 112,300 | 152,200 | 265,120 | 920,330 | 1,185,450 | 0 | 1,185,450 | 0 | 1,185,450 |
| 1970 | 700 | 0 | 114,200 | 208,000 | 322,900 | 220,630 | 543,530 | 0 | 543,530 | 0 | 543,530 |
| 71 | 890 | 0 | 116,200 | 515,300 | 632,390 | 336,530 | 968,920 | 0 | 968,920 | 0 | 968,920 |
| 72 | 970 | 0 | 118,300 | 810,211 | 929,481 | 539,330 | 1,468,811 | 0 | 1,468,811 | 0 | 1,468,811 |
| 73 | 1,100 | 0 | 120,400 | 972,659 | 1,094,159 | 534,530 | 1,628,689 | 0 | 1,628,689 | 0 | 1,628,689 |
| 74 | 1,230 | 0 | 122,400 | 1,133,426 | 1,257,056 | 417,930 | 1,674,986 | 0 | 1,674,986 | 0 | 1,674,986 |
| 75 | 1,610 | 0 | 124,500 | 1,296,276 | 1,422,386 | 303,730 | 1,726,116 | 0 | 1,726,116 | 0 | 1,726,116 |
| 76 | 1,990 | 0 | 126,500 | 1,471,722 | 1,600,212 | 303,730 | 1,903,942 | 0 | 1,903,942 | 0 | 1,903,942 |
| 77 | 2,420 | 0 | 128,600 | 1,648,261 | 1,779,281 | 308,730 | 2,083,011 | 0 | 2,083,011 | 0 | 2,083,011 |
| 78 | 2,850 | 0 | 130,700 | 1,824,300 | 1,957,850 | 303,730 | 2,261,580 | 0 | 2,261,580 | 0 | 2,261,580 |
| 79 | 3,280 | 0 | 132,700 | 1,998,383 | 2,134,363 | 303,730 | 2,438,093 | 0 | 2,438,093 | 0 | 2,438,093 |
| 1980 | 4,710 | 19,250 | 134,800 | 2,177,627 | 2,336,387 | 323,650 | 2,660,037 | 0 | 2,660,037 | 0 | 2,660,037 |
| 81 | 10,390 | 21,750 | 137,000 | 2,361,926 | 2,531,066 | 323,330 | 2,854,396 | 0 | 2,854,396 | 0 | 2,854,396 |
| 82 | 12,270 | 24,400 | 139,200 | 2,544,267 | 2,720,137 | 323,330 | 3,043,467 | 0 | 3,043,467 | 0 | 3,043,467 |
| 83 | 14,200 | 27,050 | 141,400 | 2,732,018 | 2,914,668 | 340,830 | 3,255,498 | 0 | 3,255,498 | 0 | 3,255,498 |
| 84 | 16,130 | 29,600 | 143,600 | 2,917,459 | 3,106,789 | 340,830 | 3,447,619 | 0 | 3,447,619 | 0 | 3,447,619 |
| 85 | 19,060 | 32,750 | 145,800 | 3,106,710 | 3,304,320 | 340,830 | 3,645,150 | 0 | 3,645,150 | 0 | 3,645,150 |
| 86 | 22,190 | 36,500 | 148,100 | 3,296,769 | 3,503,559 | 340,830 | 3,844,389 | 0 | 3,749,719 | 94,670 | 3,844,389 |
| 87 | 25,370 | 41,250 | 150,300 | 3,493,803 | 3,710,723 | 340,830 | 4,051,553 | 0 | 3,835,493 | 216,060 | 4,051,553 |
| 88 | 29,560 | 49,500 | 152,500 | 3,689,327 | 3,920,887 | 340,830 | 4,261,717 | 0 | 3,924,257 | 337,460 | 4,261,717 |
| 89 | 33,850 | 58,250 | 156,700 | 3,826,048 | 4,074,848 | 340,830 | 4,415,678 | 0 | 3,962,318 | 453,360 | 4,415,678 |
| 1990 | 38,140 | 67,000 | 160,900 | 3,922,098 | 4,188,138 | 340,830 | 4,528,968 | 0 | 3,948,408 | 580,560 | 4,528,968 |
| 91 | 38,180 | 67,000 | 166,400 | 3,925,200 | 4,206,780 | 340,830 | 4,547,610 | 0 | 3,955,250 | 592,360 | 4,547,610 |
| 92 | 38,220 | 67,000 | 171,900 | 3,935,200 | 4,212,320 | 340,830 | 4,553,150 | 0 | 3,948,990 | 604,160 | 4,553,150 |
| 93 | 38,260 | 67,000 | 177,400 | 3,935,200 | 4,217,860 | 340,830 | 4,558,690 | 0 | 3,942,830 | 651,860 | 4,558,690 |
| 94 | 38,300 | 67,000 | 182,000 | 3,935,200 | 4,222,500 | 340,830 | 4,563,330 | 0 | 3,935,680 | 627,650 | 4,563,330 |
| 95 | 38,350 | 67,000 | 184,000 | 3,935,200 | 4,224,550 | 340,830 | 4,565,380 | 0 | 3,925,930 | 639,450 | 4,565,380 |
| 96 | 38,400 | 67,000 | 186,000 | 3,935,200 | 4,226,600 | 340,830 | 4,567,430 | 0 | 3,919,080 | 648,350 | 4,567,430 |
| 97 | 38,450 | 67,000 | 188,000 | 3,935,200 | 4,228,650 | 340,830 | 4,569,480 | 0 | 3,912,230 | 657,250 | 4,569,480 |
| 98 | 38,500 | 67,000 | 188,000 | 3,935,200 | 4,228,700 | 340,830 | 4,569,530 | 0 | 3,903,480 | 666,050 | 4,569,530 |
| 99 | 38,550 | 67,000 | 188,000 | 3,935,200 | 4,228,750 | 340,830 | 4,569,580 | 0 | 3,900,640 | 668,940 | 4,569,580 |
| 2000 | 38,610 | 67,000 | 188,000 | 3,935,200 | 4,228,810 | 340,830 | 4,569,640 | 0 | 3,885,800 | 683,840 | 4,569,640 |
| 01 | 38,670 | 67,000 | 188,000 | 3,935,200 | 4,228,870 | 340,830 | 4,569,700 | 0 | 3,878,460 | 691,240 | 4,569,700 |
| 02 | 38,730 | 67,000 | 188,000 | 3,935,200 | 4,228,930 | 340,830 | 4,569,760 | 0 | 3,871,120 | 698,640 | 4,569,760 |
| 03 | 38,790 | 67,000 | 188,000 | 3,935,200 | 4,228,990 | 340,830 | 4,569,820 | 0 | 3,863,780 | 706,040 | 4,569,820 |
| 04 | 38,850 | 67,000 | 188,000 | 3,935,200 | 4,229,050 | 340,830 | 4,569,880 | 0 | 3,856,440 | 713,440 | 4,569,880 |
| 05 | 38,910 | 67,000 | 188,000 | 3,935,200 | 4,229,110 | 340,830 | 4,569,940 | 0 | 3,849,110 | 702,830 | 4,569,940 |
| 06 | 38,980 | 67,000 | 188,000 | 3,935,200 | 4,229,180 | 340,830 | 4,570,010 | 0 | 3,841,880 | 728,130 | 4,570,010 |
| 07 | 39,050 | 67,000 | 188,000 | 3,935,200 | 4,229,250 | 340,830 | 4,570,080 | 0 | 3,834,550 | 735,530 | 4,570,080 |
| 08 | 39,120 | 67,000 | 188,000 | 3,935,200 | 4,229,320 | 340,830 | 4,570,150 | 0 | 3,827,220 | 742,930 | 4,570,150 |
| 09 | 39,190 | 67,000 | 188,000 | 3,935,200 | 4,229,390 | 340,830 | 4,570,220 | 0 | 3,819,890 | 750,330 | 4,570,220 |
| 2010 | 39,260 | 67,000 | 188,000 | 3,935,200 | 4,229,460 | 340,830 | 4,570,290 | 0 | 3,812,570 | 757,720 | 4,570,290 |
| 11 | 39,340 | 67,000 | 188,000 | 3,935,200 | 4,229,540 | 340,830 | 4,570,370 | 0 | 3,808,250 | 762,120 | 4,570,370 |
| 12 | 39,420 | 67,000 | 188,000 | 3,935,200 | 4,229,620 | 340,830 | 4,570,450 | 0 | 3,803,840 | 766,610 | 4,570,450 |
| 13 | 39,510 | 67,000 | 188,000 | 3,935,200 | 4,229,710 | 340,830 | 4,570,540 | 0 | 3,799,530 | 771,010 | 4,570,540 |
| 14 | 39,600 | 67,000 | 188,000 | 3,935,200 | 4,229,800 | 340,830 | 4,570,630 | 0 | 3,795,130 | 775,500 | 4,570,630 |
| 15 | 39,700 | 67,000 | 188,000 | 3,935,200 | 4,229,900 | 340,830 | 4,570,730 | 0 | 3,790,830 | 779,900 | 4,570,730 |
| 2016 | 39,800 | 67,000 | 188,000 | 3,935,200 | 4,230,000 | 340,830 | 4,570,830 | 0 | 3,786,530 | 784,300 | 4,570,830 |
| 2025 | 39,800 | 67,000 | 188,000 | 3,935,200 | 4,230,000 | 340,830 | 4,570,830 | 0 | 3,738,930 | 831,900 | 4,570,830 |
| 2035 | 39,800 | 67,000 | 188,000 | 3,935,200 | 4,230,000 | 340,830 | 4,570,830 | 0 | 3,679,930 | 890,900 | 4,570,830 |

1/ Includes water to compensate for operation losses, deliveries for specific recreational usage, coolant water for a nuclear powerplant of the pressurized or boiling reactor type, and water for the initial filling of all facilities below the Delta; but excludes surplus water.

2/ Total of Bureau Water estimated to be purchased is 143,394 acre-feet.

3/ The initial project conservation facilities include the Upper Feather Area; the Oroville Area; the Delta Facilities; San Luis Dam, reservoir, and Pumping-Generating Plant; and an allocated share of the California Aqueduct between the Delta and Dos Amigos Pumping Plant.

4/ The Upper Eel River Development.

TABLE 6

ESTIMATED ANNUAL PROJECT ENERGY GENERATION

(in millions of kilowatt-hours)

| CALENDAR YEAR | OROVILLE-THERMALITO POWERPLANTS | COTTONWOOD POWERPLANT | PYRAMID AND CASTAIC POWERPLANTS | SAN LUIS PUMPING-GENERATING PLANT | UPPER & LOWER DEVIL CANYON POWERPLANTS | SAN LUIS OBISPO POWERPLANT | TOTAL GENERATION AT POWERPLANTS |
|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 1967 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 68 | 1,188 | 0 | 0 | 3 | 0 | 0 | 1,191 |
| 69 | 2,799 | 0 | 0 | 12 | 0 | 0 | 2,811 |
| 1970 | 2,846 | 0 | 36 | 33 | 0 | 0 | 2,915 |
| 71 | 2,846 | 6 | 450 | 88 | 7 | 0 | 3,397 |
| 72 | 2,846 | 34 | 581 | 141 | 165 | 0 | 3,767 |
| 73 | 2,846 | 37 | 726 | 149 | 181 | 0 | 3,939 |
| 74 | 2,846 | 36 | 775 | 1 | 155 | 0 | 3,813 |
| 75 | 2,846 | 36 | 783 | 3 | 179 | 0 | 3,847 |
| 76 | 2,846 | 41 | 913 | 32 | 302 | 0 | 4,134 |
| 77 | 2,846 | 45 | 1,026 | 54 | 338 | 0 | 4,309 |
| 78 | 2,846 | 56 | 1,139 | 79 | 373 | 0 | 4,493 |
| 79 | 2,846 | 55 | 1,248 | 95 | 410 | 0 | 4,654 |
| 1980 | 2,846 | 59 | 1,363 | 133 | 444 | 2 | 4,847 |
| 81 | 2,846 | 66 | 1,444 | 132 | 512 | 2 | 5,002 |
| 82 | 2,846 | 74 | 1,518 | 143 | 576 | 4 | 5,161 |
| 83 | 2,846 | 80 | 1,593 | 149 | 640 | 6 | 5,314 |
| 84 | 2,846 | 88 | 1,674 | 161 | 704 | 9 | 5,482 |
| 85 | 2,846 | 95 | 1,748 | 169 | 769 | 15 | 5,642 |
| 86 | 2,846 | 101 | 1,838 | 0 | 833 | 19 | 5,637 |
| 87 | 2,846 | 104 | 1,988 | 38 | 841 | 24 | 5,841 |
| 88 | 2,846 | 106 | 2,142 | 73 | 851 | 30 | 6,048 |
| 89 | 2,846 | 110 | 2,216 | 95 | 862 | 38 | 6,167 |
| 1990 | 2,846 | 111 | 2,230 | 119 | 872 | 48 | 6,226 |
| 91 | 2,846 | 113 | 2,227 | 118 | 881 | 48 | 6,233 |
| 92 | 2,846 | 113 | 2,227 | 118 | 881 | 48 | 6,233 |
| 93 | 2,846 | 113 | 2,227 | 118 | 881 | 48 | 6,233 |
| 94 | 2,846 | 113 | 2,227 | 118 | 881 | 48 | 6,233 |
| 95 | 2,846 | 113 | 2,227 | 118 | 881 | 48 | 6,233 |
| 96 | 2,846 | 113 | 2,227 | 118 | 881 | 48 | 6,233 |
| 97 | 2,846 | 113 | 2,227 | 118 | 881 | 48 | 6,233 |
| 98 | 2,846 | 113 | 2,227 | 118 | 881 | 48 | 6,233 |
| 99 | 2,846 | 113 | 2,227 | 118 | 881 | 48 | 6,233 |
| 2000 1/ | 2,846 | 113 | 2,227 | 118 | 881 | 48 | 6,233 |

1/ And each year thereafter for the remainder of the project repayment period.

TABLE 7

ESTIMATED ANNUAL PROJECT ENERGY REQUIREMENTS
FOR PUMPING

(in millions of kilowatt-hours)

| CALENDAR YEAR | OROVILLE-THERMALITO POWERPLANTS | NORTH BAY AQUEDUCT | | PERIPHERAL CANAL PUMPING PLANT | SOUTH BAY AQUEDUCT PUMPING PLANTS | CALIFORNIA AQUEDUCT | | | | | | | | | | | SAN JOAQUIN DRAIN PUMPING PLANTS | TOTAL STATE WATER PROJECT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CALHOUN PUMPING PLANT | CORDELIA PUMPING PLANT | | | DELTA PUMPING PLANT | SAN LUIS PUMPING-GENERATING PLANT | DOS AMIGOS PUMPING PLANT | BUENA VISTA PUMPING PLANT | WHEELER RIDGE PUMPING PLANT | WIND GAP PUMPING PLANT | TEHACHAPI PUMPING PLANT | PEARBLOSSOM PUMPING PLANT | OSO PUMPING PLANT | LAS PERILLAS & BADGER HILL PUMPING PLANTS | DEVIL'S DEN, SAWTOOTH, & POLONIO PUMPING PLANTS | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) |
| 1962 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 63 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 64 | 0 | 0 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| 65 | 0 | 0 | 0 | 0 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 |
| 66 | 0 | 0 | 0 | 0 | 46 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 47 |
| 67 | 0 | 0 | 0 | 0 | 56 | 48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 104 |
| 68 | 14 | 0 | 1 | 0 | 81 | 200 | 102 | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 445 |
| 69 | 469 | 0 | 1 | 0 | 92 | 393 | 184 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 1,187 |
| 1970 | 469 | 0 | 1 | 0 | 87 | 162 | 84 | 49 | 17 | 18 | 32 | 96 | 0 | 11 | 12 | 0 | 0 | 1,038 |
| 71 | 469 | 0 | 2 | 0 | 88 | 247 | 86 | 114 | 113 | 122 | 260 | 932 | 40 | 84 | 12 | 0 | 0 | 2,569 |
| 72 | 469 | 0 | 3 | 0 | 90 | 349 | 123 | 186 | 217 | 237 | 515 | 1,884 | 212 | 106 | 13 | 0 | 0 | 4,404 |
| 73 | 469 | 0 | 3 | 0 | 91 | 379 | 140 | 209 | 242 | 269 | 589 | 2,102 | 220 | 137 | 14 | 0 | 0 | 4,864 |
| 74 | 469 | 0 | 4 | 15 | 93 | 595 | 122 | 217 | 246 | 272 | 591 | 2,102 | 196 | 144 | 15 | 0 | 0 | 5,081 |
| 75 | 469 | 0 | 4 | 15 | 95 | 595 | 124 | 222 | 248 | 274 | 595 | 2,106 | 190 | 145 | 15 | 0 | 0 | 5,097 |
| 76 | 469 | 0 | 4 | 14 | 96 | 584 | 99 | 247 | 280 | 310 | 675 | 2,383 | 212 | 165 | 17 | 0 | 0 | 5,555 |
| 77 | 469 | 0 | 5 | 15 | 98 | 607 | 89 | 273 | 313 | 346 | 753 | 2,655 | 234 | 184 | 18 | 0 | 0 | 6,059 |
| 78 | 469 | 0 | 5 | 14 | 100 | 634 | 109 | 298 | 344 | 381 | 828 | 2,931 | 256 | 204 | 20 | 0 | 0 | 6,593 |
| 79 | 469 | 0 | 6 | 18 | 100 | 681 | 133 | 323 | 375 | 415 | 901 | 3,203 | 282 | 222 | 23 | 0 | 0 | 7,151 |
| 1980 | 469 | 1 | 6 | 18 | 102 | 723 | 163 | 355 | 405 | 448 | 974 | 3,472 | 301 | 242 | 25 | 11 | 1 | 7,716 |
| 81 | 469 | 1 | 7 | 28 | 103 | 811 | 199 | 379 | 432 | 483 | 1,052 | 3,756 | 340 | 257 | 25 | 13 | 1 | 8,356 |
| 82 | 469 | 2 | 7 | 30 | 105 | 855 | 204 | 405 | 468 | 520 | 1,129 | 4,035 | 385 | 268 | 26 | 20 | 1 | 8,929 |
| 83 | 469 | 2 | 8 | 32 | 107 | 908 | 211 | 434 | 502 | 557 | 1,211 | 4,289 | 421 | 281 | 27 | 27 | 1 | 9,487 |
| 84 | 469 | 2 | 8 | 36 | 109 | 957 | 219 | 462 | 537 | 595 | 1,295 | 4,585 | 463 | 296 | 30 | 38 | 1 | 10,102 |
| 85 | 469 | 2 | 9 | 39 | 110 | 1,017 | 226 | 489 | 569 | 629 | 1,367 | 4,849 | 502 | 308 | 34 | 59 | 1 | 10,679 |
| 86 | 469 | 2 | 10 | 49 | 112 | 1,268 | 187 | 517 | 601 | 666 | 1,447 | 5,126 | 535 | 324 | 38 | 77 | 1 | 11,429 |
| 87 | 469 | 2 | 10 | 43 | 114 | 1,132 | 61 | 544 | 636 | 703 | 1,528 | 5,421 | 547 | 350 | 41 | 94 | 1 | 11,696 |
| 88 | 469 | 3 | 11 | 43 | 116 | 1,158 | 81 | 573 | 669 | 741 | 1,610 | 5,716 | 557 | 376 | 45 | 116 | 1 | 12,285 |
| 89 | 469 | 3 | 11 | 47 | 118 | 1,216 | 122 | 593 | 695 | 766 | 1,659 | 5,895 | 572 | 388 | 50 | 147 | 1 | 12,752 |
| 1990 | 469 | 3 | 12 | 46 | 121 | 1,245 | 150 | 607 | 704 | 770 | 1,677 | 5,959 | 577 | 391 | 56 | 183 | 1 | 12,971 |
| 91 | 469 | 3 | 12 | 48 | 126 | 1,254 | 159 | 608 | 707 | 779 | 1,685 | 5,990 | 585 | 391 | 56 | 183 | 1 | 13,056 |
| 92 | 469 | 3 | 12 | 48 | 128 | 1,254 | 159 | 608 | 707 | 779 | 1,685 | 5,990 | 585 | 391 | 56 | 183 | 1 | 13,058 |
| 93 | 469 | 3 | 12 | 48 | 132 | 1,255 | 159 | 608 | 707 | 779 | 1,685 | 5,990 | 585 | 391 | 56 | 183 | 1 | 13,063 |
| 94 | 469 | 3 | 12 | 48 | 136 | 1,257 | 159 | 608 | 707 | 779 | 1,685 | 5,990 | 585 | 391 | 56 | 183 | 1 | 13,069 |
| 95 | 469 | 3 | 12 | 48 | 137 | 1,257 | 159 | 608 | 707 | 779 | 1,685 | 5,990 | 585 | 391 | 56 | 183 | 1 | 13,070 |
| 96 | 469 | 3 | 12 | 48 | 139 | 1,258 | 159 | 608 | 707 | 779 | 1,685 | 5,990 | 585 | 391 | 56 | 183 | 1 | 13,073 |
| 97 | 469 | 3 | 12 | 48 | 140 | 1,258 | 159 | 608 | 707 | 779 | 1,685 | 5,990 | 585 | 391 | 56 | 183 | 1 | 13,074 |
| 98 | 469 | 3 | 12 | 48 | 140 | 1,258 | 159 | 608 | 707 | 779 | 1,685 | 5,990 | 585 | 391 | 56 | 183 | 1 | 13,074 |
| 99 | 469 | 3 | 12 | 48 | 140 | 1,258 | 159 | 608 | 707 | 779 | 1,685 | 5,990 | 585 | 391 | 56 | 183 | 1 | 13,074 |
| 2000 1/ | 469 | 3 | 12 | 48 | 140 | 1,258 | 159 | 608 | 707 | 779 | 1,685 | 5,990 | 585 | 391 | 56 | 183 | 1 | 13,074 |

1/ And each year thereafter for the remainder of the project repayment period.

TABLE 8

FRENCHMAN LAKE MONTHLY OPERATION

(in acre-feet unless otherwise indicated)

| MONTH | RESERVOIR STORAGE | | | OUTFLOW | | | | INFLOW | RELEASES | |
|---|---|---|---|---|---|---|---|---|---|---|
| | WATER SURFACE ELEVATION, IN FEET | END OF MONTH STORAGE | MONTHLY STORAGE CHANGE | REGULATED RELEASE | SPILL | ESTIMATED EVAPORATION AND SEEPAGE | TOTAL GROSS OUTFLOW | COMPUTED OR ESTIMATED | WATER RIGHT ENTITLEMENT OR CONTRACT RELEASE[1] | PROJECT WATER[2] |
| 1965 | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Jan. | 5,579.88 | 43,494 | 4,809 | 123 | 0 | 92 | 215 | 5,024 | 0 | 123 |
| Feb. | 5,580.93 | 44,938 | 1,444 | 2,432 | 0 | 107 | 2,539 | 3,983 | 0 | 2,432[3] |
| Mar. | 5,585.54 | 51,617 | 6,679 | 232 | 0 | 181 | 413 | 7,092 | 0 | 232 |
| Apr. | 5,589.71 | 58,160 | 6,543 | 417 | 6,987[4] | 310 | 7,714 | 14,257 | 0 | 417 |
| May | 5,588.49 | 56,194 | -1,966 | 432 | 9,884[4] | 597 | 10,913 | 8,947 | 285 | 147 |
| Jun. | 5,586.98 | 53,821 | -2,373 | 3,160 | 504[4] | 670 | 4,334 | 1,961 | 3,160 | 0 |
| Jul. | 5,585.53 | 51,602 | -2,219 | 1,763 | 0 | 945 | 2,708 | 489 | 1,763 | 0 |
| Aug. | 5,583.62 | 48,768 | -2,834 | 2,501 | 0 | 738 | 3,239 | 405 | 2,501 | 0 |
| Sep. | 5,582.05 | 46,510 | -2,258 | 1,817 | 0 | 520 | 2,337 | 79 | 1,817 | 0 |
| Oct. | 5,581.63 | 45,917 | - 593 | 470 | 0 | 435 | 905 | 312 | 470 | 0 |
| Nov. | 5,581.97 | 46,397 | 480 | 163 | 0 | 227 | 390 | 870 | 83 | 80 |
| Dec. | 5,582.40 | 47,008 | 611 | 123 | 0 | 149 | 272 | 883 | 0 | 123 |
| Totals | - | - | 8,323 | 13,633 | 17,375 | 4,971 | 35,979 | 44,302 | 10,079 | 3,554 |

1/ Releases under the interim contract with the Last Chance Water District.
2/ Releases required specifically for streamflow maintenance.
3/ Flood control releases made to provide space for anticipated heavy spring runoff.
4/ Computed from "Little Last Chance Creek near Chilcoot" gaging station record.

TABLE 9

ANTELOPE LAKE MONTHLY OPERATION

(in acre-feet unless otherwise indicated)

| MONTH | RESERVOIR STORAGE | | | OUTFLOW | | | | INFLOW | RELEASES | |
|---|---|---|---|---|---|---|---|---|---|---|
| | WATER SURFACE ELEVATION IN FEET | END OF MONTH STORAGE | MONTHLY STORAGE CHANGE | REGULATED RELEASE | SPILL 1/ | ESTIMATED EVAPORATION AND SEEPAGE | TOTAL GROSS OUTFLOW | COMPUTED OR ESTIMATED | WATER RIGHT ENTITLEMENT OR CONTRACT RELEASE 2/ | PROJECT WATER 3/ |
| 1965 | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Jan. | 5,002.63 | 23,104 | 5,967 | 123 | 664 4/ | 62 | 849 | 6,816 | 123 | 0 |
| Feb. | 5,002.65 | 23,122 5/ | 18 | 111 | 4,947 4/ | 73 | 5,131 | 5,149 | 111 | 0 |
| Mar. | 5,002.83 | 23,293 5/ | 171 | 123 | 6,803 4/ | 119 | 7,045 | 7,216 | 123 | 0 |
| Apr. | 5,003.89 | 24,310 | 1,017 | 119 | 14,150 4/ | 187 | 14,456 | 15,473 | 119 | 0 |
| May | 5,002.94 | 23,397 | - 913 | 123 | 16,620 4/ | 356 | 17,099 | 16,186 | 123 | 0 |
| Jun. | 5,002.50 | 22,981 | - 416 | 58 | 5,258 4/ | 404 | 5,720 | 5,304 | 58 | 0 |
| Jul. | 5,002.13 | 22,634 | - 347 | 257 | 1,062 4/ | 478 | 1,797 | 1,450 | 257 | 0 |
| Aug. | 5,002.04 | 22,550 | - 84 | 453 | 167 | 359 | 979 | 895 | 453 | 0 |
| Sep. | 4,994.94 | 15,723 5/ | -6,827 | 7,196 | 0 | 354 | 7,550 | 723 | 7,196 6/ | 0 |
| Oct. | 4,993.38 | 13,305 5/ | - 418 | 615 | 0 | 155 | 770 | 352 | 0 | 615 |
| Nov. | 4,994.09 | 15,836 | 531 | 595 | 0 | 120 | 715 | 1,246 | 0 | 595 |
| Dec. | 4,994.51 | 16,156 5/ | 320 | 615 | 0 | 80 | 695 | 1,015 | 0 | 615 |
| Total | | | - 981 | 10,388 | 49,671 | 2,747 | 62,806 | 61,825 | 8,423 | 1,825 |

1/ Preliminary figures.
2/ Releases required to satisfy water right entitlements in Indian Valley and the agreement with the Pacific Gas and Electric Company.
3/ Releases required specifically for streamflow maintenance.
4/ Computed from the record of the gaging stations, "Indian Creek near Boulder Creek Guard Station".
5/ Estimated from periodic gage readings.
6/ Release made to draw reservoir down to determine effect on the phreatic line within the dam section.

TABLE 10

SOUTH BAY AQUEDUCT MONTHLY OPERATION

(All figures in acre-feet unless otherwise indicated)

| MONTH | SUPPLY FROM DELTA-MENDOTA CANAL | DELTA-MENDOTA CANAL TO SOUTH BAY PUMPING PLANT | | | | AMOUNT PUMPED AT SOUTH BAY PUMPING PLANT | SOUTH BAY PUMPING PLANT TO TERMINUS | | | | | | ELECTRICAL ENERGY CONSUMPTION (Kilowatt Hours) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | STORAGE CHANGES | | LOSSES[1] | DELIVERIES | | STORAGE CHANGES | | LOSSES[1] | DELIVERIES | | | |
| | | BETHANY RESERVOIR | AQUEDUCT | | WATER SUPPLY CONTRACTORS | | PATTERSON RESERVOIR | AQUEDUCT | | CONSTRUCTION CONTRACTORS | INITIAL AQUEDUCT FILL | WATER SUPPLY CONTRACTORS | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
| 1965 | | | | | | | | | | | | | |
| Jan. | 0 | - 79 | 0 | 0 | 1 | 78 | 0 | 0 | 0 | 0 | 6 | 72 | 81,600 |
| Feb. | 31 | -113 | 31 | 0 | 7 | 106 | 0 | 23 | 4 | 7[2] | 0 | 72 | 105,600 |
| Mar. | 192 | 20 | 0 | 29 | 10 | 133 | 0 | 0 | 37 | 0 | 4 | 92 | 124,800 |
| Apr. | 206 | 32 | 0 | 34 | 7 | 133 | 0 | 0 | 36 | 0 | 0 | 97 | 129,600 |
| May | 2,012 | 211 | 0 | 9 | 8 | 1,784 | 0 | 18 | 0 | 3[3] | 0 | 1,763 | 1,166,400 |
| Jun. | 3,683 | 68 | 0 | 244 | 6 | 3,365 | 0 | 0 | 92 | 0 | 69 | 3,204 | 2,747,200 |
| Jul. | 5,655 | - 46 | 0 | 0 | 10 | 5,691 | 75 | 0 | 0 | 0 | 4 | 5,612 | 4,372,800 |
| Aug. | 7,537 | -234 | 0 | 223 | 8 | 7,540 | 22 | 0 | 51 | 0 | 0 | 7,467 | 5,515,200 |
| Sep. | 7,032 | 219 | 0 | 123 | 10 | 6,680 | 1 | 0 | 58 | 0 | 0 | 6,621 | 5,910,140 |
| Oct. | 7,005 | - 57 | 0 | 267 | 9 | 6,786 | 0 | - 5 | 188 | 0 | 0 | 6,603 | 5,456,000 |
| Nov. | 2,463 | 162 | 0 | 66 | 5 | 2,230 | - 3 | 0 | 189 | 0 | 0 | 2,044 | 2,299,200 |
| Dec. | 169 | - 95 | 0 | 23 | 1 | 240 | - 2 | - 68 | 13 | 0 | 0 | 297 | 268,800 |
| TOTAL | 35,985 | 88 | 31 | 1,018 | 82 | 34,766 | 93 | - 32 | 668 | 10 | 83 | 33,944 | 28,177,340 |
| 1966 | | | | | | | | | | | | | |
| Jan. | 0 | - 52 | 0 | 0 | 0 | 52 | -17 | 0 | - 7 | 0 | 0 | 76 | 139,200 |
| Feb. | 1,453 | 149 | 31 | 52 | 1 | 1,220 | 22 | 123 | 9 | 0 | 0 | 1,066 | 710,400 |
| TOTAL[4] Mar.-Feb. | 37,407 | 377 | 31 | 1,070 | 75 | 35,854 | 98 | 68 | 666 | 3 | 77 | 34,942 | 28,839,740 |

| MONTH | SUMMARY OF DELIVERIES TO WATER SUPPLY CONTRACTORS BY AQUEDUCT TURNOUT | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | BETHANY RESERVOIR | ALTAMONT | | | | PATTERSON | WENTE | VALLECITOS | | SANTA CLARA METER | | TOTAL | |
| | ALAMEDA CO. F.C. & W.C.D., ZONE 7 | | | ALAMEDA CO. W.D. | | ALAMEDA CO. F.C. & W.C.D., ZONE 7 | | ALAMEDA CO. W.D. | | SANTA CLARA CO. F.C. & W.D. | | MUNICIPAL & INDUSTRIAL | AGRICULTURAL |
| | MUNICIPAL & INDUSTRIAL | MUNICIPAL & INDUSTRIAL | AGRICULTURAL | MUNICIPAL & INDUSTRIAL | AGRICULTURAL | MUNICIPAL & INDUSTRIAL | AGRICULTURAL | MUNICIPAL & INDUSTRIAL | AGRICULTURAL | MUNICIPAL & INDUSTRIAL | AGRICULTURAL | | |
| | (14) | (15) | (16) | (17) | (18) | (19) | (20) | (21) | (22) | (23) | (24) | (25) | (26) |
| 1965 | | | | | | | | | | | | | |
| Jan. | 1 | 0 | 0 | 0 | 0 | 72 | 0 | 0 | 0 | 0 | 0 | 73 | 0 |
| Feb. | 7 | 5 | 0 | 0 | 0 | 67 | 0 | 0 | 0 | 0 | 0 | 79 | 0 |
| Mar. | 10 | 15 | 0 | 0 | 0 | 77 | 0 | 0 | 0 | 0 | 0 | 102 | 0 |
| Apr. | 7 | 10 | 0 | 0 | 0 | 87 | 0 | 0 | 0 | 0 | 0 | 104 | 0 |
| May | 8 | 33 | 0 | 788 | 788 | 150 | 4 | 0 | 0 | 0 | 0 | 979 | 792 |
| Jun. | 6 | 52 | 56 | 1,203 | 1,202 | 238 | 46 | 0 | 0 | 195 | 212 | 1,694 | 1,516 |
| Jul. | 10 | 66 | 77 | 1,357 | 1,357 | 328 | 59 | 0 | 0 | 1,137 | 1,231 | 2,898 | 2,724 |
| Aug. | 8 | 57 | 60 | 1,512 | 1,513 | 274 | 29 | 0 | 0 | 1,931 | 2,091 | 3,782 | 3,693 |
| Sep. | 10 | 48 | 43 | 1,436 | 1,436 | 183 | 0 | 0 | 0 | 1,668 | 1,807 | 3,345 | 3,286 |
| Oct. | 9 | 24 | 0 | 1,297 | 1,297 | 181 | 0 | 188 | 187 | 1,646 | 1,783 | 3,345 | 3,267 |
| Nov. | 5 | 3 | 0 | 47 | 47 | 96 | 0 | 347 | 347 | 555 | 602 | 1,053 | 996 |
| Dec. | 1 | 6 | 0 | 0 | 0 | 77 | 0 | 29 | 29 | 75 | 81 | 188 | 110 |
| TOTAL | 82 | 319 | 236 | 7,640 | 7,640 | 1,830 | 138 | 564 | 563 | 7,207 | 7,807 | 17,642 | 16,384 |
| 1966 | | | | | | | | | | | | | |
| Jan. | 0 | 2 | 0 | 0 | 0 | 74 | 0 | 0 | 0 | 0 | 0 | 76 | 0 |
| Feb. | 1 | 2 | 0 | 0 | 0 | 75 | 0 | 0 | 0 | 475 | 514 | 553 | 514 |
| TOTAL[4] Mar.-Feb. | 75 | 318 | 236 | 7,640 | 7,640 | 1,840 | 138 | 564 | 563 | 7,682 | 8,321 | 18,119 | 16,898 |

1/ Includes operational spills, water surface evaporation, and seepage.
2/ To United States Steel Corporation.
3/ To Kaiser Steel Corporation.
4/ Bureau Water Year totals.

TABLE 11

WATER QUALITY AT SOUTH BAY PUMPING PLANT

(Parts per million unless otherwise noted)

| Month | Constituents | | | | | |
|---|---|---|---|---|---|---|
| | Total Dissolved Solids 1/ | Total Hardness 1/ | Chlorides 1/ | Sulfates 1/ | Boron 2/ | Sodium 2/ Percent |
| 1965 | | | | | | |
| January | 329 | 128 | 87 | 56 | 0.3 | 51 |
| February | 329 | 128 | 87 | 56 | 0.3 | 55 |
| March | 328 | 128 | 86 | 56 | 0.3 | 51 |
| April | 309 | 122 | 81 | 52 | 0.3 | 50 |
| May | 211 | 91 | 52 | 30 | 0.2 | 48 |
| June | 153 | 73 | 35 | 17 | 0.1 | 43 |
| July | 202 | 88 | 49 | 28 | 0.1 | 46 |
| August | 209 | 91 | 51 | 29 | 0.1 | 42 |
| September | 287 | 113 | 72 | 47 | 0.1 | 45 |
| October | 256 | 103 | 63 | 40 | 0.1 | 55 |
| November | 297 | 116 | 75 | 50 | 0.2 | 52 |
| December | 274 | 109 | 69 | 45 | 0.3 | 52 |
| Annual Average | 234 | 98 | 58 | 35 | 0.1 | 47 |

1/ Weighted average computed from daily flow and correlation with electrical conductivity.
2/ Laboratory analysis of monthly random sample.

TABLE 12

GENERAL RECONCILIATION OF CAPITAL COST CHANGES

(in millions of dollars)

| PROJECT FACILITIES | BULLETIN NO. 132-65 | BULLETIN NO. 132-66 | CHANGE | COSTS OF ADDITIONAL FEATURES | | CHANGES IN COSTS ITEMS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FEATURE[1] | COST | ADVANCED PLANNING[2] | DESIGN AND CONSTRUCTION[3] FEATURE | | CHANGE | RIGHT OF WAY[4] | PREOPERATING[2] |
| UPPER FEATHER AREA: | | | | | | | | | | | |
| Frenchman Dam and Lake | 3.3 | 3.2 | - 0.1 | | | | | | | | - 0.1 |
| Grizzly Valley Dam and Lake Davis | 3.8 | 4.1 | + 0.3 | | | | Dam | (+ 0.5) | + 0.5 | + 0.2 | - 0.4 |
| Antelope Dam and Lake | 4.3 | 4.5 | + 0.2 | | | | | | | | + 0.2 |
| Dixie Refuge Dam and reservoir | 2.1 | 4.7 | + 2.6 | Access Road | + 1.3 | | Dam | (+ 0.3) | | | |
| | | | | | | | Road Relocations | (+ 0.5) | | | |
| | | | | | | | Construction Supervision | (+ 0.5) | + 1.3 | | |
| Abbey Bridge Dam and reservoir | 4.4 | 5.3 | + 0.9 | | | | Dam | (+ 0.6) | | | |
| | | | | | | | Road Relocations | (+ 0.5) | | | |
| | | | | | | | Access Road | (- 0.8) | | | |
| | | | | | | | Construction Supervision | (+ 0.6) | + 0.9 | | |
| SUBTOTAL, Upper Feather Area | 17.9 | 21.8 | + 3.9 | | + 1.3 | | | | + 2.7 | + 0.2 | - 0.3 |
| OROVILLE AREA: | | | | | | | | | | | |
| Oroville Dam and reservoir | 311.5 | 307.6 | - 3.9 | | | | Dam | (- 0.6) | | | |
| | | | | | | | Feather River Hatchery | (+ 0.6) | | | |
| | | | | | | | Feather River Railroad | (- 8.6) | | | |
| | | | | | | | Relocations | (- 1.8) | -10.4 | + 5.9 | + 0.6 |
| Oroville-Thermalito Power Facilities | 148.7 | 170.9 | +22.2 | Monitor & Control System | + 1.7 | | Powerplant | (+ 5.8) | | | |
| | | | | | | | Thermalito Powerplant | (+ 2.7) | | | |
| | | | | | | | Thermalito Diversion Dam | (+ 1.4) | | | |
| | | | | | | | Other Features | (+ 1.7) | +11.7 | + 7.2 | + 1.6 |
| SUBTOTAL, Oroville Area | 460.2 | 478.5 | +18.3 | | + 1.7 | | | | + 1.3 | +13.1 | + 2.2 |
| DELTA FACILITIES | 154.2 | 55.1 | -99.1[6] | | | | | | -99.1[6] | | |
| UPPER EEL RIVER DEVELOPMENT | 220.3 | 226.5 | + 6.2 | | | + 5.3 | | | | | + 0.9 |
| NORTH BAY AQUEDUCT | 9.3 | 10.5 | + 1.2 | Monitor & Control System | + 0.8 | | Aqueduct | (+ 0.5) | + 0.5 | + 0.1 | - 0.2 |
| SOUTH BAY AQUEDUCT | 50.2 | 59.4 | + 9.2 | Monitor & Control System | + 0.6 | | Del Valle Dam & reservoir | (+ 6.0) | | | |
| | | | | | | | Del Valle Pumping Plant | (+ 0.1) | | | |
| | | | | | | | Aqueduct | (+ 1.0) | + 7.1 | + 1.5 | |
| SUBTOTAL | 434.0 | 351.5 | -82.5 | | + 1.4 | + 5.3 | | | -91.5 | + 1.6 | + 0.7 |
| CALIFORNIA AQUEDUCT: | | | | | | | | | | | |
| North San Joaquin Division | 120.4 | 134.8 | +14.4 | Clifton Court Forebay (+10.3) | | | Delta Pumping Plant | (- 7.0) | | | |
| | | | | Monitor & Control System (+ 5.3) | +15.6 | | Aqueduct | (- 1.1) | - 8.1 | + 8.0 | + 1.1 |
| San Luis Division | 195.7 | 190.0 | - 5.7 | Monitor & Control System | + 5.5 | | San Luis Dam & reservoir | (- 1.7) | | | |
| | | | | | | | San Luis Forebay | (- 0.7) | | | |
| | | | | | | | Pumping-Generating Plant | (+ 0.9) | | | |
| | | | | | | | Dos Amigos Pumping Plant | (- 0.3) | | | |
| | | | | | | | Canal | (- 2.8) | | | |
| | | | | | | | Channels, Levees, Floodworks | (-10.0) | -14.6 | + 0.7 | + 2.7 |
| South San Joaquin Division | 235.3 | 252.3 | +17.0 | Monitor & Control System | + 6.0 | | Buena Vista Pumping Plant | | | | |
| | | | | | | | Design & Construction | (+ 2.7) | | | |
| | | | | | | | Construction Supervision | (+ 2.0) | | | |
| | | | | | | | Contingencies | (+ 2.3) | | | |
| | | | | | | | Aqueduct - Tupman to Buena Vista P.P. | (+ 5.7) | | | |
| | | | | | | | Aqueduct - Wheeler Ridge P.P. to Wind Gap P.P. | (- 2.7) | | | |
| | | | | | | | Aqueduct - Wind Gap P.P. to Tehachapi P.P. | (- 3.0) | | | |
| | | | | | | | Aqueduct - Other Reaches | (- 1.2) | + 5.8 | + 5.2 | |
| Tehachapi Division | 209.7 | 234.9 | +25.2 | Monitor & Control System | + 1.5 | | Tehachapi Pumping Plant | | | | |
| | | | | | | | Design & Construction | (+ 5.9) | | | |
| | | | | | | | Construction Supervision | (+ 8.3) | | | |
| | | | | | | | Contingencies | (+ 7.8) | | | |
| | | | | | | | Aqueduct | (+ 1.4) | +23.4 | | + 0.3 |
| Mojave Division | 156.0 | 194.4 | +38.4 | Monitor & Control System | + 4.9 | | Cottonwood Powerplant | (+ 3.5) | | | |
| | | | | | | | Pearblossom Pumping Plant | (+ 6.9) | | | |
| | | | | | | | Cedar Springs Dam & res. | (+ 2.1) | | | |
| | | | | | | | Aqueduct - Palmdale to Littlerock Creek | (+ 8.3) | | | |
| | | | | | | | Aqueduct - Pearblossom P.P. to W. Fork Mojave R. | (+ 2.8) | | | |
| | | | | | | | Aqueduct - Other Reaches | (+ 4.4) | +28.0 | + 0.9 | + 4.6 |
| Santa Ana Division | 139.2 | 144.5 | + 5.3 | Monitor & Control System | + 1.5 | | Devil Canyon Powerplants | (- 5.0) | | | |
| | | | | | | | Perris Dam & reservoir | (+ 5.1) | | | |
| | | | | | | | San Bernardino Tunnel | (+ 2.6) | | | |
| | | | | | | | Aqueduct - Other Reaches | (- 0.3) | + 2.4 | + 0.6 | + 0.8 |
| West Branch | 301.9 | 284.5 | -17.4 | Monitor & Control System | + 2.2 | | Oso Pumping Plant | (- 0.4) | | | |
| | | | | | | | Pyramid Powerplant | (- 8.1) | | | |
| | | | | | | | Pyramid Dam & reservoir | (- 0.9) | | | |
| | | | | | | | Castaic Powerplant | (- 8.8) | | | |
| | | | | | | | Castaic Dam & reservoir | (- 0.1) | | | |
| | | | | | | | Aqueduct | (- 2.6) | -20.9 | + 1.8 | - 0.5 |
| Coastal Branch | 52.5 | 56.5 | + 4.0 | | | | Las Perillas & Badger Hill P.Ps. | (+ 1.5) | | | |
| | | | | | | | Other Plants | (+ 0.6) | | | |
| | | | | | | | Aqueduct | (+ 0.4) | + 2.5 | + 0.9 | + 0.6 |
| SUBTOTAL, California Aqueduct | 1,410.7 | 1,491.9 | +81.2 | | +37.2 | | | | +18.5 | +18.1 | + 7.4 |
| LOCAL PROJECTS (DAVIS-GRUNSKY PROGRAM) | 131.4 | 131.4 | 0.0 | | | | | | | | |
| SAN JOAQUIN MASTER DRAIN | 103.6 | 53.9 | -49.7 | | | | Deletion of second and third stages | | -50.2 | | + 0.5 |
| MISCELLANEOUS ADDITIONAL EXPENDITURES | 1.4 | 1.4 | 0.0 | | | | | | | | |
| SUBTOTAL | 236.4 | 186.7 | -49.7 | | | | | | -50.2 | | + 0.5 |
| TOTAL CAPITAL EXPENDITURES FINANCED | 2,559.2 | 2,530.4 | -28.8 | | +41.6 | + 5.3 | | | -119.2 | +33.0 | +10.5 |

1/ Estimated costs for these features were not included in Bulletin No. 132-65.
2/ Estimate of future expenditures for facility implementation and fish and wildlife protection has increased.
3/ Current estimate of design and construction costs based on more recent contracts and experience has resulted in the changes in this item.
4/ Current estimate based on actual appraisals has generally increased the right of way costs over those estimates utilized in Bulletin No. 132-65.
5/ In general the increased cost estimates for planning for operation and maintenance and for power programs more than offset the decreased construction costs of operation and maintenance facilities, adjustments of actual costs by utility accounting and the costs for pumping reservoir fill water.
6/ This decrease in cost primarily results from assuming that the State will share in a facility constructed by the Federal Government, rather than the Federal Government sharing in a state-constructed canal.

TABLE 13

COMPOSITION OF PROJECTED ANNUAL CAPITAL COSTS

(In dollars)

| CALENDAR YEAR | PROJECTED ANNUAL EXPENDITURES | | | | | | | | | | TOTAL ACTUAL FROM ACCOUNTING RECORDS[2] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | SURVEYS AND ENGINEERING STUDIES | DESIGN | RIGHTS OF WAY ACQUISITION AND RELOCATIONS | CONSTRUCTION | LOCAL IMPACT AID | PREOPERATING EXPENSE[1] | | LOCAL PROJECTS (Davis-Grunsky Program) | STATE PARTICIPATION IN COSTS OF SAN LUIS DIVISION | TOTAL PROJECTED | |
| | | | | | | GENERAL | DIRECT | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) |
| 1952 | | | | | | | | | | | 277,837 |
| 53 | | | | | | | | | | | 657,142 |
| 54 | | | | | | | | | | | 737,392 |
| 55 | | | | | | | | | | | 391,022 |
| 56 | | | | | | | | | | | 1,755,476 |
| 57 | | | | | | | | | | | 7,824,064 |
| 58 | | | | | | | | | | | 12,170,810 |
| 59 | | | | | | | | | | | 15,116,029 |
| 1960 | | | | | | | | | | | 20,630,155 |
| 61 | | | | | | | | | | | 31,821,960 |
| 62 | | | | | | | | | | | 36,486,149 |
| 63 | | | | | | | | | | | 112,669,177 |
| 64 | | | | | | | | | | | 125,491,768 |
| 65 | | | | | | | | | | | 166,533,011 |
| Subtotal | | | | | | | | | | | $32,561,992 |
| 1966 | 2,638,000 | 13,852,000 | 51,819,000 | 181,685,983 | 235,000 | 5,729,000 | 637,000 | 9,273,244 | 30,686,000 | 296,555,227 | |
| 67 | 2,699,000 | 12,216,000 | 26,750,000 | 255,018,000 | 470,000 | 6,521,000 | 2,064,000 | 5,000,000 | 21,871,000 | 332,609,000 | |
| 68 | 2,675,000 | 7,307,000 | 15,899,000 | 271,707,000 | 250,000 | 4,276,000 | 1,201,000 | 5,000,000 | 7,605,000 | 315,920,000 | |
| 69 | 2,579,000 | 3,876,000 | 4,209,000 | 309,292,000 | 0 | 4,261,000 | 1,918,000 | 5,000,000 | 123,000 | 331,258,000 | |
| 1970 | 2,076,000 | 2,383,000 | 1,120,000 | 186,433,000 | 0 | 4,033,000 | 3,347,000 | 5,000,000 | 0 | 204,392,000 | |
| 71 | 1,095,000 | 1,418,000 | 1,091,000 | 96,293,000 | 0 | 1,931,000 | 2,392,000 | 5,000,000 | 0 | 109,220,000 | |
| 72 | 0 | 451,000 | 44,000 | 22,718,000 | 0 | 1,188,000 | 3,698,000 | 5,000,000 | 0 | 33,099,000 | |
| 73 | 0 | 239,000 | 180,000 | 5,918,000 | 0 | 1,115,000 | 3,318,000 | 5,000,000 | 0 | 15,770,000 | |
| 74 | 0 | 299,000 | 520,000 | 3,850,000 | 0 | 255,000 | 1,387,000 | 5,000,000 | 0 | 11,311,000 | |
| 75 | 0 | 483,000 | 420,000 | 1,531,000 | 0 | 253,000 | 0 | 5,000,000 | 0 | 7,687,000 | |
| 76 | 0 | 715,000 | 320,000 | 7,608,000 | 0 | 251,000 | 0 | 5,000,000 | 0 | 13,894,000 | |
| 77 | 0 | 661,000 | 2,420,000 | 14,084,000 | 0 | 243,000 | 0 | 5,000,000 | 0 | 22,408,000 | |
| 78 | 0 | 2,710,000 | 2,620,000 | 38,340,000 | 0 | 243,000 | 0 | 5,000,000 | 0 | 48,913,000 | |
| 79 | 0 | 2,515,000 | 1,120,000 | 39,756,000 | 0 | 243,000 | 0 | 5,000,000 | 0 | 48,634,000 | |
| 1980 | 0 | 2,500,000 | 850,000 | 21,650,000 | 0 | 154,000 | 0 | 5,000,000 | 0 | 30,154,000 | |
| 81 | 0 | 0 | 850,000 | 35,420,000 | 0 | 154,000 | 0 | 5,000,000 | 0 | 41,424,000 | |
| 82 | 0 | 0 | 0 | 46,539,000 | 0 | 154,000 | 0 | 5,000,000 | 0 | 51,693,000 | |
| 83 | 0 | 60,000 | 0 | 49,079,000 | 0 | 154,000 | 0 | 5,000,000 | 0 | 54,293,000 | |
| 84 | 0 | 15,000 | 0 | 10,558,000 | 0 | 154,000 | 0 | 5,000,000 | 0 | 15,727,000 | |
| 85 | 0 | 0 | 0 | 315,000 | 0 | 154,000 | 0 | 5,000,000 | 0 | 5,469,000 | |
| 86 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,000,000 | 0 | 5,000,000 | |
| 87 | 0 | 12,000 | 0 | 0 | 0 | 0 | 0 | 2,122,195 | 0 | 2,134,195 | |
| 88 | 0 | 0 | 0 | 100,000 | 0 | 0 | 0 | 0 | 0 | 100,000 | |
| 89 | 0 | 0 | 0 | 160,000 | 0 | 0 | 0 | 0 | 0 | 160,000 | |
| 1990 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Subtotal | 13,762,000 | 51,712,000 | 110,232,000 | 1,598,054,983 | 955,000 | 31,466,000 | 19,962,000 | 111,395,439[3] | 60,285,000 | 1,997,824,422 | |
| | | | | | | | | | | GRAND TOTAL 2,530,386,414 | |

1/ Annual operating costs incurred for each facility prior to the conversion from construction to an operational status.
2/ Preliminary, subject to adjustment pending policy decisions.
3/ Balance of the $130,000,000 reserved under the Burns-Porter Act.

TABLE 14

COMPOSITION OF PROJECTED ANNUAL OPERATING COSTS

(in thousands of dollars)

| CALENDAR YEAR | PROJECTED ANNUAL EXPENDITURES | | | | | | | | LESS, PREOPERATING EXPENSE[6] | TOTAL PROJECTED ANNUAL OPERATING COSTS | TOTAL ACTUAL, FROM ACCOUNTING RECORDS[7] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | GENERAL OPERATING EXPENSE[1] | SALARIES AND EXPENSES[2] | | EQUIPMENT, MATERIALS, AND SUPPLIES[3] | POWER AND ENERGY[4] | | DEPOSITS TO REPLACEMENT RESERVES[5] | TOTAL | | | |
| | | OPERATING PERSONNEL | MAINTENANCE PERSONNEL | | PUMPING PLANTS | RECOVERY PLANTS | | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) |
| 1962 | | | | | | | | | | | 108 |
| 63 | | | | | | | | | | | 213 |
| 64 | | | | | | | | | | | 244 |
| 65 | | | | | | | | | | | 469 |
| 66 | 5,802 | 530 | 342 | 13 | 223 | 0 | 11 | 6,921 | 6,366 | 555 | 0 |
| 67 | 7,582 | 895 | 1,259 | 193 | 452 | 0 | 62 | 10,443 | 8,585 | 1,858 | 0 |
| 68 | 7,833 | 1,879 | 3,231 | 556 | 1,645 | - 6 | 611 | 15,749 | 5,477 | 10,272 | 0 |
| 69 | 8,013 | 2,265 | 4,134 | 952 | 2,486 | - 40 | 727 | 18,537 | 6,179 | 12,358 | 0 |
| 1970 | 7,829 | 2,903 | 5,177 | 994 | 2,573 | - 217 | 730 | 19,989 | 7,380 | 12,609 | 0 |
| 71 | 8,107 | 3,279 | 6,047 | 1,313 | 8,050 | - 2,009 | 1,048 | 25,835 | 4,323 | 21,512 | 0 |
| 72 | 7,993 | 3,437 | 6,392 | 1,597 | 14,331 | - 3,589 | 1,392 | 31,553 | 4,886 | 26,667 | 0 |
| 73 | 7,644 | 3,022 | 6,583 | 1,614 | 15,966 | - 4,170 | 1,466 | 32,125 | 4,433 | 27,692 | 0 |
| 74 | 7,620 | 2,845 | 6,247 | 1,614 | 14,481 | - 4,721 | 1,709 | 29,795 | 1,642 | 28,153 | 0 |
| 75 | 7,570 | 2,848 | 6,253 | 1,614 | 13,623 | - 4,324 | 1,745 | 29,329 | 253 | 29,076 | 0 |
| 76 | 7,551 | 2,847 | 6,257 | 1,650 | 14,285 | - 5,266 | 1,745 | 29,069 | 251 | 28,818 | 0 |
| 77 | 7,551 | 2,747 | 6,249 | 1,650 | 16,878 | - 6,503 | 1,782 | 30,354 | 243 | 30,111 | 0 |
| 78 | 7,551 | 2,818 | 6,178 | 1,650 | 19,153 | - 7,710 | 1,782 | 31,422 | 243 | 31,179 | 0 |
| 79 | 7,551 | 2,860 | 6,136 | 1,650 | 22,095 | - 8,765 | 1,782 | 33,309 | 243 | 33,066 | 0 |
| 1980 | 7,551 | 2,818 | 6,350 | 1,675 | 24,454 | - 9,788 | 1,811 | 34,871 | 154 | 34,717 | 0 |
| 81 | 7,551 | 2,818 | 6,365 | 1,675 | 26,857 | -10,733 | 1,811 | 36,344 | 154 | 36,190 | 0 |
| 82 | 7,551 | 2,818 | 6,365 | 1,675 | 30,041 | -11,255 | 1,811 | 39,006 | 154 | 38,852 | 0 |
| 83 | 7,551 | 2,818 | 6,365 | 1,675 | 33,434 | -12,785 | 1,811 | 40,869 | 154 | 40,715 | 0 |
| 84 | 7,551 | 2,762 | 6,521 | 1,676 | 34,561 | -12,976 | 1,811 | 41,906 | 154 | 41,752 | 0 |
| 85 | 7,551 | 2,817 | 6,365 | 1,680 | 33,297 | -13,766 | 1,811 | 39,755 | 154 | 39,601 | 0 |
| 86 | 7,551 | 2,964 | 6,705 | 1,680 | 33,056 | -10,847 | 1,836 | 42,945 | 0 | 42,945 | 0 |
| 87 | 7,551 | 2,964 | 6,695 | 1,680 | 33,465 | -11,476 | 1,836 | 42,715 | 0 | 42,715 | 0 |
| 88 | 7,551 | 2,964 | 6,832 | 1,680 | 35,837 | -12,222 | 1,836 | 44,478 | 0 | 44,478 | 0 |
| 89 | 7,551 | 2,964 | 6,694 | 1,682 | 37,908 | -12,974 | 1,837 | 45,662 | 0 | 45,662 | 0 |
| 1990 | 7,551 | 2,964 | 6,695 | 1,682 | 39,137 | -13,582 | 1,837 | 46,284 | 0 | 46,284 | 0 |
| 91 | 7,551 | 2,964 | 6,698 | 1,682 | 39,448 | -13,584 | 1,837 | 46,596 | 0 | 46,596 | 0 |
| 92 | 7,551 | 2,964 | 6,695 | 1,682 | 39,521 | -13,584 | 1,837 | 46,666 | 0 | 46,666 | 0 |
| 93 | 7,551 | 2,964 | 6,695 | 1,682 | 39,527 | -13,584 | 1,837 | 46,672 | 0 | 46,672 | 0 |
| 94 | 7,551 | 2,964 | 6,695 | 1,682 | 39,534 | -13,584 | 1,837 | 46,679 | 0 | 46,679 | 0 |
| 95 | 7,551 | 2,964 | 6,695 | 1,682 | 39,536 | -13,584 | 1,837 | 46,681 | 0 | 46,681 | 0 |
| 96 | 7,551 | 2,964 | 6,695 | 1,682 | 39,540 | -13,584 | 1,837 | 46,685 | 0 | 46,685 | 0 |
| 97 | 7,551 | 2,964 | 5,695 | 1,682 | 39,542 | -13,584 | 1,837 | 46,687 | 0 | 46,687 | 0 |
| 98 | 7,551 | 2,964 | 6,695 | 1,682 | 39,542 | -13,584 | 1,837 | 46,687 | 0 | 46,687 | 0 |
| 99 | 7,551 | 2,964 | 6,695 | 1,682 | 39,542 | -13,584 | 1,837 | 46,687 | 0 | 46,687 | 0 |
| 2000[8] | 7,551 | 2,964 | 6,695 | 1,682 | 39,542 | -13,584 | 1,837 | 46,687 | 0 | 46,687 | 0 |

1/ Includes the costs of project-wide programs for contract negotiation and administration, operation and maintenance management, and research and development. Also included in this column is a miscellaneous cost of about $209,000 annually for insurance required under revenue bond financing and for administrative costs of the Federal Power Commission license of the Oroville-Thermalito power facilities.

2/ Includes the direct costs of salaries and expenses, including general administrative and indirect costs of the Department.

3/ Includes the costs of materials, supplies, and equipment rental for electrical-mechanical plants, reservoirs, and aqueduct reaches.

4/ Does not include power and energy requirements or production by power features of the Oroville division or for the federal share of power and pumping plant features of the San Luis division.

5/ Based on sinking funds earning 3.5 percent per annum.

6/ These costs of an operational nature, which occur during the construction periods of the respective facilities, are transferred to the capital costs category as shown in Columns 6 and 7 of Table 13, and are deducted herein from the annual operating costs of the Project.

7/ Preliminary, subject to adjustment pending accounting, engineering, and legal decisions.

8/ And each year thereafter for the remainder of the project repayment period.

TABLE 15

ACTUAL AND PROJECTED CAPITAL COSTS OF FACILITIES
BY PROJECT PURPOSE

(in dollars)



| CALENDAR YEAR | UNSPECIFIED PURPOSES | | SAN JOAQUIN MASTER DRAIN, DRAINAGE BENEFIT (100.0%) | UPPER FEATHER AREA (PROJECT CONSERVATION FACILITIES) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FRENCHMAN DAM AND LAKE | | | | GRIZZLY VALLEY DAM AND LAKE DAVIS[7] | | | | | |
| | | | | | MULTIPLE-PURPOSE[5] | | | MULTIPLE-PURPOSE[5] | | | | | |
| | LOCAL PROJECTS[1] (DAVIS-GRUNSKY PROGRAM) | UNASSIGNED COSTS [2] | | SPECIFIC R&F&WE [4] | R&F&WE[4] (50.0%) | WATER SUPPLY[6] (50.0%) | TOTAL | R&F&WE[4] (94.9%) | WATER SUPPLY (5.1%) | TOTAL | ANTELOPE DAM AND LAKE, R&F&WE[4] (100%) | REMAINING UNITS, ALL ASSUMED R&F&WE [3], [4], [8] | TOTAL |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
| 1952 | 0 | 22,201 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 53 | 0 | 61,096 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 54 | 0 | 77,060 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 55 | 0 | 40,852 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 56 | 0 | 54,883 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57 | 0 | 211,800 | 0 | 0 | 1,306 | 1,306 | 2,612 | 1,736 | 93 | 1,829 | 2,175 | 3,243 | 9,859 |
| 58 | 0 | 356,752 | 0 | 0 | 102,244 | 102,244 | 204,488 | 1,962 | 105 | 2,067 | 2,433 | 3,640 | 212,628 |
| 59 | 12,666 | 201,755 | 0 | 42,110 | 210,693 | 253,804 | 506,607 | 11,465 | 616 | 12,081 | 29,445 | 75,393 | 623,526 |
| 1960 | 86,983 | 98,573 | 53,438 | 0 | 491,898 | 491,898 | 983,796 | 12,773 | 686 | 13,459 | 33,717 | 89,181 | 1,120,153 |
| 61 | 544,167 | 72,834 | 418,557 | 0 | 408,866 | 408,866 | 817,732 | 879 | 47 | 926 | 197,319 | 5,297 | 1,021,274 |
| 62 | 623,352 | 20,947 | 447,017 | - 154 | 219,750 | 226,961 | 446,557 | 117,610 | 6,320 | 123,930 | 933,979 | 10,516 | 1,514,982 |
| 63 | 3,695,417 | 53,491 | 437,998 | - 282 | 65,754 | 65,322 | 130,794 | 172,666 | 9,279 | 181,945 | 2,542,562 | 6,027 | 2,861,328 |
| 64 | 4,212,212 | 19,770 | 515,376 | -1,696 | 7,196 | -8,317 | -2,817 | 528,413 | 28,397 | 556,810 | 428,451 | 29,790 | 1,012,234 |
| 65 | 10,848,808 | 3,015 | 851,182 | 1,926 | 4,874 | 8,700 | 15,500 | 1,150,232 | 61,980 | 1,212,212 | 248,533 | 53,567 | 1,529,812 |
| 66 | 9,273,244 | 0 | 1,815,000 | 0 | 5,000 | 6,000 | 11,000 | 1,702,000 | 91,000 | 1,793,000 | 10,000 | 51,000 | 1,865,000 |
| 67 | 5,000,000 | 0 | 2,994,000 | 0 | 29,000 | 29,000 | 58,000 | 219,000 | 12,000 | 231,000 | 57,000 | 333,000 | 679,000 |
| 68 | 5,000,000 | 0 | 18,511,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,204,000 | 1,204,000 |
| 69 | 5,000,000 | 0 | 20,786,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,364,000 | 2,364,000 |
| 1970 | 5,000,000 | 0 | 7,104,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,681,000 | 3,681,000 |
| 71 | 5,000,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,072,000 | 2,072,000 |
| 72 | 5,000,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60,000 | 60,000 |
| 73 | 5,000,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 74 | 5,000,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 75 | 5,000,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 76 | 5,000,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 77 | 5,000,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 78 | 5,000,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79 | 5,000,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1980 | 5,000,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 | 5,000,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 82 | 5,000,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 83 | 5,000,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 84 | 5,000,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 85 | 5,000,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 86 | 5,000,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 87 | 2,122,195 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 88 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 89 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1990 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTALS | 131,419,044 | 1,295,029 | 53,933,568 | 41,904 | 1,546,581 | 1,585,784 | 3,174,269 | 3,918,736 | 210,523 | 4,129,259 | 4,485,614 | 10,041,654 | 21,830,796 |

Footnotes on Sheet 5.

TABLE 15 (Continued)

ACTUAL AND PROJECTED CAPITAL COSTS OF FACILITIES
BY PROJECT PURPOSE

(in dollars)



| CALENDAR YEAR | OROVILLE AREA (PROJECT CONSERVATION FACILITIES) | | | | | | | | DELTA FACILITIES[10] (PROJECT CONSERVATION FACILITIES) | | | | UPPER EEL RIVER DEVELOPMENT, ALL ASSUMED WATER SUPPLY[3] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | SPECIFIC | | | MULTIPLE-PURPOSE[5] | | | | TOTAL | SPECIFIC | MULTIPLE-PURPOSE | | | |
| | R&F&WE[4] | POWER GENERATION[2] | TOTAL | WATER SUPPLY (54.0%) | POWER GENERATION (24.8%) | FLOOD CONTROL (21.2%) | TOTAL | | R&F&WE[4] | R&F&WE[4] | WATER SUPPLY | TOTAL | |
| | (14) | (15) | (16) | (17) | (18) | (19) | (20) | (21) | (22) | (23) | (24) | (25) | (26) |
| 1952 | 0 | 20,016 | 20,016 | 71,411 | 32,796 | 28,035 | 132,242 | 152,258 | 0 | 0 | 0 | 0 | 0 |
| 53 | 0 | 44,065 | 44,065 | 119,156 | 54,723 | 46,780 | 220,659 | 264,724 | 0 | 0 | 0 | 0 | 0 |
| 54 | 0 | 37,549 | 37,549 | 112,269 | 51,560 | 44,076 | 207,905 | 245,454 | 0 | 0 | 0 | 0 | 0 |
| 55 | 0 | 29,531 | 29,531 | 65,809 | 30,224 | 25,836 | 121,869 | 151,400 | 0 | 0 | 0 | 0 | 0 |
| 56 | 0 | 76,534 | 76,534 | 661,421 | 303,764 | 259,669 | 1,224,854 | 1,301,388 | 0 | 0 | 0 | 0 | 0 |
| 57 | 0 | 165,829 | 165,829 | 3,204,668 | 1,471,774 | 1,258,129 | 5,934,571 | 6,100,400 | 0 | 0 | 0 | 0 | 0 |
| 58 | 0 | 174,695 | 174,695 | 4,956,776 | 2,276,445 | 1,945,993 | 9,179,214 | 9,353,909 | 0 | 0 | 0 | 0 | 0 |
| 59 | 0 | 368,954 | 368,954 | 5,354,827 | 2,459,254 | 2,102,266 | 9,916,347 | 10,285,301 | 0 | 0 | 0 | 0 | 0 |
| 1960 | 0 | 609,485 | 609,485 | 6,740,084 | 3,095,446 | 2,646,107 | 12,481,637 | 13,091,122 | 0 | 63,634 | 8,326 | 71,960 | 0 |
| 61 | 7,640 | 1,225,961 | 1,233,601 | 9,478,609 | 4,353,139 | 3,721,232 | 17,552,980 | 18,786,581 | 0 | 383,455 | 50,160 | 433,615 | 0 |
| 62 | 73,101 | 2,505,014 | 2,578,115 | 10,061,921 | 4,621,031 | 3,950,236 | 18,633,188 | 21,211,303 | 0 | 587,904 | 76,881 | 664,785 | 0 |
| 63 | 259,661 | 5,508,383 | 5,768,044 | 23,421,396 | 10,756,493 | 9,195,067 | 43,372,956 | 49,141,000 | 0 | 1,123,316 | 146,922 | 1,270,238 | 0 |
| 64 | 67,833 | 17,314,492 | 17,382,325 | 18,345,187 | 8,425,197 | 7,202,185 | 33,972,569 | 51,354,894 | 0 | 1,332,693 | 174,303 | 1,506,996 | 199,268 |
| 65 | 71,848 | 25,251,600 | 25,323,448 | 17,913,288 | 8,226,844 | 7,032,624 | 33,172,756 | 58,496,204 | 14,001 | 1,354,423 | 176,999 | 1,545,423 | 979,357 |
| 66 | 0 | 52,206,000 | 52,206,000 | 38,346,000 | 17,611,000 | 15,054,000 | 71,011,000 | 123,217,000 | 0 | 577,574 | 321,409 | 898,983 | 1,371,000 |
| 67 | 0 | 44,548,000 | 44,548,000 | 23,765,000 | 10,914,000 | 9,330,000 | 44,009,000 | 88,557,000 | 0 | 812,000 | 450,000 | 1,262,000 | 1,542,000 |
| 68 | 0 | 16,579,000 | 16,579,000 | 3,067,000 | 1,409,000 | 1,204,000 | 5,680,000 | 22,259,000 | 0 | 2,324,000 | 1,290,000 | 3,614,000 | 1,563,000 |
| 69 | 0 | 2,226,000 | 2,226,000 | 314,000 | 145,000 | 124,000 | 583,000 | 2,809,000 | 0 | 4,957,000 | 2,751,000 | 7,708,000 | 1,614,000 |
| 1970 | 0 | 8,000 | 8,000 | 36,000 | 16,000 | 14,000 | 66,000 | 74,000 | 0 | 6,432,000 | 3,570,000 | 10,002,000 | 1,384,000 |
| 71 | 0 | 3,000 | 3,000 | 29,000 | 14,000 | 12,000 | 55,000 | 58,000 | 0 | 6,300,000 | 3,497,000 | 9,797,000 | 678,000 |
| 72 | 0 | 4,000 | 4,000 | 24,000 | 11,000 | 9,000 | 44,000 | 48,000 | 0 | 5,337,000 | 2,963,000 | 8,300,000 | 168,000 |
| 73 | 0 | 741,000 | 741,000 | 0 | 0 | 0 | 0 | 741,000 | 0 | 3,533,000 | 1,962,000 | 5,495,000 | 157,000 |
| 74 | 0 | 735,000 | 735,000 | 0 | 0 | 0 | 0 | 735,000 | 0 | 1,625,000 | 902,000 | 2,527,000 | 156,000 |
| 75 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 155,000 |
| 76 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 154,000 |
| 77 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,154,000 |
| 78 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24,154,000 |
| 79 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32,154,000 |
| 1980 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25,154,000 |
| 81 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35,154,000 |
| 82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 44,154,000 |
| 83 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 44,154,000 |
| 84 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,154,000 |
| 85 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 154,000 |
| 86 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 87 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 88 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 89 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1990 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTALS | 480,083 | 170,382,108 | 170,862,191 | 166,087,822 | 76,278,690 | 65,205,235 | 307,571,747 | 478,433,938 | 14,001 | 36,742,999 | 18,340,000 | 55,097,000 | 226,506,625 |

Footnotes on Sheet 5.

TABLE 15 (Continued)

ACTUAL AND PROJECTED CAPITAL COSTS OF FACILITIES
BY PROJECT PURPOSE

(in dollars)



| CALENDAR YEAR | CALIFORNIA AQUEDUCT | | | | | | | | | | | | NORTH BAY AQUEDUCT, ALL ASSUMED WATER SUPPLY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PROJECT CONSERVATION FACILITIES | | | | | PROJECT TRANSPORTATION FACILITIES | | | | | | TOTAL | |
| | SPECIFIC | MULTIPLE-PURPOSE[5] | | | TOTAL | SPECIFIC | | MULTIPLE-PURPOSE[5] | | | TOTAL | | |
| | R&F&WE[4] | R&F&WE[4] (5.6%) | WATER SUPPLY (94.4%) | TOTAL | | R&F&WE[4] | WATER SUPPLY[11] | R&F&WE[4] (2.6%) | WATER SUPPLY (97.4%) | TOTAL | | | |
| | (27) | (28) | (29) | (30) | (31) | (32) | (33) | (34) | (35) | (36) | (37) | (38) | (39) |
| 1952 | 0 | 185 | 3,105 | 3,290 | 3,290 | 0 | 0 | 2,590 | 97,102 | 99,692 | 99,692 | 102,982 | 0 |
| 53 | 0 | 466 | 7,856 | 8,322 | 8,322 | 0 | 0 | 8,347 | 312,678 | 321,025 | 321,025 | 329,347 | 0 |
| 54 | 0 | 570 | 9,613 | 10,183 | 10,183 | 0 | 0 | 10,354 | 387,890 | 398,244 | 398,244 | 408,427 | 0 |
| 55 | 0 | 294 | 4,970 | 5,264 | 5,264 | 0 | 0 | 4,803 | 180,044 | 184,847 | 184,847 | 190,111 | 0 |
| 56 | 0 | 2,649 | 44,678 | 47,327 | 47,327 | 0 | 0 | 6,124 | 229,537 | 235,661 | 235,661 | 282,988 | 0 |
| 57 | 0 | 4,640 | 78,212 | 82,852 | 82,852 | 0 | 0 | 16,662 | 624,216 | 640,878 | 640,878 | 723,730 | 20,880 |
| 58 | 0 | 7,427 | 125,200 | 132,627 | 132,627 | 0 | 0 | 31,446 | 1,178,099 | 1,209,545 | 1,209,545 | 1,342,172 | 40,881 |
| 59 | 0 | 68,041 | 1,146,983 | 1,215,024 | 1,215,024 | 0 | 54,980 | 50,392 | 1,887,763 | 1,938,155 | 1,993,135 | 3,208,159 | 22,547 |
| 1960 | 2,085 | 87,492 | 1,474,863 | 1,562,355 | 1,564,440 | 0 | 112,338 | 68,047 | 2,549,113 | 2,617,160 | 2,729,498 | 4,293,938 | 18,958 |
| 61 | 0 | 55,231 | 931,027 | 986,258 | 986,258 | 371,144 | 62,653 | 125,775 | 4,711,809 | 4,837,584 | 5,271,381 | 6,257,639 | 15,869 |
| 62 | 51,629 | 117,942 | 1,988,153 | 2,106,095 | 2,157,724 | 665 | 89,524 | 168,862 | 6,325,893 | 6,494,755 | 6,584,944 | 8,742,668 | 6,063 |
| 63 | 1,124 | 1,518,471 | 25,597,086 | 27,115,557 | 27,116,681 | 324,026 | 162,131 | 559,111 | 20,945,270 | 21,504,381 | 21,990,538 | 49,107,219 | 4,931 |
| 64 | 0 | 1,157,107 | 19,505,511 | 20,662,618 | 20,662,618 | -3 | 450,536 | 1,050,787 | 33,864,479 | 34,915,266 | 35,365,799 | 56,028,417 | 81,660 |
| 65 | 28,017 | 1,312,058 | 22,117,538 | 23,429,596 | 23,457,613 | 694,892 | 767,884 | 1,676,178 | 60,191,368 | 61,867,546 | 63,330,322 | 86,787,935 | 219,461 |
| 66 | 0 | 1,321,320 | 22,273,680 | 23,595,000 | 23,595,000 | 0 | 2,569,000 | 3,050,944 | 114,293,056 | 117,344,000 | 119,913,000 | 143,508,000 | 724,000 |
| 67 | 0 | 1,047,424 | 17,656,576 | 18,704,000 | 18,704,000 | 0 | 7,639,000 | 5,097,066 | 190,943,934 | 196,041,000 | 203,680,000 | 222,384,000 | 1,617,000 |
| 68 | 0 | 204,176 | 3,441,824 | 3,646,000 | 3,646,000 | 0 | 1,232,000 | 6,667,830 | 249,787,170 | 256,455,000 | 257,687,000 | 261,333,000 | 291,000 |
| 69 | 0 | 48,832 | 823,168 | 872,000 | 872,000 | 0 | 206,000 | 7,528,574 | 282,069,426 | 289,598,000 | 289,804,000 | 290,676,000 | 238,000 |
| 1970 | 0 | 784 | 13,216 | 14,000 | 14,000 | 0 | 71,000 | 4,602,624 | 172,421,376 | 177,024,000 | 177,095,000 | 177,109,000 | 34,000 |
| 71 | 0 | 336 | 5,664 | 6,000 | 6,000 | 0 | 91,000 | 2,369,692 | 88,772,308 | 91,142,000 | 91,233,000 | 91,239,000 | 34,000 |
| 72 | 0 | 392 | 6,608 | 7,000 | 7,000 | 0 | 374,000 | 487,968 | 18,280,032 | 18,768,000 | 19,142,000 | 19,149,000 | 32,000 |
| 73 | 0 | 0 | 0 | 0 | 0 | 0 | 662,000 | 86,268 | 3,231,732 | 3,318,000 | 3,980,000 | 3,980,000 | 397,000 |
| 74 | 0 | 0 | 0 | 0 | 0 | 0 | 1,117,000 | 36,062 | 1,350,938 | 1,387,000 | 2,504,000 | 2,504,000 | 389,000 |
| 75 | 0 | 0 | 0 | 0 | 0 | 0 | 2,403,000 | 2,600 | 97,400 | 100,000 | 2,503,000 | 2,503,000 | 29,000 |
| 76 | 0 | 0 | 0 | 0 | 0 | 0 | 6,274,000 | 59,800 | 2,240,200 | 2,300,000 | 8,574,000 | 8,574,000 | 166,000 |
| 77 | 0 | 0 | 0 | 0 | 0 | 0 | 8,034,000 | 104,000 | 3,896,000 | 4,000,000 | 12,034,000 | 12,034,000 | 220,000 |
| 78 | 0 | 0 | 0 | 0 | 0 | 0 | 15,089,000 | 62,400 | 2,337,600 | 2,400,000 | 17,489,000 | 17,489,000 | 2,270,000 |
| 79 | 0 | 0 | 0 | 0 | 0 | 0 | 7,893,000 | 0 | 0 | 0 | 7,893,000 | 7,893,000 | 3,587,000 |
| 1980 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 | 0 | 13,384 | 225,616 | 239,000 | 239,000 | 0 | 0 | 26,806 | 1,004,194 | 1,031,000 | 1,031,000 | 1,270,000 | 0 |
| 82 | 0 | 26,824 | 452,176 | 479,000 | 479,000 | 0 | 0 | 53,560 | 2,006,440 | 2,060,000 | 2,060,000 | 2,539,000 | 0 |
| 83 | 0 | 53,648 | 904,352 | 958,000 | 958,000 | 0 | 60,000 | 107,146 | 4,013,854 | 4,121,000 | 4,181,000 | 5,139,000 | 0 |
| 84 | 0 | 40,208 | 677,792 | 718,000 | 718,000 | 0 | 765,000 | 80,340 | 3,009,660 | 3,090,000 | 3,855,000 | 4,573,000 | 0 |
| 85 | 0 | 0 | 0 | 0 | 0 | 0 | 315,000 | 0 | 0 | 0 | 315,000 | 315,000 | 0 |
| 86 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 87 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 88 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 89 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1990 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTALS | 82,855 | 7,089,901 | 119,515,467 | 126,605,368 | 126,688,223 | 1,390,724 | 56,494,046 | 34,203,158 | 1,273,240,581 | 1,307,443,739 | 1,365,328,509 | 1,492,016,732 | 10,469,250 |

Footnotes on Sheet 5.

TABLE 15 (Continued)

ACTUAL AND PROJECTED CAPITAL COSTS OF FACILITIES
BY PROJECT PURPOSE

(in dollars)



| CALENDAR YEAR | SOUTH BAY AQUEDUCT (PROJECT TRANSPORTATION FACILITIES) | | | | | | TOTAL BY PURPOSE, STATE WATER PROJECT | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | SPECIFIC WATER SUPPLY 12/ | MULTIPLE-PURPOSE 5/ | | | | TOTAL | UNSPECIFIED 13/ | DRAINAGE BENEFIT 14/ | RECREATION AND FISH AND WILDLIFE ENHANCEMENT 15/ | FLOOD CONTROL 16/ | WATER SUPPLY AND OROVILLE POWER | | TOTAL |
| | | R&F&WE (28.6%) 4/ | WATER SUPPLY (40.0%) | FLOOD CONTROL (31.4%) | TOTAL | | | | | | PROJECT CONSERVATION FACILITIES 17/ | PROJECT TRANSPORTATION FACILITIES 18/ | |
| | (40) | (41) | (42) | (43) | (44) | (45) | (46) | (47) | (48) | (49) | (50) | (51) | (52) |
| 1952 | 291 | 30 | 42 | 33 | 105 | 396 | 22,201 | 0 | 2,805 | 28,068 | 127,328 | 97,435 | 277,837 19/ |
| 53 | 1,451 | 150 | 210 | 164 | 524 | 1,975 | 61,096 | 0 | 8,963 | 46,944 | 225,800 | 314,339 | 657,142 19/ |
| 54 | 4,741 | 489 | 684 | 537 | 1,710 | 6,451 | 77,060 | 0 | 11,413 | 44,613 | 210,991 | 393,315 | 737,392 19/ |
| 55 | 6,374 | 654 | 913 | 718 | 2,285 | 8,659 | 40,852 | 0 | 5,751 | 26,554 | 130,534 | 187,331 | 391,022 19/ |
| 56 | 87,791 | 8,130 | 11,370 | 8,926 | 28,426 | 116,217 | 54,883 | 0 | 16,903 | 268,595 | 1,086,397 | 328,698 | 1,755,476 19/ |
| 57 | 692,714 | 18,499 | 25,872 | 20,310 | 64,681 | 757,395 | 211,800 | 0 | 48,261 | 1,278,439 | 4,921,882 | 1,363,682 | 7,824,064 19/ |
| 58 | 826,446 | 10,874 | 15,209 | 11,939 | 38,022 | 864,468 | 356,752 | 0 | 160,026 | 1,957,932 | 7,635,465 | 2,060,635 | 12,170,810 19/ |
| 59 | 709,414 | 15,061 | 21,064 | 16,536 | 52,661 | 762,075 | 214,421 | 0 | 502,600 | 2,118,802 | 9,584,438 | 2,695,768 | 15,116,029 19/ |
| 1960 | 1,602,695 | 55,008 | 76,934 | 60,393 | 192,335 | 1,795,030 | 185,556 | 53,438 | 903,835 | 2,706,500 | 12,420,788 | 4,360,038 | 20,630,155 19/ |
| 61 | 4,048,607 | 63,726 | 89,127 | 69,964 | 222,817 | 4,271,424 | 617,001 | 418,557 | 1,619,332 | 3,791,196 | 16,447,809 | 8,928,065 | 31,821,960 19/ |
| 62 | 3,143,680 | 31,847 | 44,540 | 34,965 | 111,352 | 3,255,032 | 644,299 | 447,017 | 2,313,651 | 3,985,201 | 19,486,281 | 9,609,700 | 36,486,149 19/ |
| 63 | 5,559,428 | 151,044 | 211,251 | 165,832 | 528,127 | 6,087,555 | 3,748,908 | 437,998 | 6,723,480 | 9,360,899 | 65,504,881 | 26,893,011 | 112,669,177 19/ |
| 64 | 9,795,056 | 219,043 | 306,354 | 240,488 | 765,885 | 10,560,941 | 4,231,982 | 515,376 | 4,819,614 | 7,442,673 | 63,984,038 | 44,498,085 | 125,491,768 19/ |
| 65 | 3,757,023 | 504,437 | 534,709 | 475,645 | 1,514,791 | 5,271,814 | 10,851,823 | 851,182 | 7,114,986 | 7,508,269 | 74,736,306 | 65,470,445 | 166,533,011 19/ |
| 66 | 2,409,000 | 3,282,000 | 4,590,000 | 3,602,000 | 11,474,000 | 13,883,000 | 9,273,244 | 1,815,000 | 9,999,838 | 18,656,000 | 132,226,089 | 124,585,056 | 296,555,227 |
| 67 | 846,000 | 2,210,000 | 3,091,000 | 2,427,000 | 7,728,000 | 8,574,000 | 5,000,000 | 2,994,000 | 9,804,490 | 11,757,000 | 98,916,576 | 204,136,934 | 332,609,000 |
| 68 | 1,521,000 | 178,000 | 250,000 | 196,000 | 624,000 | 2,145,000 | 5,000,000 | 18,511,000 | 10,578,006 | 1,400,000 | 27,349,824 | 253,081,170 | 315,920,000 |
| 69 | 63,000 | 0 | 0 | 0 | 0 | 63,000 | 5,000,000 | 20,786,000 | 14,898,406 | 124,000 | 7,873,168 | 282,576,426 | 331,258,000 |
| 1970 | 4,000 | 0 | 0 | 0 | 0 | 4,000 | 5,000,000 | 7,104,000 | 14,716,408 | 14,000 | 5,027,216 | 172,530,376 | 204,392,000 |
| 71 | 342,000 | 0 | 0 | 0 | 0 | 342,000 | 5,000,000 | 0 | 10,742,028 | 12,000 | 4,226,664 | 89,239,308 | 109,220,000 |
| 72 | 342,000 | 0 | 0 | 0 | 0 | 342,000 | 5,000,000 | 0 | 5,885,360 | 9,000 | 3,176,608 | 19,028,032 | 33,099,000 |
| 73 | 0 | 0 | 0 | 0 | 0 | 0 | 5,000,000 | 0 | 3,619,268 | 0 | 2,860,000 | 4,290,732 | 15,770,000 |
| 74 | 0 | 0 | 0 | 0 | 0 | 0 | 5,000,000 | 0 | 1,661,062 | 0 | 1,793,000 | 2,856,938 | 11,311,000 |
| 75 | 0 | 0 | 0 | 0 | 0 | 0 | 5,000,000 | 0 | 2,600 | 0 | 155,000 | 2,529,400 | 7,687,000 |
| 76 | 0 | 0 | 0 | 0 | 0 | 0 | 5,000,000 | 0 | 59,800 | 0 | 154,000 | 8,680,200 | 13,894,000 |
| 77 | 0 | 0 | 0 | 0 | 0 | 0 | 5,000,000 | 0 | 104,000 | 0 | 5,154,000 | 12,150,000 | 22,408,000 |
| 78 | 0 | 0 | 0 | 0 | 0 | 0 | 5,000,000 | 0 | 62,400 | 0 | 24,154,000 | 19,696,600 | 48,913,000 |
| 79 | 0 | 0 | 0 | 0 | 0 | 0 | 5,000,000 | 0 | 0 | 0 | 32,154,000 | 11,480,000 | 48,634,000 |
| 1980 | 0 | 0 | 0 | 0 | 0 | 0 | 5,000,000 | 0 | 0 | 0 | 25,154,000 | 0 | 30,154,000 |
| 81 | 0 | 0 | 0 | 0 | 0 | 0 | 5,000,000 | 0 | 40,190 | 0 | 35,379,616 | 1,004,194 | 41,424,000 |
| 82 | 0 | 0 | 0 | 0 | 0 | 0 | 5,000,000 | 0 | 80,384 | 0 | 44,606,176 | 2,006,440 | 51,693,000 |
| 83 | 0 | 0 | 0 | 0 | 0 | 0 | 5,000,000 | 0 | 160,794 | 0 | 45,058,352 | 4,073,854 | 54,293,000 |
| 84 | 0 | 0 | 0 | 0 | 0 | 0 | 5,000,000 | 0 | 120,548 | 0 | 6,831,792 | 3,774,660 | 15,727,000 |
| 85 | 0 | 0 | 0 | 0 | 0 | 0 | 5,000,000 | 0 | 0 | 0 | 154,000 | 315,000 | 5,469,000 |
| 86 | 0 | 0 | 0 | 0 | 0 | 0 | 5,000,000 | 0 | 0 | 0 | 0 | 0 | 5,000,000 |
| 87 | 12,000 | 0 | 0 | 0 | 0 | 12,000 | 2,122,195 | 0 | 0 | 0 | 0 | 12,000 | 2,134,195 |
| 88 | 100,000 | 0 | 0 | 0 | 0 | 100,000 | 0 | 0 | 0 | 0 | 0 | 100,000 | 100,000 |
| 89 | 160,000 | 0 | 0 | 0 | 0 | 160,000 | 0 | 0 | 0 | 0 | 0 | 160,000 | 160,000 |
| 1990 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTALS | 36,034,711 | 6,748,992 | 9,269,279 | 7,331,450 | 23,349,721 | 59,384,432 | 132,714,073 | 53,933,568 | 106,787,202 | 72,536,685 | 778,907,019 | 1,385,507,867 | 2,530,386,414 |

Footnotes on Sheet 5.

TABLE 15 (Continued)

ACTUAL AND PROJECTED CAPITAL COSTS OF FACILITIES
BY PROJECT PURPOSE



1/ Projects financed under the Davis-Grunsky Program may be constructed for a number of purposes as set forth in Water Code Section 12880. The allocation of the future costs of the program among purposes can not be projected at this time.

2/ Includes costs previously incurred for features deleted from the North and South Bay Aqueducts.

3/ In order to present a complete tabulation, the costs of those facilities not covered in Bulletin No. 153-66 are herein shown allocated to the primary purposes for which the facilities will be constructed.

4/ "R&F&WE" represents the abbreviation of the term "Recreation and Fish and Wildlife Enhancement". These project purposes were considered as one in Bulletin No. 153-66. Costs of R&F&WE shown consist of allocated multiple-purpose costs and certain specific costs. The latter includes costs of recreation lands purchased concurrently with project lands pursuant to Water Code Section 346.

5/ Multiple-purpose costs allocated to project purposes as determined by the percentages contained in Bulletin No. 153-66. In the case of allocations determined by the Federal Government, (Oroville and Del Valle Dams and reservoirs) the percentages reported in Bulletin No. 153-66 have been converted to percentages applicable only to the costs accounted for by the State.

6/ Includes operation and maintenance costs allocated to water supply incurred through 1965, as reduced by income from interim water sales, totaling $1,245. ($7,211 in 1962; -$432 in 1963; and -$10,784 in 1964; and $5,250 in 1965)

7/ Does not include the costs of the Grizzly Valley Pipeline (estimated to be about $463,000) which may be added at a later date.

8/ Includes the costs of Dixie Refuge and Abbey Bridge Dams and reservoirs.

9/ Consists of the costs of the Oroville-Thermalito power facilities.

10/ Based upon the State's share of costs for the Peripheral Canal, as shown in a letter from the Bureau of Reclamation, dated December 30, 1965.

11/ Consists of the total costs of the Coastal Branch. Recreation and fish fish and wildlife enhancement developments are currently not contemplated for this portion of the California Aqueduct.

12/ Consists of the total costs of the South Bay Aqueduct except those associated with Del Valle Dam and reservoir.

13/ The total of Columns 1 and 2.

14/ The same as Column 3.

15/ The total of Columns 4, 5, 8, 11, 12, 14, 22, 23, 27, 28, 32, 34, and 41.

16/ The total of Columns 19 and 43.

17/ The total of Columns 6, 9, 15, 17, 18, 24, 26, and 29.

18/ The total of Columns 33, 35, 39, 40, and 42.

19/ Actual costs; all others projected herein.

TABLE 16

ACTUAL AND PROJECTED OPERATING COSTS OF FACILITIES
BY PROJECT PURPOSE AND BY CATEGORY[1]

(in thousands of dollars)



| CALENDAR YEAR | SAN JOAQUIN MASTER DRAIN, ASSUMED SPECIFIC DRAINAGE | UPPER FEATHER AREA (PROJECT CONSERVATION FACILITIES) | | | | | | | OROVILLE AREA (PROJECT CONSERVATION FACILITIES) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FRENCHMAN UNIT MULTIPLE-PURPOSE[2] | | | GRIZZLY VALLEY UNIT MULTIPLE-PURPOSE[2] | | | REMAINING UNITS, ALL SPECIFIC R&F&WE[3] (MINIMUM) | SPECIFIC POWER GENERATION | MULTIPLE-PURPOSE[2] | | | TOTAL (MINIMUM) |
| | | R&F&WE[3] (50.0%) | WATER SUPPLY (50.0%) | TOTAL (MINIMUM) | R&F&WE[3] (91.2%) | WATER SUPPLY (8.8%) | TOTAL (MINIMUM) | | | WATER SUPPLY AND POWER GENERATION (83.5%) | FLOOD CONTROL (16.5%) | TOTAL | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 63 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 66 | 0 | 11 | 11 | 22 | 18 | 2 | 20 | 21 | 0 | 0 | 0 | 0 | 0 |
| 67 | 486 | 18 | 17 | 35 | 19 | 2 | 21 | 22 | 0 | 0 | 0 | 0 | 0 |
| 68 | 503 | 14 | 13 | 27 | 25 | 2 | 27 | 27 | 2,095 | 285 | 57 | 342 | 2,437 |
| 69 | 790 | 13 | 14 | 27 | 25 | 2 | 27 | 27 | 2,443 | 385 | 76 | 461 | 2,904 |
| 1970 | 973 | 14 | 13 | 27 | 25 | 2 | 27 | 27 | 2,443 | 383 | 76 | 459 | 2,903 |
| 71 | 985 | 13 | 14 | 27 | 25 | 2 | 27 | 54 | 2,434 | 380 | 75 | 455 | 2,889 |
| 72 | 977 | 14 | 13 | 27 | 25 | 2 | 27 | 81 | 2,429 | 371 | 74 | 445 | 2,874 |
| 73 | 958 | 13 | 13 | 26 | 24 | 2 | 26 | 78 | 2,414 | 366 | 72 | 438 | 2,852 |
| 74 | 959 | 13 | 13 | 26 | 24 | 2 | 26 | 78 | 2,412 | 366 | 72 | 438 | 2,850 |
| 75 | 955 | 13 | 13 | 26 | 24 | 2 | 26 | 78 | 2,408 | 365 | 72 | 437 | 2,845 |
| 76 | 954 | 13 | 13 | 26 | 24 | 2 | 26 | 78 | 2,407 | 365 | 72 | 437 | 2,844 |
| 77 | 854 | 13 | 13 | 26 | 24 | 2 | 26 | 78 | 2,407 | 365 | 72 | 437 | 2,844 |
| 78 | 854 | 13 | 13 | 26 | 24 | 2 | 26 | 78 | 2,407 | 365 | 72 | 437 | 2,844 |
| 79 | 854 | 13 | 13 | 26 | 24 | 2 | 26 | 78 | 2,407 | 365 | 72 | 437 | 2,844 |
| 1980 | 854 | 13 | 13 | 26 | 24 | 2 | 26 | 78 | 2,407 | 365 | 72 | 437 | 2,844 |
| 81 | 854 | 13 | 13 | 26 | 24 | 2 | 26 | 78 | 2,407 | 365 | 72 | 437 | 2,844 |
| 82 | 854 | 13 | 13 | 26 | 24 | 2 | 26 | 78 | 2,407 | 365 | 72 | 437 | 2,844 |
| 83 | 854 | 13 | 13 | 26 | 24 | 2 | 26 | 78 | 2,407 | 365 | 72 | 437 | 2,844 |
| 84 | 854 | 13 | 13 | 26 | 24 | 2 | 26 | 78 | 2,407 | 365 | 72 | 437 | 2,844 |
| 85 | 854 | 13 | 13 | 26 | 24 | 2 | 26 | 78 | 2,407 | 365 | 72 | 437 | 2,844 |
| 86 | 854 | 13 | 13 | 26 | 24 | 2 | 26 | 78 | 2,407 | 365 | 72 | 437 | 2,844 |
| 87 | 854 | 13 | 13 | 26 | 24 | 2 | 26 | 78 | 2,407 | 365 | 72 | 437 | 2,844 |
| 88 | 854 | 13 | 13 | 26 | 24 | 2 | 26 | 78 | 2,407 | 365 | 72 | 437 | 2,844 |
| 89 | 854 | 13 | 13 | 26 | 24 | 2 | 26 | 78 | 2,407 | 365 | 72 | 437 | 2,844 |
| 1990 | 854 | 13 | 13 | 26 | 24 | 2 | 26 | 78 | 2,407 | 365 | 72 | 437 | 2,844 |
| 91 | 854 | 13 | 13 | 26 | 24 | 2 | 26 | 78 | 2,407 | 365 | 72 | 437 | 2,844 |
| 92 | 854 | 13 | 13 | 26 | 24 | 2 | 26 | 78 | 2,407 | 365 | 72 | 437 | 2,844 |
| 93 | 854 | 13 | 13 | 26 | 24 | 2 | 26 | 78 | 2,407 | 365 | 72 | 437 | 2,844 |
| 94 | 854 | 13 | 13 | 26 | 24 | 2 | 26 | 78 | 2,407 | 365 | 72 | 437 | 2,844 |
| 95 | 854 | 13 | 13 | 26 | 24 | 2 | 26 | 78 | 2,407 | 365 | 72 | 437 | 2,844 |
| 96 | 854 | 13 | 13 | 26 | 24 | 2 | 26 | 78 | 2,407 | 365 | 72 | 437 | 2,844 |
| 97 | 854 | 13 | 13 | 26 | 24 | 2 | 26 | 78 | 2,407 | 365 | 72 | 437 | 2,844 |
| 98 | 854 | 13 | 13 | 26 | 24 | 2 | 26 | 78 | 2,407 | 365 | 72 | 437 | 2,844 |
| 99 | 854 | 13 | 13 | 26 | 24 | 2 | 26 | 78 | 2,407 | 365 | 72 | 437 | 2,844 |
| 2000[17] | 854 | 13 | 13 | 26 | 24 | 2 | 26 | 78 | 2,407 | 365 | 72 | 437 | 2,844 |

TABLE 16 (CONTINUED)

ACTUAL AND PROJECTED OPERATING COSTS OF FACILITIES
BY PROJECT PURPOSE AND BY CATEGORY[1/]

(in thousands of dollars)



| CALENDAR YEAR | DELTA FACILITIES (PROJECT CONSERVATION FACILITIES) | | | | UPPER EEL RIVER DEVELOPMENT, SPECIFIC WATER SUPPLY (MINIMUM) | CALIFORNIA AQUEDUCT | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | PROJECT CONSERVATION FACILITIES | | | | PROJECT TRANSPORTATION FACILITIES | | | |
| | MINIMUM | | VARIABLE, WATER SUPPLY[4/] | TOTAL | | MULTIPLE-PURPOSE (MINIMUM)[2/] | | VARIABLE WATER SUPPLY[5/] | TOTAL | SPECIFIC WATER SUPPLY[6/] | | MULTIPLE-PURPOSE (MINIMUM)[2/] | |
| | R&F&WE[3/] | WATER SUPPLY | | | | R&F&WE[3/] (5.6%) | WATER SUPPLY (94.4%) | | | MINIMUM | VARIABLE | R&F&WE[3/] (7.1%) | WATER SUPPLY (92.9%) |
| | (14) | (15) | (16) | (17) | (18) | (19) | (20) | (21) | (22) | (23) | (24) | (25) | (26) |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 63 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 67 | 0 | 0 | 0 | 0 | 0 | 5 | 91 | 21 | 117 | 0 | 0 | 31 | 405 |
| 68 | 0 | 0 | 0 | 0 | 0 | 64 | 1,624 | 508 | 2,196 | 91 | 159 | 211 | 3,406 |
| 69 | 0 | 0 | 0 | 0 | 0 | 66 | 1,691 | 567 | 2,324 | 110 | 149 | 266 | 4,209 |
| 1970 | 0 | 0 | 0 | 0 | 0 | 66 | 1,680 | 506 | 2,252 | 110 | 139 | 292 | 4,521 |
| 71 | 0 | 0 | 0 | 0 | 0 | 67 | 1,701 | 362 | 2,130 | 129 | 138 | 664 | 9,404 |
| 72 | 0 | 0 | 0 | 0 | 0 | 67 | 1,686 | - 3 | 1,750 | 131 | 147 | 857 | 11,929 |
| 73 | 0 | 0 | 0 | 0 | 0 | 65 | 1,658 | 247 | 1,970 | 128 | 172 | 836 | 11,672 |
| 74 | 429 | 92 | 113 | 634 | 0 | 65 | 1,657 | 608 | 2,330 | 128 | 193 | 832 | 11,602 |
| 75 | 429 | 92 | 97 | 618 | 0 | 64 | 1,652 | 646 | 2,362 | 128 | 187 | 828 | 11,556 |
| 76 | 429 | 92 | 92 | 613 | 0 | 64 | 1,651 | 491 | 2,206 | 127 | 189 | 822 | 11,460 |
| 77 | 429 | 92 | 119 | 640 | 0 | 64 | 1,651 | 427 | 2,142 | 127 | 194 | 821 | 11,501 |
| 78 | 429 | 92 | 80 | 601 | 0 | 64 | 1,651 | 75 | 1,790 | 127 | 220 | 822 | 11,515 |
| 79 | 429 | 92 | 90 | 611 | 0 | 64 | 1,651 | - 90 | 1,625 | 127 | 254 | 827 | 11,565 |
| 1980 | 429 | 92 | 87 | 608 | 0 | 64 | 1,651 | -315 | 1,400 | 424 | 273 | 827 | 11,561 |
| 81 | 429 | 92 | 102 | 623 | 0 | 64 | 1,651 | -136 | 1,579 | 411 | 302 | 827 | 11,568 |
| 82 | 429 | 92 | 88 | 609 | 0 | 64 | 1,651 | -197 | 1,518 | 384 | 345 | 831 | 11,620 |
| 83 | 429 | 92 | 124 | 645 | 0 | 64 | 1,651 | -423 | 1,292 | 365 | 351 | 834 | 11,653 |
| 84 | 429 | 92 | 113 | 634 | 0 | 64 | 1,651 | -536 | 1,179 | 378 | 554 | 833 | 11,618 |
| 85 | 429 | 92 | 106 | 627 | 0 | 64 | 1,651 | -541 | 1,174 | 349 | 468 | 820 | 11,504 |
| 86 | 429 | 92 | 171 | 692 | 658 | 64 | 1,651 | 773 | 2,488 | 345 | 482 | 822 | 11,479 |
| 87 | 429 | 92 | 176 | 697 | 658 | 64 | 1,651 | 445 | 2,160 | 341 | 489 | 818 | 11,434 |
| 88 | 429 | 92 | 146 | 667 | 658 | 64 | 1,651 | 635 | 2,350 | 341 | 409 | 819 | 11,444 |
| 89 | 429 | 92 | 154 | 675 | 658 | 64 | 1,651 | 98 | 1,813 | 338 | 642 | 820 | 11,462 |
| 1990 | 429 | 92 | 180 | 701 | 658 | 64 | 1,651 | - 50 | 1,665 | 338 | 767 | 823 | 11,481 |
| 91 | 429 | 92 | 182 | 703 | 658 | 64 | 1,651 | - 81 | 1,634 | 338 | 779 | 823 | 11,485 |
| 92 | 429 | 92 | 182 | 703 | 658 | 64 | 1,651 | - 81 | 1,634 | 338 | 779 | 823 | 11,488 |
| 93 | 429 | 92 | 182 | 703 | 658 | 64 | 1,651 | - 81 | 1,634 | 338 | 779 | 823 | 11,488 |
| 94 | 429 | 92 | 182 | 703 | 658 | 64 | 1,651 | - 81 | 1,634 | 338 | 779 | 823 | 11,488 |
| 95 | 529 | 92 | 182 | 703 | 658 | 64 | 1,651 | - 81 | 1,634 | 338 | 779 | 823 | 11,488 |
| 96 | 429 | 92 | 182 | 703 | 658 | 64 | 1,651 | - 81 | 1,634 | 338 | 779 | 823 | 11,488 |
| 97 | 429 | 92 | 182 | 703 | 658 | 64 | 1,651 | - 81 | 1,634 | 338 | 779 | 823 | 11,488 |
| 98 | 429 | 92 | 182 | 703 | 658 | 64 | 1,651 | - 81 | 1,634 | 338 | 779 | 823 | 11,488 |
| 99 | 429 | 92 | 182 | 703 | 658 | 64 | 1,651 | - 81 | 1,634 | 338 | 779 | 823 | 11,488 |
| 2000[17/] | 429 | 92 | 182 | 703 | 658 | 64 | 1,651 | - 81 | 1,634 | 338 | 779 | 823 | 11,488 |

Footnotes on Sheet 5.

TABLE 16 (CONTINUED)

ACTUAL AND PROJECTED OPERATING COSTS OF FACILITIES
BY PROJECT PURPOSE AND BY CATEGORY[1]

(in thousands of dollars)



| CALENDAR YEAR | CALIFORNIA AQUEDUCT | | | TOTAL, CALIFORNIA AQUEDUCT | NORTH BAY AQUEDUCT (PROJECT TRANSPORTATION FACILITIES) | | | SOUTH BAY AQUEDUCT (PROJECT TRANSPORTATION FACILITIES) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PROJECT TRANSPORTATION FACILITIES (CONT'D) | | | | SPECIFIC WATER SUPPLY | | | SPECIFIC WATER SUPPLY[8] | | MULTIPLE-PURPOSE (MINIMUM) [2] | | | |
| | MULTIPLE-PURPOSE (VARIABLE)[7] | | | | | | | | | | | | |
| | R&F&WE[3] | WATER SUPPLY | TOTAL | | MINIMUM | VARIABLE | TOTAL | MINIMUM | VARIABLE | R&F&WE[3] (25.6%) | WATER SUPPLY (41.9%) | FLOOD CONTROL (32.5%) | TOTAL |
| | (27) | (28) | (29) | (30) | (31) | (32) | (33) | (34) | (35) | (36) | (37) | (38) | (39) |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 69 | 39 | 0 | 0 | 0 | 108 |
| 63 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 153 | 60 | 0 | 0 | 0 | 213 |
| 64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 166 | 78 | 0 | 0 | 0 | 244 |
| 65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 320 | 149 | 0 | 0 | 0 | 469 |
| 66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 268 | 224 | 0 | 0 | 0 | 492 |
| 67 | 0 | 184 | 620 | 737 | 0 | 0 | 0 | 269 | 288 | 0 | 0 | 0 | 557 |
| 68 | 0 | 502 | 4,369 | 6,565 | 28 | 15 | 43 | 255 | 388 | 0 | 0 | 0 | 643 |
| 69 | 0 | 818 | 5,552 | 7,876 | 28 | 17 | 45 | 278 | 370 | 4 | 5 | 5 | 662 |
| 1970 | 0 | 566 | 5,628 | 7,880 | 28 | 19 | 46 | 279 | 433 | 4 | 5 | 5 | 726 |
| 71 | 14 | 4,286 | 14,635 | 16,765 | 28 | 21 | 49 | 279 | 423 | 4 | 5 | 5 | 716 |
| 72 | 295 | 6,799 | 20,158 | 21,908 | 28 | 21 | 49 | 272 | 438 | 4 | 5 | 5 | 724 |
| 73 | 302 | 7,902 | 21,012 | 22,982 | 27 | 21 | 48 | 268 | 441 | 3 | 6 | 4 | 722 |
| 74 | 257 | 7,435 | 20,447 | 22,777 | 27 | 25 | 52 | 268 | 470 | 3 | 6 | 4 | 751 |
| 75 | 244 | 8,466 | 21,409 | 23,771 | 27 | 32 | 59 | 264 | 421 | 3 | 6 | 4 | 698 |
| 76 | 224 | 8,489 | 21,311 | 23,517 | 27 | 33 | 60 | 264 | 423 | 3 | 6 | 4 | 700 |
| 77 | 223 | 9,868 | 22,734 | 24,876 | 27 | 34 | 61 | 264 | 429 | 3 | 6 | 4 | 706 |
| 78 | 230 | 11,294 | 24,208 | 25,998 | 27 | 35 | 62 | 263 | 414 | 3 | 6 | 4 | 690 |
| 79 | 245 | 13,215 | 26,233 | 27,858 | 27 | 40 | 67 | 263 | 426 | 3 | 6 | 4 | 702 |
| 1980 | 268 | 14,629 | 27,982 | 29,382 | 144 | 61 | 205 | 263 | 418 | 3 | 6 | 4 | 694 |
| 81 | 272 | 15,886 | 29,266 | 30,845 | 143 | 54 | 197 | 263 | 421 | 3 | 6 | 4 | 697 |
| 82 | 290 | 18,513 | 31,983 | 33,501 | 143 | 45 | 188 | 263 | 450 | 3 | 6 | 4 | 726 |
| 83 | 298 | 20,511 | 34,012 | 35,304 | 143 | 50 | 193 | 264 | 468 | 3 | 6 | 4 | 745 |
| 84 | 287 | 21,498 | 35,168 | 36,347 | 143 | 67 | 210 | 263 | 457 | 3 | 6 | 4 | 733 |
| 85 | 255 | 19,669 | 33,065 | 34,239 | 143 | 66 | 209 | 262 | 423 | 3 | 6 | 4 | 698 |
| 86 | 249 | 21,032 | 34,409 | 36,897 | 143 | 50 | 193 | 261 | 403 | 3 | 6 | 4 | 677 |
| 87 | 238 | 21,186 | 34,506 | 36,666 | 143 | 50 | 193 | 261 | 399 | 3 | 6 | 4 | 673 |
| 88 | 240 | 22,850 | 36,103 | 38,453 | 143 | 52 | 195 | 261 | 403 | 3 | 6 | 4 | 677 |
| 89 | 245 | 24,283 | 37,790 | 39,603 | 143 | 54 | 197 | 261 | 427 | 3 | 6 | 4 | 701 |
| 1990 | 248 | 24,861 | 38,518 | 40,183 | 143 | 56 | 199 | 261 | 441 | 3 | 6 | 4 | 715 |
| 91 | 251 | 25,179 | 38,855 | 40,489 | 143 | 56 | 199 | 261 | 445 | 3 | 6 | 4 | 719 |
| 92 | 252 | 25,238 | 38,918 | 40,552 | 143 | 56 | 199 | 260 | 453 | 3 | 6 | 4 | 726 |
| 93 | 252 | 25,240 | 38,920 | 40,554 | 143 | 56 | 199 | 260 | 457 | 3 | 6 | 4 | 730 |
| 94 | 252 | 25,242 | 38,922 | 40,556 | 143 | 56 | 199 | 260 | 462 | 3 | 6 | 4 | 735 |
| 95 | 252 | 25,242 | 38,922 | 40,556 | 143 | 56 | 199 | 260 | 464 | 3 | 6 | 4 | 737 |
| 96 | 252 | 25,244 | 38,924 | 40,558 | 143 | 56 | 199 | 260 | 466 | 3 | 6 | 4 | 739 |
| 97 | 252 | 25,244 | 38,924 | 40,558 | 143 | 56 | 199 | 260 | 468 | 3 | 6 | 4 | 741 |
| 98 | 252 | 25,244 | 38,924 | 40,558 | 143 | 56 | 199 | 260 | 468 | 3 | 6 | 4 | 741 |
| 99 | 252 | 25,244 | 38,924 | 40,558 | 143 | 56 | 199 | 260 | 468 | 3 | 6 | 4 | 741 |
| 2000[17] | 252 | 25,244 | 38,924 | 40,558 | 143 | 56 | 199 | 260 | 468 | 3 | 6 | 4 | 741 |

Footnotes on Sheet 5.

TABLE 16 (Continued)

ACTUAL AND PROJECTED OPERATION COSTS OF FACILITIES
BY PROJECT PURPOSE AND BY CATEGORY[1]

(in thousands of dollars)



| CALENDAR YEAR | TOTAL BY PURPOSE AND BY CATEGORY, STATE WATER PROJECT | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | RECREATION AND FISH AND WILDLIFE ENHANCEMENT[3] | | | DRAINAGE[11] | FLOOD CONTROL[12] (MINIMUM) | WATER SUPPLY AND OROVILLE POWER | | | | | | TOTAL ALL PURPOSES |
| | | | | | | PROJECT CONSERVATION FACILITIES | | | PROJECT TRANSPORTATION FACILITIES | | | TOTAL |
| | MINIMUM[2] | VARIABLE[10] | TOTAL | | | MINIMUM[13] | VARIABLE[14] | TOTAL | MINIMUM[15] | VARIABLE[16] | TOTAL | |
| | (40) | (41) | (42) | (43) | (44) | (45) | (46) | (47) | (48) | (49) | (50) | (51) | (52) |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 69 | 39 | 108 | 108 | 108[18] |
| 63 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 153 | 60 | 213 | 213 | 213[18] |
| 64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 166 | 78 | 244 | 244 | 244[18] |
| 65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 320 | 149 | 469 | 469 | 469[18] |
| 66 | 50 | 0 | 50 | 0 | 0 | 13 | 0 | 13 | 268 | 224 | 492 | 505 | 555 |
| 67 | 95 | 0 | 95 | 486 | 0 | 110 | 21 | 131 | 674 | 472 | 1,146 | 1,277 | 1,858 |
| 68 | 341 | 0 | 341 | 503 | 57 | 4,019 | 508 | 4,527 | 3,780 | 1,064 | 4,844 | 9,371 | 10,272 |
| 69 | 401 | 0 | 401 | 790 | 81 | 4,535 | 567 | 5,102 | 4,630 | 1,354 | 5,984 | 11,086 | 12,358 |
| 1970 | 428 | 0 | 428 | 973 | 81 | 4,521 | 506 | 5,027 | 4,943 | 1,157 | 6,100 | 11,127 | 12,609 |
| 71 | 827 | 14 | 841 | 985 | 80 | 4,531 | 362 | 4,893 | 9,845 | 4,868 | 14,713 | 19,606 | 21,512 |
| 72 | 1,048 | 295 | 1,343 | 977 | 79 | 4,501 | - 3 | 4,498 | 12,365 | 7,405 | 19,770 | 24,268 | 26,667 |
| 73 | 1,019 | 302 | 1,321 | 958 | 76 | 4,453 | 247 | 4,700 | 12,101 | 8,536 | 20,637 | 25,337 | 27,692 |
| 74 | 1,444 | 257 | 1,701 | 959 | 76 | 4,542 | 721 | 5,263 | 12,031 | 8,123 | 20,154 | 25,417 | 28,153 |
| 75 | 1,439 | 244 | 1,683 | 955 | 76 | 4,532 | 743 | 5,275 | 11,981 | 9,106 | 21,087 | 26,362 | 29,076 |
| 76 | 1,433 | 224 | 1,657 | 954 | 76 | 4,530 | 583 | 5,113 | 11,884 | 9,134 | 21,018 | 26,131 | 28,818 |
| 77 | 1,432 | 223 | 1,655 | 854 | 76 | 4,530 | 546 | 5,076 | 11,925 | 10,525 | 22,450 | 27,526 | 30,111 |
| 78 | 1,433 | 230 | 1,663 | 854 | 76 | 4,530 | 155 | 4,685 | 11,938 | 11,963 | 23,901 | 28,586 | 31,179 |
| 79 | 1,438 | 245 | 1,683 | 854 | 76 | 4,530 | 0 | 4,530 | 11,988 | 13,935 | 25,923 | 30,453 | 33,066 |
| 1980 | 1,438 | 268 | 1,706 | 854 | 76 | 4,530 | -228 | 4,302 | 12,398 | 15,381 | 27,779 | 32,081 | 34,717 |
| 81 | 1,438 | 272 | 1,710 | 854 | 76 | 4,530 | - 34 | 4,496 | 12,391 | 16,663 | 29,054 | 33,550 | 36,190 |
| 82 | 1,442 | 290 | 1,732 | 854 | 76 | 4,530 | -109 | 4,421 | 12,416 | 19,353 | 31,769 | 36,190 | 38,852 |
| 83 | 1,445 | 298 | 1,743 | 854 | 76 | 4,530 | -299 | 4,231 | 12,431 | 21,380 | 33,811 | 38,042 | 40,715 |
| 84 | 1,444 | 287 | 1,731 | 854 | 76 | 4,530 | -423 | 4,107 | 12,408 | 22,576 | 34,984 | 39,091 | 41,752 |
| 85 | 1,431 | 255 | 1,686 | 854 | 76 | 4,530 | -435 | 4,095 | 12,264 | 20,626 | 32,890 | 36,985 | 39,601 |
| 86 | 1,433 | 249 | 1,682 | 854 | 76 | 5,188 | 944 | 6,132 | 12,234 | 21,967 | 34,201 | 40,333 | 42,945 |
| 87 | 1,429 | 238 | 1,667 | 854 | 76 | 5,188 | 621 | 5,809 | 12,185 | 22,124 | 34,309 | 40,118 | 42,715 |
| 88 | 1,430 | 240 | 1,670 | 854 | 76 | 5,188 | 781 | 5,969 | 12,195 | 23,714 | 35,909 | 41,878 | 44,478 |
| 89 | 1,431 | 245 | 1,676 | 854 | 76 | 5,188 | 252 | 5,440 | 12,210 | 25,406 | 37,616 | 43,056 | 45,662 |
| 1990 | 1,434 | 248 | 1,682 | 854 | 76 | 5,188 | 130 | 5,318 | 12,229 | 26,125 | 38,354 | 43,672 | 46,284 |
| 91 | 1,434 | 251 | 1,685 | 854 | 76 | 5,188 | 101 | 5,289 | 12,233 | 26,459 | 38,692 | 43,981 | 46,596 |
| 92 | 1,434 | 252 | 1,686 | 854 | 76 | 5,188 | 101 | 5,289 | 12,235 | 26,526 | 38,761 | 44,050 | 46,666 |
| 93 | 1,434 | 252 | 1,686 | 854 | 76 | 5,188 | 101 | 5,289 | 12,235 | 26,532 | 38,767 | 44,056 | 46,672 |
| 94 | 1,434 | 252 | 1,686 | 854 | 76 | 5,188 | 101 | 5,289 | 12,235 | 26,539 | 38,774 | 44,063 | 46,679 |
| 95 | 1,434 | 252 | 1,686 | 854 | 76 | 5,188 | 101 | 5,289 | 12,235 | 26,541 | 38,776 | 44,065 | 46,681 |
| 96 | 1,434 | 252 | 1,686 | 854 | 76 | 5,188 | 101 | 5,289 | 12,235 | 26,545 | 38,780 | 44,069 | 46,685 |
| 97 | 1,434 | 252 | 1,686 | 854 | 76 | 5,188 | 101 | 5,289 | 12,235 | 26,547 | 38,782 | 44,071 | 46,687 |
| 98 | 1,434 | 252 | 1,686 | 854 | 76 | 5,188 | 101 | 5,289 | 12,235 | 26,547 | 38,782 | 44,071 | 46,687 |
| 99 | 1,434 | 252 | 1,686 | 854 | 76 | 5,188 | 101 | 5,289 | 12,235 | 26,547 | 38,782 | 44,071 | 46,687 |
| 2000[17] | 1,434 | 252 | 1,686 | 854 | 76 | 5,188 | 101 | 5,289 | 12,235 | 26,547 | 38,782 | 44,071 | 46,687 |

Footnotes on Sheet 5.

TABLE 16 (CONTINUED)

ACTUAL AND PROJECTED OPERATING COSTS OF FACILITIES
BY PROJECT PURPOSE AND BY CATEGORY 1/



1/ The operating costs of facilities involving the purpose of water supply are shown in this table by the two respective categories defined in the "Standard Provisions for Water Supply Contract":

Minimum operation, maintenance, power and replacements costs: those incurred irrespective of the amount of project water delivered to water supply contractors.

Variable operation, maintenance, power and replacement costs: those incurred in an amount which is dependent upon and varies with the amount delivered to water supply contractors.

Note that operating costs of Local Projects (the Davis-Grunsky Program) and of specific recreation and fish and wildlife enhancement features are not included in this table since these costs are not accounted for by the Department.

2/ Based upon the percentages determined in Bulletin No. 153-66, "Allocations of Costs Among Purposes of the State Water Project", and summarized on page 5 therein, applied to the currently estimated minimum operating costs of features jointly used by project purposes.

3/ "R&F&WE" represents the abbreviation of the purposes of "Recreation and Fish and Wildlife Enhancement", considered as one purpose in the allocations determined in Bulletin No. 153-66.

4/ Includes primarily the costs of electrical power and energy required for pumping project water at the head of the Peripheral Canal.

5/ Includes primarily the net costs of electrical power and energy required for pumping project water through the San Luis Pumping-Generating Plant and the share of the power and energy required for the Delta Pumping Plant which is allocated to conservation.

6/ Consists of the operating costs of the Coastal Branch, California Aqueduct.

7/ The percentages determined in Bulletin No. 153-66 for operating costs apply only to those of the minimum category. The variable operating costs of features jointly used by project purposes are allocated annually among purposes in proportion to the annual deliveries to each respective purpose.

8/ Consists of the operating costs of the entire South Bay Aqueduct, except those of Del Valle Dam and reservoir.

9/ The total of Columns 2, 5, 8, 14, 19, 25, and 36.

10/ Equal to Column 27.

11/ Equal to Column 1.

12/ The total of Columns 11 and 38.

13/ The total of Columns 3, 6, 9, 10, 15, 18, and 20.

14/ The total of Columns 16 and 21.

15/ The total of Columns 23, 26, 31, 34, and 37.

16/ The total of Columns 24, 28, 32, and 35.

17/ And each year thereafter for the remainder of the project repayment period

18/ Actual costs; all others projected herein.

TABLE 17

ACTUAL AND PROJECTED CAPITAL COSTS
BY PROGRAMS

(in dollars)

| CALENDAR YEAR | STATE UTILITY PROGRAMS | | | | STATE NONUTILITY PROGRAMS | | | | FEDERAL PROGRAMS | | | TOTAL, ALL PROGRAMS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | WATER SUPPLY AND OROVILLE POWER | | DRAINAGE | TOTAL | UNSPECIFIED PURPOSES | | RECREATION AND FISH AND WILDLIFE ENHANCEMENT | TOTAL | FLOOD CONTROL | DRAINAGE | TOTAL | |
| | PROJECT CONSERVATION FACILITIES | PROJECT TRANSPORTATION FACILITIES | | | LOCAL PROJECTS (DAVIS-GRUNSKY PROGRAMS) | DELETED FEATURES | | | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
| 1952 | 127,328 | 97,435 | 0 | 224,763 | 0 | 22,201 | 2,805 | 25,006 | 28,068 | 0 | 28,068 | 277,837 1/ |
| 53 | 225,800 | 314,339 | 0 | 540,139 | 0 | 61,096 | 8,963 | 70,059 | 46,944 | 0 | 46,944 | 657,142 1/ |
| 54 | 210,991 | 393,315 | 0 | 604,306 | 0 | 77,060 | 11,413 | 88,473 | 44,613 | 0 | 44,613 | 737,392 1/ |
| 55 | 130,534 | 187,331 | 0 | 317,865 | 0 | 40,852 | 5,751 | 46,603 | 26,554 | 0 | 26,554 | 391,022 1/ |
| 56 | 1,086,397 | 328,698 | 0 | 1,415,095 | 0 | 54,883 | 16,903 | 71,786 | 268,595 | 0 | 268,595 | 1,755,476 1/ |
| 57 | 4,921,882 | 1,363,682 | 0 | 6,285,564 | 0 | 211,800 | 48,261 | 260,061 | 1,278,439 | 0 | 1,278,439 | 7,824,064 1/ |
| 58 | 7,635,465 | 2,060,635 | 0 | 9,696,100 | 0 | 356,752 | 160,026 | 516,778 | 1,957,932 | 0 | 1,957,932 | 12,170,810 1/ |
| 59 | 9,584,438 | 2,695,768 | 0 | 12,280,206 | 12,666 | 201,755 | 502,600 | 717,021 | 2,118,802 | 0 | 2,118,802 | 15,116,029 1/ |
| 1960 | 12,420,788 | 4,360,038 | 46,330 | 16,827,156 | 86,983 | 98,573 | 903,835 | 1,089,391 | 2,706,500 | 7,108 | 2,713,608 | 20,630,155 1/ |
| 61 | 16,447,809 | 8,928,065 | 362,890 | 25,738,764 | 544,167 | 72,834 | 1,619,332 | 2,236,333 | 3,791,196 | 55,667 | 3,846,863 | 31,821,960 1/ |
| 62 | 19,486,281 | 9,609,700 | 387,564 | 29,483,545 | 623,352 | 20,947 | 2,313,651 | 2,957,950 | 3,985,201 | 59,453 | 4,044,654 | 36,486,149 1/ |
| 63 | 65,504,881 | 26,893,011 | 379,744 | 92,777,636 | 3,695,417 | 53,491 | 6,723,480 | 10,472,388 | 9,360,899 | 58,254 | 9,419,153 | 112,669,177 1/ |
| 64 | 63,984,038 | 44,498,085 | 333,449 | 108,815,572 | 4,212,212 | 19,770 | 4,819,614 | 9,051,596 | 7,442,673 | 181,927 | 7,624,600 | 125,491,768 1/ |
| 65 | 74,736,306 | 65,470,445 | 340,473 | 140,547,224 | 10,848,808 | 3,015 | 7,114,986 | 17,966,809 | 7,508,269 | 510,709 | 8,018,978 | 166,533,011 1/ |
| 66 | 132,226,089 | 124,585,056 | 726,000 | 257,537,145 | 9,273,244 | 0 | 9,999,838 | 19,273,082 | 18,656,000 | 1,089,000 | 19,745,000 | 296,555,227 |
| 67 | 98,916,576 | 204,136,934 | 1,198,000 | 304,251,510 | 5,000,000 | 0 | 9,804,490 | 14,804,490 | 11,757,000 | 1,796,000 | 13,553,000 | 332,609,000 |
| 68 | 27,349,824 | 253,081,170 | 7,404,000 | 287,834,994 | 5,000,000 | 0 | 10,578,006 | 15,578,006 | 1,400,000 | 11,107,000 | 12,507,000 | 315,920,000 |
| 69 | 7,873,168 | 282,576,426 | 8,314,000 | 298,763,594 | 5,000,000 | 0 | 14,898,406 | 19,898,406 | 124,000 | 12,472,000 | 12,596,000 | 331,258,000 |
| 1970 | 5,027,216 | 172,530,376 | 2,842,000 | 180,399,592 | 5,000,000 | 0 | 14,716,408 | 19,716,408 | 14,000 | 4,262,000 | 4,276,000 | 204,392,000 |
| 71 | 4,226,664 | 89,239,308 | 0 | 93,465,972 | 5,000,000 | 0 | 10,742,028 | 15,742,028 | 12,000 | 0 | 12,000 | 109,220,000 |
| 72 | 3,176,608 | 19,028,032 | 0 | 22,204,640 | 5,000,000 | 0 | 5,885,360 | 10,885,360 | 9,000 | 0 | 9,000 | 33,099,000 |
| 73 | 2,860,000 | 4,290,732 | 0 | 7,150,732 | 5,000,000 | 0 | 3,619,268 | 8,619,268 | 0 | 0 | 0 | 15,770,000 |
| 74 | 1,793,000 | 2,856,938 | 0 | 4,649,938 | 5,000,000 | 0 | 1,661,062 | 6,661,062 | 0 | 0 | 0 | 11,311,000 |
| 75 | 155,000 | 2,529,400 | 0 | 2,684,400 | 5,000,000 | 0 | 2,600 | 5,002,600 | 0 | 0 | 0 | 7,687,000 |
| 76 | 154,000 | 8,680,200 | 0 | 8,834,200 | 5,000,000 | 0 | 59,800 | 5,059,800 | 0 | 0 | 0 | 13,894,000 |
| 77 | 5,154,000 | 12,150,000 | 0 | 17,304,000 | 5,000,000 | 0 | 104,000 | 5,104,000 | 0 | 0 | 0 | 22,408,000 |
| 78 | 24,154,000 | 19,696,600 | 0 | 43,850,600 | 5,000,000 | 0 | 62,400 | 5,062,400 | 0 | 0 | 0 | 48,913,000 |
| 79 | 32,154,000 | 11,480,000 | 0 | 43,634,000 | 5,000,000 | 0 | 0 | 5,000,000 | 0 | 0 | 0 | 48,634,000 |
| 1980 | 25,154,000 | 0 | 0 | 25,154,000 | 5,000,000 | 0 | 0 | 5,000,000 | 0 | 0 | 0 | 30,154,000 |
| 81 | 35,379,616 | 1,004,194 | 0 | 36,383,810 | 5,000,000 | 0 | 40,190 | 5,040,190 | 0 | 0 | 0 | 41,424,000 |
| 82 | 44,606,176 | 2,006,440 | 0 | 46,612,616 | 5,000,000 | 0 | 80,384 | 5,080,384 | 0 | 0 | 0 | 51,693,000 |
| 83 | 45,058,352 | 4,073,854 | 0 | 49,132,206 | 5,000,000 | 0 | 160,794 | 5,160,794 | 0 | 0 | 0 | 54,293,000 |
| 84 | 6,831,792 | 3,774,660 | 0 | 10,606,452 | 5,000,000 | 0 | 120,548 | 5,120,548 | 0 | 0 | 0 | 15,727,000 |
| 85 | 154,000 | 315,000 | 0 | 469,000 | 5,000,000 | 0 | 0 | 5,000,000 | 0 | 0 | 0 | 5,469,000 |
| 86 | 0 | 0 | 0 | 0 | 5,000,000 | 0 | 0 | 5,000,000 | 0 | 0 | 0 | 5,000,000 |
| 87 | 0 | 12,000 | 0 | 12,000 | 2,122,195 | 0 | 0 | 2,122,195 | 0 | 0 | 0 | 2,134,195 |
| 88 | 0 | 100,000 | 0 | 100,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100,000 |
| 89 | 0 | 160,000 | 0 | 160,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 160,000 |
| 1990 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTALS | 778,907,019 | 1,385,507,867 | 22,334,450 | 2,186,749,336 | 131,419,044 | 1,295,029 | 106,787,202 | 239,501,275 | 72,536,685 | 31,599,118 | 104,135,803 | 2,530,386,414 |

1/ Actual costs; all others projected herein.

TABLE 18

ACTUAL AND PROJECTED OPERATING COSTS BY PROGRAMS

(In thousands of dollars)

| CALENDAR YEAR | STATE UTILITY PROGRAMS | | | | STATE NONUTILITY PROGRAMS | FEDERAL PROGRAMS | | | | TOTAL, ALL PROGRAMS |
|---|---|---|---|---|---|---|---|---|---|---|
| | WATER SUPPLY AND OROVILLE POWER | | DRAINAGE | TOTAL | RECREATION AND FISH AND WILDLIFE ENHANCEMENT | WATER SUPPLY | FLOOD CONTROL | DRAINAGE | TOTAL | |
| | PROJECT CONSERVATION FACILITIES | PROJECT TRANSPORTATION FACILITIES | | | | | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| 1962 | 0 | 108 | 0 | 108 | 0 | 0 | 0 | 0 | 0 | 108 1/ |
| 63 | 0 | 213 | 0 | 213 | 0 | 0 | 0 | 0 | 0 | 213 1/ |
| 64 | 0 | 244 | 0 | 244 | 0 | 0 | 0 | 0 | 0 | 244 1/ |
| 65 | 0 | 469 | 0 | 469 | 0 | 0 | 0 | 0 | 0 | 469 1/ |
| 66 | 13 | 492 | 0 | 505 | 50 | 0 | 0 | 0 | 0 | 555 |
| 67 | 131 | 1,146 | 159 | 1,436 | 95 | 0 | 0 | 327 | 327 | 1,858 |
| 68 | 3,836 | 4,137 | 164 | 8,137 | 341 | 1,398 | 57 | 339 | 1,794 | 10,272 |
| 69 | 4,397 | 5,198 | 258 | 9,853 | 401 | 1,491 | 81 | 532 | 2,104 | 12,358 |
| 1970 | 4,335 | 5,322 | 318 | 9,975 | 428 | 1,470 | 81 | 655 | 2,206 | 12,609 |
| 71 | 4,190 | 13,918 | 322 | 18,430 | 841 | 1,498 | 80 | 663 | 2,421 | 21,512 |
| 72 | 3,796 | 18,978 | 319 | 23,093 | 1,343 | 1,494 | 79 | 658 | 2,231 | 26,667 |
| 73 | 4,007 | 19,856 | 313 | 24,176 | 1,321 | 1,474 | 76 | 645 | 2,195 | 27,692 |
| 74 | 4,571 | 19,374 | 313 | 24,258 | 1,701 | 1,472 | 76 | 646 | 2,194 | 28,153 |
| 75 | 4,584 | 20,308 | 312 | 25,204 | 1,683 | 1,470 | 76 | 643 | 2,189 | 29,076 |
| 76 | 4,422 | 20,241 | 312 | 24,975 | 1,657 | 1,468 | 76 | 642 | 2,186 | 28,818 |
| 77 | 4,385 | 21,673 | 279 | 26,337 | 1,655 | 1,468 | 76 | 575 | 2,119 | 30,111 |
| 78 | 3,994 | 23,124 | 279 | 27,397 | 1,663 | 1,468 | 76 | 575 | 2,119 | 31,179 |
| 79 | 3,839 | 25,146 | 279 | 29,264 | 1,683 | 1,468 | 76 | 575 | 2,119 | 33,066 |
| 1980 | 3,611 | 26,998 | 279 | 30,888 | 1,706 | 1,472 | 76 | 575 | 2,123 | 34,717 |
| 81 | 3,805 | 28,273 | 279 | 32,357 | 1,710 | 1,472 | 76 | 575 | 2,123 | 36,190 |
| 82 | 3,730 | 30,988 | 279 | 34,997 | 1,732 | 1,472 | 76 | 575 | 2,123 | 38,852 |
| 83 | 3,540 | 33,030 | 279 | 36,849 | 1,743 | 1,472 | 76 | 575 | 2,123 | 40,715 |
| 84 | 3,416 | 34,203 | 279 | 37,898 | 1,731 | 1,472 | 76 | 575 | 2,123 | 41,752 |
| 85 | 3,404 | 32,109 | 279 | 35,792 | 1,686 | 1,472 | 76 | 575 | 2,123 | 39,601 |
| 86 | 5,441 | 33,420 | 279 | 39,140 | 1,682 | 1,472 | 76 | 575 | 2,123 | 42,945 |
| 87 | 5,118 | 33,528 | 279 | 38,925 | 1,667 | 1,472 | 76 | 575 | 2,123 | 42,715 |
| 88 | 5,278 | 35,128 | 279 | 40,685 | 1,670 | 1,472 | 76 | 575 | 2,123 | 44,478 |
| 89 | 4,749 | 36,835 | 279 | 41,863 | 1,676 | 1,472 | 76 | 575 | 2,123 | 45,662 |
| 1990 | 4,627 | 37,573 | 279 | 42,479 | 1,682 | 1,472 | 76 | 575 | 2,123 | 46,284 |
| 91 | 4,598 | 37,911 | 279 | 42,788 | 1,685 | 1,472 | 76 | 575 | 2,123 | 46,596 |
| 92 | 4,598 | 37,980 | 279 | 42,857 | 1,686 | 1,472 | 76 | 575 | 2,123 | 46,666 |
| 93 | 4,598 | 37,986 | 279 | 42,863 | 1,686 | 1,472 | 76 | 575 | 2,123 | 46,672 |
| 94 | 4,598 | 37,993 | 279 | 42,870 | 1,686 | 1,472 | 76 | 575 | 2,123 | 46,679 |
| 95 | 4,598 | 37,995 | 279 | 42,872 | 1,686 | 1,472 | 76 | 575 | 2,123 | 46,681 |
| 96 | 4,598 | 37,999 | 279 | 42,876 | 1,686 | 1,472 | 76 | 575 | 2,123 | 46,685 |
| 97 | 4,598 | 38,001 | 279 | 42,878 | 1,686 | 1,472 | 76 | 575 | 2,123 | 46,687 |
| 98 | 4,598 | 38,001 | 279 | 42,878 | 1,686 | 1,472 | 76 | 575 | 2,123 | 46,687 |
| 99 | 4,598 | 38,001 | 279 | 42,878 | 1,686 | 1,472 | 76 | 575 | 2,123 | 46,687 |
| 2000 2/ | 4,598 | 38,001 | 279 | 42,878 | 1,686 | 1,472 | 76 | 575 | 2,123 | 46,687 |

1/ Actual costs, all others projected herein.

2/ And each year thereafter for the remainder of the project repayment period.

TABLE 19

SUMMARY OF ANNUAL CAPITAL EXPENDITURES

(in dollars)

| CALENDAR YEAR | LOCAL PROJECTS (DAVIS-GRUNSKY PROGRAMS) | SUMMARY OF EXPENDITURES BY FACILITIES[1] | | | | | | | | | TOTAL | MISCELLANEOUS ADDITIONAL EXPENDITURES[2] | CAPITAL EXPENDITURES COVERED IN FINANCIAL ANALYSIS[3] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SAN JOAQUIN MASTER DRAIN | UPPER FEATHER AREA | OROVILLE AREA | DELTA FACILITIES | UPPER EEL RIVER DEVELOPMENT | CALIFORNIA AQUEDUCT | NORTH BAY AQUEDUCT | SOUTH BAY AQUEDUCT | DELETED FEATURES | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
| | | | | | | FROM FUNDS PROVIDED PRIOR TO THE BURNS-PORTER ACT[4] | | | | | | | |
| 1952 | 0 | 0 | 0 | 152,258 | 0 | 0 | 102,982 | 0 | 396 | 22,201 | 277,837 | 0 | 277,837 |
| 53 | 0 | 0 | 0 | 264,724 | 0 | 0 | 329,347 | 0 | 1,975 | 61,096 | 657,142 | 0 | 657,142 |
| 54 | 0 | 0 | 0 | 245,454 | 0 | 0 | 408,427 | 0 | 6,451 | 77,060 | 737,392 | 0 | 737,392 |
| 55 | 0 | 0 | 0 | 151,400 | 0 | 0 | 190,111 | 0 | 8,659 | 40,852 | 391,022 | 0 | 391,022 |
| 56 | 0 | 0 | 0 | 1,301,388 | 0 | 0 | 282,988 | 0 | 116,217 | 54,883 | 1,755,476 | 0 | 1,755,476 |
| 57 | 0 | 0 | 9,859 | 6,100,400 | 0 | 0 | 723,730 | 20,880 | 757,395 | 211,800 | 7,824,064 | 0 | 7,824,064 |
| 58 | 0 | 0 | 212,628 | 9,353,909 | 0 | 0 | 1,342,172 | 40,881 | 864,468 | 356,752 | 12,170,810 | 19,413 | 12,190,223 |
| 59 | 12,666 | 0 | 623,526 | 10,285,301 | 0 | 0 | 3,208,159 | 22,547 | 762,075 | 201,755 | 15,116,029 | 27,745 | 15,143,774 |
| 1960 | 86,983 | 53,438 | 1,120,028 | 13,086,041 | 71,960 | 0 | 4,278,740 | 18,576 | 1,794,570 | 98,573 | 20,608,909 | 93,666 | 20,702,575 |
| 61 | 483,005 | 254,717 | 712,724 | 16,721,563 | 271,587 | 0 | 3,649,245 | 10,995 | 3,595,122 | 75,691 | 25,774,649 | 129,809 | 25,904,458 |
| 62 | 79,858 | 17,192 | 114,295 | 4,265,969 | 142,071 | 0 | 1,794,084 | -23,440 | 1,699,570 | 21,349 | 8,110,948 | 229,898 | 8,340,846 |
| 63 | 755,966 | -880 | - 2,806 | 1,541,621 | 9,517 | 0 | 3,703,105 | -54,906 | 901,597 | 54,423 | 6,907,637 | 272,070 | 7,179,707 |
| 64 | 566 | 909 | - 9,395 | -863,141 | 2,373 | 0 | -317,136 | - 6,678 | -569,377 | 12,077 | -1,749,802 | 953,441 | -796,361 |
| 1965 | 0 | 4 | -12,592 | -254,299 | 5 | 0 | -221,859 | 5 | -682,775 | - 2 | -1,171,513 | 1,138,425 | - 33,088 |
| Subtotal | 1,419,044 | 325,380 | 2,768,267 | 62,352,588 | 497,513 | 0 | 19,474,095 | 28,860 | 9,256,343 | 1,288,510 | 97,410,600 | 2,864,467 | 100,275,067 |
| | | | | | | FROM FUNDS PROVIDED SUBSEQUENT TO THE BURNS-PORTER ACT[5] | | | | | | | |
| 1960 | 0 | 0 | 125 | 5,081 | 0 | 0 | 15,198 | 382 | 460 | 0 | 21,246 | 0 | 21,246 |
| 61 | 61,162 | 163,840 | 308,550 | 2,065,018 | 162,028 | 0 | 2,608,394 | 4,874 | 676,302 | -2,857 | 6,047,311 | 0 | 6,047,311 |
| 62 | 543,494 | 429,825 | 1,400,687 | 16,945,334 | 522,714 | 0 | 6,948,584 | 29,503 | 1,555,462 | - 402 | 28,375,201 | 39,870 | 28,415,071 |
| 63 | 2,939,451 | 438,878 | 2,864,134 | 47,599,379 | 1,260,721 | 0 | 45,404,114 | 69,837 | 5,185,958 | - 932 | 105,761,540 | 15,989 | 105,777,529 |
| 64 | 4,211,646 | 514,467 | 1,021,629 | 52,218,035 | 1,504,623 | 199,268 | 56,345,553 | 88,338 | 11,130,318 | 7,693 | 127,241,570 | 16,722 | 127,258,292 |
| 65 | 10,848,808 | 851,178 | 1,542,404 | 58,750,503 | 1,545,418 | 979,357 | 87,009,794 | 219,456 | 5,954,589 | 3,017 | 167,704,524 | 33,732 | 167,738,256 |
| 66 | 9,273,244 | 1,815,000 | 1,865,000 | 123,217,000 | 898,983 | 1,371,000 | 143,508,000 | 724,000 | 13,883,000 | 0 | 296,555,227 | 0 | 296,555,227 |
| 67 | 5,000,000 | 2,994,000 | 679,000 | 88,557,000 | 1,262,000 | 1,542,000 | 222,384,000 | 1,617,000 | 8,574,000 | 0 | 332,609,000 | 0 | 332,609,000 |
| 68 | 5,000,000 | 18,511,000 | 1,204,000 | 22,259,000 | 3,614,000 | 1,563,000 | 261,333,000 | 291,000 | 2,145,000 | 0 | 315,920,000 | 0 | 315,920,000 |
| 69 | 5,000,000 | 20,786,000 | 2,364,000 | 2,809,000 | 7,708,000 | 1,614,000 | 290,676,000 | 238,000 | 63,000 | 0 | 331,258,000 | 0 | 331,258,000 |
| 1970 | 5,000,000 | 7,104,000 | 3,681,000 | 74,000 | 10,002,000 | 1,384,000 | 177,109,000 | 34,000 | 4,000 | 0 | 204,392,000 | 0 | 204,392,000 |
| 71 | 5,000,000 | 0 | 2,072,000 | 58,000 | 9,797,000 | 678,000 | 91,239,000 | 34,000 | 342,000 | 0 | 109,220,000 | 0 | 109,220,000 |
| 72 | 5,000,000 | 0 | 60,000 | 48,000 | 8,300,000 | 168,000 | 19,149,000 | 32,000 | 342,000 | 0 | 33,099,000 | 0 | 33,099,000 |
| 73 | 5,000,000 | 0 | 0 | 741,000 | 5,495,000 | 157,000 | 3,980,000 | 397,000 | 0 | 0 | 15,770,000 | 0 | 15,770,000 |
| 74 | 5,000,000 | 0 | 0 | 735,000 | 2,527,000 | 156,000 | 2,504,000 | 389,000 | 0 | 0 | 11,311,000 | 0 | 11,311,000 |
| 75 | 5,000,000 | 0 | 0 | 0 | 0 | 155,000 | 2,503,000 | 29,000 | 0 | 0 | 7,687,000 | 0 | 7,687,000 |
| 76 | 5,000,000 | 0 | 0 | 0 | 0 | 154,000 | 8,574,000 | 166,000 | 0 | 0 | 13,894,000 | 0 | 13,894,000 |
| 77 | 5,000,000 | 0 | 0 | 0 | 0 | 5,154,000 | 12,034,000 | 220,000 | 0 | 0 | 22,408,000 | 0 | 22,408,000 |
| 78 | 5,000,000 | 0 | 0 | 0 | 0 | 24,154,000 | 17,489,000 | 2,270,000 | 0 | 0 | 48,913,000 | 0 | 48,913,000 |
| 79 | 5,000,000 | 0 | 0 | 0 | 0 | 32,154,000 | 7,893,000 | 3,587,000 | 0 | 0 | 48,634,000 | 0 | 48,634,000 |
| 1980 | 5,000,000 | 0 | 0 | 0 | 0 | 25,154,000 | 0 | 0 | 0 | 0 | 30,154,000 | 0 | 30,154,000 |
| 81 | 5,000,000 | 0 | 0 | 0 | 0 | 35,154,000 | 1,270,000 | 0 | 0 | 0 | 41,424,000 | 0 | 41,424,000 |
| 82 | 5,000,000 | 0 | 0 | 0 | 0 | 44,154,000 | 2,539,000 | 0 | 0 | 0 | 51,693,000 | 0 | 51,693,000 |
| 83 | 5,000,000 | 0 | 0 | 0 | 0 | 44,154,000 | 5,139,000 | 0 | 0 | 0 | 54,293,000 | 0 | 54,293,000 |
| 84 | 5,000,000 | 0 | 0 | 0 | 0 | 6,154,000 | 4,573,000 | 0 | 0 | 0 | 15,727,000 | 0 | 15,727,000 |
| 85 | 5,000,000 | 0 | 0 | 0 | 0 | 154,000 | 315,000 | 0 | 0 | 0 | 5,469,000 | 0 | 5,469,000 |
| 86 | 5,000,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,000,000 | 0 | 5,000,000 |
| 87 | 2,122,195 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12,000 | 0 | 2,134,195 | 0 | 2,134,195 |
| 88 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100,000 | 0 | 100,000 | 0 | 100,000 |
| 89 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 160,000 | 0 | 160,000 | 0 | 160,000 |
| 1990 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Subtotal | 130,000,000 | 53,608,188 | 19,062,529 | 416,081,350 | 54,599,487 | 226,506,625 | 1,472,542,637 | 10,440,390 | 50,128,089 | 6,519 | 2,432,975,814 | 106,313 | 2,433,082,127 |
| TOTALS | 131,419,044 | 53,933,568 | 21,830,796 | 478,433,938 | 55,097,000 | 226,506,625 | 1,492,016,732 | 10,469,250 | 59,384,432 | 1,295,029 | 2,530,386,414 | 2,970,780 | 2,533,357,194 |

1/ Shown distributed to project purposes in Table 15.

2/ The costs in the upper portion of Column 12, totaling $2,864,467, represent those covered by miscellaneous project receipts, including those from rights-of-way rentals and sales. Such receipts are applied for accounting purposes to reduce the capital costs of the particular facilities from which realized. The costs so credited must, however, be initially financed from other sources.

The costs in the lower portion of Column 12, totaling $106,313, represent certain reimbursable operating costs not covered by repayment contracts which have been included in the capital costs of the project.

3/ The financial analysis is described in Chapter XII.

4/ Includes actual expenditures from the General Fund, California Water Fund, and Local Projects Assistance Fund. Negative amounts reflect accounting adjustments.

5/ Includes actual and projected expenditures from Water Bond proceeds, California Water Fund, and miscellaneous receipts.

TABLE 20

PROJECTED CAPITAL EXPENDITURES AND RECEIPTS
FOR REQUESTED EXCESS DELIVERY CAPABILITIES,[1]
STATE UTILITY PROGRAMS

(in thousands of dollars)

| CALENDAR YEAR | TOTAL ESTIMATED COSTS | | | | ESTIMATED COSTS WITHOUT EXCESS CAPACITY[3] | | | | ALLOCATED COSTS FOR EXCESS CAPACITY[4] | TOTAL REQUIRED ADVANCE OF FUNDS[5] | INTEREST CREDITS ON ANNUAL ADVANCES IN EXCESS OF COSTS[6] | ESTIMATED TOTAL CREDITS TO DISTRICTS' ACCOUNT | NET REQUIRED ADVANCE OF FUNDS[7] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | CALIFORNIA AQUEDUCT | | | TOTAL | CALIFORNIA AQUEDUCT | | | TOTAL | | | | | |
| | SOUTH SAN JOAQUIN DIVISION | TEHACHAPI DIVISION | WEST BRANCH[2] | | SOUTH SAN JOAQUIN DIVISION | TEHACHAPI DIVISION | WEST BRANCH[2] | | | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
| 1952 | 14 | 12 | 4 | 30 | 14 | 12 | 4 | 30 | | | | | |
| 1953 | 52 | 37 | 13 | 102 | 52 | 37 | 13 | 102 | | | | | |
| 1954 | 68 | 69 | 14 | 151 | 68 | 69 | 14 | 151 | | | | | |
| 1955 | 32 | 45 | 5 | 82 | 32 | 45 | 5 | 82 | | | | | |
| 1956 | 77 | 55 | 5 | 137 | 77 | 55 | 5 | 137 | | | | | |
| 1957 | 215 | 147 | 17 | 379 | 215 | 147 | 17 | 379 | | | | | |
| 1958 | 481 | 206 | 27 | 714 | 481 | 206 | 27 | 714 | | | | | |
| 1959 | 722 | 172 | 52 | 946 | 722 | 172 | 52 | 946 | | | | | |
| 1960 | 766 | 200 | 79 | 1,045 | 766 | 200 | 79 | 1,045 | | | | | |
| 1961 | 1,205 | 503 | 80 | 1,788 | 1,205 | 503 | 80 | 1,788 | | | | | |
| 1962 | 1,217 | 482 | 329 | 2,028 | 1,217 | 482 | 329 | 2,028 | | | | | |
| 1963 | 2,207 | 1,418 | 597 | 4,222 | 2,207 | 1,418 | 597 | 4,222 | | | | | |
| 1964 | 6,323 | 2,539 | 1,111 | 9,973 | 6,323 | 2,539 | 1,111 | 9,973 | | | | | |
| 1965 | 14,260 | 5,118 | 2,384 | 21,762 | 14,027 | 4,989 | 2,292 | 21,308 | 454 | 1,030 | | | |
| 1966 | 25,796 | 13,287 | 4,203 | 43,286 | 25,437 | 12,741 | 3,723 | 41,901 | 1,385 | 2,882 | | | |
| 1967 | 45,521 | 42,961 | 23,148 | 111,630 | 44,931 | 41,015 | 18,712 | 104,658 | 6,972 | 13,382 | | | 9,127 |
| 1968 | 61,617 | 63,428 | 45,863 | 170,908 | 60,445 | 60,521 | 39,507 | 160,473 | 10,435 | 20,210 | 14 | 303 | 19,907 |
| 1969 | 62,485 | 46,928 | 50,584 | 159,997 | 61,066 | 44,709 | 43,900 | 149,675 | 10,322 | 20,605 | 69 | 917 | 19,688 |
| 1970 | 21,532 | 29,292 | 15,912 | 66,736 | 21,070 | 27,915 | 13,762 | 62,747 | 3,989 | 7,527 | 102 | 1,268 | 6,259 |
| 1971 | 7,250 | 13,935 | 3,767 | 24,952 | 7,250 | 13,935 | 3,767 | 24,952 | 0 | 0 | 2,963 | 32,739 | -32,739 |
| 1972 | 495 | 5,247 | 593 | 6,335 | 495 | 5,247 | 593 | 6,335 | 0 | 0 | 0 | 0 | 0 |
| 1973 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1974 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1975 | 0 | 100 | 0 | 100 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 |
| 1976 | 0 | 2,300 | 0 | 2,300 | 0 | 2,300 | 0 | 2,300 | 0 | 0 | 0 | 0 | 0 |
| 1977 | 0 | 4,000 | 0 | 4,000 | 0 | 4,000 | 0 | 4,000 | 0 | 0 | 0 | 0 | 0 |
| 1978 | 0 | 2,400 | 0 | 2,400 | 0 | 2,400 | 0 | 2,400 | 0 | 0 | 0 | 0 | 0 |
| TOTALS | 252,335 | 234,881 | 148,787 | 636,003 | 248,100 | 225,757 | 128,589 | 602,446 | 33,557 | 65,636 | 3,148 | 35,227 | 22,242 |

1/ Pursuant to "Amendment No. 2 to Water Supply Contract between the State of California Department of Water Resources and The Metropolitan Water District of Southern California", dated February 23, 1965; and assumed pursuant to requests by the Antelope Valley-East Kern Water Agency.

2/ Excluding the costs of Pyramid and Castaic reservoirs.

3/ These estimated capital costs, reduced by those allocable to the nonreimbursable purposes of recreation and fish and wildlife enhancement, are distributed among all water supply contractors utilizing the concerned aqueduct reaches in accordance with Article 24(b) of the "Standard Provisions for Water Supply Contract".

4/ The costs allocated to the Agencies pursuant to Article 24(d) of the "Standard Provisions", constituting the estimated costs shown in Column 4, less the estimated cost had no such excess capacity been provided as shown in Column 8.

5/ Funds bear the same proportion to the total capital costs of the concerned aqueduct reaches, including the costs of providing such excess capacity, as such excess capacity bears to to the total capacity of the concerned aqueduct reaches, including such excess capacity. (See Table B-6, Appendix B).

6/ Interest credits computed from date of advance to completion of construction for each respective reach, at a rate of 3.5 percent per annum.

7/ Negative value denotes credit, herein applied to reduce the capital cost components of the Transportation Charge of the two contractors.

TABLE 21

PROJECTED CAPITAL EXPENDITURES AND RECEIPTS
FOR RECREATION AND FISH AND WILDLIFE ENHANCEMENT,
STATE NONUTILITY PROGRAMS

(in thousands of dollars)

| CALENDAR YEAR | OUTSTANDING BALANCE AT BEGINNING OF YEAR[1] | CAPITAL COSTS OF STATE NONUTILITY PROGRAMS ALLOCATED TO RECREATION AND FISH AND WILDLIFE ENHANCEMENT | | OUTSTANDING BALANCE AT END OF YEAR, PRIOR TO INTEREST ACCRUAL[4] | INTEREST ACCRUAL ON AVERAGE BALANCE AT 3.7% |
|---|---|---|---|---|---|
| | | EXPENDITURES[2] | RECEIPTS[3] | | |
| | (1) | (2) | (3) | (4) | (5) |
| 1952 | 0 | 3 | 0 | 3 | 0 |
| 1953 | 3 | 9 | 0 | 12 | 0 |
| 1954 | 12 | 11 | 0 | 23 | 1 |
| 1955 | 24 | 6 | 0 | 30 | 1 |
| 1956 | 31 | 17 | 0 | 48 | 1 |
| 1957 | 49 | 48 | 0 | 97 | 3 |
| 1958 | 100 | 160 | 0 | 260 | 7 |
| 1959 | 267 | 503 | 0 | 770 | 19 |
| 1960 | 789 | 904 | 0 | 1,693 | 46 |
| 1961 | 1,739 | 1,619 | 0 | 3,358 | 94 |
| 1962 | 3,452 | 2,314 | 0 | 5,766 | 171 |
| 1963 | 5,937 | 6,723 | 0 | 12,660 | 344 |
| 1964 | 13,004 | 4,820 | 0 | 17,824 | 570 |
| 1965 | 18,394 | 7,115 | 0 | 25,509 | 812 |
| 1966 | 26,321 | 10,000 | 0 | 36,321 | 1,159 |
| 1967 | 37,480 | 9,804 | 10,000 | 37,284 | 1,383 |
| 1968 | 38,667 | 10,578 | 5,000 | 44,245 | 1,534 |
| 1969 | 45,779 | 14,899 | 5,000 | 55,678 | 1,877 |
| 1970 | 57,555 | 14,716 | 5,000 | 67,271 | 2,309 |
| 1971 | 69,580 | 10,742 | 5,000 | 75,322 | 2,681 |
| 1972 | 78,003 | 5,885 | 5,000 | 78,888 | 2,902 |
| 1973 | 81,790 | 3,619 | 5,000 | 80,409 | 3,001 |
| 1974 | 83,410 | 1,661 | 5,000 | 80,071 | 3,024 |
| 1975 | 83,095 | 3 | 5,000 | 78,098 | 2,982 |
| 1976 | 81,080 | 60 | 5,000 | 76,140 | 2,909 |
| 1977 | 79,049 | 104 | 5,000 | 74,153 | 2,834 |
| 1978 | 76,987 | 62 | 5,000 | 72,049 | 2,757 |
| 1979 | 74,806 | 0 | 5,000 | 69,806 | 2,675 |
| 1980 | 72,481 | 0 | 5,000 | 67,481 | 2,589 |
| 1981 | 70,070 | 40 | 5,000 | 65,110 | 2,501 |
| 1982 | 67,611 | 80 | 5,000 | 62,691 | 2,411 |
| 1983 | 65,102 | 161 | 5,000 | 60,263 | 2,319 |
| 1984 | 62,582 | 121 | 5,000 | 57,703 | 2,225 |
| 1985 | 59,928 | 0 | 5,000 | 54,928 | 2,125 |
| 1986 | 57,053 | 0 | 5,000 | 52,053 | 2,018 |
| 1987 | 54,071 | 0 | 5,000 | 49,071 | 1,908 |
| 1988 | 50,979 | 0 | 5,000 | 45,979 | 1,794 |
| 1989 | 47,773 | 0 | 5,000 | 42,773 | 1,675 |
| 1990 | 44,448 | 0 | 5,000 | 39,448 | 1,552 |
| 1991 | 41,000 | 0 | 5,000 | 36,000 | 1,424 |
| 1992 | 37,424 | 0 | 5,000 | 32,424 | 1,292 |
| 1993 | 33,716 | 0 | 5,000 | 28,716 | 1,155 |
| 1994 | 29,871 | 0 | 5,000 | 24,871 | 1,013 |
| 1995 | 25,884 | 0 | 5,000 | 20,884 | 865 |
| 1996 | 21,749 | 0 | 5,000 | 16,749 | 712 |
| 1997 | 17,461 | 0 | 5,000 | 12,461 | 554 |
| 1998 | 13,015 | 0 | 5,000 | 8,015 | 389 |
| 1999 | 8,404 | 0 | 5,000 | 3,404 | 218 |
| 2000 | 3,622 | 0 | 3,689 | 0 | 67 |
| TOTALS | - | 106,787 | 173,689 | - | 66,902 |

1/ The total of Columns 4 and 5 for the preceeding year.

2/ From Column 7, Table 17.

3/ As limited to $5,000,000 annually under Assembly Bill No. 12 of the 1966 Legislative Session. The 1966 receipts are included in 1967 because legislative approval must be obtained prior to disbursement. Approval is not expected in 1966.

4/ The total of Columns 1 and 2 less Column 3.

TABLE 22

ACTUAL AND PROJECTED RECEIPTS, FEDERAL PROGRAMS

(in dollars)

| CALENDAR YEAR | FLOOD CONTROL | | | WATER SUPPLY | | | DRAINAGE SAN JOAQUIN DRAINAGE FACILITIES[4] | | TOTAL RECEIPTS, COVERING: | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | OROVILLE DAM AND RESERVOIR[1] | DEL VALLE DAM AND RESERVOIR[2] | TOTAL | SAN LUIS DIVISION[3] | | | | | | | |
| | CAPITAL AND CAPITALIZED OPERATING COSTS | | | ANNUAL OPERATING COSTS | | | CAPITAL COSTS | ANNUAL OPERATING COSTS | CAPITAL AND CAPITALIZED OPERATING COSTS | ANNUAL OPERATING COSTS | TOTAL |
| | | | | CONSERVATION | TRANSPORTATION | TOTAL | | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) |
| 1962 | 13,950,000 | 0 | 13,950,000 | 0 | 0 | 0 | 0 | 0 | 13,950,000 | 0 | 13,950,000[5] |
| 63 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 64 | 13,040,000 | 0 | 13,040,000 | 0 | 0 | 0 | 0 | 0 | 13,040,000 | 0 | 13,040,000[5] |
| 65 | 8,000,000 | 0 | 8,000,000 | 0 | 0 | 0 | 0 | 0 | 8,000,000 | 0 | 8,000,000[5] |
| 66 | 16,760,000 | 0 | 16,760,000 | 0 | 0 | 0 | 0 | 0 | 16,760,000 | 0 | 16,760,000 |
| 67 | 4,819,643 | 4,708,450 | 9,528,093 | 0 | 0 | 0 | 3,758,118 | 327,000 | 13,286,211 | 327,000 | 13,613,211 |
| 68 | 9,681,980 | 2,427,000 | 12,108,980 | 691,000 | 707,000 | 1,398,000 | 11,107,000 | 339,000 | 23,215,980 | 1,737,000 | 24,952,980 |
| 69 | 1,249,600 | 972,000 | 2,221,600 | 705,000 | 786,000 | 1,491,000 | 12,472,000 | 532,000 | 14,693,600 | 2,023,000 | 16,716,600 |
| 1970 | 128,260 | 0 | 128,260 | 692,000 | 778,000 | 1,470,000 | 4,262,000 | 655,000 | 4,390,260 | 2,125,000 | 6,515,260 |
| 71 | 14,520 | 0 | 14,520 | 703,000 | 795,000 | 1,498,000 | 0 | 663,000 | 14,520 | 2,161,000 | 2,175,520 |
| 72 | 12,100 | 0 | 12,100 | 702,000 | 792,000 | 1,494,000 | 0 | 658,000 | 12,100 | 2,152,000 | 2,165,100 |
| 73 | 9,680 | 0 | 9,680 | 693,000 | 781,000 | 1,474,000 | 0 | 645,000 | 9,680 | 2,119,000 | 2,128,680 |
| 74 | 0 | 0 | 0 | 692,000 | 780,000 | 1,472,000 | 0 | 646,000 | 0 | 2,118,000 | 2,118,000 |
| 75 | 0 | 0 | 0 | 691,000 | 779,000 | 1,470,000 | 0 | 643,000 | 0 | 2,113,000 | 2,113,000 |
| 76 | 0 | 0 | 0 | 691,000 | 777,000 | 1,468,000 | 0 | 642,000 | 0 | 2,110,000 | 2,110,000 |
| 77 | 0 | 0 | 0 | 691,000 | 777,000 | 1,468,000 | 0 | 575,000 | 0 | 2,043,000 | 2,043,000 |
| 78 | 0 | 0 | 0 | 691,000 | 777,000 | 1,468,000 | 0 | 575,000 | 0 | 2,043,000 | 2,043,000 |
| 79 | 0 | 0 | 0 | 691,000 | 777,000 | 1,468,000 | 0 | 575,000 | 0 | 2,043,000 | 2,043,000 |
| 1980 | 0 | 0 | 0 | 691,000 | 781,000 | 1,472,000 | 0 | 575,000 | 0 | 2,047,000 | 2,047,000 |
| 81 | 0 | 0 | 0 | 691,000 | 781,000 | 1,472,000 | 0 | 575,000 | 0 | 2,047,000 | 2,047,000 |
| 82 | 0 | 0 | 0 | 691,000 | 781,000 | 1,472,000 | 0 | 575,000 | 0 | 2,047,000 | 2,047,000 |
| 83 | 0 | 0 | 0 | 691,000 | 781,000 | 1,472,000 | 0 | 575,000 | 0 | 2,047,000 | 2,047,000 |
| 84 | 0 | 0 | 0 | 691,000 | 781,000 | 1,472,000 | 0 | 575,000 | 0 | 2,047,000 | 2,047,000 |
| 85 | 0 | 0 | 0 | 691,000 | 781,000 | 1,472,000 | 0 | 575,000 | 0 | 2,047,000 | 2,047,000 |
| 86 | 0 | 0 | 0 | 691,000 | 781,000 | 1,472,000 | 0 | 575,000 | 0 | 2,047,000 | 2,047,000 |
| 87 | 0 | 0 | 0 | 691,000 | 781,000 | 1,472,000 | 0 | 575,000 | 0 | 2,047,000 | 2,047,000 |
| 88 | 0 | 0 | 0 | 691,000 | 781,000 | 1,472,000 | 0 | 575,000 | 0 | 2,047,000 | 2,047,000 |
| 89 | 0 | 0 | 0 | 691,000 | 781,000 | 1,472,000 | 0 | 575,000 | 0 | 2,047,000 | 2,047,000 |
| 1990 | 0 | 0 | 0 | 691,000 | 781,000 | 1,472,000 | 0 | 575,000 | 0 | 2,047,000 | 2,047,000 |
| 91 | 0 | 0 | 0 | 691,000 | 781,000 | 1,472,000 | 0 | 575,000 | 0 | 2,047,000 | 2,047,000 |
| 92 | 0 | 0 | 0 | 691,000 | 781,000 | 1,472,000 | 0 | 575,000 | 0 | 2,047,000 | 2,047,000 |
| 93 | 0 | 0 | 0 | 691,000 | 781,000 | 1,472,000 | 0 | 575,000 | 0 | 2,047,000 | 2,047,000 |
| 94 | 0 | 0 | 0 | 691,000 | 781,000 | 1,472,000 | 0 | 575,000 | 0 | 2,047,000 | 2,047,000 |
| 95 | 0 | 0 | 0 | 691,000 | 781,000 | 1,472,000 | 0 | 575,000 | 0 | 2,047,000 | 2,047,000 |
| 96 | 0 | 0 | 0 | 691,000 | 781,000 | 1,472,000 | 0 | 575,000 | 0 | 2,047,000 | 2,047,000 |
| 97 | 0 | 0 | 0 | 691,000 | 781,000 | 1,472,000 | 0 | 575,000 | 0 | 2,047,000 | 2,047,000 |
| 98 | 0 | 0 | 0 | 691,000 | 781,000 | 1,472,000 | 0 | 575,000 | 0 | 2,047,000 | 2,047,000 |
| 99 | 0 | 0 | 0 | 691,000 | 781,000 | 1,472,000 | 0 | 575,000 | 0 | 2,047,000 | 2,047,000 |
| 2000[6] | 0 | 0 | 0 | 691,000 | 781,000 | 1,472,000 | 0 | 575,000 | 0 | 2,047,000 | 2,047,000 |
| TOTALS | 67,665,783 | 8,107,450 | 75,773,233 | - | - | - | 31,599,118 | - | 107,372,351 | - | - |

1/ Based upon the agreement executed March 8, 1962, whereby the United States shall contribute 22.0 percent of the capital costs of Oroville Dam and reservoir; shown in Column 19 of Table 15.

2/ Based upon the proposed agreement authorized by Congress, whereby the United States shall reimburse to the State 30.7 percent of the total State and Federal capital costs of Del Valle Dam and reservoir (or 31.4 percent of the State's cost, shown on Column 43 of Table 15); plus $776,000 for a capitalized share of total annual operating costs.

3/ Based upon a proposed agreement whereby the United States would bear 45 percent of the joint operating costs of the San Luis division.

4/ Based upon a proposed agreement whereby the United States would bear 60 percent of the capital costs and 67 percent of the operating costs of the first stage of the San Joaquin Master Drain.

5/ Actual receipts; all others projected herein.

6/ And each year thereafter for the remainder of the project repayment period.

TABLE 23

ACTUAL AND PROJECTED STATE UTILITY REVENUES

(in thousands of dollars)

| CALENDAR YEAR | DELTA WATER CHARGES | | | | OROVILLE-THERMALITO POWER REVENUES 5/ | TRANSPORTATION CHARGES | | | | DRAINAGE CHARGES | | | | TOTAL STATE UTILITY REVENUES (ADJUSTED) 11/ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | CAPITAL COST COMPONENTS | | OPERATING COST COMPONENTS 3/ | TOTAL (ADJUSTED) 4/ | | CAPITAL COST COMPONENTS | | OPERATING COST COMPONENTS 6/ | TOTAL (ADJUSTED) 7/ | CAPITAL COST COMPONENTS | | OPERATING COST COMPONENTS 9/ | TOTAL (ADJUSTED) 10/ | |
| | ACTUAL 1/ | ADJUSTED 2/ | | | | ACTUAL 6/ | ADJUSTED 2/ | | | ACTUAL 8/ | ADJUSTED 2/ | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| 1961 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 964 | 60 | 1,024 | 0 | 0 | 0 | 0 | 1,024 13/ |
| 1963 | 0 | 0 | 0 | 0 | 0 | 1,927 | 2,199 | 116 | 2,315 | 0 | 0 | 0 | 0 | 2,315 13/ |
| 1964 | 0 | 0 | 0 | 0 | 0 | 2,471 | 2,364 | 186 | 2,550 | 0 | 0 | 0 | 0 | 2,550 13/ |
| 1965 | 0 | 0 | 0 | 0 | 0 | 2,858 | 4,141 | 430 | 4,844 | 0 | 0 | 0 | 0 | 4,844 13/ |
| 1966 | 0 | 120 | 0 | 120 | 0 | 6,569 | 7,772 | 503 | 8,275 | 0 | 0 | 0 | 0 | 8,395 |
| 1967 | 241 | 555 | 0 | 555 | 0 | 8,975 | 13,694 | 842 | 14,536 | 0 | 0 | 159 | 159 | 15,250 |
| 1968 | 869 | 898 | 0 | 898 | 3,170 | 18,413 | 23,274 | 4,087 | 27,361 | 0 | 258 | 164 | 422 | 31,851 |
| 1969 | 928 | 1,392 | 0 | 1,392 | 15,174 | 28,135 | 34,100 | 5,138 | 39,238 | 515 | 698 | 258 | 956 | 56,760 |
| 1970 | 1,855 | 2,744 | 207 | 2,951 | 17,100 | 40,065 | 43,892 | 5,259 | 49,151 | 882 | 945 | 318 | 1,263 | 70,465 |
| 10 Years 1961-1970 | 3,893 | 5,709 | 207 | 5,916 | 35,444 | 108,813 | 132,673 | 16,621 | 149,294 | 1,397 | 1,901 | 899 | 2,800 | 193,454 |
| 1971 | 3,634 | 4,488 | 405 | 4,893 | 17,100 | 47,719 | 49,904 | 13,835 | 63,739 | 1,008 | 1,008 | 322 | 1,330 | 87,062 |
| 1972 | 5,341 | 5,864 | 595 | 6,459 | 17,100 | 52,090 | 52,728 | 18,894 | 71,622 | 1,008 | 1,008 | 319 | 1,327 | 96,508 |
| 1973 | 6,387 | 6,855 | 711 | 7,566 | 17,100 | 53,366 | 53,578 | 19,822 | 73,400 | 1,008 | 1,008 | 313 | 1,321 | 99,387 |
| 1974 | 7,323 | 7,798 | 816 | 8,614 | 17,100 | 53,791 | 53,961 | 19,340 | 73,301 | 1,008 | 1,008 | 313 | 1,321 | 100,336 |
| 1975 | 8,273 | 8,784 | 921 | 9,705 | 17,100 | 54,131 | 54,480 | 20,274 | 74,754 | 1,008 | 1,008 | 312 | 1,320 | 102,879 |
| 1976 | 9,295 | 9,810 | 1,035 | 10,845 | 17,100 | 54,830 | 55,170 | 20,207 | 75,377 | 1,008 | 1,008 | 312 | 1,320 | 104,642 |
| 1977 | 10,324 | 10,837 | 1,150 | 11,987 | 17,100 | 55,510 | 55,926 | 21,639 | 77,565 | 1,008 | 1,008 | 279 | 1,287 | 107,939 |
| 1978 | 11,350 | 11,857 | 1,264 | 13,121 | 17,100 | 56,341 | 56,914 | 23,091 | 80,005 | 1,008 | 1,008 | 279 | 1,287 | 111,513 |
| 1979 | 12,364 | 12,944 | 1,377 | 14,321 | 17,100 | 57,488 | 57,890 | 25,113 | 83,003 | 1,008 | 1,008 | 279 | 1,287 | 115,711 |
| 1980 | 13,525 | 14,084 | 1,506 | 15,590 | 17,100 | 58,291 | 58,445 | 26,970 | 85,415 | 1,008 | 1,008 | 279 | 1,287 | 119,392 |
| 10 Years 1971-1980 | 87,816 | 93,321 | 9,780 | 103,101 | 171,000 | 543,557 | 548,996 | 209,185 | 758,181 | 10,080 | 10,080 | 3,007 | 13,087 | 1,015,369 |
| 1981 | 14,644 | 15,187 | 1,631 | 16,818 | 17,100 | 58,599 | 58,755 | 28,240 | 86,995 | 1,008 | 1,008 | 279 | 1,287 | 122,200 |
| 1982 | 15,730 | 16,339 | 1,752 | 18,091 | 17,100 | 58,911 | 59,104 | 30,955 | 90,059 | 1,008 | 1,008 | 279 | 1,287 | 126,537 |
| 1983 | 16,918 | 17,500 | 1,887 | 19,387 | 17,100 | 59,297 | 59,508 | 32,997 | 92,505 | 1,008 | 1,008 | 279 | 1,287 | 130,279 |
| 1984 | 18,052 | 18,620 | 2,010 | 20,630 | 17,100 | 59,718 | 59,929 | 34,170 | 94,099 | 1,008 | 1,008 | 279 | 1,287 | 133,116 |
| 1985 | 19,187 | 19,760 | 2,137 | 21,897 | 17,100 | 60,140 | 60,293 | 32,076 | 92,369 | 1,008 | 1,008 | 279 | 1,287 | 132,653 |
| 1986 | 20,332 | 20,927 | 2,264 | 23,191 | 17,100 | 60,446 | 60,601 | 33,378 | 93,979 | 1,008 | 1,008 | 279 | 1,287 | 135,557 |
| 1987 | 21,522 | 22,126 | 2,397 | 24,523 | 17,100 | 60,756 | 60,878 | 33,495 | 94,373 | 1,008 | 1,008 | 279 | 1,287 | 137,283 |
| 1988 | 22,730 | 23,172 | 2,531 | 25,703 | 17,100 | 61,000 | 61,116 | 35,264 | 96,380 | 1,008 | 1,008 | 279 | 1,287 | 140,470 |
| 1989 | 23,614 | 23,910 | 2,630 | 26,570 | 17,100 | 61,231 | 61,370 | 36,802 | 98,172 | 1,008 | 1,008 | 279 | 1,287 | 143,129 |
| 1990 | 24,265 | 24,318 | 2,702 | 27,020 | 17,100 | 61,508 | 61,508 | 37,540 | 99,048 | 1,008 | 1,008 | 279 | 1,287 | 144,455 |
| 10 Years 1981-1990 | 197,024 | 201,889 | 21,941 | 223,830 | 171,000 | 601,606 | 603,062 | 334,917 | 937,979 | 10,080 | 10,080 | 2,790 | 12,870 | 1,345,679 |
| 10 Years 1991-2000 | 244,630 | 244,693 | 27,242 | 271,935 | 171,000 | 615,080 | 615,080 | 379,533 | 994,613 | 10,080 | 10,080 | 2,790 | 12,870 | 1,450,418 |
| 10 Years 2001-2010 | 245,010 | 245,012 | 27,284 | 272,296 | 171,000 | 615,080 | 615,080 | 379,680 | 994,760 | 10,080 | 10,080 | 2,790 | 12,870 | 1,450,926 |
| 10 Years 2011-2020 | 245,051 | 245,053 | 27,290 | 272,343 | 171,000 | 508,226 | 484,934 | 379,680 | 864,614 | 8,683 | 8,179 | 2,790 | 10,969 | 1,318,926 |
| 10 Years 2021-2030 | 245,060 | 245,060 | 27,290 | 272,350 | 171,000 | 96,670 | 92,718 | 379,680 | 472,398 | 0 | 0 | 2,790 | 2,790 | 918,538 |
| 2 Years 2031-2032 | 49,012 | 49,012 | 5,458 | 54,470 | 34,200 | 14,012 | 13,970 | 75,936 | 89,906 | 0 | 0 | 558 | 558 | 179,134 |
| TOTALS 12/ | 1,317,496 | 1,329,749 | 146,492 | 1,476,241 | 1,095,644 | 3,103,044 | 3,106,513 | 2,155,232 | 5,261,745 | 50,400 | 50,400 | 18,414 | 68,814 | 7,902,444 |

1/ As determined by applying the following unit rates to the sum of the annual entitlements shown in Column 5, Table 5 and the coolant water for the nuclear powerplant; $3.50 per acre-foot for the period 1967 through 1969, and $5.75 per acre-foot for 1970 and each year thereafter. (Water for nuclear powerplant is 17,500 acre-feet annually for the years 1973-1982 and 35,000 acre-feet annually thereafter.)

2/ Since annual service on general obligation bonds is shown on an accrual basis in the financial analysis described in Chapter XII, project revenues are herein adjusted to a similar accrual basis.

3/ As determined by applying a unit rate of $0.64 per acre-foot to the sum of the annual entitlements shown in Column 5, Table 5, and to the coolant water for the nuclear powerplant for 1970 and each year thereafter.

4/ The total of Columns 2 and 3.

5/ The total estimated sales less the costs of energy consumed in the pumpback operation.

6/ The total annual components developed in Appendix B, converted to a future project interest rate of 3.7 percent.

7/ The total of Columns 7 and 8.

8/ Repayment of the annual capital costs shown in Column 3, Table 17, in 50 equal annual installments of principal and interest, at a future project interest rate of 3.7 percent, and commencing in 1969.

9/ See Column 3, Table 18.

10/ The total of Columns 11 and 12.

11/ The total of Columns 4, 5, 9, and 13.

12/ In the financial analysis described in Chapter XII, revenues are considered only through the final repayment of general obligation bonds shown therein. For the purpose of the preparation of relevant revenue tables, it was necessary to assume that the repayment of capital costs would extend for a period of 50 years beyond the completion of construction.

13/ Actual revenues; all others projected herein.

TABLE 24

NET OPERATING REVENUES AVAILABLE
FOR
COVERAGE OF GENERAL OBLIGATION BOND SERVICE

(in thousands of dollars)

| CALENDAR YEAR | STATE UTILITY PROGRAMS | | | | PRIOR REVENUES APPLIED TO CAPITAL EXPENDITURES 5/ | NET OPERATING REVENUES RESERVED FOR COVERAGE OF REVENUE BONDS 6/ | OPERATING COSTS OF FEDERAL PROGRAMS ALLOCATED TO FLOOD CONTROL 7/ | AVAILABLE NET OPERATING REVENUES 8/ |
|---|---|---|---|---|---|---|---|---|
| | TOTAL REVENUES (ADJUSTED) 1/ | TOTAL OPERATING COSTS 2/ | NET CREDITS FROM ADVANCES FOR REQUESTED EXCESS CAPACITY 3/ | TOTAL NET OPERATING REVENUES 4/ | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| 1961 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1962 | 1,024 | 108 | 0 | 916 | 47 | 0 | 0 | 869 |
| 1963 | 2,315 | 213 | 0 | 2,102 | 16 | 0 | 0 | 2,086 |
| 1964 | 2,550 | 244 | 0 | 2,306 | 6 | 0 | 0 | 2,300 |
| 1965 | 4,844 | 469 | 0 | 4,375 | 39 | 0 | 0 | 4,336 |
| 1966 | 8,395 | 505 | 0 | 7,890 | 0 | 0 | 0 | 7,890 |
| 1967 | 15,250 | 1,436 | 0 | 13,814 | 0 | 0 | 0 | 13,814 |
| 1968 | 31,851 | 8,137 | 0 | 23,714 | 0 | 935 | 57 | 22,722 |
| 1969 | 56,760 | 9,853 | 0 | 46,907 | 0 | 12,542 | 81 | 34,284 |
| 1970 | 70,465 | 9,975 | 0 | 60,490 | 0 | 14,469 | 81 | 45,940 |
| 10 Years 1961 - 1970 | 193,454 | 30,940 | 0 | 162,514 | 108 | 27,946 | 219 | 134,241 |
| 1971 | 87,062 | 18,430 | 32,739 | 35,893 | 0 | 14,479 | 80 | 21,334 |
| 1972 | 96,508 | 23,093 | 0 | 73,415 | 0 | 14,489 | 79 | 58,847 |
| 1973 | 99,387 | 24,176 | 0 | 75,211 | 0 | 14,506 | 76 | 60,629 |
| 1974 | 100,336 | 24,258 | 0 | 76,078 | 0 | 14,508 | 76 | 61,494 |
| 1975 | 102,879 | 25,204 | 0 | 77,675 | 0 | 14,513 | 76 | 63,086 |
| 1976 | 104,642 | 24,975 | 0 | 79,667 | 0 | 14,514 | 76 | 65,077 |
| 1977 | 107,939 | 26,337 | 0 | 81,602 | 0 | 14,514 | 76 | 67,012 |
| 1978 | 111,513 | 27,397 | 0 | 84,116 | 0 | 14,514 | 76 | 69,526 |
| 1979 | 115,711 | 29,264 | 0 | 86,447 | 0 | 14,514 | 76 | 71,857 |
| 1980 | 119,392 | 30,888 | 0 | 88,504 | 0 | 14,514 | 76 | 73,914 |
| 10 Years 1971 - 1980 | 1,045,369 | 254,022 | 32,739 | 758,608 | 0 | 145,065 | 767 | 612,776 |
| 1981 | 122,200 | 32,357 | 0 | 89,843 | 0 | 14,514 | 76 | 75,253 |
| 1982 | 126,537 | 34,997 | 0 | 91,540 | 0 | 14,514 | 76 | 76,950 |
| 1983 | 130,279 | 36,849 | 0 | 93,430 | 0 | 14,514 | 76 | 78,840 |
| 1984 | 133,116 | 37,898 | 0 | 95,218 | 0 | 14,514 | 76 | 80,628 |
| 1985 | 132,653 | 35,792 | 0 | 96,861 | 0 | 14,514 | 76 | 82,271 |
| 1986 | 135,557 | 39,140 | 0 | 96,417 | 0 | 14,514 | 76 | 81,827 |
| 1987 | 137,283 | 38,925 | 0 | 98,358 | 0 | 14,514 | 76 | 83,768 |
| 1988 | 140,470 | 40,685 | 0 | 99,785 | 0 | 14,514 | 76 | 85,195 |
| 1989 | 143,129 | 41,363 | 0 | 101,266 | 0 | 14,514 | 76 | 86,676 |
| 1990 | 144,455 | 42,479 | 0 | 101,976 | 0 | 14,514 | 76 | 87,386 |
| 10 Years 1981 - 1990 | 1,345,679 | 380,985 | 0 | 964,694 | 0 | 145,140 | 760 | 818,794 |
| 10 Years 1991 - 2000 | 1,450,418 | 428,638 | 0 | 1,021,780 | 0 | 145,140 | 760 | 875,880 |
| 10 Years 2001 - 2010 | 1,450,926 | 428,780 | 0 | 1,022,146 | 0 | 145,140 | 760 | 876,246 |
| 10 Years 2011 - 2020 | 1,318,926 | 428,780 | 0 | 890,146 | 0 | 145,140 | 760 | 744,246 |
| 10 Years 2021 - 2030 | 918,538 | 428,780 | 0 | 489,758 | 0 | 145,140 | 760 | 343,858 |
| 2 Years 2031 - 2032 | 179,134 | 85,756 | 0 | 93,378 | 0 | 29,028 | 152 | 64,198 |
| TOTALS | 7,902,444 | 2,466,681 | 32,739 | 5,403,024 | 108 | 927,739 | 4,938 | 4,470,239 |

1/ From Column 14, Table 23.

2/ From Column 4, Table 18.

3/ Negative value shown in Column 13, Table 20.

4/ Column 1, less Columns 2 and 3.

5/ Represents minor revenues derived from water charges applied to capital expenditures.

6/ Represents the annual revenues from the sale of 710,000 kilowatts of Oroville-Thermalito power, reduced by associated annual operating costs, which are herein reserved for the coverage of revenue bonds.

7/ From Column 7, Table 18.

8/ Column 4, less Columns 5, 6, and 7.

TABLE 25

FINANCIAL ANALYSIS FOR WATER BONDS
JUNE 1966

(in thousands of dollars)

| CALENDAR YEAR | TOTAL CAPITAL EXPENDITURES [1] | FINANCING OF CAPITAL EXPENDITURES | | | | GENERAL OBLIGATION BOND SERVICE [5] | NET OPERATING REVENUES [6] | BOND SERVICE IN EXCESS OF NET OPERATING REVENUES [7] | NET OPERATING REVENUES IN EXCESS OF BOND SERVICE | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | GENERAL OBLIGATION BONDS [2] | CALIFORNIA WATER FUND | REVENUE BOND PROCEEDS [3] | MISCELLANEOUS RECEIPTS [4] | | | | PAID TO CALIF. WATER FUND [8] | AVAILABLE FOR CONSTRUCTION [9] |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Prior appropriations | 100,275 [10] | | | | 100,275 | | | | | |
| 6 years, 1960-1965 | 435,258 | 450,000 | 150,458 | 0 | 108 | 18,144 | 9,591 | 8,553 | 0 | 0 |
| 1966 | 296,555 | 200,000 | 11,000 | 0 | 0 | 21,942 | 7,890 | 14,052 | 0 | 0 |
| 1967 | 332,609 | 175,000 | 11,000 | 150,000 | 0 | 29,092 | 13,814 | 15,278 | 0 | 0 |
| 1968 | 315,920 | 230,000 | 11,000 | 60,000 | 0 | 37,347 | 22,722 | 14,625 | 0 | 0 |
| 1969 | 331,258 | 230,000 | 11,000 | 0 | 36,426 | 46,317 | 34,284 | 12,033 | 0 | 0 |
| 1970 | 204,392 | 170,000 | 11,000 | 00 | 9,000 | 53,727 | 45,940 | 7,787 | 0 | 0 |
| 5 years, 1960-1970 | 1,480,734 | 1,005,000 | 55,000 | 210,000 | 45,426 | 188,425 | 124,650 | 63,775 | 0 | 0 |
| 1971 | 109,220 | 89,542 | 11,000 | 0 | 8,678 | 58,265 | 21,334 | 36,931 | 0 | 0 |
| 1972 | 33,099 | 168 | 11,000 | 0 | 21,931 | 59,833 | 58,847 | 986 | 0 | 0 |
| 1973 | 15,770 | 157 | 11,000 | 0 | 4,613 | 61,220 | 60,629 | 591 | 0 | 0 |
| 1974 | 11,311 | 156 | 11,000 | 0 | 155 | 63,254 | 61,494 | 1,760 | 0 | 0 |
| 1975 | 7,687 | 0 | 7,687 | 0 | 0 | 66,006 | 63,086 | 2,920 | 0 | 0 |
| 1976 | 13,894 | 0 | 13,894 | 0 | 0 | 67,483 | 65,077 | 2,406 | 0 | 0 |
| 1977 | 22,408 | 5,154 | 11,419 | 0 | 5,835 | 69,718 | 67,012 | 2,706 | 0 | 0 |
| 1978 | 48,913 | 4,154 | 11,000 | 0 | 33,759 | 72,216 | 69,526 | 2,690 | 0 | 0 |
| 1979 | 48,634 | 27,154 | 11,000 | 0 | 10,480 | 74,689 | 71,857 | 2,832 | 0 | 0 |
| 1980 | 30,154 | 14,154 | 11,000 | 0 | 5,000 | 76,043 | 73,914 | 2,129 | 0 | 0 |
| 10 years, 1971-1980 | 341,090 | 140,639 | 110,000 | 0 | 90,451 | 668,727 | 612,776 | 55,951 | 0 | 0 |
| 1981 | 41,424 | 26,424 | 11,000 | 0 | 4,000 | 76,824 | 75,253 | 1,571 | 0 | 0 |
| 1982 | 51,693 | 36,193 | 11,000 | 0 | 4,500 | 77,983 | 76,950 | 1,033 | 0 | 0 |
| 1983 | 54,293 | 38,900 | 11,000 | 0 | 4,393 | 79,482 | 78,840 | 642 | 0 | 0 |
| 1984 | 15,727 | 0 | 11,000 | 0 | 4,727 | 80,063 | 80,628 | 0 | 565 | 0 |
| 1985 | 5,469 | 0 | 5,469 | 0 | 0 | 79,828 | 82,271 | 0 | 2,443 | 0 |
| 1986 | 5,000 | 0 | 5,000 | 0 | 0 | 79,620 | 81,827 | 0 | 2,207 | 0 |
| 1987 | 2,134 | 0 | 2,134 | 0 | 0 | 79,606 | 83,768 | 0 | 4,162 | 0 |
| 1988 | 100 | 0 | 100 | 0 | 0 | 79,960 | 85,195 | 0 | 5,235 | 0 |
| 1989 | 160 | 0 | 160 | 0 | 0 | 80,163 | 86,676 | 0 | 6,513 | 0 |
| 1990 | 0 | 0 | 0 | 0 | 0 | 80,292 | 87,386 | 0 | 7,094 | 0 |
| 10 years, 1981-1990 | 176,000 | 101,517 | 56,863 | 0 | 17,620 | 793,821 | 818,794 | 3,246 | 28,219 | 0 |
| 10 years, 1991-2000 | 0 | 0 | 0 | 0 | 0 | 809,619 | 875,880 | 0 | 66,261 | 0 |
| 10 years, 2001-2010 | 0 | 0 | 0 | 0 | 0 | 810,844 | 876,246 | 0 | 65,402 | 0 |
| 10 years, 2011-2020 | 0 | 0 | 0 | 0 | 0 | 533,055 | 744,246 | 0 | 211,191 | 0 |
| 10 years, 2021-2030 | 0 | 0 | 0 | 0 | 0 | 68,564 | 343,858 | 0 | 1,248 | 274,046 |
| 2 years, 2031-2032 | 0 | 0 | 0 | 0 | 0 | 5,501 | 64,198 | 0 | 0 | 58,697 |
| TOTALS | 2,533,357 | 1,697,156 | 372,321 | 210,000 | 253,880 | 3,896,700 | 4,470,239 | 131,525 | 372,321 | 332,743 |

1/ From Column 13, Table 19.

2/ Amounts of bonds issued during the period through 1969 produce a temporary excess of unexpended bond proceeds which are utilized by the end of 1970.

3/ From revenue bonds supported by sale of 710,000 kilowatts of Oroville-Thermalito power. The financing of the project may include the issuance of revenue bonds for certain other purposes as well.

4/ From Column 10, Table 26.

5/ From Column 7, Table 28.

6/ From Column 8, Table 24. Excludes net operating revenues from 710,000 kilowatts of Oroville-Thermalito power, which are assumed herein to be applied to payment of revenue bond service.

7/ See Column 11, Table 26. These deficiencies are covered by miscellaneous receipts.

8/ These amounts represent projected reimbursement of expenditures made from the California Water Fund, shown in Column 3 to be $372,321,000.

9/ These amounts represent those available for future construction under the fourth priority of revenues under the Burns-Porter Act.

10/ Represents expenditures made during the period 1952-1965 from appropriations made prior to the effective date of the Burns-Porter Act (November 8, 1960).

TABLE 26

MISCELLANEOUS RECEIPTS AND THE EXPENDITURES THEREOF

(in thousands of dollars)

| CALENDAR YEAR | CUMULATIVE BALANCE AT BEGINNING OF YEAR[1] | MISCELLANEOUS RECEIPTS | | | | | | | CUMULATIVE BALANCE PLUS RECEIPTS[7] | EXPENDITURES | | BALANCE AT END OF YEAR, EXCLUDING INTEREST[10] | INTEREST ON AVERAGE BALANCE AT 3.5%[11] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LEGISLATIVE APPROPRIATIONS[2] | FEDERAL REIMBURSEMENTS[3] | | | RIGHT OF WAY SALES, ETC.[4] | NET ADVANCES FOR EXCESS CAPACITY[5] | TOTALS[6] | | FINANCING OF CAPITAL EXPENDITURES[8] | COVERAGE OF BOND SERVICE[9] | | |
| | | | OROVILLE DAM AND RESERVOIR | DEL VALLE DAM AND RESERVOIR | SAN JOAQUIN DRAINAGE FACILITIES | | | | | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
| Prior appropriations | - | 100,275 | 0 | 0 | 0 | 0 | 0 | 100,275 | - | 100,275 | 0 | - | 0 |
| 6 years, 1960-1965 | - | 0 | 34,990 | 0 | 0 | 2,865 | 0 | 37,855 | - | 108 | 8,553 | - | 2,631 |
| 1966 | 31,825 | 0 | 16,760 | 0 | 0 | 0 | 0 | 16,760 | 48,585 | 0 | 14,052 | 34,533 | 1,161 |
| 1967 | 35,694 | 10,000 | 4,820 | 4,708 | 3,758 | 0 | 9,127 | 32,413 | 68,107 | 0 | 15,278 | 52,829 | 1,549 |
| 1968 | 54,378 | 5,000 | 9,682 | 2,427 | 11,107 | 0 | 19,907 | 48,123 | 102,501 | 0 | 14,625 | 87,876 | 2,489 |
| 1969 | 90,365 | 5,000 | 1,250 | 972 | 12,472 | 0 | 19,688 | 39,382 | 129,747 | 36,426 | 12,033 | 81,288 | 3,004 |
| 1970 | 84,292 | 5,000 | 128 | 0 | 4,262 | 0 | 6,259 | 15,649 | 99,941 | 9,000 | 7,787 | 83,154 | 2,930 |
| 5 years, 1966-1970 | - | 25,000 | 32,640 | 8,107 | 31,599 | 0 | 54,981 | 152,327 | - | 45,426 | 63,775 | - | 11,133 |
| 1971 | 86,084 | 5,000 | 15 | 0 | 0 | 0 | 0 | 5,015 | 91,099 | 8,678 | 36,931 | 45,490 | 2,302 |
| 1972 | 47,792 | 5,000 | 12 | 0 | 0 | 0 | 0 | 5,012 | 52,804 | 21,931 | 986 | 29,887 | 1,359 |
| 1973 | 31,246 | 5,000 | 10 | 0 | 0 | 0 | 0 | 5,010 | 36,256 | 4,613 | 591 | 31,052 | 1,090 |
| 1974 | 32,142 | 5,000 | 0 | 0 | 0 | 0 | 0 | 5,000 | 37,142 | 155 | 1,760 | 35,227 | 1,179 |
| 1975 | 36,406 | 5,000 | 0 | 0 | 0 | 0 | 0 | 5,000 | 41,406 | 0 | 2,920 | 38,486 | 1,311 |
| 1976 | 39,797 | 5,000 | 0 | 0 | 0 | 0 | 0 | 5,000 | 44,797 | 0 | 2,406 | 42,391 | 1,438 |
| 1977 | 43,829 | 5,000 | 0 | 0 | 0 | 0 | 0 | 5,000 | 48,829 | 5,835 | 2,706 | 40,288 | 1,472 |
| 1978 | 41,760 | 5,000 | 0 | 0 | 0 | 0 | 0 | 5,000 | 46,760 | 33,759 | 2,690 | 10,311 | 911 |
| 1979 | 11,222 | 5,000 | 0 | 0 | 0 | 0 | 0 | 5,000 | 16,222 | 10,480 | 2,832 | 2,910 | 247 |
| 1980 | 3,157 | 5,000 | 0 | 0 | 0 | 0 | 0 | 5,000 | 8,157 | 5,000 | 2,129 | 1,028 | 73 |
| 10 years, 1971-1980 | - | 50,000 | 37 | 0 | 0 | 0 | 0 | 50,037 | - | 90,451 | 55,951 | - | 11,382 |
| 1981 | 1,101 | 5,000 | 0 | 0 | 0 | 0 | 0 | 5,000 | 6,101 | 4,000 | 1,571 | 530 | 28 |
| 1982 | 558 | 5,000 | 0 | 0 | 0 | 0 | 0 | 5,000 | 5,558 | 4,500 | 1,033 | 25 | 10 |
| 1983 | 35 | 5,000 | 0 | 0 | 0 | 0 | 0 | 5,000 | 5,035 | 4,393 | 642 | 0 | 1 |
| 1984 | 1 | 4,726 | 0 | 0 | 0 | 0 | 0 | 4,726 | 4,727 | 4,727 | 0 | 0 | 0 |
| 1985 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1986 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1987 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1988 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1989 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1990 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10 years, 1981-1990 | - | 19,726 | 0 | 0 | 0 | 0 | 0 | 19,726 | - | 17,620 | 3,246 | - | 39 |
| TOTALS | - | 195,001 | 67,667 | 8,107 | 31,599 | 2,865 | 54,981 | 360,220 | - | 253,880 | 131,525 | - | 25,185 |

1/ The total of Columns 12 and 13 for the preceeding year.

2/ Appropriations under the provision of AB 12 for the Capital Costs of multiple-purpose features of the State Water Project allocated to the purposes of recreation and fish and wildlife enhancement and for recreational lands purchased by project funds. The 1966 and 1967 values are combined because legislative authorization must be obtained prior to expenditure, and that authorization is not herein assumed until 1967.

3/ From values shown in Table 22.

4/ From the values shown in the upper portion of Column 12, Table 19.

5/ Positive values from Column 13, Table 20.

6/ The total of Columns 2 through 7.

7/ The total of Columns 1 and 8.

8/ See Column 5, Table 25.

9/ See Column 8, Table 25.

10/ Column 9, less Columns 10 and 11.

11/ Interest accruals on the average of Columns 1 and 12 at an interest rate of 3.5 percent per annum.

TABLE 27

ANALYSIS OF OFFSET BONDS

(in thousands of dollars)

| CALENDAR YEAR | FINANCING OF CAPITAL EXPENDITURES | | | | | | | | | | | | BALANCE OF UNISSUED OFFSET BONDS 6/ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | TOTAL STATE WATER PROJECT | | | | STATE WATER FACILITIES | | | | ADDITIONAL FACILITIES | | | | |
| | CALIFORNIA WATER FUND 1/ | GENERAL OBLIGATION BONDS 2/ | ALL OTHER 3/ | TOTAL 4/ | CALIFORNIA WATER FUND | GENERAL OBLIGATION BONDS | ALL OTHER | TOTAL | CALIFORNIA WATER FUND | GENERAL OBLIGATION BONDS | ALL OTHER | TOTAL 5/ | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
| Prior Appropriations | 0 | 0 | 100,275 | 100,275 | 0 | 0 | 100,275 | 100,275 | 0 | 0 | 0 | 0 | 0 |
| 6 years, 1960-1965 | 150,458 | 284,692 | 108 | 435,258 | 150,458 | 283,513 | 108 | 434,079 | 0 | 1,179 | 0 | 1,179 | - |
| 1966 | 11,000 | 285,555 | 0 | 296,555 | 11,000 | 284,184 | 0 | 295,184 | 0 | 1,371 | 0 | 1,371 | 158,908 |
| 1967 | 11,000 | 171,609 | 150,000 | 332,609 | 11,000 | 170,067 | 150,000 | 331,067 | 0 | 1,542 | 0 | 1,542 | 168,366 |
| 1968 | 11,000 | 244,920 | 60,000 | 315,920 | 11,000 | 243,357 | 60,000 | 314,357 | 0 | 1,563 | 0 | 1,563 | 177,803 |
| 1969 | 11,000 | 283,832 | 36,426 | 331,258 | 11,000 | 282,218 | 36,426 | 329,644 | 0 | 1,614 | 0 | 1,614 | 187,189 |
| 1970 | 11,000 | 184,392 | 9,000 | 204,392 | 11,000 | 183,008 | 9,000 | 203,008 | 0 | 1,384 | 0 | 1,384 | 196,805 |
| 5 years, 1966-1970 | 55,000 | 1,170,308 | 255,426 | 1,480,734 | 55,000 | 1,162,834 | 255,426 | 1,473,260 | 0 | 7,474 | 0 | 7,474 | - |
| 1971 | 11,000 | 89,542 | 8,678 | 109,220 | 11,000 | 88,864 | 8,678 | 108,542 | 0 | 678 | 0 | 678 | 205,458 |
| 1972 | 11,000 | 168 | 21,931 | 33,099 | 11,000 | 0 | 21,931 | 32,931 | 0 | 168 | 0 | 168 | 205,290 |
| 1973 | 11,000 | 157 | 4,613 | 15,770 | 11,000 | 0 | 4,613 | 15,613 | 0 | 157 | 0 | 157 | 205,133 |
| 1974 | 11,000 | 156 | 155 | 11,311 | 11,000 | 0 | 155 | 11,155 | 0 | 156 | 0 | 156 | 204,977 |
| 1975 | 7,687 | 0 | 0 | 7,687 | 7,532 | 0 | 0 | 7,532 | 155 | 0 | 0 | 155 | 204,977 |
| 1976 | 13,894 | 0 | 0 | 13,894 | 13,740 | 0 | 0 | 13,740 | 154 | 0 | 0 | 154 | 204,977 |
| 1977 | 11,419 | 5,154 | 5,835 | 22,408 | 11,419 | 0 | 5,835 | 17,254 | 0 | 5,154 | 0 | 5,154 | 199,823 |
| 1978 | 11,000 | 4,154 | 33,759 | 48,913 | 11,000 | 0 | 13,759 | 24,759 | 0 | 4,154 | 20,000 | 24,154 | 195,669 |
| 1979 | 11,000 | 27,154 | 10,480 | 48,634 | 11,000 | 0 | 5,480 | 16,480 | 0 | 27,154 | 5,000 | 32,154 | 168,515 |
| 1980 | 11,000 | 14,154 | 5,000 | 30,154 | 5,000 | 0 | 0 | 5,000 | 6,000 | 14,154 | 5,000 | 25,154 | 154,361 |
| 10 years, 1971-1980 | 110,000 | 140,639 | 90,451 | 341,090 | 103,691 | 88,864 | 60,451 | 253,006 | 6,309 | 51,775 | 30,000 | 88,084 | - |
| 1981 | 11,000 | 26,424 | 4,000 | 41,424 | 6,270 | 0 | 0 | 6,270 | 4,730 | 26,424 | 4,000 | 35,154 | 127,937 |
| 1982 | 11,000 | 36,193 | 4,500 | 51,693 | 7,539 | 0 | 0 | 7,539 | 3,461 | 36,193 | 4,500 | 44,154 | 91,744 |
| 1983 | 11,000 | 38,900 | 4,393 | 54,293 | 10,139 | 0 | 0 | 10,139 | 861 | 38,900 | 4,393 | 44,154 | 52,844 |
| 1984 | 11,000 | 0 | 4,727 | 15,727 | 9,573 | 0 | 0 | 9,573 | 1,427 | 0 | 4,727 | 6,154 | 52,844 |
| 1985 | 5,469 | 0 | 0 | 5,469 | 5,315 | 0 | 0 | 5,315 | 154 | 0 | 0 | 154 | 52,844 |
| 1986 | 5,000 | 0 | 0 | 5,000 | 5,000 | 0 | 0 | 5,000 | 0 | 0 | 0 | 0 | 52,844 |
| 1987 | 2,134 | 0 | 0 | 2,134 | 2,134 | 0 | 0 | 2,134 | 0 | 0 | 0 | 0 | 52,844 |
| 1988 | 100 | 0 | 0 | 100 | 100 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 52,844 |
| 1989 | 160 | 0 | 0 | 160 | 160 | 0 | 0 | 160 | 0 | 0 | 0 | 0 | 52,844 |
| 1990 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52,844 |
| 10 years, 1981-1990 | 56,863 | 101,517 | 17,620 | 176,000 | 46,230 | 0 | 0 | 46,230 | 10,633 | 101,517 | 17,620 | 129,770 | - |
| TOTALS | 372,321 | 1,697,156 | 463,880 | 2,533,357 | 355,379 | 1,535,211 | 416,260 | 2,306,850 | 16,942 | 161,945 | 47,620 | 226,507 | - |

1/ From Column 3, Table 25.
2/ From Column 2, Table 25, after elimination of temporary excess of unexpended bond proceeds during the period through 1970.
3/ From Columns 4 and 5, Table 25.
4/ From Column 1, Table 25.
5/ Costs of Upper Eel River Development as shown in Column 6, Table 19.
6/ Cumulative values of Column 5, less Column 10 through calendar year 1970; plus $9,331,000, less Column 10 in 1971; and less Column 10 in 1972 and each year thereafter. The value of $9,331,000 represents the amount of $1,750,000,000 reduced by expenditures from the California Water Fund and general obligation bond proceeds shown for the State Water Facilities in Columns 5 and 6 during the period through 1970, together with the amount shown in Column 6 for 1971.

TABLE 28

SERVICE ON ACTUAL AND PROJECTED GENERAL OBLIGATION BONDS

(in thousands of dollars)

| CALENDAR YEAR | BOND SERVICE ON ACTUAL ISSUES THROUGH SERIES "E"[1] | | | BOND SERVICE ON PROJECTED ISSUES[2] | | | TOTAL BOND SERVICE ACTUAL AND PROJECTED |
|---|---|---|---|---|---|---|---|
| | PRINCIPAL | INTEREST | TOTAL | PRINCIPAL | INTEREST | TOTAL | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 1961 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 62 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 63 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 64 | 0 | 5,507 | 5,507 | 0 | 0 | 0 | 5,507 |
| 65 | 0 | 12,637 | 12,637 | 0 | 0 | 0 | 12,637 |
| 66 | 0 | 16,742 | 16,742 | 0 | 5,200 | 5,200 | 21,942 |
| 67 | 0 | 16,742 | 16,742 | 0 | 12,350 | 12,350 | 29,092 |
| 68 | 0 | 16,742 | 16,742 | 0 | 20,605 | 20,605 | 37,347 |
| 69 | 0 | 16,742 | 16,742 | 0 | 29,575 | 29,575 | 46,317 |
| 1970 | 0 | 16,742 | 16,742 | 0 | 36,985 | 36,985 | 53,727 |
| 71 | 0 | 16,742 | 16,742 | 0 | 41,523 | 41,523 | 58,265 |
| 72 | 400 | 16,742 | 17,142 | 0 | 42,691 | 42,691 | 59,833 |
| 73 | 1,800 | 16,722 | 18,522 | 0 | 42,698 | 42,698 | 61,220 |
| 74 | 3,917 | 16,633 | 20,550 | 0 | 42,704 | 42,704 | 63,254 |
| 75 | 5,000 | 16,448 | 21,448 | 1,852 | 42,706 | 44,558 | 66,006 |
| 76 | 5,091 | 16,214 | 21,305 | 3,556 | 42,622 | 46,178 | 67,483 |
| 77 | 5,300 | 15,976 | 21,276 | 5,846 | 42,596 | 48,442 | 69,718 |
| 78 | 5,741 | 15,728 | 21,469 | 8,239 | 42,508 | 50,747 | 72,216 |
| 79 | 6,150 | 15,458 | 21,608 | 10,183 | 42,898 | 53,081 | 74,689 |
| 1980 | 6,242 | 15,170 | 21,412 | 11,471 | 43,160 | 54,631 | 76,043 |
| 81 | 6,442 | 14,878 | 21,320 | 11,989 | 43,515 | 55,504 | 76,824 |
| 82 | 6,617 | 14,577 | 21,194 | 12,529 | 44,260 | 56,789 | 77,983 |
| 83 | 6,941 | 14,268 | 21,209 | 13,095 | 45,178 | 58,273 | 79,482 |
| 84 | 7,341 | 13,943 | 21,284 | 13,684 | 45,095 | 58,779 | 80,063 |
| 85 | 7,450 | 13,599 | 21,049 | 14,300 | 44,479 | 58,779 | 79,828 |
| 86 | 7,542 | 13,251 | 20,793 | 14,991 | 43,836 | 58,827 | 79,620 |
| 87 | 7,842 | 12,899 | 20,741 | 15,704 | 43,161 | 58,865 | 79,606 |
| 88 | 8,300 | 12,543 | 20,843 | 16,662 | 42,455 | 59,117 | 79,960 |
| 89 | 8,691 | 12,224 | 20,915 | 17,543 | 41,705 | 59,248 | 80,163 |
| 1990 | 8,891 | 11,909 | 20,800 | 18,577 | 40,915 | 59,492 | 80,292 |
| 91 | 9,000 | 11,586 | 20,586 | 19,748 | 40,079 | 59,827 | 80,413 |
| 92 | 9,225 | 11,273 | 20,498 | 20,997 | 39,191 | 60,188 | 80,686 |
| 93 | 9,892 | 10,951 | 20,843 | 21,942 | 38,246 | 60,188 | 81,031 |
| 94 | 10,492 | 10,605 | 21,097 | 22,930 | 37,258 | 60,188 | 81,285 |
| 95 | 10,600 | 10,237 | 20,837 | 23,961 | 36,227 | 60,188 | 81,025 |
| 96 | 10,691 | 9,865 | 20,556 | 25,040 | 35,148 | 60,188 | 80,744 |
| 97 | 11,058 | 9,489 | 20,547 | 26,166 | 34,022 | 60,188 | 80,735 |
| 98 | 11,842 | 9,097 | 20,939 | 27,344 | 32,844 | 60,188 | 81,127 |
| 99 | 12,542 | 8,679 | 21,221 | 28,574 | 31,614 | 60,188 | 81,409 |
| 2000 | 12,742 | 8,234 | 20,976 | 29,860 | 30,328 | 60,188 | 81,164 |
| 01 | 12,942 | 7,778 | 20,720 | 31,204 | 28,984 | 60,188 | 80,908 |
| 02 | 13,342 | 7,315 | 20,657 | 32,550 | 27,638 | 60,188 | 80,845 |
| 03 | 14,242 | 6,838 | 21,080 | 33,904 | 26,284 | 60,188 | 81,268 |
| 04 | 15,042 | 6,326 | 21,368 | 35,248 | 24,940 | 60,188 | 81,556 |
| 05 | 15,242 | 5,782 | 21,024 | 36,579 | 23,609 | 60,188 | 81,212 |
| 06 | 15,533 | 5,231 | 20,764 | 37,911 | 22,277 | 60,188 | 80,952 |
| 07 | 16,008 | 4,669 | 20,677 | 39,266 | 20,922 | 60,188 | 80,865 |
| 08 | 16,792 | 4,089 | 20,881 | 40,671 | 19,517 | 60,188 | 81,069 |
| 09 | 17,583 | 3,480 | 21,063 | 42,125 | 18,063 | 60,188 | 81,251 |
| 2010 | 17,892 | 2,838 | 20,730 | 43,632 | 16,556 | 60,188 | 80,918 |
| 11 | 18,092 | 2,184 | 20,276 | 45,193 | 14,995 | 60,188 | 80,464 |
| 12 | 18,383 | 1,528 | 19,911 | 46,790 | 13,398 | 60,188 | 80,099 |
| 13 | 17,358 | 951 | 18,309 | 48,403 | 11,785 | 60,188 | 78,497 |
| 14 | 12,892 | 513 | 13,405 | 50,029 | 10,159 | 60,188 | 73,593 |
| 15 | 4,875 | 146 | 5,021 | 51,671 | 8,517 | 60,188 | 65,209 |
| 16 | 0 | 0 | 0 | 43,767 | 6,769 | 50,536 | 50,536 |
| 17 | 0 | 0 | 0 | 36,793 | 5,297 | 42,090 | 42,090 |
| 18 | 0 | 0 | 0 | 26,965 | 4,025 | 30,990 | 30,990 |
| 19 | 0 | 0 | 0 | 16,827 | 3,064 | 19,891 | 19,891 |
| 2020 | 0 | 0 | 0 | 9,244 | 2,442 | 11,686 | 11,686 |
| 21 | 0 | 0 | 0 | 5,271 | 2,094 | 7,365 | 7,365 |
| 22 | 0 | 0 | 0 | 5,447 | 1,910 | 7,357 | 7,357 |
| 23 | 0 | 0 | 0 | 5,629 | 1,720 | 7,349 | 7,349 |
| 24 | 0 | 0 | 0 | 5,818 | 1,524 | 7,342 | 7,342 |
| 25 | 0 | 0 | 0 | 6,016 | 1,326 | 7,342 | 7,342 |
| 26 | 0 | 0 | 0 | 6,218 | 1,124 | 7,342 | 7,342 |
| 27 | 0 | 0 | 0 | 6,176 | 917 | 7,093 | 7,093 |
| 28 | 0 | 0 | 0 | 6,177 | 716 | 6,893 | 6,893 |
| 29 | 0 | 0 | 0 | 5,070 | 512 | 5,582 | 5,582 |
| 2030 | 0 | 0 | 0 | 4,549 | 350 | 4,899 | 4,899 |
| 31 | 0 | 0 | 0 | 3,426 | 198 | 3,624 | 3,624 |
| 32 | 0 | 0 | 0 | 1,804 | 73 | 1,877 | 1,877 |
| TOTALS | 450,000 | 557,462 | 1,007,462 | 1,247,156 | 1,642,082 | 2,889,238 | 3,896,700 |

1/ Placed on an accrual basis.

2/ All projected issues are assumed at approximately 3.75 percent net interest cost, with amortization commencing in the tenth year of such issues, to produce level annual bond service for the 41-year period beginning with the tenth and ending with the fiftieth year.

TABLE 29

STATE OF CALIFORNIA WATER BONDS
SCHEDULE OF MATURITIES, AMOUNTS AND COUPONS

(In thousands of dollars unless otherwise noted)

| CALENDAR YEAR | SERIES A[1]/ MATURITY DATE SEPTEMBER 1 | | SERIES B MATURITY DATE MAY 1 | | SERIES C MATURITY DATE NOVEMBER 1 | | SERIES D MATURITY DATE MARCH 1 | | SERIES E MATURITY DATE DECEMBER 1 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | AMOUNT | COUPON(%) | AMOUNT | COUPON(%) | AMOUNT | COUPON(%) | AMOUNT | COUPON(%) | AMOUNT | COUPON(%) |
| 1973 | 1,200 | 5.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1974 | 1,200 | 5.00 | 600 | 5.00 | 1,200 | 4.50 | 0 | 0 | 0 | 0 |
| 1975 | 1,200 | 5.00 | 600 | 5.00 | 1,200 | 4.50 | 1,000 | 4.50 | 1,000 | 4.50 |
| 1976 | 1,200 | 5.00 | 600 | 5.00 | 1,200 | 4.50 | 1,000 | 4.50 | 1,000 | 4.50 |
| 1977 | 1,200 | 5.00 | 600 | 5.00 | 1,200 | 4.50 | 1,100 | 4.50 | 1,100 | 4.50 |
| 1978 | 1,500 | 5.00 | 600 | 5.00 | 1,200 | 4.50 | 1,100 | 4.50 | 1,100 | 4.50 |
| 1979 | 1,500 | 5.00 | 750 | 5,00 | 1,500 | 4.50 | 1,200 | 4.50 | 1,200 | 4.50 |
| 1980 | 1,500 | 5.00 | 750 | 5.00 | 1,500 | 4.50 | 1,200 | 4.50 | 1,200 | 4.50 |
| 1981 | 1,500 | 5.00 | 750 | 5.00 | 1,500 | 4.50 | 1,300 | 4.50 | 1,300 | 4.50 |
| 1982 | 1,500 | 5.00 | 750 | 5.00 | 1,500 | 4.50 | 1,400 | 4.50 | 1,400 | 4.50 |
| 1983 | 1,700 | 5.00 | 750 | 5.00 | 1,500 | 4.50 | 1,400 | 4.50 | 1,400 | 4.50 |
| 1984 | 1,700 | 5.00 | 850 | 5.00 | 1,700 | 4.50 | 1,500 | 4.50 | 1,500 | 4.50 |
| 1985 | 1,700 | 5.00 | 850 | 5.00 | 1,700 | 4.50 | 1,600 | 4.50 | 1,600 | 4.50 |
| 1986 | 1,700 | 5.00 | 850 | 5.00 | 1,700 | 4.50 | 1,600 | 4.50 | 1,600 | 4.50 |
| 1987 | 1,700 | 5.00 | 850 | 5.00 | 1,700 | 4.50 | 1,700 | 4.50 | 1,700 | 4.50 |
| 1988 | 2,000 | 4.00 | 850 | 4.75 | 1,700 | 3.75 | 1,800 | 4.50 | 1,800 | 4.50 |
| 1989 | 2,000 | 3.40 | 1,000 | 3.40 | 2,000 | 3.40 | 1,800 | 3.25 | 1,800 | 4.50 |
| 1990 | 2,000 | 3.40 | 1,000 | 3.40 | 2,000 | 3.40 | 1,900 | 3.40 | 1,900 | 4.50 |
| 1991 | 2,000 | 3.40 | 1,000 | 3.50 | 2,000 | 3.50 | 2,000 | 3.40 | 2,000 | 3.60 |
| 1992 | 2,000 | 3.40 | 1,000 | 3.50 | 2,000 | 3.50 | 2,000 | 3.40 | 2,000 | 3.60 |
| 1993 | 2,400 | 3.50 | 1,000 | 3.50 | 2,000 | 3.50 | 2,100 | 3.40 | 2,100 | 3.60 |
| 1994 | 2,400 | 3.50 | 1,200 | 3.50 | 2,400 | 3.50 | 2,200 | 3,40 | 2,200 | 3.625 |
| 1995 | 2,400 | 3.50 | 1,200 | 3.50 | 2,400 | 3.55 | 2,300 | 3.40 | 2,300 | 3.625 |
| 1996 | 2,400 | 3.50 | 1,200 | 3.50 | 2,400 | 3.55 | 2,300 | 3.40 | 2,300 | 3.625 |
| 1997 | 2,400 | 3.50 | 1,200 | 3.50 | 2,400 | 3.55 | 2,400 | 3.40 | 2,400 | 3.625 |
| 1998 | 2,900 | 3.50 | 1,200 | 3.50 | 2,400 | 3.55 | 2,500 | 3.50 | 2,500 | 3.625 |
| 1999 | 2,900 | 3.50 | 1,450 | 3.50 | 2,900 | 3.55 | 2,600 | 3.50 | 2,600 | 3.625 |
| 2000 | 2,900 | 3.50 | 1,450 | 3.60 | 2,900 | 3.60 | 2,700 | 3.50 | 2,700 | 3.70 |
| 2001 | 2,900 | 3.50 | 1,450 | 3.60 | 2,900 | 3.60 | 2,800 | 3.50 | 2,800 | 3.70 |
| 2002 | 2,900 | 3.50 | 1,450 | 3.60 | 2,900 | 3.60 | 2,900 | 3.50 | 2,900 | 3.70 |
| 2003 | 3,500 | 3.50 | 1,450 | 3.60 | 2,900 | 3.60 | 3,000 | 3.50 | 3,000 | 3.75 |
| 2004 | 3,500 | 3.60 | 1,750 | 3.60 | 3,500 | 3.625 | 3,100 | 3.50 | 3,100 | 3.75 |
| 2005 | 3,500 | 3.60 | 1,750 | 3.60 | 3,500 | 3.625 | 3,200 | 3.50 | 3,200 | 3.75 |
| 2006 | 3,500 | 3.60 | 1,750 | 3.625 | 3,500 | 3.625 | 3,300 | 3.50 | 3,300 | 3.75 |
| 2007 | 3,500 | 3.60 | 1,750 | 3.625 | 3,500 | 3.625 | 3,500 | 3.50 | 3,500 | 3.75 |
| 2008 | 4,000 | 3.625 | 1,750 | 3.625 | 3,500 | 3.65 | 3,600 | 3.50 | 3,600 | 3.75 |
| 2009 | 4,000 | 3.625 | 2,000 | 3.625 | 4,000 | 3.65 | 3,700 | 3.50 | 3,700 | 3.75 |
| 2010 | 4,000 | 3.625 | 2,000 | 3.625 | 4,000 | 3.65 | 3,900 | 3.60 | 3,900 | 3.75 |
| 2011 | 4,000 | 3.625 | 2,000 | 3.625 | 4,000 | 3.65 | 4,000 | 3.60 | 4,000 | 3.75 |
| 2012 | 4,000 | 3.625 | 2,000 | 3.625 | 4,000 | 3.00 | 4,100 | 3.60 | 4,100 | 3.75 |
| 2013 | 4,000 | 1/10 | 2,000 | 3.625 | 4,000 | 3.00 | 4,300 | 3.00 | 4,300 | 3.75 |
| 2014 | 0 | 0 | 2,000 | 1/20 | 4,000 | 3.00 | 4,400 | 3.00 | 4,400 | 3.00 |
| 2015 | 0 | 0 | 0 | 0 | 0 | 0 | 4,500 | 3.00 | 4,500 | 3.00 |
| Total | 100,000 | | 50,000 | | 100,000 | | 100,000 | | 100,000 | |
| Average Life (years) | 34.02 | | 34.52 | | 34.52 | | 34.98 | | 34.98 | |

1/ Bond Anticipation Notes dated December 1, 1963, in the amount of $50,000,000 and maturing on June 15, 1964, had a life of 0.27 years.

TABLE 30

REDEMPTION PREMIUMS FOR STATE OF CALIFORNIA WATER BONDS

| Year of Maturity | Maturity dates for respective Series: Series A, September 1. Series B, May 1. Series C, November 1. Series D, March 1. Series E, December 1. % premium if redemption occurs during 12-month period ending on maturity date for respective Series in year named below: | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1983[1] | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003[2] |
| 1984 | 1/8 | 0 | | | | | | | | | | | | | | | | | | | |
| 1985 | 1/4 | 1/8 | 0 | | | | | | | | | | | | | | | | | | |
| 1986 | 3/8 | 1/4 | 1/8 | 0 | | | | | | | | | | | | | | | | | |
| 1987 | 1/2 | 3/8 | 1/4 | 1/8 | 0 | | | | | | | | | | | | | | | | |
| 1988 | 5/8 | 1/2 | 3/8 | 1/4 | 1/8 | 0 | | | | | | | | | | | | | | | |
| 1989 | 3/4 | 5/8 | 1/2 | 3/8 | 1/4 | 1/8 | 0 | | | | | | | | | | | | | | |
| 1990 | 7/8 | 3/4 | 5/8 | 1/2 | 3/8 | 1/4 | 1/8 | 0 | | | | | | | | | | | | | |
| 1991 | 1 | 7/8 | 3/4 | 5/8 | 1/2 | 3/8 | 1/4 | 1/8 | 0 | | | | | | | | | | | | |
| 1992 | 1 1/8 | 1 | 7/8 | 3/4 | 5/8 | 1/2 | 3/8 | 1/4 | 1/8 | 0 | | | | | | | | | | | |
| 1993 | 1 1/4 | 1 1/8 | 1 | 7/8 | 3/4 | 5/8 | 1/2 | 3/8 | 1/4 | 1/8 | 0 | | | | | | | | | | |
| 1994 | 1 3/8 | 1 1/4 | 1 1/8 | 1 | 7/8 | 3/4 | 5/8 | 1/2 | 3/8 | 1/4 | 1/8 | 0 | | | | | | | | | |
| 1995 | 1 1/2 | 1 3/8 | 1 1/4 | 1 1/8 | 1 | 7/8 | 3/4 | 5/8 | 1/2 | 3/8 | 1/4 | 1/8 | 0 | | | | | | | | |
| 1996 | 1 5/8 | 1 1/2 | 1 3/8 | 1 1/4 | 1 1/8 | 1 | 7/8 | 3/4 | 5/8 | 1/2 | 3/8 | 1/4 | 1/8 | 0 | | | | | | | |
| 1997 | 1 3/4 | 1 5/8 | 1 1/2 | 1 3/8 | 1 1/4 | 1 1/8 | 1 | 7/8 | 3/4 | 5/8 | 1/2 | 3/8 | 1/4 | 1/8 | 0 | | | | | | |
| 1998 | 1 7/8 | 1 3/4 | 1 5/8 | 1 1/2 | 1 3/8 | 1 1/4 | 1 1/8 | 1 | 7/8 | 3/4 | 5/8 | 1/2 | 3/8 | 1/4 | 1/8 | 0 | | | | | |
| 1999 | 2 | 1 7/8 | 1 3/4 | 1 5/8 | 1 1/2 | 1 3/8 | 1 1/4 | 1 1/8 | 1 | 7/8 | 3/4 | 5/8 | 1/2 | 3/8 | 1/4 | 1/8 | 0 | | | | |
| 2000 | 2 1/8 | 2 | 1 7/8 | 1 3/4 | 1 5/8 | 1 1/2 | 1 3/8 | 1 1/4 | 1 1/8 | 1 | 7/8 | 3/4 | 5/8 | 1/2 | 3/8 | 1/4 | 1/8 | 0 | | | |
| 2001 | 2 1/4 | 2 1/8 | 2 | 1 7/8 | 1 3/4 | 1 5/8 | 1 1/2 | 1 3/8 | 1 1/4 | 1 1/8 | 1 | 7/8 | 3/4 | 5/8 | 1/2 | 3/8 | 1/4 | 1/8 | 0 | | |
| 2002 | 2 3/8 | 2 1/4 | 2 1/8 | 2 | 1 7/8 | 1 3/4 | 1 5/8 | 1 1/2 | 1 3/8 | 1 1/4 | 1 1/8 | 1 | 7/8 | 3/4 | 5/8 | 1/2 | 3/8 | 1/4 | 1/8 | 0 | |
| 2003[2] | 2 1/2 | 2 3/8 | 2 1/4 | 2 1/8 | 2 | 1 7/8 | 1 3/4 | 1 5/8 | 1 1/2 | 1 3/8 | 1 1/4 | 1 1/8 | 1 | 7/8 | 3/4 | 5/8 | 1/2 | 3/8 | 1/4 | 1/8 | 0 |

Bonds maturing prior to 1984 are not callable. Bonds of each series maturing in 1984 or later are callable for redemption, in inverse order of maturities, on the 1983 maturity date for the respective series, and on any date thereafter, at premiums of 1/8% for each full 12-month period from the redemption date to the earlier of (1) the maturity date of the bonds being called or (2) the 2003 maturity date for respective series.

1/ Premium shown in this column applies only if called for redemption on the 1983 maturity date for the respective series, since bonds of each series are not callable for redemption prior thereto.

2/ Or later.

# APPENDIX A

# FINANCIAL STATEMENTS

# INTRODUCTION

This appendix to Bulletin 132-66 contains the financial statements of the State Water Resources Development System as of December 31, 1965, and explanatory notes thereto.

Significant changes since the date of the financial statements included in Bulletin 132-65 (December 31, 1964), are summarized below.

There were additional sales of General Obligation Bonds authorized by the Burns-Porter Act totaling $200,000,000. In addition, funds in the amount of $12,000,000 were utilized from the California Water Fund.

The above funds were applied principally to additions for construction of the State Water Project in the amount of $174,000,000 (including interest during construction of $14,500,000) and to increase net current assets of $38,000,000 which will be utilized for construction during 1966.

Total revenues in 1965 from water supply contractors amounted to $2,900,000 which included $689,000 for water deliveries from the South Bay Aqueduct and Frenchman Dam and Lake. Federal flood control contributions for Oroville Dam were received in the amount of $8,000,000.

Interest charges on bonds were $12,500,000 and interest earnings on investments amounted to $6,800,000 in 1965.

Payments on grants to local agencies made under the Davis-Grunsky Local Projects Assistance Program, totaled $9,900,000 during the year.

STATE WATER RESOURCES DEVELOPMENT SYSTEM
(Excluding Davis-Grunsky Local Projects Assistance Program)
DEPARTMENT OF WATER RESOURCES
BALANCE SHEET - DECEMBER 31, 1965

EXHIBIT 1

ASSETS

| | | | |
|---|---|---|---|
| Utility Plant: (Note A) | | | |
| Construction Work in Progress - | | | |
| Water Conservation Facilities (including Oroville Power) | $300,366,337 | | |
| Water Transportation Facilities | 148,035,616 | | |
| San Joaquin Drainage Facilities | 2,916,702 | | |
| Accrued (Unallocated) | 14,306,398 | | |
| | | $465,625,053 | |
| Plant in Service - | | | |
| Water Conservation Facilities | $ 1,867,248 | | |
| Water Transportation Facilities | 28,602,243 | | |
| | $ 30,469,491 | | |
| Less: Reserve for Depreciation | 1,140,819 | | |
| | | 29,328,672 | |
| Plant Held for Future Use - | | | |
| Water Transportation Facilities | | 3,219,093 | |
| | | | $498,172,818 |
| Nonutility Plant: (Note A) | | | |
| Construction Work in Progress - | | | |
| Recreation Facilities | $ 14,668,522 | | |
| Flood Control Facilities | 42,010,174 | | |
| Delta Facilities | 2,536,053 | | |
| | | $ 59,214,749 | |
| Plant in Service - | | | |
| Recreation Facilities | | 5,973,100 | |
| | | | 65,187,849 |
| Special Funds: (Note B) | | | |
| Central Valley Water Project Construction Fund | | $ 37,408,534 | |
| Central Valley Water Project Revenue Fund | | 30,141 | |
| California Water Resources Development Bond Fund - Replacement Account | | 44,908 | |
| | | | 37,483,583 |
| Current Assets: (Note B) | | | |
| Cash | | $ 1,384,640 | |
| Investments | | 167,464,700 | |
| Accounts Receivable | | 4,439,713 | |
| Advances to Water Resources Revolving Fund | | 2,088,722 | |
| | | | 175,377,775 |
| Deferred Charges: | | | |
| Operation and Maintenance | | | 184,773 |
| | | | $776,406,798 |

See Notes to Financial Statements

EXHIBIT 1

## LIABILITIES

| | | | |
|---|---|---|---|
| **Capitalization:** | | | |
| Long-Term Debt - | | | |
| Bonds Payable (Note C) | | $450,000,000 | |
| Advances from California Water Fund (Note D) | | 132,336,568 | |
| Grants in Aid of Construction - (Note E) | | | |
| From Prior Appropriations - | | | |
| California Water Fund | $ 86,082,087 | | |
| General Fund | 11,269,082 | | |
| | $ 97,351,169 | | |
| Other | | | |
| Interest on State Advances and Grants | 29,487,605 | | |
| Federal Fund Control Contributions | 34,990,000 | | |
| | | 161,828,774 | |
| Accumulated Deferred Net Income (Note F) | | 8,157,897 | |
| Advances for Delivery Structures | | 759,086 | |
| | | | $753,082,325 |
| **Current Liabilities:** | | | |
| Accounts Payable | | $ 6,701,082 | |
| Contract Retentions | | 12,453,771 | |
| Due to California Water Fund | | 106,398 | |
| Accrued Interest on Bonds Payable | | 3,579,827 | |
| | | | 22,841,078 |
| **Reserves:** | | | |
| Reserve for Replacements - Transportation | | $ 44,908 | |
| Reserve for Deferred Accounts Receivables | | 32,520 | |
| | | | 77,428 |
| **Deferred Credits:** | | | |
| Operation and Maintenance | | $ 175,596 | |
| Advance ~~Payments~~ - Transportation (Note G) | | 198,027 | |
| Delivery Structures | | 32,344 | |
| | | | 405,967 |
| | | | $776,406,798 |

STATE WATER RESOURCES DEVELOPMENT SYSTEM
DEPARTMENT OF WATER RESOURCES
STATEMENT OF DEFERRED NET INCOME
FOR THE CALENDAR YEAR ENDED DECEMBER 31, 1965

EXHIBIT 2A

| | | |
|---|---|---|
| REVENUES (EXHIBIT 3) | | |
| Conservation | | $ 14,000 |
| Transportation | | |
| Capital Cost Component | $ 2,258,212 | |
| Operation Components | 675,917 | 2,934,129 |
| Total Revenues | | $ 2,948,129 |
| COST OF OPERATIONS (EXHIBIT 4) | | |
| Conservation | $ 14,000 | |
| Transportation | 658,435 | |
| Provision for Replacements | 17,482 | |
| Provision for Depreciation | 792,665 | |
| Total Cost of Operations | | 1,482,582 |
| NET OPERATING REVENUES | | $ 1,465,547 |
| INTEREST EARNINGS FROM INVESTMENTS | | 6,785,814 |
| GROSS INCOME | | $ 8,251,361 |
| DEDUCTIONS | | |
| Interest on Bonds | $12,557,236 | |
| Interest on State Advances and Grants, Credited to Grants in Aid of Construction | 7,508,228 | |
| | $20,065,464 | |
| Less: Interest Charged to Construction | 14,472,399 | |
| Total Deductions | | 5,593,065 |
| DEFERRED NET INCOME | | $ 2,658,296 |
| Accumulated Deferred Net Income, December 31, 1964 | | 5,499,601 |
| ACCUMULATED DEFERRED NET INCOME (EXHIBIT 1) | | $ 8,157,897 |



EXHIBIT 2A

STATE WATER RESOURCES DEVELOPMENT SYSTEM
DEPARTMENT OF WATER RESOURCES
STATEMENT OF DEFERRED NET INCOME
CUMULATIVE TO DECEMBER 31, 1965

EXHIBIT 2B

| | | |
|---|---|---|
| REVENUES | | |
| Conservation | | $ 42,000 |
| Transportation | | |
| Capital Cost Component | $ 6,656,375 | |
| Operation Components | 1,492,699 | 8,149,074 |
| Total Revenues | | $ 8,191,074 |
| COST OF OPERATIONS | | |
| Conservation | $ 42,000 | |
| Transportation | 1,447,790 | |
| Provision for Replacements | 44,909 | |
| Provision for Depreciation | 1,140,819 | |
| Total Cost of Operations | | 2,675,518 |
| NET OPERATING REVENUES | | $ 5,515,556 |
| INTEREST EARNINGS FROM INVESTMENTS | | 11,507,554 |
| GROSS INCOME | | $17,023,110 |
| DEDUCTIONS | | |
| Interest on Bonds | $17,575,173 | |
| Interest on State Advances and Grants, Credited to Grants in Aid of Construction | 29,487,605 | |
| | $47,062,778 | |
| Less: Interest Charged to Construction | 38,197,565 | |
| Total Deductions | | 8,865,213 |
| ACCUMULATED DEFERRED NET INCOME (EXHIBIT 1) | | $ 8,157,897 |



EXHIBIT 2B

STATE WATER RESOURCES DEVELOPMENT SYSTEM
DEPARTMENT OF WATER RESOURCES
STATEMENT OF REVENUES
FOR THE CALENDAR YEAR ENDED DECEMBER 31, 1965

EXHIBIT 3

| | Conservation | Transportation: Capital Cost Component | Transportation: Operation Component | Total |
|---|---|---|---|---|
| CONSERVATION FACILITIES | | | | |
| Frenchman Dam and Lake | | | | |
| Last Chance Creek Water District | $14,000 | | | $ 14,000 |
| TRANSPORTATION FACILITIES | | | | |
| South Bay Aqueduct | | | | |
| Alameda County Water District | | $ 195,496 | $250,366 | 445,862 |
| Alameda County F. C. & W. C. District | | 131,912 | 98,369 | 230,281 |
| Santa Clara County F. C. & Water District | | 780,713 | 327,182 | 1,107,895 |
| California Aqueduct | | | | |
| Antelope Valley - East Kern Water Agency | | 60,949 | | 60,949 |
| City of West Covina | | 9,165 | | 9,165 |
| Coachella Valley County Water District | | 16,674 | | 16,674 |
| Crestline - Lake Arrowhead Water Agency | | 4,483 | | 4,483 |
| Desert Water Agency | | 22,750 | | 22,750 |
| Littlerock Creek Irrigation District | | 1,686 | | 1,686 |
| Metropolitan Water District of Southern California | | 692,541 | | 692,541 |
| Mojave Water Agency | | 37,774 | | 37,774 |
| Palmdale Irrigation District | | 12,236 | | 12,236 |
| San Bernardino Valley Municipal Water District | | 66,808 | | 66,808 |
| San Gabriel Valley Municipal Water District | | 19,564 | | 19,564 |
| San Gorgonio Pass Water Agency | | 11,101 | | 11,101 |
| San Luis Obispo County F. C. & W. C. District | | 18,277 | | 18,277 |
| Santa Barbara County F. C. & W. C. District | | 39,520 | | 39,520 |
| Upper Santa Clara Valley Water Agency | | 23,632 | | 23,632 |
| Ventura County Flood Control District | | 20,055 | | 20,055 |
| Plumas County F. C. & W. C. District | | 726 | | 726 |
| Kern County Water Agency | | 92,150 | | 92,150 |
| Total (Exhibit 2A) | $14,000 | $2,258,212 | $675,917 | $2,948,129 |



EXHIBIT 3

STATE WATER RESOURCES DEVELOPMENT SYSTEM
DEPARTMENT OF WATER RESOURCES
STATEMENT OF COST OF OPERATIONS
FOR THE CALENDAR YEAR ENDED DECEMBER 31, 1965

EXHIBIT 4

| | Grand Total | Operation, Maintenance and Power | | | |
|---|---|---|---|---|---|
| | | Conservation Facilities | Transportation Facilities | | |
| | | | Minimum Component | Variable Component | Bureau Water Charge |
| CONSERVATION FACILITIES | | | | | |
| Frenchman Dam and Lake | | | | | |
| Operation and Maintenance | $ 11,581 | $11,581 | | | |
| TRANSPORTATION FACILITIES | | | | | |
| South Bay Aqueduct | | | | | |
| Reach No. 1 - Bethany Forebay to Altamont Turnout | | | | | |
| Operation | 153,172 | | $153,172 | | |
| Maintenance | 64,488 | | 64,488 | | |
| Management | 6,335 | | 6,335 | | |
| Water Purchased | 242,577 | | | | $242,577 |
| Power Purchased | 138,046 | | | $138,046 | |
| Water Quality Testing | 4,943 | | | 4,943 | |
| Reclassification of Transportation Losses | | | 299 | - 299 | |
| Total - Reach No. 1 | $ 609,561 | | $224,294 | $142,690 | $242,577 |
| Reach No. 2 - Altamont Turnout thru Patterson Reservoir | | | | | |
| Operation | 9,498 | | 9,498 | | |
| Maintenance | 10,333 | | 10,333 | | |
| Management | 2,748 | | 2,748 | | |
| Total - Reach No. 2 | $ 22,579 | | $ 22,579 | | |
| Reach No. 4 - Patterson Reservoir to Del Valle Junction | | | | | |
| Operation | 22,988 | | 22,988 | | |
| Maintenance | 16,699 | | 16,699 | | |
| Management | 4,223 | | 4,223 | | |
| Total - Reach No. 4 | $ 43,910 | | $ 43,910 | | |
| Reach No. 6 - Del Valle Junction to South Livermore Turnout | | | | | |
| Operation | 54 | | 54 | | |
| Maintenance | 400 | | 400 | | |
| Management | 1,401 | | 1,401 | | |
| Total - Reach No. 6 | $ 1,855 | | $ 1,855 | | |
| Reach No. 7 - South Livermore Turnout to Vallecitos Turnout | | | | | |
| Operation | 652 | | 652 | | |
| Maintenance | 1,036 | | 1,036 | | |
| Management | 4,500 | | 4,500 | | |
| Total - Reach No. 7 | $ 6,188 | | $ 6,188 | | |
| Reach No. 8 - Vallecitos Turnout to Alameda Bayside Turnout | | | | | |
| Operation | 435 | | 435 | | |
| Maintenance | 467 | | 467 | | |
| Management | 2,295 | | 2,295 | | |
| Total - Reach No. 8 | $ 3,197 | | $ 3,197 | | |
| Reach No. 9 - Alameda Bayside Turnout to Santa Clara Terminus | | | | | |
| Operation | 1,368 | | 1,368 | | |
| Maintenance | 1,033 | | 1,033 | | |
| Management | 3,116 | | 3,116 | | |
| Total - Reach No. 9 | $ 5,517 | | $ 5,517 | | |
| Total - Transportation Facilities | $ 692,807 | | $307,540 | $142,690 | $242,577 |
| Total Expenditures | $ 704,388 | $11,581 | $307,540 | $142,690 | $242,577 |
| Provision for Replacements | 17,482 | | 322 | 17,160 | |
| Provision for Depreciation | 792,665 | | | | |
| Less: | | | | | |
| Deferred Operating Costs (C.Y. 1965) | 32,159 | | 32,159 | | |
| Deferred Operating Costs (C.Y. 1964) | -1,463 | -2,419 | 956 | | |
| Charges to Construction | 1,257 | | | 672 | 585 |
| Total (Exhibit 2A) | $1,482,582 | $14,000 | $274,747 | $159,178 | $241,992 |

EXHIBIT 5A

STATE WATER RESOURCES DEVELOPMENT SYSTEM
DEPARTMENT OF WATER RESOURCES
STATEMENT OF SOURCE AND APPLICATION OF FUNDS
FOR THE CALENDAR YEAR ENDED DECEMBER 31, 1965

| | Utility & Non-Utility Plant | Davis-Grunsky Program | Total |
|---|---|---|---|
| FUNDS PROVIDED | | | |
| Burns-Porter Act Appropriation | | | |
| Sales of General Obligation Bonds | $200,000,000 | | $200,000,000 |
| California Water Fund | 1,309,967 | $10,849,480 | 12,159,447 |
| Grants in Aid of Construction | | | |
| From Prior Appropriations (Adjustments) | | | |
| California Water Fund | -347,756 | | -347,756 |
| General Fund | -78,601 | | -78,601 |
| Interest on State Advances and Grants | 7,508,228 | | 7,508,228 |
| Federal Flood Control Constributions | 8,000,000 | | 8,000,000 |
| Local Project Assistance Fund | | | |
| Deferred Net Income | 2,658,296 | | 2,658,296 |
| Advances for Delivery Structures | 245,980 | | 245,980 |
| Interest Earnings on Loans | | 62,252 | 62,252 |
| Provision for Depreciations | 792,665 | | 792,665 |
| Provision for Replacements | 17,481 | | 17,481 |
| Deferred Accounts Receivable | 32,520 | | 32,520 |
| Increase in Deferred Credits (Net) | 13,940 | -5,967 | 7,973 |
| Total | $220,152,720 | $10,905,765 | $231,058,485 |
| FUNDS APPLIED | | | |
| Additions to Plant | | | |
| Reimbursable under Project Contracts | | | |
| Conservation (Including Oroville Power) | $ 74,024,871 | | $ 74,024,871 |
| Transportation | 64,314,264 | | 64,314,264 |
| Delivery Structures | 245,980 | | 245,980 |
| Drainage | 829,647 | | 829,647 |
| Interest During Construction | 14,472,399 | | 14,472,399 |
| Unallocated | 4,856,866 | | 4,856,866 |
| Nonreimbursable | | | |
| Recreation | 6,818,220 | | 6,818,220 |
| Flood Control | 7,667,068 | | 7,667,068 |
| Delta Facilities-Federal & Local Participation | 666,944 | | 666,944 |
| Total | $173,896,259 | | $173,896,259 |
| Davis-Grunsky Program | | | |
| Loans | | $ 502,500 | 502,500 |
| Grants | | 9,897,504 | 9,897,504 |
| Administrative Expenses | | 449,476 | 449,476 |
| Total | | $10,849,480 | $ 10,849,480 |
| Less Repayments | | 5,900 | 5,900 |
| Increases in | | | |
| Special Funds | $ 8,165,918 | | 8,165,918 |
| Net Current Assets | 38,090,543 | 62,185 | 38,152,728 |
| Total | $220,152,720 | $10,905,765 | $231,058,485 |



EXHIBIT 5A

STATE WATER RESOURCES DEVELOPMENT SYSTEM
DEPARTMENT OF WATER RESOURCES
STATEMENT OF SOURCE AND APPLICATION OF FUNDS
CUMULATIVE TO DECEMBER 31, 1965

EXHIBIT 5B

| | Utility & Non-Utility Plant | Davis-Grunsky Program | Total |
|---|---|---|---|
| FUNDS PROVIDED | | | |
| Burns-Porter Act Appropriation | | | |
| Sales of General Obligation Bonds | $450,000,000 | | $450,000,000 |
| California Water Fund | 132,336,568 | $18,604,560 | 150,941,128 |
| Grants in Aid of Construction | | | |
| From Prior Appropriations | | | |
| California Water Fund | 86,082,087 | 102,549 | 86,184,636 |
| General Fund | 11,269,082 | 54,487 | 11,323,569 |
| Interest on State Advances and Grants | 29,487,605 | | 29,487,605 |
| Federal Flood Control Contributions | 34,990,000 | | 34,990,000 |
| Local Project Assistance Fund | | 1,262,008 | 1,262,008 |
| Accumulated Deferred Net Income | 8,157,897 | | 8,157,897 |
| Advances for Delivery Structures | 759,086 | | 759,086 |
| Accumulated Interest Earnings on Loans | | 135,241 | 135,241 |
| Reserve for Depreciation | 1,140,819 | | 1,140,819 |
| Reserve for Replacements | 44,908 | | 44,908 |
| Reserve for Deferred Accounts Receivable | 32,520 | | 32,520 |
| Increase in Deferred Credits (Net) | 221,194 | -5,967 | 215,227 |
| Total | $754,521,766 | $20,152,878 | $774,674,644 |
| FUNDS APPLIED | | | |
| Additions to Plant | | | |
| Reimbursable Under Project Contracts | | | |
| Conservation (Including Oroville Power) | $276,168,102 | | $276,168,102 |
| Transportation | 167,318,307 | | 167,318,307 |
| Delivery Structures | 759,086 | | 759,086 |
| Drainage | 2,694,743 | | 2,694,743 |
| Interest During Construction | 38,197,565 | | 38,197,565 |
| Accrued (Unallocated) | 14,175,834 | | 14,175,834 |
| Nonreimbursable | | | |
| Recreation | 20,641,622 | | 20,641,622 |
| Flood Control | 42,010,174 | | 42,010,174 |
| Delta Facilities-Federal & Local Participation | 2,536,053 | | 2,536,053 |
| Total | $564,501,486 | | $564,501,486 |
| Davis-Grunsky Program | | | |
| Loans | | $ 3,401,000 | 3,401,000 |
| Grants | | 15,136,739 | 15,136,739 |
| Administrative Expenses | | 1,485,865 | 1,485,865 |
| Total | | $20,023,604 | $ 20,023,604 |
| Less Repayments | | 12,550 | 12,550 |
| Increases in | | | |
| Special Funds | $ 37,483,583 | | 37,483,583 |
| Net Current Assets | 152,536,697 | 141,824 | 152,678,521 |
| Total | $754,521,766 | $20,152,878 | $774,674,644 |

EXHIBIT 5B

STATE WATER RESOURCES DEVELOPMENT SYSTEM
DEPARTMENT OF WATER RESOURCES
DAVIS-GRUNSKY LOCAL PROJECT ASSISTANCE PROGRAM
BALANCE SHEET - DECEMBER 31, 1965

EXHIBIT 6

## ASSETS

| | | |
|---|---|---|
| **CURRENT ASSETS** | | |
| Cash | $ 136,544 | |
| Loans Receivable, Current Portion | 5,280 | $ 141,824 |
| **LONG-TERM LOANS RECEIVABLE** | | |
| Loans Receivable | $ 3,389,697 | |
| Less: Current Portion Included Above | 5,280 | 3,384,417 |
| NONREIMBURSABLE GRANTS FOR LOCAL PROJECTS AND ADMINISTRATIVE COSTS | | 16,622,604 |
| | | $20,148,845 |

## LIABILITIES

| | | |
|---|---|---|
| **CAPITALIZATION** | | |
| Long-Term Debt: | | |
| Due to California Water Fund | | |
| Burns-Porter Act Appropriation | $18,594,822 | |
| Special Appropriation | 1,250,000 | $19,844,822 |
| Due to California Water Resources Development Bond Fund | | 9,738 |
| Accumulated Interest Earnings on Loans | | 135,241 |
| State's Contribution From Prior Appropriations | | 159,044 |
| | | $20,148,845 |

EXHIBIT 6

State of California
The Resources Agency
DEPARTMENT OF WATER RESOURCES

STATE WATER RESOURCES DEVELOPMENT SYSTEM
Notes to Financial Statements
December 31, 1965

NOTE A

UTILITY AND NONUTILITY PLANT

Utility Plant includes interest during construction at 3.573% which is the project interest rate after reflecting the sale of Series E Bonds. Depreciation of Plant in Service is being recorded which will fully depreciate the facilities, including land, over their estimated service lives.

Capital costs included in Utility Plant and Nonutility Plant for the period from 1952 through 1960 are subject to adjustments pending legal, policy and engineering review of these costs.

Costs allocated between Utility Plant and Nonutility Plant are subject to adjustments in future years until the allocations of costs among all purposes and for all facilities of the project have been completed.

NOTE B

SPECIAL FUNDS AND CURRENT ASSETS

Special funds and current assets are subject to certain applications according to their source and purpose. Current assets consist of funds planned for expenditure during 1966. Special funds include those funds to be expended after 1966. The amounts shown in the Balance Sheet at December 31, 1965, consist of:

| | Cash | Investments* | Accounts Receivable | Total |
|---|---|---|---|---|
| CURRENT ASSETS | | | | |
| Bond Fund: | | | | |
| Revenue | $ 784,163 | $ 508,557 | $ 22,001 | $ 1,314,721 |
| Construction | 567,957 | 166,841,443 | 6,506,434 | 173,915,834 |
| CVWP Funds: | | | | |
| Construction | 32,520 | 114,700 | | 147,220 |
| Total | $1,384,640 | $167,464,700 | $6,528,435 | $175,377,775 |
| SPECIAL FUNDS | | | | |
| Bond Fund: | | | | |
| Replacements | $ 43,803 | | $ 1,105 | $ 44,908 |
| CVWP Funds: | | | | |
| Construction | 2,694 | $ 36,735,300 | 670,540 | 37,408,534 |
| Revenue | 4,618 | 25,000 | 523 | 30,141 |
| Total | $ 51,115 | $ 36,760,300 | $ 672,168 | $ 37,483,583 |
| TOTAL | $1,435,755 | $204,225,000 | $7,200,603 | $212,861,358 |

*Investments are made through the State's Surplus Money Investment Fund for the account of each of the funds listed.

NOTE B

SPECIAL FUNDS AND CURRENT ASSETS (cont.)

Planned Application of Current Assets and Special Funds:

| | Construction | Interest on Bonds | Replacements | Total |
|---|---|---|---|---|
| CURRENT ASSETS | | | | |
| Bond Fund: | | | | |
| Revenue | | $ 1,314,721 | | $ 1,314,721 |
| Construction | $173,915,834 | | | 173,915,834 |
| CVWP Funds: | | | | |
| Construction | 147,220 | | | 147,220 |
| Total | $174,063,054 | $ 1,314,721 | | $175,377,775 |
| SPECIAL FUNDS | | | | |
| Bond Fund: | | | | |
| Replacements | | | $44,908 | $ 44,908 |
| CVWP Funds: | | | | |
| Construction | | $37,408,534 | | 37,408,534 |
| Revenue | | 30,141 | | 30,141 |
| Total | | $37,438,675 | $44,908 | $ 37,483,583 |
| TOTAL | $174,063,054 | $38,753,396 | $44,908 | $212,861,358 |

Sources, purposes and restrictions applicable to the funds are as follows:

Bond Fund-Revenue Account: Payments, other than advance payments for replacements and delivery structures, from contracting agencies and other income received are deposited in this fund. Expenditures from this fund are subject to the following priorities under the Burns-Porter Act:

1. Operation and Maintenance Costs
2. Transfers to General Fund for Principal and Interest on General Obligation Bonds
3. Repayments to California Water Fund for Advances (See Note D)
4. Construction of Additional Facilities

Bond Fund-Construction Account: Proceeds from sales of general obligation bonds, excluding premium and accrued interest received on such sales which are applied toward interest payments, are deposited in this account. Expenditures for construction of the State Water Resources Development System are made in part from this account.

Central Valley Water Project Construction Fund: Federal Contributions received as reimbursements for the cost of flood control facilities or open-space recreation lands, advance payments for delivery structures, and proceeds from the sales of improvements are deposited in this fund. Expenditures for construction or interest on general obligation bonds will be made in part from this fund.

NOTE B

SPECIAL FUNDS AND CURRENT ASSETS (cont.)

Bond Fund-Replacement Account: Payments received for replacement costs are deposited in this fund. Expenditures are limited to the acquisition of replacements.

Central Valley Water Project Revenue Fund: Revenue from sales of Oroville Power will be deposited in this fund. Property rental income accrued prior to the effective date of the Bond Act, November 8, 1960, was deposited in this fund. Expenditures for interest on revenue bonds and Oroville Power operating expenses will be made from this fund.

NOTE C

BONDS

The Burns-Porter Act authorized the issue of State General Obligation Bonds in the amount of $1,750,000,000 for the State Water Resources Development System which included $130,000,000 for financing of local projects as defined in the Davis-Grunsky Act. The use of the continuing appropriation of the California Water Fund pursuant to the Burns-Porter Act supplements the bond authorization. As California Water Fund money is used for construction of the State Water Facilities as defined in the Burns-Porter Act in lieu of bond proceeds, an equal amount of bond authorization is set aside to be used only for the construction of facilities additional to the State Water Facilities.

As a result of bonds issued and California Water Fund expenditures, the status of bond authorization, by purpose, as of December 31, 1965, is summarized below:

| | Water Facilities | Davis-Grunsky Projects | Additional Facilities | Total |
|---|---|---|---|---|
| Bonds Authorized | $1,620,000,000 | $130,000,000 | | $1,750,000,000 |
| Less: | | | | |
| Bonds Issued | 448,821,375 | | $ 1,178,625 | 450,000,000 |
| Calif. Water Fund Advances | 132,336,568 | 18,604,560 | -150,941,128 | |
| Balance Available | $1,038,842,057 | $111,395,440 | $149,762,503 | $1,300,000,000 |

NOTE C

BONDS (cont.)

The General Obligation Bonds outstanding as of December 31, 1965, with their net interest rates and maturity dates are shown below:

| Date Issued | Series | Amount | Net Interest Rates | Maturity Dates |
|---|---|---|---|---|
| 3/1/64 | A | $100,000,000 | 3.520% | 9/1/1973-2013 |
| 5/1/64 | B | 50,000,000 | 3.533% | 5/1/1974-2014 |
| 11/1/64 | C | 100,000,000 | 3.585% | 11/1/1974-2014 |
| 3/1/65 | D | 100,000,000 | 3.499% | 3/1/1975-2015 |
| 12/1/65 | E | 100,000,000 | 3.717% | 12/1/1975-2015 |
| | Total | $450,000,000 | 3.573% | |

NOTE D

ADVANCES FROM CALIFORNIA WATER FUND

Advances from California Water Fund represent expenditures financed from this fund pursuant to the Burns-Porter Act Appropriation which excludes amounts covered by prior appropriations. Such advances will be repaid from the third priority of system revenues, as shown in Note B. Repayments are not expected to begin until the latter part of the presently programmed construction period.

NOTE E

GRANTS IN AID OF CONSTRUCTION

Grants in aid of construction consist of the following:

1. Construction expenditures financed from the California Water Fund and General Fund from special appropriations made prior to the effective date of the Burns-Porter Act (November 8, 1960).

2. Interest computed on State advances and grants, consisting of the reimbursable portion of (1) above and interest computed on advances from the California Water Fund, as described in Note D.

3. Federal flood control contributions received.

NOTE F

ACCUMULATED DEFERRED NET INCOME

The rate structure for the State Water Project generally provides for reimbursement of project costs, with interest, by beneficiaries of the various project purposes. Project revenues, therefore, will ultimately equal project costs. Due to provisions for recovering such costs, there will normally be differences

NOTE F

ACCUMULATED DEFERRED NET INCOME (cont.)

between revenues and costs at any one time during the life of the project; this amount is designated in these financial statements as "Accumulated Deferred Net Income."

NOTE G

PAYMENTS BY PROJECT CONTRACTORS

The State has entered into long-term contracts with thirty-one water service agencies for a water supply. These contracts provide for payments by the agencies calculated to reimburse the State over the project repayment period for all reimbursable capital costs with interest thereon. Annual operation and maintenance costs of the system are recovered generally as incurred; annual charges also include provision for future plant replacements.

A summary of reimbursable capital costs incurred including interest through December 31, 1965, less payments thereon as of December 31, 1965, is presented below:

| | Capital Costs | Interest | Total |
|---|---|---|---|
| Reimbursable Costs | | | |
| Conservation (Including Oroville Power) | $276,168,102 | $26,065,483 | $302,233,585 |
| Transportation | 167,318,307 | 11,910,123 | 179,228,430 |
| Delivery Structures | 759,086 | | 759,086 |
| Drainage | 2,694,743 | 221,959 | 2,916,702 |
| Total | $446,940,238 | $38,197,565 | $485,137,803 |
| Less: Payments from Water Contractors | | | |
| Transportation | $ 1,180,063 | $ 5,476,312 | $ 6,656,375 |
| Delivery Structures | 759,086 | | 759,086 |
| Total Payments | $ 1,939,149 | $ 5,476,312 | $ 7,415,461 |
| Balance | $445,001,089 | $32,721,253 | $477,722,342 |

In addition to the above, payments received in advance of due dates totaled $198,027 for transportation and $32,344 for delivery structures.

NOTE H

CONTRACT COMMITMENTS

The Department of Water Resources has entered into contract commitments in connection with construction of the State Water Facilities, of which the uncompleted portion was approximately $259,000,000 as of December 31, 1965. In addition, the Department is committed to pay 55% of the San Luis Joint-Use Facilities which are under construction by the Federal Bureau of Reclamation. The State's share of these facilities is estimated at $169,000,000 of which $69,000,000 was uncompleted as of December 31, 1965.

# APPENDIX B

# DISTRIBUTION OF COSTS OF THE PROJECT TRANSPORTATION FACILITIES AMONG WATER SUPPLY CONTRACTORS

## Introduction

Article 29 of the "Standard Provisions for Water Supply Contract", in describing the annual statements of charges, provides in part that:

> ". . .All such statements shall be accompanied by the latest revised copies of the document amendatory to Article 22 and of Tables B, C, D, E, F, and G of this contract, together with such other data and computations used by the State in determining the amounts of the above charges as the State deems appropriate."

Compliance with this article requires a comprehensive annual review of the water supply aspects of the Project as the basis for the substantiating data. This annual reanalysis is provided for in Article 28 of the standard contract provisions with regard to the project transportation facilities and in Article 22(f) for the project conservation facilities.

This appendix constitutes such an analysis for the purpose of substantiating estimated water charges for 1967. It reflects the State Water Project described in the main text of this bulletin.

## Scope of Analysis

The analysis described herein pertains to the project transportation facilities and not to the project conservation facilities. It is contemplated that deliveries of project water, to which the Delta Water Charge applies, will commence in 1967. In accordance with Article 22(f) of the standard contract provisions, the unit Delta Water Charge is fixed at $3.50 per acre-foot through December 31, 1969. Therefore, a document amendatory to Article 22 is not required until July 1, 1969. Based upon the estimated costs of the project conservation facilities presented in the main text of this bulletin, and upon the computations summarized in Chapter XI thereof, it is indicated that the unit Delta Water Charge would be adjusted upwards to $6.39 per acre-foot, effective January 1, 1970. This rate would apply to all annual entitlements to project water for the remainder of the project repayment period, under current projections.

The analysis in this appendix reflects the allocations of the costs of multiple-purpose features of the project transportation facilities among project purposes developed as described

in the main text of this bulletin on the basis of Department of Water Resources' Bulletin No. 153-66, "Allocations of Costs Among Purposes of the California State Water Project", dated January 1966. These allocations involve the capital and minimum operation, maintenance, power and replacement components. In this appendix, only the costs of these two components allocated to the purpose of water supply are analyzed.

The main text does not allocate among project purposes costs included in the variable operation and maintenance category. Therefore, this appendix considers the total costs in this category for each reach. These costs are allocated among purposes based upon the annual amounts of water conveyed through each electro-mechanical plant and delivered for each respective project purpose, in accordance with the criteria set forth on page 34 of Bulletin No. 153-66.

The analysis herein does not cover the adjustments, for overpayments or underpayments by contractors, required by Article 28 of the standard contract provisions. These adjustments must be determined for each of the contractors individually. Consequently, they are set forth in separate attachments to the statements of charges for each contractor.

This appendix contains the following information concerning the project transportation facilities, reflecting conditions as of about April 1, 1966:

1. The estimated capacity and maximum annual conveyance capability of each aqueduct reach and the proportionate use thereof by each water supply contractor.

2. The annual conveyance through each aqueduct reach during the period annual entitlements are building up to their maxima and the proportionate share thereof for each water supply contractor.

3. The actual and estimated annual expenditures allocated to the project purpose of water supply for each aqueduct reach and for each category of cost.

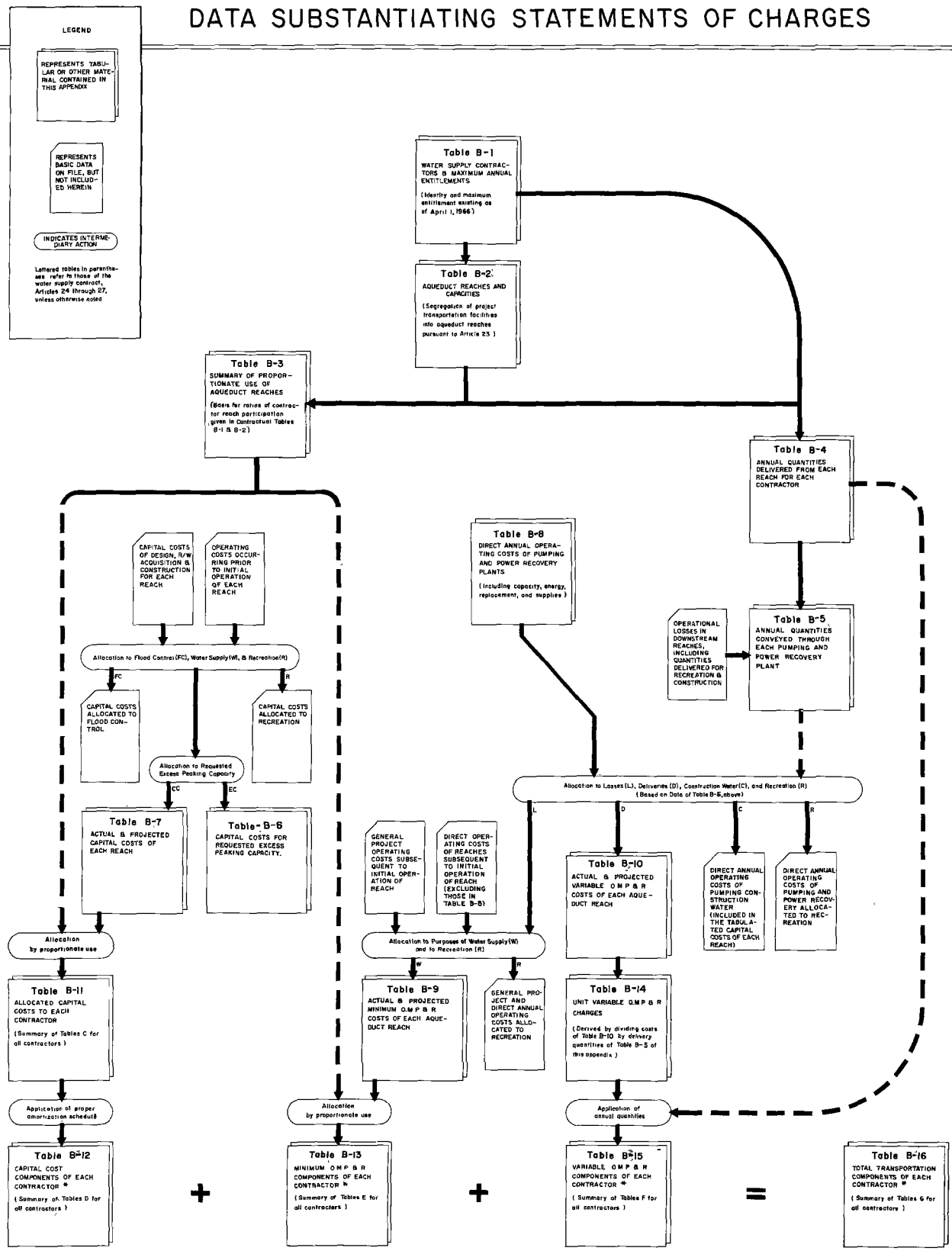
4. The proportionate share of such costs to be borne by each contractor.

5. The schedules of annual payments by each contractor over the entire project repayment period based on the above data, without regard to prior payments made.

The basic tabular material contained in this appendix, and the inter-relationships among the various data contained in the tables, are schematically portrayed in Figure B-1. All tables are included at the end of this appendix.

Figure B-1

# SCHEMATIC RELATIONSHIP OF DATA SUBSTANTIATING STATEMENTS OF CHARGES




*Unadjusted for prior payments, if any

## Basis for Maximum Use of Facilities

The major items considered in the determination of maximum use of the project transportation facilities by each water supply contractor include:

1. The maximum annual entitlements of each contractor.

2. The separation of the facilities into aqueduct reaches.

3. Operational considerations, including the use of aqueduct reaches for project purposes other than water supply, allowances to compensate for water losses and aqueduct outages incidental to operation, and the use of reservoir storage in conjunction with aqueduct capacity in meeting the delivery requirements provided in the water supply contracts.

4. The maximum annual entitlements diverted from or conveyed through each aqueduct reach for each contractor, together with (a) appropriate use of aqueduct and reservoir capacities to provide the specified delivery capabilities, and (b) an appropriate share of allowances for the operational considerations in (3) above.

## Maximum Annual Entitlements

A summary of the maximum annual entitlements for each water supply contractor, as of April 1, 1966, is shown on Table B-1. The corresponding annual entitlements for each contractor are discussed in Chapter VI, "Entitlements to Project Water". These maximum annual entitlements also include those under the contracts currently being negotiated with the Big Bear Municipal Water District (4,600 acre-feet) and Kings County (4,000 acre-feet), so as to aggregate the minimum project yield of 4,230,000 acre-feet.

## Aqueduct Reaches

The designation of aqueduct reaches for purposes of the analyses in this bulletin are presented in Table B-2 and are generally shown on Table B-3. The differences between these reaches and those shown in Articles 23 of some of the contracts,

reflect modifications required under subsequently executed contracts and changes in the locations of major delivery structures requested pursuant to Article 10(a) of the water supply contracts. Reach nomenclature has been revised in certain instances to describe reach termini more accurately and to reflect route modifications under continuing engineering studies.

Reach termini have been selected as those points at which the physical use of project transportation facilities significantly changes for any of the contractors. These points are generally at the locations of (1) aqueduct branch junctions, (2) aqueduct regulatory reservoirs, and (3) major delivery structures for contractors.

## Operational Considerations

Table B-2 also identifies the contractors to be served directly from each reach, together with the maximum annual entitlements and the maximum monthly delivery capabilities so provided for each contractor; summarizes the total capacity provided in the reach for all water supply contractors; indicates the additional capacity to be included in each reach for project purposes other than water supply and for practical design considerations; and, concludes with the total capacity to be included in each reach.

The additional capacity provided in each reach of the project transportation facilities, over-and-above that required for all water supply contractors, is made up of the following components:

1. Capacity required to convey water consumed in specific recreation and fish and wildlife enhancement developments located adjacent to the project transportation facilities. Recreation and fish and wildlife enhancement are the only project purposes, other than water supply, considered in this analysis. The following reach capacities have been provided for the conveyance of water for specific recreation and fish and wildlife enhancement developments adjacent to the California Aqueduct:

| | (cubic feet per second) |
|---|---|
| Delta to Tupman Road | 74 |
| Tupman Road to Junction, West Branch | 28 |
| Junction, West Branch to Pearblossom Pumping Plant | 21 |
| Pearblossom Pumping Plant to Cedar Springs reservoir | 15 |
| Cedar Springs reservoir to Perris reservoir | 8 |
| Junction, West Branch to Castaic reservoir | 7 |

2. Capacity included due to practial design considerations. The total capacities of California Aqueduct reaches south of Kettleman City have been increased generally above the theoretical required capacity to the nearest multiple of 50 cubic feet per second upstream from the junction of the West Branch, and of 20 cubic feet per second downstream from that point. This additional allowance recognizes the practical limitations in estimating accurately coefficients and efficiencies inherently involved in the design procedure.

The total reach capacities developed in Table B-2 for the California Aqueduct conform with those presented in the final edition of the Department's report entitled, "Design Capacities of the California Aqueduct-Kettleman City to: 1. Junction, East and West Branches, 2. Devil's Den Pumping Plant", dated April 1965; and in the preliminary edition of the Department's report entitled, "Design Capacities of the California Aqueduct-Junction, West Branch to: 1. Perris Reservoir. 2. Castaic Reservoir", dated December 1965.

The total capacities provided in each reach for water supply contractors include those contemplated for agencies with which the State has not executed contracts as of this date; include sufficient capacity to compensate for required operational losses, aqueduct outages, and downstream regulation; and also include capacity requested by certain contractors which would permit maximum monthly deliveries in excess of those provided under the standard contract provisions. The capacity so provided in each reach for each contractor is shown in detail in Table B-3. Each of these considerations is further described in the following sections.

Future Contractors. In addition to the Big Bear Municipal Water District and Kings County, which agencies are currently negotiating for a project water supply, three instances of excess capacity are included in this analysis for the purpose of making project water available, in the future, to agencies which currently do not have a contract with the State. These instances occur:

1. In the reaches of the South Bay Aqueduct, to and including Del Valle reservoir, where an agency could obtain a supply of 22,000 acre-feet annually, and in varying amounts in reaches downstream therefrom.

2. In the reaches of the California Aqueduct, from the Delta to the Tehachpi Pumping Plant, where capacity has been provided in final designs to make available 35,000 acre-feet annually to a possible nuclear powerplant.

3. In Cedar Springs reservoir, where about 7,100 acre-feet of the total usable capacity of the reservoir considered in this analysis, 177,000 acre-feet, would not be required for the regulation of annual entitlements considered herein.

The costs of the project transportation facilities associated with the above instances are determined under Article 24(b)(2) of the standard contract provisions.

Capacity Provided for Delivery of Entitlements. Under the general plan of project operation, annual entitlements destined for delivery in the respective project service areas will be conveyed through the aqueduct reaches within the San Joaquin Valley on the following bases:

1. For contractors within the San Joaquin Valley, on a varied monthly schedule corresponding to the monthly demand for project water.

2. For contractors within the South Bay, Central Coastal, and Southern California areas, on a uniform flow, regulated to the monthly demand in storage capacity located within the respective service areas.

Compensating Capacity for Operational Losses. The additional capacity provided in each aqueduct reach to compensate for water losses due to evaporation, leakage, seepage, or other causes also includes the additional capacity required to compensate for losses occurring in downstream reaches. The estimated magnitude of these operational losses are described in Chapter VII, "Project Water Yield".

Compensating Capacity for Scheduled Outages. The additional capacity for scheduled outages for purposes of necessary investigation, inspection, maintenance, repair, and replacement is provided only in those reaches wherein the project entitlements will be conveyed at uniform flow to contractors in the Central Coastal and Southern California areas, in the amount of seven and one-half percent ($7\frac{1}{2}\%$) of such uniform flow. Emergency storage in these two service areas could sustain the use of project water during outages and this storage could be replenished through the additional conveyance capacity provided. However, this type of additional capacity would not benefit contractors

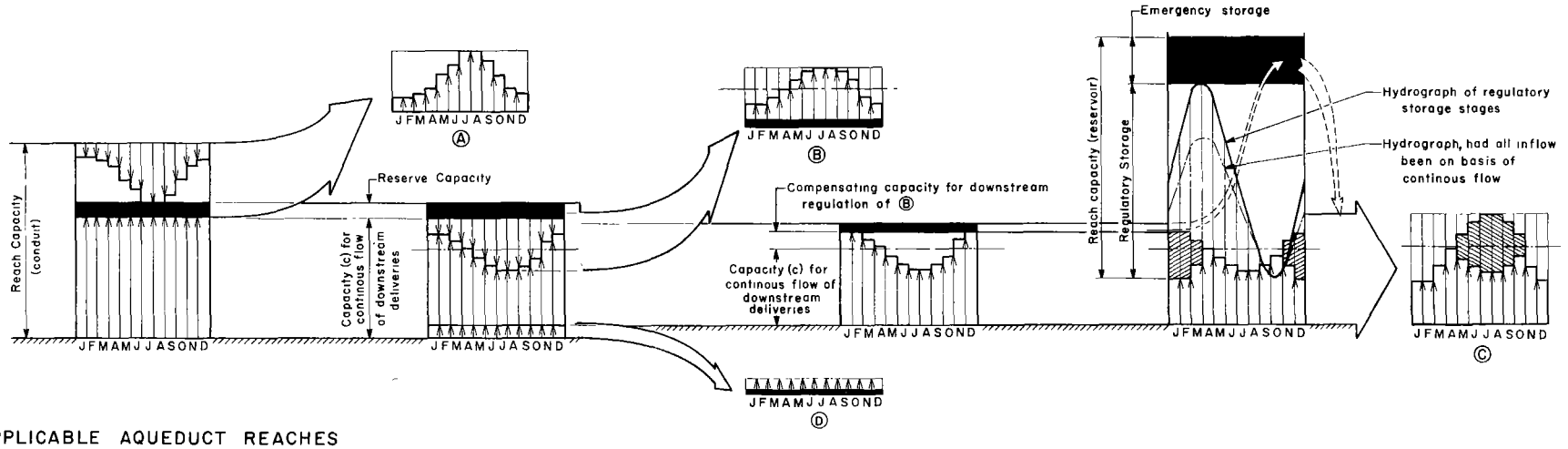
located in the South Bay area and in the San Joaquin Valley, since emergency storage capacity is not associated with the use of project water therein.

Compensating Capacity for Downstream Regulation. The situation exists in the South Bay and Southern California areas whereby a contractor's point of delivery from the aqueduct may be located upstream from regulation reservoirs. The varied monthly quantities desired by the contractor may be physically obtained from the uniform flow in the aqueduct, provided that the total flow is at least equal to the contractor's desired maximum rate of delivery. At such times, the contractor would be permitted to appropriate all, or a portion of, the uniform flow destined for downstream contractors, and the demands of downstream contractors would be simultaneously met by downstream reservoir releases. The appropriated flow would be returned during months of minimum delivery to the contractor, and would be conveyed to the downstream reservoir in additional capacity provided for this purpose.

Figure B-2 graphically illustrates the use of reservoir storage in conjunction with aqueduct capacity to provide maximum delivery rates, and the extent that additional capacity for scheduled outages (reserve capacity) is included in the project transportation facilities.

Capacity Provided for Requested Excess Peaking. Pursuant to Amendment No. 2 to its contract, The Metropolitan Water District of Southern California has requested excess capacity in the amount of 238 cubic feet per second in the reaches from Kettleman City to the junction of the West Branch and 809 cubic feet per second in the reaches of the West Branch, exclusive of reservoirs. It is assumed herein that the District will not make a future request which would extend the 238 cubic feet per second of excess capacity to the reaches of the project transportation facilities upstream from Kettleman City. The analysis contained in last year's bulletin was based upon the assumption that the District would eventually make such a request.

At the time this analysis was initiated, the requests by the Antelope Valley-East Kern Water Agency, for delivery capabilities to be provided in aqueduct reaches upstream from its delivery structures, would have resulted in 40 cubic feet per second of excess capacity for the Agency. Such capacity is herein assumed to be located in the first reach of the West Branch only. The Agency has since revised its request, which would reduce the amount of excess to five cubic feet per second.




## APPLICABLE AQUEDUCT REACHES

| | | | | |
|---|---|---|---|---|
| REACHES OF THE CALIFORNIA AQUEDUCT THROUGH THE SAN JOAQUIN VALLEY AND NORTH BAY AQUEDUCT. | INTER-BASIN REACHES, SUCH AS THOSE IMMEDIATELY BELOW THE TEHACHAPI, SOUTH BAY,* & DEVIL'S DEN PUMPING PLANTS. | SUBSEQUENT REACHES ABOVE AQUEDUCT REGULATION RESERVOIRS. | REGULATION RESERVOIRS, SUCH AS CEDAR SPRINGS, PYRAMID, CASTAIC, DEL VALLE, AND PERRIS. | SUBSEQUENT REACHES BELOW AQUEDUCT REGULATION RESERVOIRS. |

| TYPE OF DELIVERY | APPLICABLE CONTRACTORS |
|---|---|
| Ⓐ | ALL SAN JOAQUIN VALLEY & NORTH BAY AQUEDUCT CONTRACTORS |
| Ⓑ | ALAMEDA COUNTY F. C. & W. C. D. (a portion of) *<br>COACHELLA VALLEY COUNTY W. D.<br>DESERT WATER AGENCY |
| Ⓒ | ALAMEDA COUNTY W. D *<br>ALAMEDA COUNTY F. C & W. C. D. (a portion of)*<br>CRESTLINE-LAKE ARROWHEAD W. A.<br>SAN BERNARDINO VALLEY M. W. D.<br>SAN GABRIEL VALLEY M. W D.<br>SAN GORGONIO PASS W. A.<br>SANTA CLARA COUNTY F C & W. C. D *<br>THE METROPOLITAN W. D OF S. C.<br>UPPER SANTA CLARA VALLEY W. A.<br>VENTURA COUNTY F. C. D. |
| Ⓓ | ANTELOPE VALLEY, EAST KERN W. A<br>LITTLEROCK CREEK I. D.<br>MOJAVE WATER AGENCY<br>PALMDALE I. D.<br>SAN LUIS OBISPO COUNTY F C. & W. C. D.<br>SANTA BARBARA COUNTY F. C. & W. C D. |

### WATER QUANTITY LEGEND

- MAXIMUM ANNUAL ENTITLEMENT SHOWN BY APPROXIMATE MONTHLY DISTRIBUTION AS REACH CONVEYANCE OR AS TURNOUT DELIVERY.
- DELIVERY CAPABILITY OF RESERVE CAPACITY, TO REPLENISH EMERGENCY STORAGE IN THE AQUEDUCT, OR IN THE CONTRACTOR'S DISTRIBUTION SYSTEM
- WATER QUANTITIES ENTERING REGULATORY STORAGE
- WATER QUANTITIES RELEASED FROM REGULATORY STORAGE

Note Water quantities lost due to evaporation and seepage, and additional capacity to compensate for such losses, are not presented. However, their characteristics would correspond with delivery types Ⓐ, Ⓑ, and Ⓒ for the appropriate reaches

* With the exception that emergency storage is not considered for the reaches of the South Bay Aqueduct.

# SCHEMATIC DIAGRAM

## OPERATIONAL CONSIDERATIONS ASSOCIATED WITH PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES

FIGURE B-2

Maximum Use of Aqueduct Reaches by Contractors

The data and computations determining the proportionate use by each water supply contractor under full project development of each aqueduct reach are summarized in Table B-3.

The proportionate use of certain aqueduct reaches for distributing capital costs among contractors are different from those for distributing minimum operation, maintenance, power, and replacement costs. These dual allocation criteria pertain to those reaches in which requested excess capacity will be included.

Pursuant to Article 24(d) of the standard contract provisions, the capital costs borne by a contractor for requested excess capacity will be the additional capital costs of the aqueduct reaches caused by including such capacity, commonly referred to as the "incremental costs". Therefore, such capacities are excluded from capacities used to determine the proportionate use of the various reaches by the contractors. In other words, the inclusion of excess capacity does not affect the allocation of capital costs among water supply contractors other than those agencies requesting excess capacity.

Amendment No. 2 of the Metropolitan Water District's contract provides that all of the minimum operation, maintenance, power, and replacement costs of aqueduct reaches containing requested excess capacity shall be allocated among contractors by the proportionate use of facilities method specified in Article 25 of the contracts, based upon total reach capacities, including such excess capacity, and upon the maximum annual entitlements conveyed thereby.

The maximum use of aqueduct reaches for distributing capital costs among contractors is shown in Column 8 of Table B-3, and for distributing minimum operation, maintenance, power, and replacement costs, in Column 12; the latter being increased by the amount of requested excess capacity included in each respective reach.

Water losses incidental to aqueduct operation occurring within each reach (Column 5) have been prorated among users of the reach. This has been done, both with regard to the maximum annual quantity of the loss and to the reach capacity required to compensate for the loss, in proportion to the quantities diverted from or flowing out of the reach for each contractor. Therefore, the computations to account for losses were initiated at the farthest downstream reach in the aqueduct system and were

performed progressively upstream. This was done in order that the true gross requirements of each contractor, for maximum water quantities and maximum aqueduct capacities, might be reflected in the proportionate use factors for each reach of the project transportaion facilities constructed to serve that contractor.

Reserve capacity to compensate for scheduled aqueduct outages (Column 6), and the maximum annual quantity to be conveyed through such capacity, are likewise associated with the specific requirements for each water supply contractor and are reflected in the contractor's gross requirements in upstream reaches.

## Basis for Variable Annual Use of Facilities

The annual water quantities conveyed through each electro-mechanical plant of the project transportation facilities form the basis for cost allocations involving the annual use of facilities, including:

1. The allocations of the annual operating costs of electro-mechanical plants (exclusive of salaries of operation and maintenance personnel) between those associated with the conveyance of operational losses (included in the minimum operation and maintenance category) and those associated with the conveyance of water delivered (included in the variable operation and maintenance category).

2. The allocation of operating costs included in the variable category among project purposes.

3. The distribution of the variable operating costs allocated to water supply among water supply contractors and, in certain instances, to the capital costs of facilities.

The annual water quantities estimated to be conveyed through the project transportation facilities include actual deliveries to, and future entitlements for, water supply contractors; deliveries to specific recreation and enhancement developments adjacent to the facilities; water losses incidental to the operation of facilities; and water utilized for construction purposes. These items are discussed in Chapter VII, "Project Yield".

## Annual Reach Deliveries for Each Water Supply Contractor

The annual deliveries at each major delivery structure are used to estimate charges under the variable operation, maintenance, power and replacement components for future years of the project repayment period. These estimated charges are set forth in Tables F of the water supply contracts in compliance with Article 26(c) of the contracts. Long-term requests by the contractors for the annual quantities to be delivered through each turnout are not specifically required by the standard provisions. It has therefore been necessary for the Department to assume the annual quantities to be desired at each location for those contractors served by more than one such structure. Table B-4 presents these assumed annual deliveries for each contractor from each aqueduct reach.

Table B-5 presents a summary of the annual quantities conveyed through each pumping or power recovery plant of the project transportation facilities. The values shown are divided into the following four categories with respect to usage in downstream reaches:

1. Water utilized for construction purposes, including the initial filling of reservoir storage.

2. Water delivered to water supply contractors.

3. Water delivered to recreation and fish and wildlife enhancement developments.

4. Water losses incidental to the operation of downstream facilities.

The deliveries to water supply contractors conveyed through each plant represent the cumulative values of Table B-4 proceeding upstream from the end of each aqueduct or branch of an aqueduct.

## Reach Costs by Category

Chapter X, "Project Costs", develops the actual and projected costs of the project transportation facilities allocated to water supply, which are included in State Utility Programs. Tables 17 and 18 summarize these annual capital and operating costs, respectively. This section describes the distribution of these costs among aqueduct reaches and the further subdivision of annual operating costs into the minimum and variable categories.

## Capital Costs

The capital costs of the project transportation facilities which are reimbursable by water supply contractors are of two types: (1) those associated with requested excess capacity and borne by the contractors requesting such capacity; and, (2) those proportionately distributed among all water supply contractors.

The estimated annual amounts of capital costs allocated to excess capacity, together with the gross annual amounts of advances required, are developed in Table B-6 for each aqueduct reach between Kettleman City and Castaic reservoir.

The remaining annual capital costs which are proportionately borne by all water supply contractors are shown for each aqueduct reach in Table B-7.

## Annual Operation and Maintenance Costs

The annual operation and maintenance costs of project transportation facilities are divided into two categories:

1. Minimum Costs, including those items which are incurred irrespective of the actual amount of water delivered during a particular year.

2. Variable Costs, including those items which vary with, or are dependent upon, annual water deliveries.

The annual operating costs of pumping and power recovery plants constitute the major portion of the annual operation and maintenance costs of the project transportation facilities and warrant special discussion. Furthermore, these particular costs are allocated annually between the minimum and variable categories. Estimated direct operating costs associated with pumping and power recovery plants, exclusive of salaries of operating and maintenance personnel, are presented in Table B-8. These costs are allocated between the minimum and variable categories in proportion to annual amounts conveyed through each plant for downstream losses or deliveries, respectively, as shown by the data in Table B-5.

The costs included in the minimum operation and maintenance category, which are allocated to water supply, are summarized in Table B-9 for each reach of the project transportation facilities. In addition to the operating costs associated with the conveyance of losses, these costs include:

1. Salaries of operation and maintenance personnel associated with pumping and power recovery plants.

2. Direct annual operation and maintenance costs of the remaining features of reaches of the project transportation facilities.

3. General project operation and maintenance costs, allocated among reaches in proportion to the annual values of (1) and (2) above under conditions of full project utilization.

The allocation percentages applicable to the project purpose of water supply, developed in Bulletin No. 153-66, have been applied to the totals of the above-itemized costs in determining the values of Table B-9.

The total operation and maintenance costs included in the variable category for all project purposes are shown by aqueduct reach in Table B-10.

## Costs Allocated to Water Supply Contractors

The accumulation by category, of the annual reach costs allocated to each contractor forms the basis for the annual components of the Transportation Charge for the respective contractors.

### Allocated Capital Costs

Table B-11 summarizes for each water supply contracting agency its total annual share of reach capital costs, as presented in Table B-7, which is allocated by the average proportionate use of facilities ratios for each reach, as presented in Table B-3.

### Capital Cost Components

Table B-12 presents the repayment schedule for each water supply contractor corresponding to the allocated capital costs of Table B-11.

Criteria as to the types of repayment schedules used for each water supply contractor, under the payment provisions of its contract, are summarized in the following tabulation:

| Water supply contractor | Schedule type no. | Water supply contractor | Schedule type no. |
|---|---|---|---|
| Alameda County Flood Control and Water Conservation District, Zone 7 | 2 | Mojave Water Agency | 4 |
| Alameda County Water District | 1 | Napa County Flood Control and Water Conservation District | 7 |
| Antelope Valley-East Kern Water Agency | 1 | Oak Flat Water District | 10 |
| Big Bear Municipal Water District (assumed) | 8 | Palmdale Irrigation District | 4 |
| County of Butte | 11 | Plumas County Flood Control and Water Conservation District | 11 |
| City of Yuba City | 11 | San Bernardino Valley Municipal Water District | 1 |
| Coachella Valley County Water District | 4 | San Gabriel Valley Municipal Water District | 3 |
| Crestline-Lake Arrowhead Water Agency | 4 | San Gorgonio Pass Water Agency | 3 |
| Desert Water Agency | 3 | San Luis Obispo County Flood Control and Water Conservation District | 5 |
| Devil's Den Water District | 10 | Santa Barbara County Flood Control and Water Conservation District | 5 |
| Dudley Ridge Water District | 10 | Santa Clara County Flood Control and Water District | 1 |
| Empire West Side Irrigation District | 10 | Solano County Flood Control and Water Conservation District | 9 |
| Hacienda Water District | 10 | Tulare Lake Basin Water Storage District | 10 |
| Kern County Water Agency: | | Upper Santa Clara Valley Water Agency | 4 |
| Agricultural Use | 10 | Ventura County Flood Control District | 4 |
| Municipal Use | 6 | | |
| Kings County (assumed) | 8 | | |
| Littlerock Creek Irrigation District | 4 | | |
| The Metropolitan Water District of Southern California | 1 | | |

| Type no. | Description |
|---|---|
| 1. | Repayment of allocated capital costs in 50 equal annual installments, with initial payment due in calendar year 1963. |
| 2. | Repayment of allocated capital costs in 50 equal annual installments, with initial payment due in calendar year 1963 and with principal payments on each annual capital cost prior to 1971 delayed until calendar year 1972, except payments for 1963. |
| 3. | Repayment of allocated capital costs in 50 equal annual installments, with initial payment due in calendar year 1963 but deferred and added to the 1964 payment with accrued interest. |
| 4. | Repayment of allocated capital costs in 50 equal annual installments, with initial payment due in calendar year 1964. |
| 5. | Repayment of allocated capital costs in 50 equal annual installments, with initial payment due in calendar year 1964, except that all principal and interest payments for costs of the "Coastal Stub" are assumed deferred until 1976. |
| 6. | Repayment of allocated capital costs in 50 equal annual installments, with initial payment due in calendar year 1965. |
| 7. | Repayment of allocated capital costs in 50 equal annual installments, with initial payment due in calendar year 1966. |
| 8. | Repayment of allocated capital costs in 50 equal annual installments, with initial payment due in calendar year 1967. |
| 9. | Repayment of allocated capital costs in 50 equal annual installments, with initial payment due in calendar year 1969. |
| 10. | Repayment of allocated capital costs on the basis of an equivalent unit rate applied to annual entitlements within the project repayment period. |
| 11. | Payments on the Delta Water Charge only. (Plumas County Flood Control and Water Conservation District may eventually be assessed a Transportation Charge.) |

The project interest rate derived in Chapter XI, "Project Revenues", is 3.573 percent per annum. The annual payments in Table B-12 reflect the application of this rate throughout the project repayment period.

## Minimum Operation, Maintenance, Power and Replacement Components

Table B-13 summarizes, for each water supply contractor, its annual share of total minimum operation and maintenance costs. These values are derived from data presented in Table B-9 by application of the average proportionate use of facilities ratios for each reach presented in Table B-3.

## Variable Operation, Maintenance, Power and Replacement Components

Article 26(a) of the standard contract provisions indicates the manner in which the variable operation and maintenance component is to be computed for each contractor. This is as follows:

1. An annual unit charge per acre-foot of deliveries from or through each reach is determined. This is to recover the estimated variable operation, maintenance, power and replacement costs for each year applicable to each reach.

2. The total charge to any contractor for a given reach is obtained by multiplying the unit charge associated with that reach by the quantity of water delivered from or through the reach to the contractor.

The annual unit charges referred to in (1) above are presented in Table B-14. Data in that table have been computed by dividing the annual reach costs in the variable category, shown in Table B-10, by the total annual quantities delivered from or through the reach as shown in Table B-5. The unit variable charges presented in Table B-14 have been accumulated, from the Delta through the particular pumping and power recovery plant listed in the headings of the table, to facilitate their usage.

The annual total component of each water supply contractor is obtained by multiplying the appropriate reach deliveries of Table B-4 by the unit charges of Table B-14. The resulting variable operating components are summarized in Table B-15.

## Total Annual Transportation Charges

Table B-16 presents the estimated total annual Transportation Charges for the entire project repayment period for each water supply contractor. Table B-16 constitutes the sum of the computed values shown in Tables B-12, B-13, and B-15. These total charges are as calculated on the date of this bulletin. They do not include adjustments for overpayments or underpayments by water supply contractors who have made, or are under obligation to make, payments through the current calendar year. As indicated in the introduction to this appendix, these adjustments will be set forth in separate attachments to the individual statements of charges for each contractor.

# TABLES TO APPENDIX B

## B-1 thru B-16

TABLE B-1

MAXIMUM ANNUAL ENTITLEMENTS

| Project Service Area and Water Supply Contractor | Maximum Annual Entitlement, in Acre-feet |
|---|---|
| FEATHER RIVER AREA | |
| City of Yuba City (CYC) | 9,600 |
| County of Butte (CB) | 27,500 |
| Plumas County Flood Control and Water Conservation District (PCFC&WCD) | 2,700 |
| Total | 39,800 |
| NORTH BAY AREA | |
| Napa County Flood Control and Water Conservation District (NCFC&WCD) | 25,000 |
| Solano County Flood Control and Water Conservation District (SCFC&WCD) | 42,000 |
| Total | 67,000 |
| SOUTH BAY AREA | |
| Alameda County Flood Control and Water Conservation District, Zone 7 (ACFC&WCD) | 46,000 |
| Alameda County Water District (ACWD) | 42,000 |
| Santa Clara County Flood Control and Water District (SCCFC&WD) | 100,000 |
| Total | 188,000 |
| SAN JOAQUIN VALLEY AREA | |
| Devil's Den Water District (DDWD) | 12,700 |
| Dudley Ridge Water District (DRWD) | 57,700 |
| Empire West Side Irrigation District (EWSID) | 3,000 |
| Hacienda Water District (HWD) | 8,500 |
| Kern County Water Agency (KCWA) | 1,153,400 |
| Kings County* (KC) | 4,000 |
| Oak Flat Water District (OFWD) | 5,700 |
| Tulare Lake Basin Water Storage District (TLBWSD) | 110,000 |
| Total | 1,355,000 |
| CENTRAL COASTAL AREA | |
| San Luis Obispo County Flood Control and Water Conservation District (SLOCFC&WCD) | 25,000 |
| Santa Barbara County Flood Control and Water Conservation District (SBCFC&WCD) | 57,700 |
| Total | 82,700 |
| SOUTHERN CALIFORNIA AREA | |
| Antelope Valley-East Kern Water Agency (AVEKWA) | 138,400 |
| Big Bear Municipal Water District* (BBMWD) | 4,600 |
| Coachella Valley County Water District (CVCWD) | 23,100 |
| Crestline-Lake Arrowhead Water Agency (CLAWA) | 5,800 |
| Desert Water Agency (DWA) | 38,100 |
| Littlerock Creek Irigation District (LCID) | 2,300 |
| Mojave Water Agency (MWA) | 50,800 |
| Palmdale Irrigation District (PID) | 17,300 |
| San Bernardino Valley Municipal Water District (SBVMWD) | 98,000 |
| San Gabriel Valley Municipal Water District (SGVMWD) | 28,800 |
| San Gorgonio Pass Water Agency (SGPWA) | 17,300 |
| The Metropolitan Water District of Southern California (MWD-SC) | 2,011,500 |
| Upper Santa Clara Valley Water Agency (USCVWA) | 41,500 |
| Ventura County Flood Control District (VCFCD) | 20,000 |
| Total | 2,497,500 |
| GRAND TOTAL | 4,230,000 |

* Water supply contracts were being negotiated with these agencies for the indicated maximum annual entitlements as of April 1, 1966.

TABLE B-2

PROJECT TRANSPORTATION FACILITIES,
REACH DELIVERY CAPABILITIES AND CAPACITIES

(in cubic feet per second, unless otherwise noted)



| REACH NUMBER | REACH DESCRIPTION | WATER SUPPLY CONTRACTORS SERVED FROM REACH | MAXIMUM DELIVERIES FROM REACH | | TOTAL CAPACITY PROVIDED FOR WATER SUPPLY CONTRACTORS 1/ | ADDITIONAL CAPACITY 2/ | TOTAL REACH CAPACITY |
|---|---|---|---|---|---|---|---|
| | | | ANNUAL ENTITLEMENTS, IN ACRE-FEET | MONTHLY, IN PERCENT OF ANNUAL | | | |
| | NORTH BAY AQUEDUCT | | | | | | |
| 1 | Lindsey Slough to Suisun City | - | - | - | 117 | 0 | 117 |
| 2 | Suisun City to Cordelia Pumping Plant | Solano County Flood Control and Water Conservation District | 37,800 | 11 | 115 | 0 | 115 |
| 3 | Cordelia Pumping Plant to Napa turnout reservoir | Napa County Flood Control and Water Conservation District | 25,000 | 11 | 46 | 0 | 46 |
| | SOUTH BAY AQUEDUCT | | | | | | |
| 1 | Bethany reservoir to Altamont Turnout | - | - | - | 300 | 0 | 300 |
| 2 | Altamont Turnout thru Patterson Reservoir | Alameda County Flood Control and Water Conservation District, Zone 7 | 17,000 | 11 | 300 | 0 | 300 |
| 4 | Patterson Reservoir to Del Valle Junction | - | - | - | 300 | 0 | 300 |
| 5 | Del Valle Junction thru Del Valle reservoir | Future Contractor - South Bay | 12,000 4/ | 11 | 30,000 AF | 0 | 30,000 AF |
| 6 | Del Valle Junction to South Livermore Turnout | Alameda County Flood Control and Water Conservation District, Zone 7 | 29,000 | 11 | 332 | 31 | 363 |
| 7 | South Livermore Turnout to Vallecitos Turnout | Alameda County Water District | 37,000 | 3/ | 279 | 26 | 305 |
| 8 | Vallecitos Turnout to Alameda-Bayside Turnout | Alameda County Water District<br>Future Contractor - South Bay | 5,000<br>25,000 4/ | 3/<br>11 | 246 | 9 | 255 |
| 9 | Alameda-Bayside Turnout to Santa Clara terminal facilities | Santa Clara County Flood Control and Water District | 100,000 | 11 | 184 | 0 | 184 |
| | CALIFORNIA AQUEDUCT | | | | | | |
| 1 | Delta thru Bethany reservoir | - | - | - | 8,387 | 74 | 10,300 5/ |
| 2 | Bethany reservoir to San Luis Forebay | Oak Flat Water District | 5,700 | 18 | 8,086 | 74 | 10,000 5/ |
| 3 | San Luis Forebay to Dos Amigos Pumping Plant | - | - | - | 8,019 | 74 | 8,093 6/ |
| 4 | Dos Amigos Pumping Plant to Panoche Creek | - | - | - | 8,007 | 74 | 8,081 6/ |
| 5 | Panoche Creek to Five Points | - | - | - | 7,992 | 74 | 8,066 6/ |
| 6 | Five Points to Arroyo Pasajero | - | - | - | 7,967 | 74 | 8,041 6/ |

Footnotes shown on Sheet 4.

TABLE B-2 (Continued)

PROJECT TRANSPORTATION FACILITIES,
REACH DELIVERY CAPABILITIES AND CAPACITIES

(in cubic feet per second, unless otherwise noted)



| REACH NUMBER | REACH DESCRIPTION | WATER SUPPLY CONTRACTORS SERVED FROM REACH | MAXIMUM DELIVERIES FROM REACH | | TOTAL CAPACITY PROVIDED FOR WATER SUPPLY CONTRACTORS 1/ | ADDITIONAL CAPACITY 2/ | TOTAL REACH CAPACITY |
|---|---|---|---|---|---|---|---|
| | | | ANNUAL ENTITLEMENTS, IN ACRE-FEET | MONTHLY, IN PERCENT OF ANNUAL | | | |
| | CALIFORNIA AQUEDUCT (Continued) | | | | | | |
| 7 | Arroyo Pasajero to Kettleman City | Empire West Side Irrigation District<br>Kings County<br>Tulare Lake Basin Water Storage District | 3,000<br>4,000<br>61,050 | 18<br>11<br>18 | 7,957 | 74 | 8,031 6/ |
| 8 | Kettleman City to Avenal Gap | Dudley Ridge Water District<br>Hacienda Water District<br>Tulare Lake Basin Water Storage District | 57,700<br>8,500<br>48,950 | 18<br>18<br>18 | 7,983 | 117 | 8,100 7/ |
| 9 | Avenal Gap to Twisselman Road | Kern County Water Agency - Agriculture | 47,300 | 18 | 7,193 | 107 | 7,300 7/ |
| 10A | Twisselman Road to near Lost Hills | Kern County Water Agency - Agriculture | 265,700 | 18 | 7,041 | 109 | 7,150 7/ |
| 11B | Near Lost Hills to Seventh Standard Road | Kern County Water Agency - Agriculture | 126,400 | 18 | 6,238 | 112 | 6,350 7/ |
| 12D | Seventh Standard Road to Elk Hills Road | Kern County Water Agency - Agriculture | 3,600 | 18 | 5,855 | 95 | 5,950 7/ |
| 12E | Elk Hills Road to Tupman Road | Kern County Water Agency - Agriculture<br>Kern County Water Agency - M. & I. | 213,200<br>94,500 | 18<br>11 | 5,834 | 116 | 5,950 7/ |
| 13B | Tupman Road to Buena Vista Pumping Plant | Kern County Water Agency - Agriculture<br>Kern County Water Agency - M. & I. | 34,700<br>25,000 | 18<br>11 | 5,020 | 80 | 5,100 7/ |
| 14A | Buena Vista Pumping Plant to Santiago Creek | - | - | - | 4,861 | 39 | 4,900 7/ |
| 14B | Santiago Creek to Old River Road | Kern County Water Agency - Agriculture | 60,700 | 18 | 4,853 | 47 | 4,900 7/ |
| 14C | Old River Road to Wheeler Ridge Pumping Plant | Kern County Water Agency - Agriculture | 32,500 | 18 | 4,666 | 34 | 4,700 7/ |
| 15 | Wheeler Ridge Pumping Plant to Wind Gap Pumping Plant | Kern County Water Agency - Agriculture | 70,000 | 18 | 4,564 | 36 | 4,600 7/ |
| 16 | Wind Gap Pumping Plant to Tehachapi Pumping Plant | Future Contractor - Nuclear<br>Kern County Water Agency - Agriculture<br>Kern County Water Agency - M. & I. | 35,000<br>67,400<br>17,500 | 8-1/3<br>18<br>11 | 4,354 | 46 | 4,400 7/ |
| 17C | Tehachapi Pumping Plant to South Portal Tehachapi tunnel No. 3 | Kern County Water Agency - M. & I. | 5,000 | 11 | 4,064 | 36 | 4,100 7/ |
| 17D | South Portal Tehachapi tunnel No. 3 to Junction, West Branch, California Aqueduct | - | - | - | 4,055 | 45 | 4,100 7/ |

Footnotes shown on Sheet 4.

TABLE B-2 (Continued)

PROJECT TRANSPORTATION FACILITIES,
REACH DELIVERY CAPABILITIES AND CAPACITIES

(in cubic feet per second, unless otherwise noted)



| REACH NUMBER | REACH DESCRIPTION | WATER SUPPLY CONTRACTORS SERVED FROM REACH | MAXIMUM DELIVERIES FROM REACH | | TOTAL CAPACITY PROVIDED FOR WATER SUPPLY CONTRACTORS 1/ | ADDITIONAL CAPACITY 2/ | TOTAL REACH CAPACITY |
|---|---|---|---|---|---|---|---|
| | | | ANNUAL ENTITLEMENTS, IN ACRE-FEET | MONTHLY, IN PERCENT OF ANNUAL | | | |
| | EAST BRANCH | | | | | | |
| 18A | Junction, West Branch, California Aqueduct thru Cottonwood Powerplant | - | - | - | 1,524 | 36 | 1,560 3/ |
| 19 | Cottonwood Powerplant to Fairmont | Antelope Valley-East Kern Water Agency | 138,400 | 8-1/3 | 1,522 | 38 | 1,560 3/ |
| 20 | Fairmont to Palmdale | Palmdale Irrigation District | 17,300 | 8-1/3 | 1,311 | 29 | 1,340 3/ |
| 21 | Palmdale to Littlerock Creek | Littlerock Creek Irrigation District | 2,300 | 8-1/3 | 1,274 | 26 | 1,300 3/ |
| 22A | Littlerock Creek to Pearblossom Pumping Plant | - | - | - | 1,267 | 33 | 1,300 3/ |
| 22B | Pearblossom Pumping Plant to West Fork Mojave River | Coachella Valley County Water District<br>Desert Water Agency<br>Mojave Water Agency | 23,100<br>38,100<br>50,800 | 11<br>11<br>8-1/3 | 1,266 | 34 | 1,300 3/ |
| 23 | West Fork Mojave River to Cedar Springs reservoir | - | - | - | 1,174 | 26 | 1,200 3/ |
| 24 | Cedar Springs Dam and reservoir | Crestline-Lake Arrowhead Water Agency | 5,800 | 11 | 177,000 AF | - | 177,000 AF |
| 25 | Cedar Springs reservoir to South Portal San Bernardino tunnel | San Gorgonio Pass Water Agency | 17,300 | 11 | 1,202 | 18 | 1,220 3/ |
| 26 | South Portal San Bernardino tunnel thru Upper Devil Canyon Powerplant | - | - | - | 1,170 | 10 | 1,180 3/ |
| 27 | Upper Devil Canyon Powerplant thru Lower Devil Canyon Powerplant | The Metropolitan Water District of Southern California<br>San Gabriel Valley Municipal Water District | 284,000<br>28,800 | 11<br>10 | 1,170 | 10 | 1,180 3/ |
| 28A | Lower Devil Canyon Powerplant to Mill Street | Big Bear Municipal Water District<br>San Bernardino Valley Municipal Water District | 4,600<br>98,000 | 8-1/3<br>11 | 605 | 15 | 620 3/ |
| 28B | Mill Street to Perris reservoir | - | - | - | 419 | 21 | 440 3/ |
| 28C | Perris Dam and reservoir | The Metropolitan Water District of Southern California | 272,500 | 11 | 99,000 AF | - | 99,000 AF |
| | WEST BRANCH | | | | | | |
| 29A | Junction West Branch, California Aqueduct thru Oso Pumping Plant | - | - | - | 3,142 | 18 | 3,160 3/ |
| 29B | Oso Pumping Plant to State Route 138 | - | - | - | 3,101 | 19 | 3,120 3/ |
| 29C | State Route 138 thru Pyramid Powerplant | - | - | - | 3,097 | 23 | 3,120 3/ |
| 29D | Pyramid Dam and reservoir | - | - | - | 130,100 AF | - | 130,100 AF |
| 29F | Pyramid reservoir thru Castaic Powerplant | - | - | - | 3,085 | 15 | 3,100 3/ |
| 30 | Castaic Dam and reservoir | The Metropolitan Water District of Southern California<br>Upper Santa Clara Valley Water Agency<br>Ventura County Flood Control District | 1,455,000<br>41,500<br>20,000 | 11<br>11<br>11 | 334,000 AF | - | 334,000 AF |

Footnotes shown on Sheet 4.

TABLE B-2 (Continued)

PROJECT TRANSPORTATION FACILITIES,
REACH DELIVERY CAPABILITIES AND CAPACITIES

(in cubic feet per second, unless otherwise noted)



| REACH NUMBER | REACH DESCRIPTION | WATER SUPPLY CONTRACTORS SERVED FROM REACH | MAXIMUM DELIVERIES FROM REACH | | TOTAL CAPACITY PROVIDED FOR WATER SUPPLY CONTRACTORS 1/ | ADDITIONAL CAPACITY 2/ | TOTAL REACH CAPACITY |
|---|---|---|---|---|---|---|---|
| | | | ANNUAL ENTITLEMENTS, IN ACRE-FEET | MONTHLY, IN PERCENT OF ANNUAL | | | |
| | COASTAL BRANCH | | | | | | |
| 31A | Avenal Gap to Devil's Den Pumping Plant | Devil's Den Water District<br>Kern County Water Agency - Agriculture | 12,700<br>89,900 | 18<br>18 | 435 | 15 | 450 7/ |
| 33A | Devil's Den Pumping Plant thru San Luis Obispo Powerplant | San Luis Obispo County Flood Control and Water Conservation District | 10,000 | 8-1/3 | 126 | 0 | 126 |
| 34 | San Luis Obispo Powerplant to Arroyo Grande | San Luis Obispo County Flood Control and Water Conservation District | 5,000 | 8-1/3 | 110 | 0 | 110 |
| 35 | Arroyo Grande to Santa Maria terminus | San Luis Obispo County Flood Control and Water Conservation District<br>Santa Barbara County Flood Control and Water Conservation District | 10,000<br>57,700 | 8-1/3<br>8-1/3 | 102 | 0 | 102 |

1/ For detailed break-down of capacities provided for water supply contractors, see Table B-3.

2/ Additional capacity includes that provided for practical design considerations and for project purposes other than water supply.

3/ Maximum monthly delivery in percent of annual entitlement is 11% with 16 cfs (5,000 AF) delivered in Reach No. 8 and the balance in Reach No. 7.

4/ Maximum annual entitlement of a future contractor is considered for allocation purposes to be 25,000AF in Reach No. 8; 10,000 AF in Reach Nos. 6 and 7; and 22,000 AF in Reach Nos. 1, 2, 4, and 5 of the South Bay Aqueduct.

5/ Total reach capacities for both project conservation facilities and project transportation facilities. Required capacities for project transportation facilities are 8,461 cubic feet per second in Reach No. 1 and 8,160 cubic feet per second in Reach No. 2.

6/ Total reach capacities required for the State Water Project; not the State's share of design capacities of reaches currently under construction.

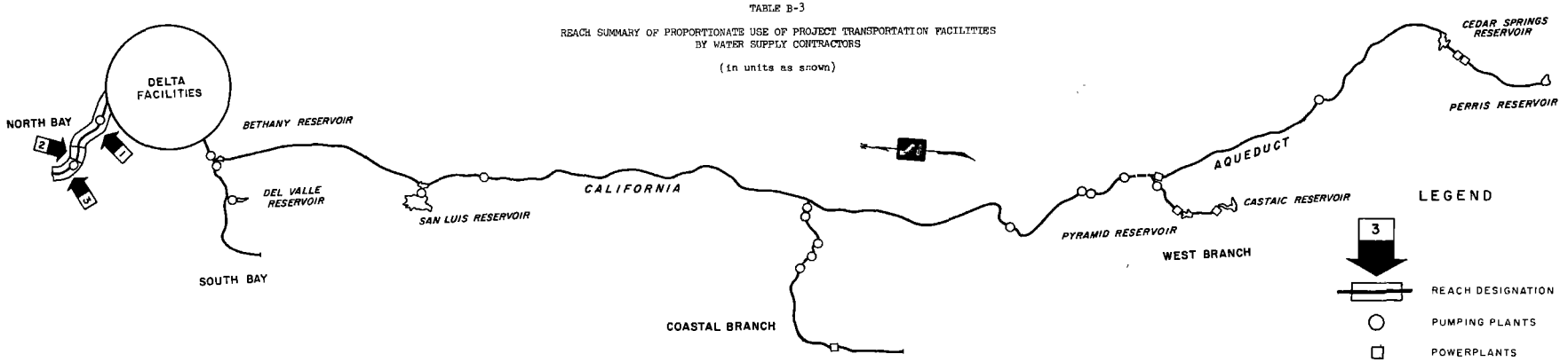
7/ Capacities established by the report "Design Capacities of the California Aqueduct, Kettleman City to: (1) Junction, East and West Branch; (2) Devil's Den Pumping Plant", dated April 1965.

8/ Capacities established by the report "Design Capacities of the California Aqueduct, Junction, West Branch to: (1) Perris reservoir; (2) Castaic reservoir", Preliminary Edition, Dated December 1965

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(in units as shown)

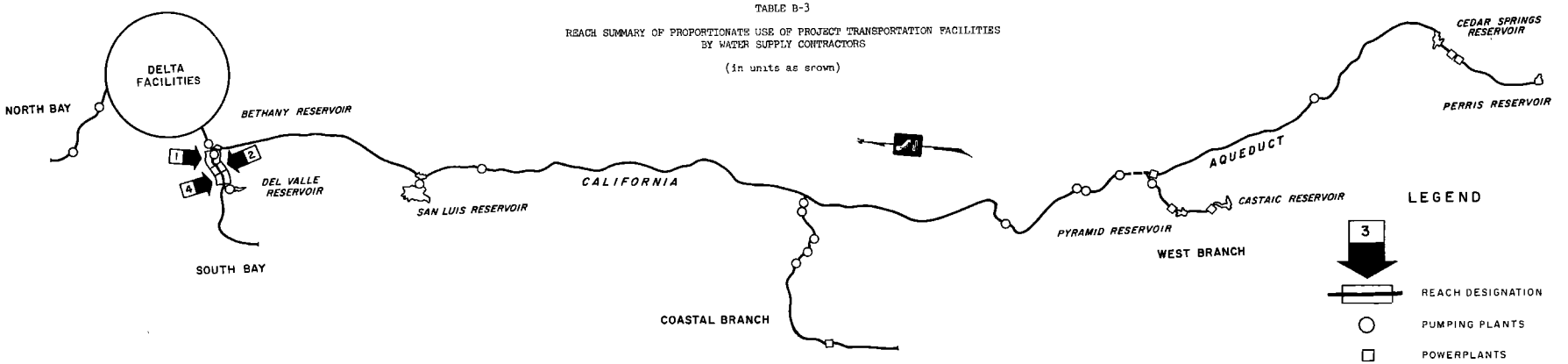



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 1 - LINDSEY SLOUGH TO SUISUN CITY | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| NAPA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | QUANTITY, AF | 0.0 | 398.1 | 25000.0 | 557.3 | 0.0 | | 25557.3 | .39808879 | | | 25557.3 | .39808879 | |
| | CAPACITY, CFS | 0.00000 | .65524 | 45.58219 | .91727 | 0.00000 | 0.00000 | 46.49946 | .39808874 | .39808876 | 0.00000 | 46.49946 | .39808874 | .39808876 |
| SOLANO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | QUANTITY, AF | 0.0 | 601.9 | 37800.0 | 842.7 | 0.0 | | 38642.7 | .60191121 | | | 38642.7 | .60191121 | |
| | CAPACITY, CFS | 0.00000 | .99069 | 68.92028 | 1.38703 | 0.00000 | 0.00000 | 70.30731 | .60191126 | .60191124 | 0.00000 | 70.30731 | .60191126 | .60191124 |
| TOTAL | QUANTITY, AF | 0.0 | 1000.0 | 62800.0 | 1400.0 | 0.0 | | 64200.0 | 1.00000000 | | | 64200.0 | 1.00000000 | |
| | CAPACITY, CFS | 0.00000 | 1.64593 | 114.50247 | 2.30430 | 0.00000 | 0.00000 | 116.80677 | 1.00000000 | 1.00000000 | 0.00000 | 116.80677 | 1.00000000 | 1.00000000 |
| REACH 2 - SUISUN CITY TO CORDELIA PUMPING PLANT | | | | | | | | | | | | | | |
| NAPA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | QUANTITY, AF | 0.0 | 159.2 | 25000.0 | 159.2 | 0.0 | | 25159.2 | .39808861 | | | 25159.2 | .39808861 | |
| | CAPACITY, CFS | 0.00000 | .26203 | 45.58219 | .26203 | 0.00000 | 0.00000 | 45.84422 | .39808862 | .39808861 | 0.00000 | 45.84422 | .39808862 | .39808861 |
| SOLANO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | QUANTITY, AF | 37800.0 | 240.8 | 37800.0 | 240.8 | 0.0 | | 38040.8 | .60191139 | | | 38040.8 | .60191139 | |
| | CAPACITY, CFS | 68.92028 | .39634 | 68.92028 | .39634 | 0.00000 | 0.00000 | 69.31662 | .60191138 | .60191139 | 0.00000 | 69.31662 | .60191138 | .60191139 |
| TOTAL | QUANTITY, AF | 37800.0 | 400.0 | 62800.0 | 400.0 | 0.0 | | 63200.0 | 1.00000000 | | | 63200.0 | 1.00000000 | |
| | CAPACITY, CFS | 68.92028 | .65837 | 114.50247 | .65837 | 0.00000 | 0.00000 | 115.16084 | 1.00000000 | 1.00000000 | 0.00000 | 115.16084 | 1.00000000 | 1.00000000 |
| REACH 3 - CORDELIA PUMPING PLANT TO NAPA TURNOUT RESERVOIR | | | | | | | | | | | | | | |
| NAPA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | QUANTITY, AF | 25000.0 | 0.0 | 25000.0 | 0.0 | 0.0 | | 25000.0 | 1.00000000 | | | 25000.0 | 1.00000000 | |
| | CAPACITY, CFS | 45.58219 | 0.00000 | 45.58219 | 0.00000 | 0.00000 | 0.00000 | 45.58219 | 1.00000000 | 1.00000000 | 0.00000 | 45.58219 | 1.00000000 | 1.00000000 |
| TOTAL | QUANTITY, AF | 25000.0 | 0.0 | 25000.0 | 0.0 | 0.0 | | 25000.0 | 1.00000000 | | | 25000.0 | 1.00000000 | |
| | CAPACITY, CFS | 45.58219 | 0.00000 | 45.58219 | 0.00000 | 0.00000 | 0.00000 | 45.58219 | 1.00000000 | 1.00000000 | 0.00000 | 45.58219 | 1.00000000 | 1.00000000 |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(in units as shown)

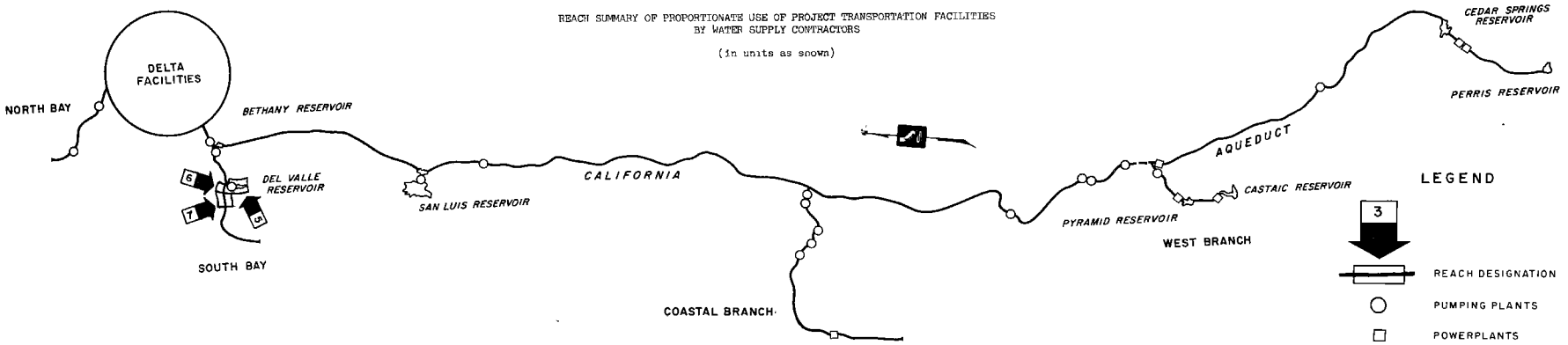



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 1 - BETHANY RESERVOIR TO ALTAMONT TURNOUT | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| SANTA CLARA COUNTY FLOOD CONTROL AND WATER DISTRICT | QUANTITY, AF | 0.0 | 85.8 | 100000.0 | 2412.6 | 1172.9 | 0.00000 | 103585.5 | .47692835 | .47692826 | 0.00000 | 103585.5 | .47692835 | .47692826 |
| | CAPACITY, CFS | 0.00000 | .11851 | 138.12786 | 3.33248 | 1.61811 | | 143.07845 | .47692817 | | | 143.07845 | .47692817 | |
| ALAMEDA COUNTY WATER DISTRICT | QUANTITY, AF | 0.0 | 35.9 | 42000.0 | 831.1 | 493.6 | 0.00000 | 43324.7 | .19947558 | .19947329 | 0.00000 | 43324.7 | .19947558 | .19947329 |
| | CAPACITY, CFS | 0.00000 | .04959 | 58.01370 | 1.14799 | .67961 | | 59.84130 | .19947100 | | | 59.84130 | .19947100 | |
| ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7 | QUANTITY, AF | 0.0 | 39.4 | 46000.0 | 982.7 | 538.5 | 0.00000 | 47521.2 | .21879711 | .21879944 | 0.00000 | 47521.2 | .21879711 | .21879944 |
| | CAPACITY, CFS | 0.00000 | .05442 | 63.53882 | 1.35738 | .74455 | | 65.64053 | .21880177 | | | 65.64053 | .21880177 | |
| FUTURE CONTRACTOR - SOUTH BAY | QUANTITY, AF | 0.0 | 18.9 | 22000.0 | 503.6 | 258.0 | 0.00000 | 22761.6 | .10479896 | .10479901 | 0.00000 | 22761.6 | .10479896 | .10479901 |
| | CAPACITY, CFS | 0.00000 | .02611 | 30.38813 | .69561 | .35598 | | 31.43972 | .10479908 | | | 31.43972 | .10479908 | |
| TOTAL | QUANTITY, AF | 0.0 | 180.0 | 210000.0 | 4730.0 | 2463.0 | 0.00000 | 217193.0 | 1.00000000 | 1.00000000 | 0.00000 | 217193.0 | 1.00000000 | 1.00000000 |
| | CAPACITY, CFS | 0.00000 | .24863 | 290.06851 | 6.53346 | 3.39803 | | 300.00000 | 1.00000000 | | | 300.00000 | 1.00000000 | |
| REACH 2 - ALTAMONT TURNOUT THRU PATTERSON RESERVOIR | | | | | | | | | | | | | | |
| SANTA CLARA COUNTY FLOOD CONTROL AND WATER DISTRICT | QUANTITY, AF | 0.0 | 114.5 | 100000.0 | 2326.8 | 1172.9 | 0.00000 | 103499.7 | .47692857 | .47692819 | 0.00000 | 103499.7 | .47692857 | .47692819 |
| | CAPACITY, CFS | 0.00000 | .15816 | 138.12786 | 3.21397 | 1.73651 | | 143.07834 | .47692780 | | | 143.07834 | .47692780 | |
| ALAMEDA COUNTY WATER DISTRICT | QUANTITY, AF | 0.0 | 47.9 | 42000.0 | 795.2 | 493.6 | 0.00000 | 43288.8 | .19947561 | .19947352 | 0.00000 | 43288.8 | .19947561 | .19947352 |
| | CAPACITY, CFS | 0.00000 | .06616 | 58.01370 | 1.09840 | .72933 | | 59.84143 | .19947143 | | | 59.84143 | .19947143 | |
| ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7 | QUANTITY, AF | 17000.0 | 52.5 | 46000.0 | 943.3 | 538.5 | 0.00000 | 47481.8 | .21879703 | .21879946 | 0.00000 | 47481.8 | .21879703 | .21879946 |
| | CAPACITY, CFS | 23.48174 | .07252 | 63.53882 | 1.30296 | .79879 | | 65.64057 | .21880190 | | | 65.64057 | .21880190 | |
| FUTURE CONTRACTOR - SOUTH BAY | QUANTITY, AF | 0.0 | 25.1 | 22000.0 | 484.7 | 258.0 | 0.00000 | 22742.7 | .10479879 | .10479883 | 0.00000 | 22742.7 | .10479879 | .10479883 |
| | CAPACITY, CFS | 0.00000 | .03467 | 30.38813 | .66950 | .38203 | | 31.43966 | .10479887 | | | 31.43966 | .10479887 | |
| TOTAL | QUANTITY, AF | 17000.0 | 240.0 | 210000.0 | 4550.0 | 2463.0 | 0.00000 | 217013.0 | 1.00000000 | 1.00000000 | 0.00000 | 217013.0 | 1.00000000 | 1.00000000 |
| | CAPACITY, CFS | 23.48174 | .33151 | 290.06851 | 6.28483 | 3.64666 | | 300.00000 | 1.00000000 | | | 300.00000 | 1.00000000 | |
| REACH 4 - PATTERSON RESERVOIR TO DEL VALLE JUNCTION | | | | | | | | | | | | | | |
| SANTA CLARA COUNTY FLOOD CONTROL AND WATER DISTRICT | QUANTITY, AF | 0.0 | 419.6 | 100000.0 | 2212.3 | 1276.2 | 0.00000 | 103488.5 | .51803046 | .49775673 | 0.00000 | 103488.5 | .51803046 | .49775673 |
| | CAPACITY, CFS | 0.00000 | .57959 | 138.12786 | 3.05581 | 2.06123 | | 143.24490 | .47748300 | | | 143.24490 | .47748300 | |
| ALAMEDA COUNTY WATER DISTRICT | QUANTITY, AF | 0.0 | 175.5 | 42000.0 | 747.3 | 537.0 | | 43284.3 | .21666742 | .20818646 | 0.00000 | 43284.3 | .21666742 | .20818646 |
| | CAPACITY, CFS | 0.00000 | .24242 | 58.01370 | 1.03224 | .86571 | 0.00000 | 59.91165 | .19970550 | | | 59.91165 | .19970550 | |
| ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7 | QUANTITY, AF | 0.0 | 122.7 | 29000.0 | 890.8 | 369.1 | | 30259.9 | .15147142 | .18468074 | 0.00000 | 30259.9 | .15147142 | .18468074 |
| | CAPACITY, CFS | 0.00000 | .16948 | 40.05708 | 1.23044 | .59776 | 23.48174 | 65.36702 | .21789007 | | | 65.36702 | .21789007 | |
| FUTURE CONTRACTOR - SOUTH BAY | QUANTITY, AF | 0.0 | 92.2 | 22000.0 | 450.6 | 280.7 | | 22740.3 | .11383070 | .10937607 | 0.00000 | 22740.3 | .11383070 | .10937607 |
| | CAPACITY, CFS | 0.00000 | .12735 | 30.38813 | .63483 | .45347 | 0.00000 | 31.47643 | .10492143 | | | 31.47643 | .10492143 | |
| TOTAL | QUANTITY, AF | 0.0 | 810.0 | 193000.0 | 4310.0 | 2463.0 | | 199773.0 | 1.00000000 | 1.00000000 | 0.00000 | 199773.0 | 1.00000000 | 1.00000000 |
| | CAPACITY, CFS | 0.00000 | 1.11884 | 266.58677 | 5.95332 | 3.97817 | 23.48174 | 300.00000 | 1.00000000 | | | 300.00000 | 1.00000000 | |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(in units as shown)

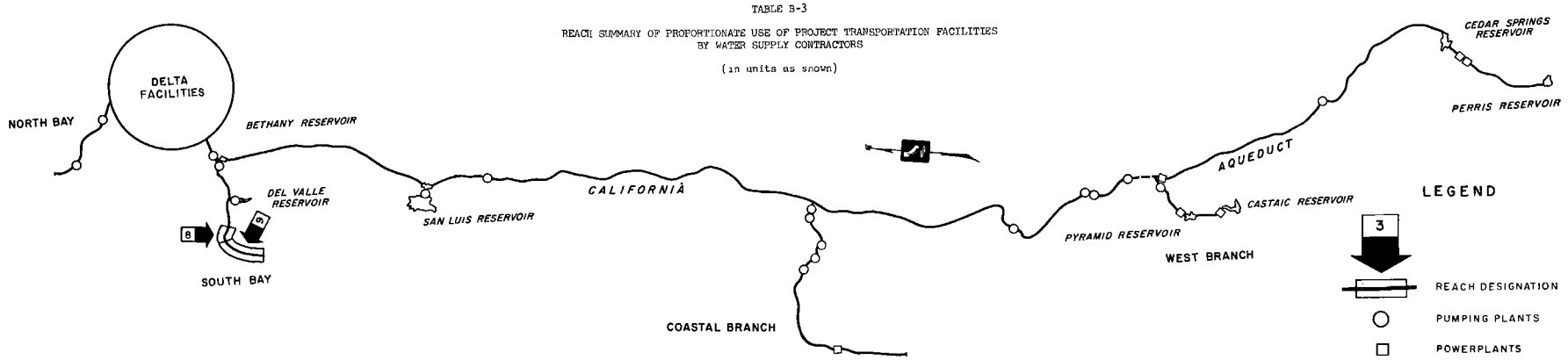



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 5 - DEL VALLE JUNCTION THRU DEL VALLE RESERVOIR | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| SANTA CLARA COUNTY FLOOD CONTROL AND WATER DISTRICT | QUANTITY, AF | 0.0 | 1792.7 | 100000.0 | 1792.7 | | | | | | | | | |
| | CAPACITY, AF | 14590.0 | 581.0 | 14590.0 | 581.0 | 195.0 | | 15366.0 | .51220000 | .51220000 | | 15366.0 | .51220000 | .51220000 |
| ALAMEDA COUNTY WATER DISTRICT | QUANTITY, AF | 0.0 | 571.8 | 42000.0 | 571.8 | | | | | | | | | |
| | CAPACITY, AF | 4654.0 | 185.0 | 4654.0 | 185.0 | 63.0 | | 4902.0 | .16340000 | .16340000 | | 4902.0 | .16340000 | .16340000 |
| ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7 | QUANTITY, AF | 0.0 | 768.1 | 29000.0 | 768.1 | | | | | | | | | |
| | CAPACITY, AF | 6751.0 | 249.0 | 6751.0 | 249.0 | 83.0 | | 6583.0 | .21943333 | .21943333 | | 6583.0 | .21943333 | .21943333 |
| FUTURE CONTRACTOR - SOUTH BAY | QUANTITY, AF | 12000.0 | 367.4 | 22000.0 | 367.4 | | | | | | | | | |
| | CAPACITY, AF | 2990.0 | 119.0 | 2990.0 | 119.0 | 40.0 | | 3149.0 | .10496667 | .10496667 | | 3149.0 | .10496667 | .10496667 |
| TOTAL | QUANTITY, AF | 12000.0 | 3500.0 | 193000.0 | 3500.0 | | | | | | | | | |
| | CAPACITY, AF | 28485.0 | 1134.0 | 28485.0 | 1134.0 | 381.0 | | 30000.0 | 1.00000000 | 1.00000000 | | 30000.0 | 1.00000000 | 1.00000000 |
| REACH 6 - DEL VALLE JUNCTION TO SOUTH LIVERMORE TURNOUT | | | | | | | | | | | | | | |
| SANTA CLARA COUNTY FLOOD CONTROL AND WATER DISTRICT | QUANTITY, AF | 0.0 | 0.0 | 100000.0 | 0.0 | 0.0 | | 100000.0 | .55248619 | | | 100000.0 | .55248619 | |
| | CAPACITY, CFS | 0.00000 | 0.00000 | 184.00000 | 0.00000 | 0.00000 | 0.00000 | 184.00000 | .50688705 | .52968662 | 0.00000 | 184.00000 | .50688705 | .52968662 |
| ALAMEDA COUNTY WATER DISTRICT | QUANTITY, AF | 0.0 | 0.0 | 42000.0 | 0.0 | 0.0 | | 42000.0 | .23204420 | | | 42000.0 | .23204420 | |
| | CAPACITY, CFS | 0.00000 | 0.00000 | 76.57808 | 0.00000 | 0.00000 | 0.00000 | 76.57808 | .21093890 | .22150155 | 0.00000 | 76.57808 | .21093890 | .22150155 |
| ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7 | QUANTITY, AF | 29000.0 | 0.0 | 29000.0 | 0.0 | 0.0 | | 29000.0 | .16022099 | | | 29000.0 | .16022099 | |
| | CAPACITY, CFS | 52.87534 | 0.00000 | 52.87534 | 0.00000 | 0.00000 | 0.00000 | 52.87534 | .14506207 | .15294154 | 0.00000 | 52.87534 | .14506207 | .15294154 |
| FUTURE CONTRACTOR - SOUTH BAY | QUANTITY, AF | 0.0 | 0.0 | 10000.0 | 0.0 | 0.0 | | 10000.0 | .03524862 | | | 10000.0 | .03524862 | |
| | CAPACITY, CFS | 0.00000 | 0.00000 | 18.23287 | 0.00000 | 0.00000 | 0.00000 | 18.23287 | .05022829 | .05273846 | 0.00000 | 18.23287 | .05022829 | .05273846 |
| EXCESS | QUANTITY, AF | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | .00000000 | | | 0.0 | .00000000 | |
| | CAPACITY, CFS | 5.12466 | 0.00000 | 31.31371 | 0.00000 | 0.00000 | 0.00000 | 31.31371 | .08626367 | .04313183 | 0.00000 | 31.31371 | .08626367 | .04313183 |
| TOTAL | QUANTITY, AF | 29000.0 | 0.0 | 181000.0 | 0.0 | 0.0 | | 181000.0 | 1.00000000 | | | 181000.0 | 1.00000000 | |
| | CAPACITY, CFS | 58.00000 | 0.00000 | 363.00000 | 0.00000 | 0.00000 | 0.00000 | 363.00000 | 1.00000000 | 1.00000000 | 0.00000 | 363.00000 | 1.00000000 | 1.00000000 |
| REACH 7 - SOUTH LIVERMORE TURNOUT TO VALLECITOS TURNOUT | | | | | | | | | | | | | | |
| SANTA CLARA COUNTY FLOOD CONTROL AND WATER DISTRICT | QUANTITY, AF | 0.0 | 0.0 | 100000.0 | 0.0 | 0.0 | | 100000.0 | .65789474 | | | 100000.0 | .65789474 | |
| | CAPACITY, CFS | 0.00000 | 0.00000 | 184.00000 | 0.00000 | 0.00000 | 0.00000 | 184.00000 | .60327869 | .63058671 | 0.00000 | 184.00000 | .60327869 | .63058671 |
| ALAMEDA COUNTY WATER DISTRICT | QUANTITY, AF | 37000.0 | 0.0 | 42000.0 | 0.0 | 0.0 | | 42000.0 | .27631579 | | | 42000.0 | .27631579 | |
| | CAPACITY, CFS | 67.46165 | 0.00000 | 76.57808 | 0.00000 | 0.00000 | 0.00000 | 76.57808 | .25107567 | .26369573 | 0.00000 | 76.57808 | .25107567 | .26369573 |
| FUTURE CONTRACTOR - SOUTH BAY | QUANTITY, AF | -15000.0 | 0.0 | 10000.0 | 0.0 | 0.0 | | 10000.0 | .06578947 | | | 10000.0 | .06578947 | |
| | CAPACITY, CFS | -27.34932 | 0.00000 | 18.23287 | 0.00000 | 0.00000 | 0.00000 | 18.23287 | .05977990 | .06278469 | 0.00000 | 18.23287 | .05977990 | .06278469 |
| EXCESS | QUANTITY, AF | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | .00000000 | | | 0.0 | .00000000 | |
| | CAPACITY, CFS | 16.77124 | 0.00000 | 26.18905 | 0.00000 | 0.00000 | 0.00000 | 26.18905 | .08586574 | .04293287 | 0.00000 | 26.18905 | .08586574 | .04293287 |
| TOTAL | QUANTITY, AF | 22000.0 | 0.0 | 152000.0 | 0.0 | 0.0 | | 152000.0 | 1.00000000 | | | 152000.0 | 1.00000000 | |
| | CAPACITY, CFS | 56.88357 | 0.00000 | 305.00000 | 0.00000 | 0.00000 | 0.00000 | 305.00000 | 1.00000000 | 1.00000000 | 0.00000 | 305.00000 | 1.00000000 | 1.00000000 |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(in units as shown)

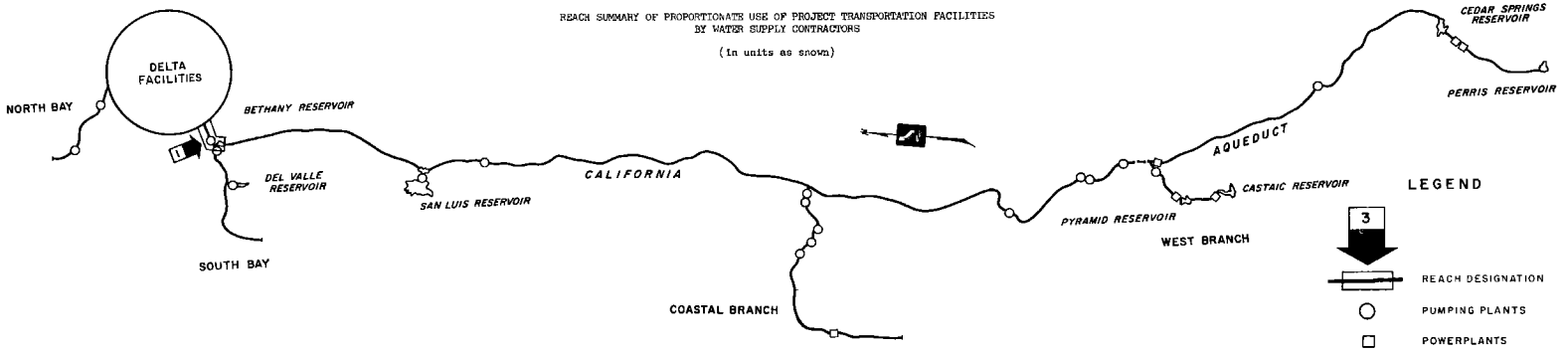



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 8 - VALLECITOS TURNOUT TO ALAMEDA-BAYSIDE TURNOUT (1) | | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| SANTA CLARA COUNTY FLOOD CONTROL AND WATER DISTRICT | QUANTITY, AF | 0.0 | 0.0 | 100000.0 | 0.0 | 0.0 | | 100000.0 | .76923077 | | | 100000.0 | .76923077 | |
| | CAPACITY, CFS | 0.00000 | 0.00000 | 184.00000 | 0.00000 | 0.00000 | 0.00000 | 184.00000 | .72156863 | .74539970 | 0.00000 | 184.00000 | .72156863 | .74539970 |
| ALAMEDA COUNTY WATER DISTRICT | QUANTITY, AF | 5000.0 | 0.0 | 5000.0 | 0.0 | 0.0 | | 5000.0 | .03846154 | | | 5000.0 | .03846154 | |
| | CAPACITY, CFS | 16.00000 | 0.00000 | 16.00000 | 0.00000 | 0.00000 | 0.00000 | 16.00000 | .06274510 | .05060332 | 0.00000 | 16.00000 | .06274510 | .05060332 |
| FUTURE CONTRACTOR - SOUTH BAY | QUANTITY, AF | 25000.0 | 0.0 | 25000.0 | 0.0 | 0.0 | | 25000.0 | .19230769 | | | 25000.0 | .19230769 | |
| | CAPACITY, CFS | 45.58219 | 0.00000 | 45.58219 | 0.00000 | 0.00000 | 0.00000 | 45.58219 | .17875368 | .18553069 | 0.00000 | 45.58219 | .17875368 | .18553069 |
| EXCESS | QUANTITY, AF | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | .00000000 | | | 0.0 | .00000000 | |
| | CAPACITY, CFS | 9.41781 | 0.00000 | 9.41781 | 0.00000 | 0.00000 | 0.00000 | 9.41781 | .03693259 | .01846629 | 0.00000 | 9.41781 | .03693259 | .01846629 |
| TOTAL | QUANTITY, AF | 30000.0 | 0.0 | 130000.0 | 0.0 | 0.0 | | 130000.0 | 1.00000000 | | | 130000.0 | 1.00000000 | |
| | CAPACITY, CFS | 71.00000 | 0.00000 | 255.00000 | 0.00000 | 0.00000 | 0.00000 | 255.00000 | 1.00000000 | 1.00000000 | 0.00000 | 255.00000 | 1.00000000 | 1.00000000 |
| REACH 9 - ALAMEDA-BAYSIDE TURNOUT TO SANTA CLARA TERMINAL FACILITIES | | | | | | | | | | | | | | |
| SANTA CLARA COUNTY FLOOD CONTROL AND WATER DISTRICT | QUANTITY, AF | 100000.0 | 0.0 | 100000.0 | 0.0 | 0.0 | | 100000.0 | 1.00000000 | | | 100000.0 | 1.00000000 | |
| | CAPACITY, CFS | 184.00000 | 0.00000 | 184.00000 | 0.00000 | 0.00000 | 0.00000 | 184.00000 | 1.00000000 | 1.00000000 | 0.00000 | 184.00000 | 1.00000000 | 1.00000000 |
| TOTAL | QUANTITY, AF | 100000.0 | 0.0 | 100000.0 | 0.0 | 0.0 | | 100000.0 | 1.00000000 | | | 100000.0 | 1.00000000 | |
| | CAPACITY, CFS | 184.00000 | 0.00000 | 184.00000 | 0.00000 | 0.00000 | 0.00000 | 184.00000 | 1.00000000 | 1.00000000 | 0.00000 | 184.00000 | 1.00000000 | 1.00000000 |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(In units as shown)

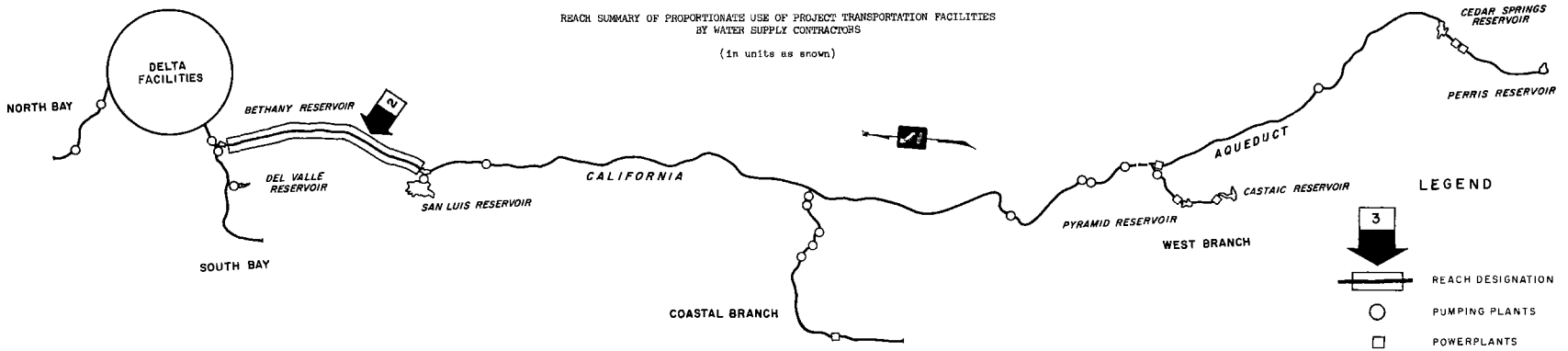



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 1 - DELTA THRU BETHANY RESERVOIR | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF | 0.0 | 293.2 | 2011500.0 | 134883.3 | 150862.5 | | 2297225.8 | .50072405 | | | 2297225.8 | .50072405 | |
| | CAPACITY, CFS | 0.00000 | .48259 | 2778.44186 | 211.72844 | 212.39436 | 0.00000 | 3202.56466 | .38186861 | .44129633 | 0.00000 | 3202.56466 | .38186861 | .44129633 |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 14.4 | 98000.0 | 7666.9 | 7350.0 | | 113016.9 | .02463418 | | | 113016.9 | .02463418 | |
| | CAPACITY, CFS | 0.00000 | .02370 | 135.36930 | 12.30973 | 10.27353 | 0.00000 | 157.94856 | .01883353 | .02173386 | 0.00000 | 157.94856 | .01883353 | .02173386 |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | .7 | 4600.0 | 359.9 | 345.0 | | 5304.9 | .00115630 | | | 5304.9 | .00115630 | |
| | CAPACITY, CFS | 0.00000 | .00115 | 6.35388 | .57783 | .48223 | 0.00000 | 7.41394 | .00088403 | .00102016 | 0.00000 | 7.41394 | .00088403 | .00102016 |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 4.2 | 28800.0 | 2253.0 | 2160.0 | | 33213.0 | .00723940 | | | 33213.0 | .00723940 | |
| | CAPACITY, CFS | 0.00000 | .00691 | 39.78082 | 3.61735 | 3.01916 | 0.00000 | 46.41733 | .00553473 | .00638707 | 0.00000 | 46.41733 | .00553473 | .00638707 |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY, AF | 0.0 | 2.5 | 17300.0 | 1353.5 | 1297.5 | | 19951.0 | .00434870 | | | 19951.0 | .00434870 | |
| | CAPACITY, CFS | 0.00000 | .00412 | 23.89612 | 2.17316 | 1.81359 | 0.00000 | 27.88287 | .00332471 | .00383670 | 0.00000 | 27.88287 | .00332471 | .00383670 |
| CRESTLINE-LAKE ARROWHEAD WATER AGENCY | QUANTITY, AF | 0.0 | .9 | 5800.0 | 453.8 | 435.0 | | 6688.8 | .00145795 | | | 6688.8 | .00145795 | |
| | CAPACITY, CFS | 0.00000 | .00148 | 8.01142 | .72860 | .60802 | 0.00000 | 9.34804 | .00111464 | .00128630 | 0.00000 | 9.34804 | .00111464 | .00128630 |
| COACHELLA VALLEY COUNTY WATER DISTRICT | QUANTITY, AF | 0.0 | 3.4 | 23100.0 | 1513.4 | 1732.5 | | 26345.9 | .00574259 | | | 26345.9 | .00574259 | |
| | CAPACITY, CFS | 0.00000 | .00560 | 31.90754 | 2.49097 | 2.39307 | 0.00000 | 36.79158 | .00438697 | .00506478 | 0.00000 | 36.79158 | .00438697 | .00506478 |
| DESERT WATER AGENCY | QUANTITY, AF | 0.0 | 5.5 | 38100.0 | 2496.1 | 2857.5 | | 43453.6 | .00947154 | | | 43453.6 | .00947154 | |
| | CAPACITY, CFS | 0.00000 | .00905 | 52.62671 | 4.10839 | 3.94700 | 0.00000 | 60.68210 | .00723563 | .00835359 | 0.00000 | 60.68210 | .00723563 | .00835359 |
| MOJAVE WATER AGENCY | QUANTITY, AF | 0.0 | 7.4 | 50800.0 | 3328.6 | 3810.0 | | 57938.6 | .01262882 | | | 57938.6 | .01262882 | |
| | CAPACITY, CFS | 0.00000 | .01218 | 70.16895 | 5.47865 | 5.26267 | 0.00000 | 80.91027 | .00964761 | .01113821 | 0.00000 | 80.91027 | .00964761 | .01113821 |
| LITTLEROCK CREEK IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | .3 | 2300.0 | 119.1 | 172.5 | | 2591.6 | .00056489 | | | 2591.6 | .00056489 | |
| | CAPACITY, CFS | 0.00000 | .00049 | 3.17694 | .19601 | .23827 | 0.00000 | 3.61122 | .00043060 | .00049774 | 0.00000 | 3.61122 | .00043060 | .00049774 |
| PALMDALE IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 2.5 | 17300.0 | 857.4 | 1297.5 | | 19454.9 | .00424057 | | | 19454.9 | .00424057 | |
| | CAPACITY, CFS | 0.00000 | .00411 | 23.89612 | 1.41124 | 1.79221 | 0.00000 | 27.09957 | .00323131 | .00373594 | 0.00000 | 27.09957 | .00323131 | .00373594 |
| ANTELOPE VALLEY-EAST KERN WATER AGENCY | QUANTITY, AF | 0.0 | 19.7 | 138400.0 | 5737.3 | 10380.0 | | 154517.3 | .03367998 | | | 154517.3 | .03367998 | |
| | CAPACITY, CFS | 0.00000 | .03243 | 191.16896 | 9.44319 | 14.33767 | 0.00000 | 214.94982 | .02563027 | .02965513 | 0.00000 | 214.94982 | .02563027 | .02965513 |
| UPPER SANTA CLARA VALLEY WATER AGENCY | QUANTITY, AF | 0.0 | 6.0 | 41500.0 | 2305.5 | 3112.5 | | 46916.0 | .01022623 | | | 46916.0 | .01022623 | |
| | CAPACITY, CFS | 0.00000 | .00988 | 57.32306 | 3.62413 | 4.36471 | 0.00000 | 65.31190 | .00778768 | .00900696 | 0.00000 | 65.31190 | .00778768 | .00900696 |
| VENTURA COUNTY FLOOD CONTROL DISTRICT | QUANTITY, AF | 0.0 | 2.9 | 20000.0 | 1110.1 | 1800.0 | | 22810.1 | .00492830 | | | 22810.1 | .00492830 | |
| | CAPACITY, CFS | 0.00000 | .00477 | 27.62557 | 1.74655 | 2.10347 | 0.00000 | 31.47559 | .00375310 | .00434070 | 0.00000 | 31.47559 | .00375310 | .00434070 |
| KERN COUNTY WATER AGENCY - MUNICIPAL & INDUSTRIAL | QUANTITY, AF | 0.0 | 20.0 | 142000.0 | 4242.7 | 0.0 | | 146242.7 | .03187638 | | | 146242.7 | .03187638 | |
| | CAPACITY, CFS | 0.00000 | .03292 | 258.90686 | 6.98321 | 0.00000 | 0.00000 | 265.89007 | .03170430 | .03179034 | 0.00000 | 265.89007 | .03170430 | .03179034 |
| KERN COUNTY WATER AGENCY - AGRICULTURAL | QUANTITY, AF | 0.0 | 142.0 | 1011400.0 | 28321.8 | 0.0 | | 1039721.8 | .22662714 | | | 1039721.8 | .22662714 | |
| | CAPACITY, CFS | 0.00000 | .23372 | 3017.57433 | 46.61575 | 0.00000 | 0.00000 | 3064.19008 | .36536904 | .29599809 | 0.00000 | 3064.19008 | .36536904 | .29599809 |
| FUTURE CONTRACTOR - NUCLEAR | QUANTITY, AF | 0.0 | 5.0 | 35000.0 | 1282.9 | 0.0 | | 36282.9 | .00790855 | | | 36282.9 | .00790855 | |
| | CAPACITY, CFS | 0.00000 | .00823 | 48.34475 | 2.11155 | 0.00000 | 0.00000 | 50.45630 | .00601633 | .00696244 | 0.00000 | 50.45630 | .00601633 | .00696244 |
| SANTA BARBARA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | QUANTITY, AF | 0.0 | 8.3 | 57700.0 | 3407.2 | 4327.5 | | 65434.7 | .01426274 | | | 65434.7 | .01426274 | |
| | CAPACITY, CFS | 0.00000 | .01366 | 79.69977 | 5.27733 | 6.10693 | 0.00000 | 91.08403 | .01086071 | .01256172 | 0.00000 | 91.08403 | .01086071 | .01256172 |
| SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | QUANTITY, AF | 0.0 | 3.6 | 25000.0 | 1174.7 | 1875.0 | | 28049.7 | .00611397 | | | 28049.7 | .00611397 | |
| | CAPACITY, CFS | 0.00000 | .00593 | 34.53197 | 1.82720 | 2.61585 | 0.00000 | 39.01502 | .00465209 | .00538303 | 0.00000 | 39.01502 | .00465209 | .00538303 |
| DEVIL'S DEN WATER DISTRICT | QUANTITY, AF | 0.0 | 1.8 | 12700.0 | 356.2 | 0.0 | | 13056.2 | .00284585 | | | 13056.2 | .00284585 | |
| | CAPACITY, CFS | 0.00000 | .00296 | 17.89123 | .58627 | 0.00000 | 0.00000 | 18.47750 | .00458799 | .00371692 | 0.00000 | 18.47750 | .00458799 | .00371692 |
| DUDLEY RIDGE WATER DISTRICT | QUANTITY, AF | 0.0 | 8.0 | 57700.0 | 1179.2 | 0.0 | | 58879.2 | .01283384 | | | 58879.2 | .01283384 | |
| | CAPACITY, CFS | 0.00000 | .01317 | 172.15151 | 1.94089 | 0.00000 | 0.00000 | 174.09240 | .02075849 | .01679617 | 0.00000 | 174.09240 | .02075849 | .01679617 |
| TULARE LAKE BASIN WATER STORAGE DISTRICT | QUANTITY, AF | 0.0 | 15.3 | 110000.0 | 2142.9 | 0.0 | | 112142.9 | .02444368 | | | 112142.9 | .02444368 | |
| | CAPACITY, CFS | 0.00000 | .02518 | 328.19179 | 3.52706 | 0.00000 | 0.00000 | 331.71885 | .03955362 | .03199865 | 0.00000 | 331.71885 | .03955362 | .03199865 |
| HACIENDA WATER DISTRICT | QUANTITY, AF | 0.0 | 1.2 | 8500.0 | 173.8 | 0.0 | | 8673.8 | .00189062 | | | 8673.8 | .00189062 | |
| | CAPACITY, CFS | 0.00000 | .00198 | 25.36027 | .28606 | 0.00000 | 0.00000 | 25.64633 | .00305803 | .00247432 | 0.00000 | 25.64633 | .00305803 | .00247432 |
| EMPIRE WEST SIDE IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | .4 | 3000.0 | 56.1 | 0.0 | | 3056.1 | .00066614 | | | 3056.1 | .00066614 | |
| | CAPACITY, CFS | 0.00000 | .00066 | 8.95069 | .09233 | 0.00000 | 0.00000 | 9.04302 | .00107827 | .00087221 | 0.00000 | 9.04302 | .00107827 | .00087221 |
| KINGS COUNTY | QUANTITY, AF | 0.0 | .5 | 4000.0 | 75.0 | 0.0 | | 4075.0 | .00088822 | | | 4075.0 | .00088822 | |
| | CAPACITY, CFS | 0.00000 | .00055 | 7.29315 | .12345 | 0.00000 | 0.00000 | 7.41660 | .00088434 | .00088628 | 0.00000 | 7.41660 | .00088434 | .00088628 |
| OAK FLAT WATER DISTRICT | QUANTITY, AF | 0.0 | .8 | 5700.0 | 42.2 | 0.0 | | 5742.2 | .00125162 | | | 5742.2 | .00125162 | |
| | CAPACITY, CFS | 0.00000 | .00132 | 17.00630 | .06946 | 0.00000 | 0.00000 | 17.07576 | .00203609 | .00164385 | 0.00000 | 17.07576 | .00203609 | .00164385 |
| SANTA CLARA COUNTY FLOOD CONTROL AND WATER DISTRICT | QUANTITY, AF | 0.0 | 14.0 | 100000.0 | 2426.6 | 1172.9 | | 103599.5 | .02258148 | | | 103599.5 | .02258148 | |
| | CAPACITY, CFS | 0.00000 | .02304 | 138.12786 | 3.35552 | 1.61811 | 0.00000 | 143.10149 | .01706319 | .01982234 | 0.00000 | 143.10149 | .01706319 | .01982234 |
| ALAMEDA COUNTY WATER DISTRICT | QUANTITY, AF | 0.0 | 5.9 | 42000.0 | 837.0 | 493.6 | | 43330.6 | .00944473 | | | 43330.6 | .00944473 | |
| | CAPACITY, CFS | 0.00000 | .00971 | 58.01370 | 1.15770 | .67961 | 0.00000 | 59.85101 | .00713654 | .00829063 | 0.00000 | 59.85101 | .00713654 | .00829063 |
| ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7 | QUANTITY, AF | 0.0 | 6.4 | 46000.0 | 989.1 | 538.5 | | 47527.6 | .01035954 | | | 47527.6 | .01035954 | |
| | CAPACITY, CFS | 0.00000 | .01053 | 63.53682 | 1.36791 | .74433 | 0.00000 | 65.65106 | .00782812 | .00909383 | 0.00000 | 65.65106 | .00782812 | .00909383 |
| FUTURE CONTRACTOR - SOUTH BAY | QUANTITY, AF | 0.0 | 3.1 | 22000.0 | 506.7 | 258.0 | | 22764.7 | .00496200 | | | 22764.7 | .00496200 | |
| | CAPACITY, CFS | 0.00000 | .00510 | 30.38813 | .70071 | .35598 | 0.00000 | 31.44482 | .00374943 | .00435571 | 0.00000 | 31.44482 | .00374943 | .00435571 |
| TOTAL | QUANTITY, AF | 0.0 | 600.0 | 4180200.0 | 211630.0 | 195978.0 | | 4587808.0 | 1.00000000 | | | 4587808.0 | 1.00000000 | |
| | CAPACITY, CFS | 0.00000 | .98756 | 7775.71438 | 335.69664 | 275.15077 | 0.00000 | 8386.56179 | 1.00000000 | 1.00000000 | 0.00000 | 8386.56179 | 1.00000000 | 1.00000000 |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(in units as shown)

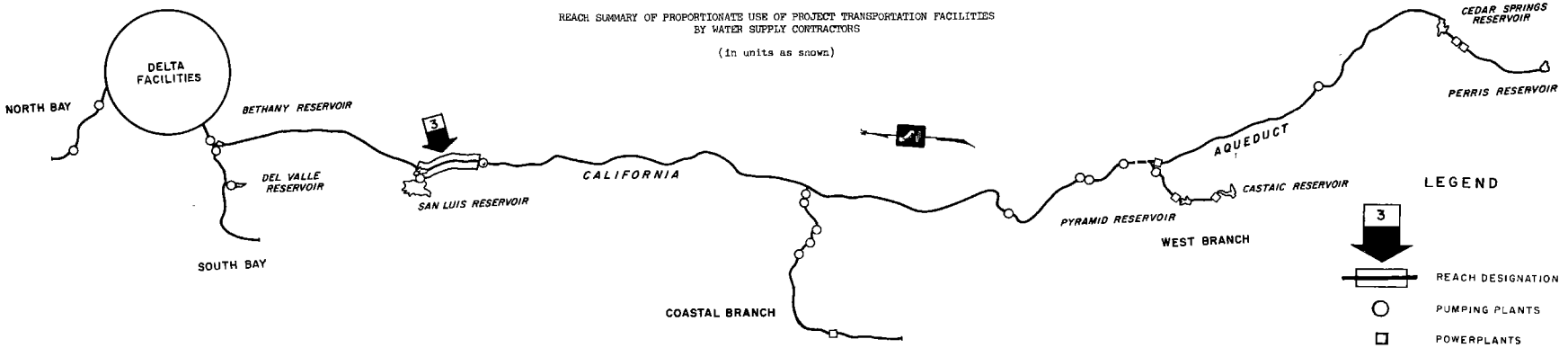



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 2 - BETHANY RESERVOIR TO SAN LUIS FOREBAY | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF | 0.0 | 15466.7 | 2011500.0 | 134570.1 | 150862.5 | 0.00000 | 2296932.6 | .52561206 | .46081807 | 0.00000 | 2296932.6 | .52561206 | .46081807 |
| | CAPACITY, CFS | 0.00000 | 25.45713 | 2778.44186 | 211.24585 | 212.39436 | | 3202.08207 | .39602408 | | | 3202.08207 | .39602408 | |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 761.4 | 98000.0 | 7652.5 | 7350.0 | 0.00000 | 113002.5 | .02585861 | .02269514 | 0.00000 | 113002.5 | .02585861 | .02269514 |
| | CAPACITY, CFS | 0.00000 | 1.25321 | 135.36530 | 12.28603 | 10.27353 | | 157.92486 | .01953168 | | | 157.92486 | .01953168 | |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 35.7 | 4600.0 | 359.2 | 345.0 | 0.00000 | 5304.2 | .00121377 | .00106528 | 0.00000 | 5304.2 | .00121377 | .00106528 |
| | CAPACITY, CFS | 0.00000 | .05876 | 6.35388 | .57668 | .48223 | | 7.41279 | .00091679 | | | 7.41279 | .00091679 | |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 223.8 | 28800.0 | 2248.8 | 2160.0 | 0.00000 | 33208.8 | .00759924 | .00666957 | 0.00000 | 33208.8 | .00759924 | .00666957 |
| | CAPACITY, CFS | 0.00000 | .36836 | 39.78082 | 3.61044 | 3.01916 | | 46.41042 | .00573990 | | | 46.41042 | .00573990 | |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY, AF | 0.0 | 134.4 | 17300.0 | 1351.0 | 1297.5 | 0.00000 | 19948.5 | .00456486 | .00400641 | 0.00000 | 19948.5 | .00456486 | .00400641 |
| | CAPACITY, CFS | 0.00000 | .22121 | 23.89612 | 2.16904 | 1.81359 | | 27.87875 | .00344796 | | | 27.87875 | .00344796 | |
| CRESTLINE-LAKE ARROWHEAD WATER AGENCY | QUANTITY, AF | 0.0 | 45.1 | 5800.0 | 452.9 | 435.0 | 0.00000 | 6687.9 | .00153041 | .00134318 | 0.00000 | 6687.9 | .00153041 | .00134318 |
| | CAPACITY, CFS | 0.00000 | .07423 | 8.01142 | .72712 | .60802 | | 9.34656 | .00115595 | | | 9.34656 | .00115595 | |
| COACHELLA VALLEY COUNTY WATER DISTRICT | QUANTITY, AF | 0.0 | 177.4 | 23100.0 | 1810.0 | 1732.5 | 0.00000 | 26342.5 | .00602801 | .00528880 | 0.00000 | 26342.5 | .00602801 | .00528880 |
| | CAPACITY, CFS | 0.00000 | .29199 | 31.90754 | 2.48537 | 2.39307 | | 36.78598 | .00454958 | | | 36.78598 | .00454958 | |
| DESERT WATER AGENCY | QUANTITY, AF | 0.0 | 292.5 | 38100.0 | 2490.6 | 2857.5 | 0.00000 | 43448.1 | .00994232 | .00872309 | 0.00000 | 43448.1 | .00994232 | .00872309 |
| | CAPACITY, CFS | 0.00000 | .48144 | 52.62671 | 4.09934 | 3.94700 | | 60.67305 | .00750386 | | | 60.67305 | .00750386 | |
| MOJAVE WATER AGENCY | QUANTITY, AF | 0.0 | 390.1 | 50800.0 | 3321.2 | 3810.0 | 0.00000 | 57931.2 | .01325652 | .01163088 | 0.00000 | 57931.2 | .01325652 | .01163088 |
| | CAPACITY, CFS | 0.00000 | .64208 | 70.16895 | 5.46647 | 5.26267 | | 80.89809 | .01000524 | | | 80.89809 | .01000524 | |
| LITTLEROCK CREEK IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 17.4 | 2300.0 | 118.8 | 172.5 | 0.00000 | 2591.3 | .00059297 | .00051977 | 0.00000 | 2591.3 | .00059297 | .00051977 |
| | CAPACITY, CFS | 0.00000 | .02864 | 3.17694 | .19552 | .23827 | | 3.61073 | .00044656 | | | 3.61073 | .00044656 | |
| PALMDALE IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 130.8 | 17300.0 | 854.9 | 1297.5 | 0.00000 | 19452.4 | .00445134 | .00390121 | 0.00000 | 19452.4 | .00445134 | .00390121 |
| | CAPACITY, CFS | 0.00000 | .21529 | 23.89612 | 1.40713 | 1.79221 | | 27.09546 | .00335109 | | | 27.09546 | .00335109 | |
| ANTELOPE VALLEY-EAST KERN WATER AGENCY | QUANTITY, AF | 0.0 | 1038.7 | 138400.0 | 5717.6 | 10480.0 | 0.00000 | 154497.6 | .03535402 | .03096718 | 0.00000 | 154497.6 | .03535402 | .03096718 |
| | CAPACITY, CFS | 0.00000 | 1.70963 | 191.16896 | 9.41076 | 14.33767 | | 214.91739 | .02658035 | | | 214.91739 | .02658035 | |
| UPPER SANTA CLARA VALLEY WATER AGENCY | QUANTITY, AF | 0.0 | 315.7 | 41500.0 | 2297.5 | 3112.5 | 0.00000 | 46910.0 | .01073452 | .00940544 | 0.00000 | 46910.0 | .01073452 | .00940544 |
| | CAPACITY, CFS | 0.00000 | .51962 | 57.32306 | 3.61425 | 4.36471 | | 65.30202 | .00807636 | | | 65.30202 | .00807636 | |
| VENTURA COUNTY FLOOD CONTROL DISTRICT | QUANTITY, AF | 0.0 | 162.1 | 20000.0 | 1107.2 | 1500.0 | 0.00000 | 22607.2 | .00517325 | .00453274 | 0.00000 | 22607.2 | .00517325 | .00453274 |
| | CAPACITY, CFS | 0.00000 | .25035 | 27.62557 | 1.74178 | 2.10347 | | 31.47082 | .00389222 | | | 31.47082 | .00389222 | |
| KERN COUNTY WATER AGENCY - MUNICIPAL & INDUSTRIAL | QUANTITY, AF | 0.0 | 1053.8 | 142000.0 | 4222.7 | 0.0 | 0.00000 | 146222.7 | .03346046 | .03317044 | 0.00000 | 146222.7 | .03346046 | .03317044 |
| | CAPACITY, CFS | 0.00000 | 1.73448 | 258.90686 | 6.95029 | 0.00000 | | 265.85715 | .03288043 | | | 265.85715 | .03288043 | |
| KERN COUNTY WATER AGENCY - AGRICULTURAL | QUANTITY, AF | 0.0 | 7492.2 | 1011400.0 | 28179.8 | 0.0 | 0.00000 | 1039579.8 | .23788930 | .30841520 | 0.00000 | 1039579.8 | .23788930 | .30841520 |
| | CAPACITY, CFS | 0.00000 | 12.33165 | 3017.57433 | 46.38203 | 0.00000 | | 3063.95636 | .37894110 | | | 3063.95636 | .37894110 | |
| FUTURE CONTRACTOR - NUCLEAR | QUANTITY, AF | 0.0 | 261.5 | 35000.0 | 1277.9 | 0.0 | 0.00000 | 36277.9 | .00830155 | .00727041 | 0.00000 | 36277.9 | .00830155 | .00727041 |
| | CAPACITY, CFS | 0.00000 | .43041 | 48.34475 | 2.10332 | 0.00000 | | 50.44807 | .00623927 | | | 50.44807 | .00623927 | |
| SANTA BARBARA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | QUANTITY, AF | 0.0 | 440.3 | 57700.0 | 3398.9 | 4327.5 | 0.00000 | 65426.4 | .01497167 | .01311749 | 0.00000 | 65426.4 | .01497167 | .01311749 |
| | CAPACITY, CFS | 0.00000 | .72470 | 79.69977 | 5.26367 | 6.10693 | | 91.07037 | .01126331 | | | 91.07037 | .01126331 | |
| SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | QUANTITY, AF | 0.0 | 188.6 | 25000.0 | 1171.1 | 1875.0 | 0.00000 | 28046.1 | .00641785 | .00562119 | 0.00000 | 28046.1 | .00641785 | .00562119 |
| | CAPACITY, CFS | 0.00000 | .31042 | 34.53197 | 1.86127 | 2.61585 | | 39.00909 | .00482453 | | | 39.00909 | .00482453 | |
| DEVIL'S DEN WATER DISTRICT | QUANTITY, AF | 0.0 | 94.1 | 12700.0 | 354.4 | 0.0 | 0.00000 | 13054.4 | .00298727 | .00387284 | 0.00000 | 13054.4 | .00298727 | .00387284 |
| | CAPACITY, CFS | 0.00000 | .15488 | 17.89123 | .58331 | 0.00000 | | 18.47454 | .00475842 | | | 18.47454 | .00475842 | |
| DUDLEY RIDGE WATER DISTRICT | QUANTITY, AF | 0.0 | 424.3 | 57700.0 | 1171.2 | 0.0 | 0.00000 | 58871.2 | .01347162 | .01750062 | 0.00000 | 58871.2 | .01347162 | .01750062 |
| | CAPACITY, CFS | 0.00000 | .69837 | 172.15151 | 1.92772 | 0.00000 | | 174.07923 | .02152961 | | | 174.07923 | .02152961 | |
| TULARE LAKE BASIN WATER STORAGE DISTRICT | QUANTITY, AF | 0.0 | 808.1 | 110000.0 | 2127.6 | 0.0 | 0.00000 | 112127.6 | .02565840 | .03334065 | 0.00000 | 112127.6 | .02565840 | .03334065 |
| | CAPACITY, CFS | 0.00000 | 1.33008 | 328.19179 | 3.50188 | 0.00000 | | 331.69367 | .04102290 | | | 331.69367 | .04102290 | |
| HACIENDA WATER DISTRICT | QUANTITY, AF | 0.0 | 62.5 | 8500.0 | 172.6 | 0.0 | 0.00000 | 8672.6 | .00198457 | .00257809 | 0.00000 | 8672.6 | .00198457 | .00257809 |
| | CAPACITY, CFS | 0.00000 | .10287 | 25.36027 | .28408 | 0.00000 | | 25.64435 | .00317162 | | | 25.64435 | .00317162 | |
| EMPIRE WEST SIDE IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 22.0 | 3000.0 | 55.7 | 0.0 | 0.00000 | 3055.7 | .00069924 | .00090879 | 0.00000 | 3055.7 | .00069924 | .00090879 |
| | CAPACITY, CFS | 0.00000 | .03621 | 8.95069 | .09167 | 0.00000 | | 9.04236 | .00111833 | | | 9.04236 | .00111833 | |
| KINGS COUNTY | QUANTITY, AF | 0.0 | 29.4 | 4000.0 | 74.4 | 0.0 | 0.00000 | 4074.4 | .00093235 | .00092475 | 0.00000 | 4074.4 | .00093235 | .00092475 |
| | CAPACITY, CFS | 0.00000 | .04839 | 7.29315 | .12246 | 0.00000 | | 7.41561 | .00091714 | | | 7.41561 | .00091714 | |
| OAK FLAT WATER DISTRICT | QUANTITY, AF | 5700.0 | 41.4 | 5700.0 | 41.4 | 0.0 | 0.00000 | 5741.4 | .00131382 | .00171277 | 0.00000 | 5741.4 | .00131382 | .00171277 |
| | CAPACITY, CFS | 17.00630 | .06814 | 17.00630 | .06814 | 0.00000 | | 17.07444 | .00211172 | | | 17.07444 | .00211172 | |
| TOTAL | QUANTITY, AF | 5700.0 | 30100.0 | 3970200.0 | 206300.0 | 193515.0 | 0.00000 | 4370015.0 | 1.00000000 | 1.00000000 | 0.00000 | 4370015.0 | 1.00000000 | 1.00000000 |
| | CAPACITY, CFS | 17.00630 | 49.54254 | 7485.64587 | 328.17562 | 271.75274 | | 8085.57423 | 1.00000000 | | | 8085.57423 | 1.00000000 | |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(in units as shown)

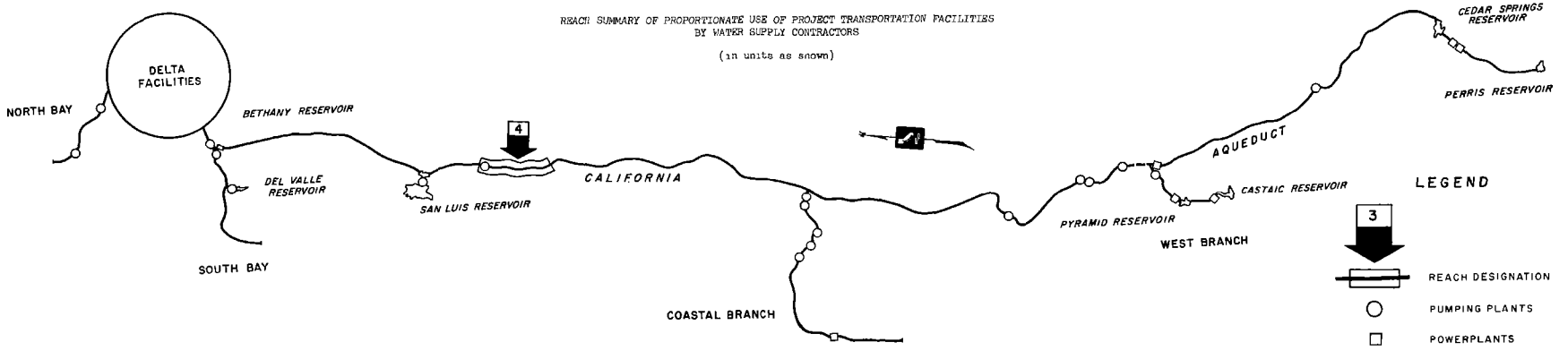



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 3 - SAN LUIS FOREBAY TO DOS AMIGOS PUMPING PLANT | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF | 0.0 | 3704.8 | 2011500.0 | 119103.4 | 150862.5 | 0.00000 | 2281465.9 | .52638503 | .46126053 | 0.00000 | 2281465.9 | .52638503 | .46126053 |
| | CAPACITY, CFS | 0.00000 | 6.09785 | 2778.44186 | 185.78872 | 212.39436 | | 3176.62494 | .39613604 | | | 3176.62494 | .39613604 | |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 182.4 | 98000.0 | 6891.1 | 7350.0 | 0.00000 | 112241.1 | .02589652 | .02271701 | 0.00000 | 112241.1 | .02589652 | .02271701 |
| | CAPACITY, CFS | 0.00000 | .30022 | 135.36530 | 11.03282 | 10.27353 | | 156.67165 | .01953749 | | | 156.67165 | .01953749 | |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 8.6 | 4600.0 | 323.5 | 345.0 | 0.00000 | 5268.5 | .00121556 | .00106632 | 0.00000 | 5268.5 | .00121556 | .00106632 |
| | CAPACITY, CFS | 0.00000 | .01415 | 6.35388 | .61792 | .48223 | | 7.35403 | .00091707 | | | 7.35403 | .00091707 | |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 53.6 | 28800.0 | 2025.0 | 2160.0 | 0.00000 | 32985.0 | .00761038 | .00667599 | 0.00000 | 32985.0 | .00761038 | .00667599 |
| | CAPACITY, CFS | 0.00000 | .08822 | 39.78082 | 3.04208 | 3.01916 | | 46.04206 | .00574160 | | | 46.04206 | .00574160 | |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY, AF | 0.0 | 32.2 | 17300.0 | 1216.6 | 1297.5 | 0.00000 | 19814.1 | .00457156 | .00401027 | 0.00000 | 19814.1 | .00457156 | .00401027 |
| | CAPACITY, CFS | 0.00000 | .05300 | 23.89612 | 1.94783 | 1.81359 | | 27.65754 | .00344899 | | | 27.65754 | .00344899 | |
| CRESTLINE-LAKE ARROWHEAD WATER AGENCY | QUANTITY, AF | 0.0 | 10.8 | 5800.0 | 407.8 | 435.0 | 0.00000 | 6642.8 | .00153264 | .00134447 | 0.00000 | 6642.8 | .00153264 | .00134447 |
| | CAPACITY, CFS | 0.00000 | .01778 | 8.01142 | .65289 | .60802 | | 9.27233 | .00115629 | | | 9.27233 | .00115629 | |
| COACHELLA VALLEY COUNTY WATER DISTRICT | QUANTITY, AF | 0.0 | 42.5 | 23100.0 | 1332.6 | 1732.5 | 0.00000 | 26165.1 | .00603687 | .00529390 | 0.00000 | 26165.1 | .00603687 | .00529390 |
| | CAPACITY, CFS | 0.00000 | .06995 | 31.90754 | 2.19338 | 2.39307 | | 36.49399 | .00455093 | | | 36.49399 | .00455093 | |
| DESERT WATER AGENCY | QUANTITY, AF | 0.0 | 70.1 | 38100.0 | 2198.1 | 2857.5 | 0.00000 | 43155.6 | .00995696 | .00873153 | 0.00000 | 43155.6 | .00995696 | .00873153 |
| | CAPACITY, CFS | 0.00000 | .11538 | 52.62671 | 3.61790 | 3.94700 | | 60.19161 | .00750610 | | | 60.19161 | .00750610 | |
| MOJAVE WATER AGENCY | QUANTITY, AF | 0.0 | 93.4 | 50800.0 | 2931.1 | 3810.0 | 0.00000 | 57541.1 | .01327602 | .01164211 | 0.00000 | 57541.1 | .01327602 | .01164211 |
| | CAPACITY, CFS | 0.00000 | .15373 | 70.16895 | 4.82439 | 5.26267 | | 80.25601 | .01000820 | | | 80.25601 | .01000820 | |
| LITTLEROCK CREEK IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 4.2 | 2300.0 | 101.4 | 172.5 | 0.00000 | 2573.9 | .00059386 | .00052028 | 0.00000 | 2573.9 | .00059386 | .00052028 |
| | CAPACITY, CFS | 0.00000 | .00691 | 3.17694 | .16688 | .23827 | | 3.58209 | .00044670 | | | 3.58209 | .00044670 | |
| PALMDALE IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 31.3 | 17300.0 | 724.1 | 1297.5 | 0.00000 | 19321.6 | .00445792 | .00390499 | 0.00000 | 19321.6 | .00445792 | .00390499 |
| | CAPACITY, CFS | 0.00000 | .03152 | 23.89612 | 1.19184 | 1.79221 | | 26.88017 | .00335205 | | | 26.88017 | .00335205 | |
| ANTELOPE VALLEY-EAST KERN WATER AGENCY | QUANTITY, AF | 0.0 | 248.8 | 138400.0 | 4678.9 | 10380.0 | 0.00000 | 153458.9 | .03540639 | .03099706 | 0.00000 | 153458.9 | .03540639 | .03099706 |
| | CAPACITY, CFS | 0.00000 | .40951 | 191.16896 | 7.70113 | 14.33767 | | 213.20776 | .02658774 | | | 213.20776 | .02658774 | |
| UPPER SANTA CLARA VALLEY WATER AGENCY | QUANTITY, AF | 0.0 | 75.6 | 41500.0 | 1981.8 | 3112.5 | 0.00000 | 46594.3 | .01075034 | .00941447 | 0.00000 | 46594.3 | .01075034 | .00941447 |
| | CAPACITY, CFS | 0.00000 | .12443 | 57.32306 | 3.09463 | 4.36471 | | 64.78240 | .00807859 | | | 64.78240 | .00807859 | |
| VENTURA COUNTY FLOOD CONTROL DISTRICT | QUANTITY, AF | 0.0 | 36.4 | 20000.0 | 955.1 | 1500.0 | 0.00000 | 22455.1 | .00518089 | .00453710 | 0.00000 | 22455.1 | .00518089 | .00453710 |
| | CAPACITY, CFS | 0.00000 | .05991 | 27.62557 | 1.49143 | 2.10347 | | 31.22047 | .00389330 | | | 31.22047 | .00389330 | |
| KERN COUNTY WATER AGENCY - MUNICIPAL & INDUSTRIAL | QUANTITY, AF | 0.0 | 252.4 | 142000.0 | 3168.9 | 0.0 | 0.00000 | 145168.9 | .03349370 | .03321535 | 0.00000 | 145168.9 | .03349370 | .03321535 |
| | CAPACITY, CFS | 0.00000 | .41543 | 258.90686 | 5.21581 | 0.00000 | | 264.12267 | .03293700 | | | 264.12267 | .03293700 | |
| KERN COUNTY WATER AGENCY - AGRICULTURAL | QUANTITY, AF | 0.0 | 1794.6 | 1011400.0 | 20687.6 | 0.0 | 0.00000 | 1032087.6 | .23812561 | .30933684 | 0.00000 | 1032087.6 | .23812561 | .30933684 |
| | CAPACITY, CFS | 0.00000 | 2.95379 | 3017.57433 | 34.05038 | 0.00000 | | 3051.62471 | .38054808 | | | 3051.62471 | .38054808 | |
| FUTURE CONTRACTOR - NUCLEAR | QUANTITY, AF | 0.0 | 62.6 | 35000.0 | 1016.4 | 0.0 | 0.00000 | 36016.4 | .00830979 | .00727358 | 0.00000 | 36016.4 | .00830979 | .00727358 |
| | CAPACITY, CFS | 0.00000 | .10304 | 48.34475 | 1.67291 | 0.00000 | | 50.01766 | .00623737 | | | 50.01766 | .00623737 | |
| SANTA BARBARA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | QUANTITY, AF | 0.0 | 105.5 | 57700.0 | 2958.6 | 4327.5 | 0.00000 | 64986.1 | .01499374 | .01313008 | 0.00000 | 64986.1 | .01499374 | .01313008 |
| | CAPACITY, CFS | 0.00000 | .17365 | 79.69977 | 4.53897 | 6.10693 | | 90.34567 | .01126642 | | | 90.34567 | .01126642 | |
| SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | QUANTITY, AF | 0.0 | 45.2 | 25000.0 | 982.5 | 1875.0 | 0.00000 | 27857.5 | .00642735 | .00562660 | 0.00000 | 27857.5 | .00642735 | .00562660 |
| | CAPACITY, CFS | 0.00000 | .07440 | 34.53197 | 1.55085 | 2.61585 | | 38.69867 | .00482586 | | | 38.69867 | .00482586 | |
| DEVIL'S DEN WATER DISTRICT | QUANTITY, AF | 0.0 | 22.5 | 12700.0 | 260.3 | 0.0 | 0.00000 | 12960.3 | .00299023 | .00388441 | 0.00000 | 12960.3 | .00299023 | .00388441 |
| | CAPACITY, CFS | 0.00000 | .03703 | 17.89123 | .42843 | 0.00000 | | 18.31966 | .00477859 | | | 18.31966 | .00477859 | |
| DUDLEY RIDGE WATER DISTRICT | QUANTITY, AF | 0.0 | 101.6 | 57700.0 | 746.9 | 0.0 | 0.00000 | 58446.9 | .01348500 | .01755309 | 0.00000 | 58446.9 | .01348500 | .01755309 |
| | CAPACITY, CFS | 0.00000 | .16723 | 172.15151 | 1.72935 | 0.00000 | | 173.38086 | .02162119 | | | 173.38086 | .02162119 | |
| TULARE LAKE BASIN WATER STORAGE DISTRICT | QUANTITY, AF | 0.0 | 193.6 | 110000.0 | 1319.5 | 0.0 | 0.00000 | 111319.5 | .02568389 | .03344068 | 0.00000 | 111319.5 | .02568389 | .03344068 |
| | CAPACITY, CFS | 0.00000 | .31865 | 328.19179 | 2.17180 | 0.00000 | | 330.36359 | .04119747 | | | 330.36359 | .04119747 | |
| HACIENDA WATER DISTRICT | QUANTITY, AF | 0.0 | 15.0 | 8500.0 | 110.1 | 0.0 | 0.00000 | 8610.1 | .00198654 | .00258583 | 0.00000 | 8610.1 | .00198654 | .00258583 |
| | CAPACITY, CFS | 0.00000 | .02469 | 25.36027 | .18121 | 0.00000 | | 25.54148 | .00318511 | | | 25.54148 | .00318511 | |
| EMPIRE WEST SIDE IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 5.3 | 3000.0 | 33.7 | 0.0 | 0.00000 | 3033.7 | .00069994 | .00091152 | 0.00000 | 3033.7 | .00069994 | .00091152 |
| | CAPACITY, CFS | 0.00000 | .00872 | 8.95069 | .05546 | 0.00000 | | 9.00615 | .00112310 | | | 9.00615 | .00112310 | |
| KINGS COUNTY | QUANTITY, AF | 0.0 | 7.0 | 4000.0 | 45.0 | 0.0 | 0.00000 | 4045.0 | .00093327 | .00092599 | 0.00000 | 4045.0 | .00093327 | .00092599 |
| | CAPACITY, CFS | 0.00000 | .01152 | 7.29315 | .07407 | 0.00000 | | 7.36722 | .00091872 | | | 7.36722 | .00091872 | |
| TOTAL | QUANTITY, AF | 0.0 | 7200.0 | 3964500.0 | 176200.0 | 193515.0 | 0.00000 | 4334215.0 | 1.00000000 | 1.00000000 | 0.00000 | 4334215.0 | 1.00000000 | 1.00000000 |
| | CAPACITY, CFS | 0.00000 | 11.85071 | 7468.63957 | 278.63308 | 271.75274 | | 8019.02539 | 1.00000000 | | | 8019.02539 | 1.00000000 | |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(in units as shown)

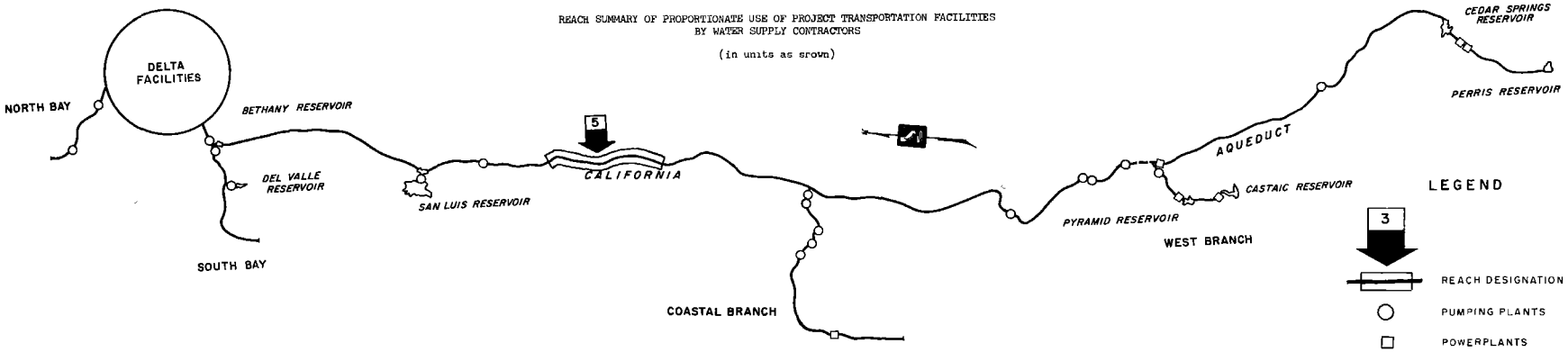



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 4 - DOS AMIGOS PUMPING PLANT TO PANOCHE CREEK | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY; AF | 0.0 | 4888.2 | 2011500.0 | 115398.6 | 150862.5 | | 2277761.1 | .52640472 | | | 2277761.1 | .52640472 | |
| | CAPACITY; CFS | 0.00000 | 8.04584 | 2778.44186 | 179.69087 | 212.39436 | 0.00000 | 3170.52709 | .39596077 | .46118274 | 0.00000 | 3170.52709 | .39596077 | .46118274 |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY; AF | 0.0 | 240.6 | 98000.0 | 6708.7 | 7350.0 | | 112058.7 | .02589746 | | | 112058.7 | .02589746 | |
| | CAPACITY; CFS | 0.00000 | .39601 | 135.36530 | 10.79260 | 10.27353 | 0.00000 | 156.37143 | .01952892 | .02271319 | 0.00000 | 156.37143 | .01952892 | .02271319 |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY; AF | 0.0 | 11.3 | 4600.0 | 314.9 | 345.0 | | 5259.9 | .00121560 | | | 5259.9 | .00121560 | |
| | CAPACITY; CFS | 0.00000 | .01860 | 6.35388 | .50377 | .48223 | 0.00000 | 7.33988 | .00091666 | .00106613 | 0.00000 | 7.33988 | .00091666 | .00106613 |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY; AF | 0.0 | 70.7 | 28800.0 | 1971.4 | 2160.0 | | 32931.4 | .00761065 | | | 32931.4 | .00761065 | |
| | CAPACITY; CFS | 0.00000 | .11637 | 39.78082 | 3.15386 | 3.01916 | 0.00000 | 45.95384 | .00573908 | .00667487 | 0.00000 | 45.95384 | .00573908 | .00667487 |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY; AF | 0.0 | 42.5 | 17300.0 | 1184.4 | 1297.5 | | 19781.9 | .00457172 | | | 19781.9 | .00457172 | |
| | CAPACITY; CFS | 0.00000 | .06995 | 23.89612 | 1.89483 | 1.81359 | 0.00000 | 27.60454 | .00344748 | .00400960 | 0.00000 | 27.60454 | .00344748 | .00400960 |
| CRESTLINE-LAKE ARROWHEAD WATER AGENCY | QUANTITY; AF | 0.0 | 14.2 | 5800.0 | 397.0 | 435.0 | | 6632.0 | .00153270 | | | 6632.0 | .00153270 | |
| | CAPACITY; CFS | 0.00000 | .02337 | 8.01142 | .63511 | .60802 | 0.00000 | 9.25455 | .00115578 | .00134424 | 0.00000 | 9.25455 | .00115578 | .00134424 |
| COACHELLA VALLEY COUNTY WATER DISTRICT | QUANTITY; AF | 0.0 | 56.1 | 23100.0 | 1290.1 | 1732.5 | | 26122.6 | .00603709 | | | 26122.6 | .00603709 | |
| | CAPACITY; CFS | 0.00000 | .09234 | 31.90754 | 2.12343 | 2.39307 | 0.00000 | 36.42404 | .00454893 | .00529301 | 0.00000 | 36.42404 | .00454893 | .00529301 |
| DESERT WATER AGENCY | QUANTITY; AF | 0.0 | 92.5 | 38100.0 | 2128.0 | 2857.5 | | 43085.5 | .00995733 | | | 43085.5 | .00995733 | |
| | CAPACITY; CFS | 0.00000 | .15225 | 52.62671 | 3.50252 | 3.94700 | 0.00000 | 60.07623 | .00750280 | .00873006 | 0.00000 | 60.07623 | .00750280 | .00873006 |
| MOJAVE WATER AGENCY | QUANTITY; AF | 0.0 | 123.3 | 50800.0 | 2837.7 | 3810.0 | | 57447.7 | .01327652 | | | 57447.7 | .01327652 | |
| | CAPACITY; CFS | 0.00000 | .20294 | 70.16895 | 4.67066 | 5.26267 | 0.00000 | 80.10228 | .01000381 | .01164017 | 0.00000 | 80.10228 | .01000381 | .01164017 |
| LITTLEROCK CREEK IRRIGATION DISTRICT | QUANTITY; AF | 0.0 | 5.5 | 2300.0 | 97.2 | 172.5 | | 2569.7 | .00059387 | | | 2569.7 | .00059387 | |
| | CAPACITY; CFS | 0.00000 | .00905 | 3.17694 | .15997 | .23827 | 0.00000 | 3.57518 | .00044650 | .00052019 | 0.00000 | 3.57518 | .00044650 | .00052019 |
| PALMDALE IRRIGATION DISTRICT | QUANTITY; AF | 0.0 | 41.3 | 17300.0 | 692.8 | 1297.5 | | 19290.3 | .00445811 | | | 19290.3 | .00445811 | |
| | CAPACITY; CFS | 0.00000 | .06798 | 23.89612 | 1.14032 | 1.79221 | 0.00000 | 26.82865 | .00335058 | .00390434 | 0.00000 | 26.82865 | .00335058 | .00390434 |
| ANTELOPE VALLEY-EAST KERN WATER AGENCY | QUANTITY; AF | 0.0 | 328.3 | 138400.0 | 4430.1 | 10380.0 | | 153210.1 | .03540780 | | | 153210.1 | .03540780 | |
| | CAPACITY; CFS | 0.00000 | .54036 | 191.16896 | 7.29162 | 14.33767 | 0.00000 | 212.79825 | .02657595 | .03099188 | 0.00000 | 212.79825 | .02657595 | .03099188 |
| UPPER SANTA CLARA VALLEY WATER AGENCY | QUANTITY; AF | 0.0 | 99.8 | 41500.0 | 1906.2 | 3112.5 | | 46518.7 | .01075076 | | | 46518.7 | .01075076 | |
| | CAPACITY; CFS | 0.00000 | .16426 | 57.32306 | 2.97020 | 4.36471 | 0.00000 | 64.65797 | .00807500 | .00941288 | 0.00000 | 64.65797 | .00807500 | .00941288 |
| VENTURA COUNTY FLOOD CONTROL DISTRICT | QUANTITY; AF | 0.0 | 48.1 | 20000.0 | 918.7 | 1500.0 | | 22418.7 | .00518110 | | | 22418.7 | .00518110 | |
| | CAPACITY; CFS | 0.00000 | .07917 | 27.62557 | 1.43152 | 2.10347 | 0.00000 | 31.16056 | .00389158 | .00453634 | 0.00000 | 31.16056 | .00389158 | .00453634 |
| KERN COUNTY WATER AGENCY - MUNICIPAL & INDUSTRIAL | QUANTITY; AF | 0.0 | 333.1 | 142000.0 | 2916.5 | 0.0 | | 144916.5 | .03349110 | | | 144916.5 | .03349110 | |
| | CAPACITY; CFS | 0.00000 | .54826 | 196.90686 | 4.80038 | 0.00000 | 0.00000 | 263.70724 | .03293387 | .03321248 | 0.00000 | 263.70724 | .03293387 | .03321248 |
| KERN COUNTY WATER AGENCY - AGRICULTURAL | QUANTITY; AF | 0.0 | 2367.8 | 1011400.0 | 18893.0 | 0.0 | | 1030293.0 | .23810710 | | | 1030293.0 | .23810710 | |
| | CAPACITY; CFS | 0.00000 | 3.89740 | 3017.57433 | 31.09659 | 0.00000 | 0.00000 | 3048.67092 | .38074240 | .30942475 | 0.00000 | 3048.67092 | .38074240 | .30942475 |
| FUTURE CONTRACTOR - NUCLEAR | QUANTITY; AF | 0.0 | 82.6 | 35000.0 | 953.8 | 0.0 | | 35953.8 | .00830915 | | | 35953.8 | .00830915 | |
| | CAPACITY; CFS | 0.00000 | .13595 | 48.34475 | 1.56987 | 0.00000 | 0.00000 | 49.91462 | .00623374 | .00727144 | 0.00000 | 49.91462 | .00623374 | .00727144 |
| SANTA BARBARA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | QUANTITY; AF | 0.0 | 139.2 | 57700.0 | 2853.1 | 4327.5 | | 64880.6 | .01499431 | | | 64880.6 | .01499431 | |
| | CAPACITY; CFS | 0.00000 | .22911 | 79.69977 | 4.36532 | 6.10693 | 0.00000 | 90.17202 | .01126140 | .01312786 | 0.00000 | 90.17202 | .01126140 | .01312786 |
| SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | QUANTITY; AF | 0.0 | 59.6 | 25000.0 | 937.3 | 1875.0 | | 27812.3 | .00642759 | | | 27812.3 | .00642759 | |
| | CAPACITY; CFS | 0.00000 | .09810 | 34.53197 | 1.47645 | 2.61585 | 0.00000 | 38.62427 | .00482371 | .00562565 | 0.00000 | 38.62427 | .00482371 | .00562565 |
| DEVIL'S DEN WATER DISTRICT | QUANTITY; AF | 0.0 | 29.7 | 12700.0 | 237.8 | 0.0 | | 12937.8 | .00299001 | | | 12937.8 | .00299001 | |
| | CAPACITY; CFS | 0.00000 | .04889 | 17.69123 | .39140 | 0.00000 | 0.00000 | 18.28263 | .00478104 | .00388552 | 0.00000 | 18.28263 | .00478104 | .00388552 |
| DUDLEY RIDGE WATER DISTRICT | QUANTITY; AF | 0.0 | 134.1 | 57700.0 | 645.3 | 0.0 | | 58345.3 | .01348396 | | | 58345.3 | .01348396 | |
| | CAPACITY; CFS | 0.00000 | .22072 | 172.15151 | 1.06212 | 0.00000 | 0.00000 | 173.21363 | .02163230 | .01755813 | 0.00000 | 173.21363 | .02163230 | .01755813 |
| TULARE LAKE BASIN WATER STORAGE DISTRICT | QUANTITY; AF | 0.0 | 255.4 | 110000.0 | 1125.9 | 0.0 | | 111125.9 | .02568188 | | | 111125.9 | .02568188 | |
| | CAPACITY; CFS | 0.00000 | .42037 | 328.19179 | 1.85315 | 0.00000 | 0.00000 | 330.04494 | .04121865 | .03345027 | 0.00000 | 330.04494 | .04121865 | .03345027 |
| HACIENDA WATER DISTRICT | QUANTITY; AF | 0.0 | 19.7 | 8500.0 | 95.1 | 0.0 | | 8595.1 | .00198638 | | | 8595.1 | .00198638 | |
| | CAPACITY; CFS | 0.00000 | .03243 | 25.36027 | .15652 | 0.00000 | 0.00000 | 25.51679 | .00318674 | .00258656 | 0.00000 | 25.51679 | .00318674 | .00258656 |
| EMPIRE WEST SIDE IRRIGATION DISTRICT | QUANTITY; AF | 0.0 | 7.0 | 3000.0 | 28.4 | 0.0 | | 3028.4 | .00069988 | | | 3028.4 | .00069988 | |
| | CAPACITY; CFS | 0.00000 | .01152 | 8.95069 | .04674 | 0.00000 | 0.00000 | 8.99743 | .00112367 | .00091178 | 0.00000 | 8.99743 | .00112367 | .00091178 |
| KINGS COUNTY | QUANTITY; AF | 0.0 | 9.3 | 4000.0 | 38.0 | 0.0 | | 4038.0 | .00093321 | | | 4038.0 | .00093321 | |
| | CAPACITY; CFS | 0.00000 | .01531 | 7.29315 | .06255 | 0.00000 | 0.00000 | 7.35570 | .00091864 | .00092592 | 0.00000 | 7.35570 | .00091864 | .00092592 |
| TOTAL | QUANTITY; AF | 0.0 | 9500.0 | 3964500.0 | 169000.0 | 193515.0 | | 4327015.0 | 1.00000000 | | | 4327015.0 | 1.00000000 | |
| | CAPACITY; CFS | 0.00000 | 15.63635 | 7468.63957 | 266.78237 | 271.75274 | 0.00000 | 8007.17468 | 1.00000000 | 1.00000000 | 0.00000 | 8007.17468 | 1.00000000 | 1.00000000 |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(in units as shown)

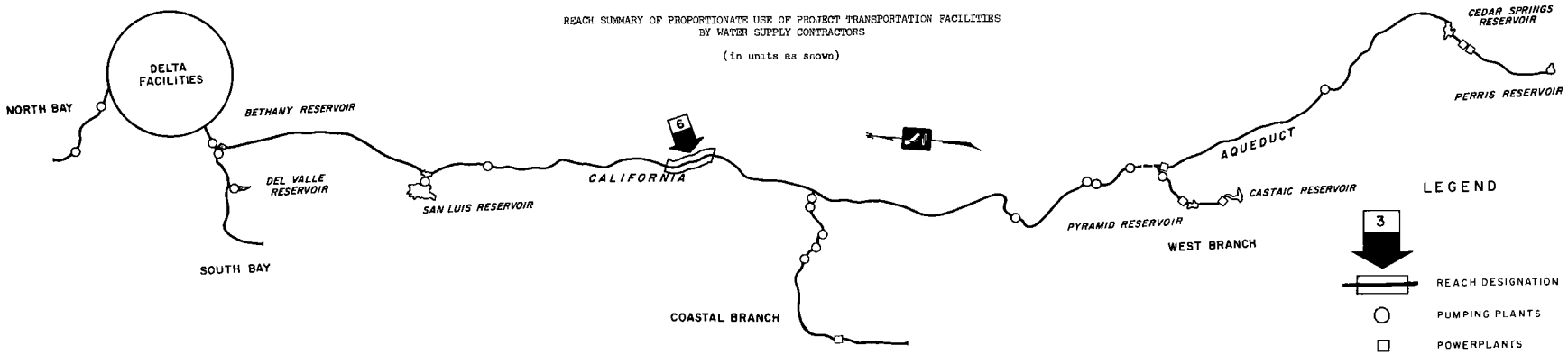



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 5 - PANOCHE CREEK TO FIVE POINTS | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF | 0.0 | 7666.8 | 2011500.0 | 110510.4 | 150862.5 | 0.00000 | 2272872.9 | .52643081 | .46107978 | 0.00000 | 2272872.9 | .52643081 | .46107978 |
| | CAPACITY, CFS | 0.00000 | 12.61903 | 2778.44186 | 171.64523 | 212.39436 | | 3162.48145 | .39572875 | | | 3162.48145 | .39572875 | |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 377.4 | 98000.0 | 6468.1 | 7350.0 | 0.00000 | 111818.1 | .02589872 | .02270814 | 0.00000 | 111818.1 | .02589872 | .02270814 |
| | CAPACITY, CFS | 0.00000 | .62117 | 135.36530 | 10.33659 | 10.27353 | | 155.97542 | .01951757 | | | 155.97542 | .01951757 | |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 17.7 | 4600.0 | 303.6 | 345.0 | 0.00000 | 5248.6 | .00121565 | .00106589 | 0.00000 | 5248.6 | .00121565 | .00106589 |
| | CAPACITY, CFS | 0.00000 | .02913 | 6.35388 | .48517 | .48223 | | 7.32128 | .00091613 | | | 7.32128 | .00091613 | |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 110.9 | 28800.0 | 1900.7 | 2160.0 | 0.00000 | 32860.7 | .00761102 | .00667339 | 0.00000 | 32860.7 | .00761102 | .00667339 |
| | CAPACITY, CFS | 0.00000 | .18253 | 39.78082 | 3.03749 | 3.01916 | | 45.83747 | .00573575 | | | 45.83747 | .00573575 | |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY, AF | 0.0 | 66.6 | 17300.0 | 1141.9 | 1297.5 | 0.00000 | 19739.4 | .00457194 | .00400870 | 0.00000 | 19739.4 | .00457194 | .00400870 |
| | CAPACITY, CFS | 0.00000 | .10962 | 23.89612 | 1.82488 | 1.81359 | | 27.53459 | .00344547 | | | 27.53459 | .00344547 | |
| CRESTLINE-LAKE ARROWHEAD WATER AGENCY | QUANTITY, AF | 0.0 | 22.3 | 5800.0 | 382.8 | 435.0 | 0.00000 | 6617.8 | .00153278 | .00134395 | 0.00000 | 6617.8 | .00153278 | .00134395 |
| | CAPACITY, CFS | 0.00000 | .03670 | 8.01142 | .61174 | .60802 | | 9.23118 | .00115512 | | | 9.23118 | .00115512 | |
| COACHELLA VALLEY COUNTY WATER DISTRICT | QUANTITY, AF | 0.0 | 87.9 | 23100.0 | 1234.0 | 1732.5 | 0.00000 | 26066.5 | .00603738 | .00529183 | 0.00000 | 26066.5 | .00603738 | .00529183 |
| | CAPACITY, CFS | 0.00000 | .14468 | 31.90754 | 2.03109 | 2.39307 | | 36.33170 | .00454627 | | | 36.33170 | .00454627 | |
| DESERT WATER AGENCY | QUANTITY, AF | 0.0 | 145.0 | 38100.0 | 2035.5 | 2857.5 | 0.00000 | 42993.0 | .00995781 | .00872812 | 0.00000 | 42993.0 | .00995781 | .00872812 |
| | CAPACITY, CFS | 0.00000 | .23866 | 52.62671 | 3.35027 | 3.94700 | | 59.92398 | .00749843 | | | 59.92398 | .00749843 | |
| MOJAVE WATER AGENCY | QUANTITY, AF | 0.0 | 193.4 | 50800.0 | 2714.4 | 3810.0 | 0.00000 | 57324.4 | .01327717 | .01163758 | 0.00000 | 57324.4 | .01327717 | .01163758 |
| | CAPACITY, CFS | 0.00000 | .31832 | 70.16895 | 4.46772 | 5.26267 | | 79.89934 | .00999799 | | | 79.89934 | .00999799 | |
| LITTLEROCK CREEK IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 8.6 | 2300.0 | 91.7 | 172.5 | 0.00000 | 2564.2 | .00059391 | .00052007 | 0.00000 | 2564.2 | .00059391 | .00052007 |
| | CAPACITY, CFS | 0.00000 | .01416 | 3.17694 | .15092 | .23827 | | 3.56613 | .00044624 | | | 3.56613 | .00044624 | |
| PALMDALE IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 64.9 | 17300.0 | 651.5 | 1297.5 | 0.00000 | 19249.0 | .00445835 | .00390349 | 0.00000 | 19249.0 | .00445835 | .00390349 |
| | CAPACITY, CFS | 0.00000 | .10682 | 23.89612 | 1.07234 | 1.79221 | | 26.76067 | .00334862 | | | 26.76067 | .00334862 | |
| ANTELOPE VALLEY-EAST KERN WATER AGENCY | QUANTITY, AF | 0.0 | 514.9 | 138400.0 | 4101.8 | 10380.0 | 0.00000 | 152881.8 | .03540967 | .03098500 | 0.00000 | 152881.8 | .03540967 | .03098500 |
| | CAPACITY, CFS | 0.00000 | .84749 | 191.16896 | 6.75126 | 14.33767 | | 212.25789 | .02656033 | | | 212.25789 | .02656033 | |
| UPPER SANTA CLARA VALLEY WATER AGENCY | QUANTITY, AF | 0.0 | 156.5 | 41500.0 | 1806.4 | 3112.5 | 0.00000 | 46418.9 | .01075130 | .00941078 | 0.00000 | 46418.9 | .01075130 | .00941078 |
| | CAPACITY, CFS | 0.00000 | .25759 | 57.32306 | 2.80594 | 4.36471 | | 64.49371 | .00807025 | | | 64.49371 | .00807025 | |
| VENTURA COUNTY FLOOD CONTROL DISTRICT | QUANTITY, AF | 0.0 | 75.4 | 20000.0 | 870.6 | 1500.0 | 0.00000 | 22370.6 | .00518136 | .00453532 | 0.00000 | 22370.6 | .00518136 | .00453532 |
| | CAPACITY, CFS | 0.00000 | .12410 | 27.62557 | 1.35235 | 2.10347 | | 31.08139 | .00388929 | | | 31.08139 | .00388929 | |
| KERN COUNTY WATER AGENCY - MUNICIPAL & INDUSTRIAL | QUANTITY, AF | 0.0 | 522.4 | 142000.0 | 2583.4 | 0.0 | 0.00000 | 144583.4 | .03348764 | .03320867 | 0.00000 | 144583.4 | .03348764 | .03320867 |
| | CAPACITY, CFS | 0.00000 | .85984 | 258.90686 | 4.25212 | 0.00000 | | 263.15898 | .03292970 | | | 263.15898 | .03292970 | |
| KERN COUNTY WATER AGENCY - AGRICULTURAL | QUANTITY, AF | 0.0 | 3713.9 | 1011400.0 | 16525.1 | 0.0 | 0.00000 | 1027925.1 | .23808258 | .30954113 | 0.00000 | 1027925.1 | .23808258 | .30954113 |
| | CAPACITY, CFS | 0.00000 | 6.11283 | 3017.57433 | 27.19919 | 0.00000 | | 3044.77352 | .38099967 | | | 3044.77352 | .38099967 | |
| FUTURE CONTRACTOR - NUCLEAR | QUANTITY, AF | 0.0 | 129.6 | 35000.0 | 871.2 | 0.0 | 0.00000 | 35871.2 | .00830830 | .00726861 | 0.00000 | 35871.2 | .00830830 | .00726861 |
| | CAPACITY, CFS | 0.00000 | .21331 | 48.34475 | 1.43392 | 0.00000 | | 49.77867 | .00622892 | | | 49.77867 | .00622892 | |
| SANTA BARBARA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | QUANTITY, AF | 0.0 | 218.3 | 57700.0 | 2713.9 | 4327.5 | 0.00000 | 64741.4 | .01499506 | .01312492 | 0.00000 | 64741.4 | .01499506 | .01312492 |
| | CAPACITY, CFS | 0.00000 | .35931 | 79.69977 | 4.13621 | 6.10693 | | 89.94291 | .01125477 | | | 89.94291 | .01125477 | |
| SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | QUANTITY, AF | 0.0 | 93.5 | 25000.0 | 877.7 | 1875.0 | 0.00000 | 27752.7 | .00642793 | .00562440 | 0.00000 | 27752.7 | .00642793 | .00562440 |
| | CAPACITY, CFS | 0.00000 | .15390 | 34.53197 | 1.37835 | 2.61585 | | 38.52617 | .00482087 | | | 38.52617 | .00482087 | |
| DEVIL'S DEN WATER DISTRICT | QUANTITY, AF | 0.0 | 46.6 | 12700.0 | 208.1 | 0.0 | 0.00000 | 12908.1 | .00298971 | .00388699 | 0.00000 | 12908.1 | .00298971 | .00388699 |
| | CAPACITY, CFS | 0.00000 | .07670 | 17.89123 | .34251 | 0.00000 | | 18.23374 | .00478428 | | | 18.23374 | .00478428 | |
| DUDLEY RIDGE WATER DISTRICT | QUANTITY, AF | 0.0 | 210.3 | 57700.0 | 511.2 | 0.0 | 0.00000 | 58211.2 | .01348257 | .01756479 | 0.00000 | 58211.2 | .01348257 | .01756479 |
| | CAPACITY, CFS | 0.00000 | .34614 | 172.15151 | .84140 | 0.00000 | | 172.99291 | .02164701 | | | 172.99291 | .02164701 | |
| TULARE LAKE BASIN WATER STORAGE DISTRICT | QUANTITY, AF | 0.0 | 400.6 | 110000.0 | 870.5 | 0.0 | 0.00000 | 110870.5 | .02567924 | .03346297 | 0.00000 | 110870.5 | .02567924 | .03346297 |
| | CAPACITY, CFS | 0.00000 | .65936 | 328.19179 | 1.43278 | 0.00000 | | 329.62457 | .04124670 | | | 329.62457 | .04124670 | |
| HACIENDA WATER DISTRICT | QUANTITY, AF | 0.0 | 31.0 | 8500.0 | 75.4 | 0.0 | 0.00000 | 8575.4 | .00198619 | .00258755 | 0.00000 | 8575.4 | .00198619 | .00258755 |
| | CAPACITY, CFS | 0.00000 | .05102 | 25.36027 | .12409 | 0.00000 | | 25.48436 | .00318892 | | | 25.48436 | .00318892 | |
| EMPIRE WEST SIDE IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 10.9 | 3000.0 | 21.4 | 0.0 | 0.00000 | 3021.4 | .00069980 | .00091212 | 0.00000 | 3021.4 | .00069980 | .00091212 |
| | CAPACITY, CFS | 0.00000 | .01794 | 8.95069 | .03522 | 0.00000 | | 8.98591 | .00112443 | | | 8.98591 | .00112443 | |
| KINGS COUNTY | QUANTITY, AF | 0.0 | 14.6 | 4000.0 | 28.7 | 0.0 | 0.00000 | 4028.7 | .00093311 | .00092581 | 0.00000 | 4028.7 | .00093311 | .00092581 |
| | CAPACITY, CFS | 0.00000 | .02403 | 7.29315 | .04724 | 0.00000 | | 7.34039 | .00091852 | | | 7.34039 | .00091852 | |
| TOTAL | QUANTITY, AF | 0.0 | 14900.0 | 3964500.0 | 159500.0 | 193515.0 | 0.00000 | 4317515.0 | 1.00000000 | 1.00000000 | 0.00000 | 4317515.0 | 1.00000000 | 1.00000000 |
| | CAPACITY, CFS | 0.00000 | 24.52438 | 7468.63957 | 251.14602 | 271.75274 | | 7991.53833 | 1.00000000 | | | 7991.53833 | 1.00000000 | |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(in units as shown)

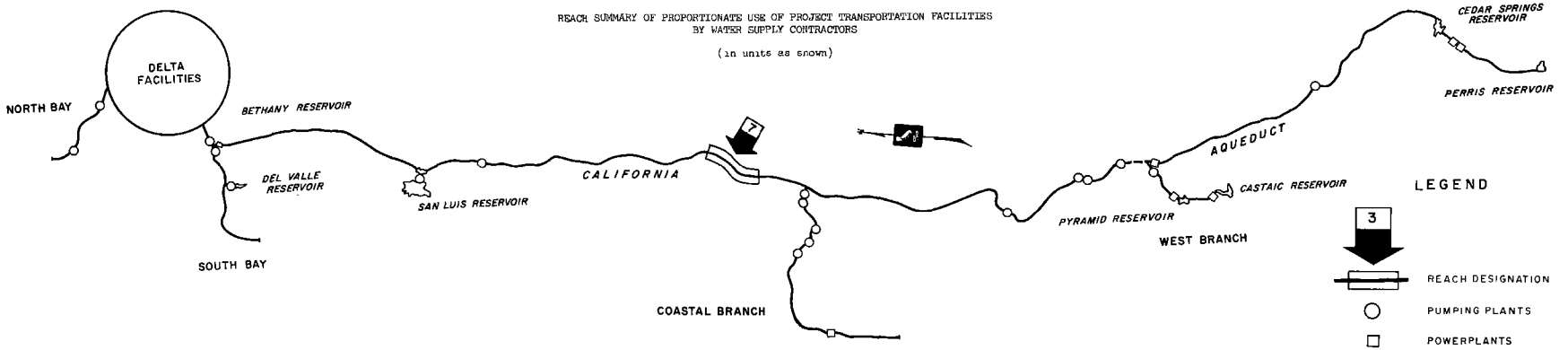



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 6 - FIVE POINTS TO ARROYO PASAJERO | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 3087.3<br>5.08149 | 2011500.0<br>2778.44186 | 102843.6<br>159.02620 | 150862.5<br>212.39436 | 0.00000 | 2265206.1<br>3149.86242 | .52647195<br>.39536299 | .46091747 | 0.00000 | 2265206.1<br>3149.86242 | .52647195<br>.39536299 | .46091747 |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 152.0<br>.25018 | 98000.0<br>135.36530 | 6090.7<br>9.71547 | 7350.0<br>10.27353 | 0.00000 | 111440.7<br>155.35425 | .02590069<br>.01949968 | .02270019 | 0.00000 | 111440.7<br>155.35425 | .02590069<br>.01949968 | .02270019 |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 7.1<br>.01169 | 4600.0<br>6.35388 | 285.9<br>.45604 | 345.0<br>.48223 | 0.00000 | 5230.9<br>7.29215 | .00121575<br>.00091529 | .00106552 | 0.00000 | 5230.9<br>7.29215 | .00121575<br>.00091529 | .00106552 |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 44.7<br>.07357 | 28800.0<br>39.78082 | 1789.8<br>2.85496 | 2160.0<br>3.01916 | 0.00000 | 32749.8<br>45.65494 | .00761160<br>.00573050 | .00667105 | 0.00000 | 32749.8<br>45.65494 | .00761160<br>.00573050 | .00667105 |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 26.8<br>.04411 | 17300.0<br>23.89612 | 1075.3<br>1.71526 | 1297.5<br>1.81359 | 0.00000 | 19672.8<br>27.42497 | .00457229<br>.00344232 | .00400730 | 0.00000 | 19672.8<br>27.42497 | .00457229<br>.00344232 | .00400730 |
| CRESTLINE-LAKE ARROWHEAD WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 9.0<br>.01481 | 5800.0<br>8.01142 | 360.5<br>.57504 | 435.0<br>.60802 | 0.00000 | 6595.5<br>9.19448 | .00153291<br>.00115407 | .00134349 | 0.00000 | 6595.5<br>9.19448 | .00153291<br>.00115407 | .00134349 |
| COACHELLA VALLEY COUNTY WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 35.4<br>.05827 | 23100.0<br>31.90754 | 1146.1<br>1.88641 | 1732.5<br>2.39307 | 0.00000 | 25978.6<br>36.18702 | .00603786<br>.00454211 | .00528998 | 0.00000 | 25978.6<br>36.18702 | .00603786<br>.00454211 | .00528998 |
| DESERT WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 58.4<br>.09612 | 38100.0<br>52.62671 | 1890.5<br>3.11161 | 2857.5<br>3.94700 | 0.00000 | 42848.0<br>59.68532 | .00995860<br>.00749156 | .00872507 | 0.00000 | 42848.0<br>59.68532 | .00995860<br>.00749156 | .00872507 |
| MOJAVE WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 77.9<br>.12822 | 50800.0<br>70.16899 | 2521.0<br>4.14940 | 3810.0<br>5.26267 | 0.00000 | 57131.0<br>79.58102 | .01327820<br>.00998681 | .01163351 | 0.00000 | 57131.0<br>79.58102 | .01327820<br>.00998681 | .01163351 |
| LITTLEROCK CREEK IRRIGATION DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 3.5<br>.00576 | 2300.0<br>3.17694 | 83.1<br>.13676 | 172.5<br>.23827 | 0.00000 | 2555.6<br>3.55197 | .00059396<br>.00044583 | .00051990 | 0.00000 | 2555.6<br>3.55197 | .00059396<br>.00044583 | .00051990 |
| PALMDALE IRRIGATION DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 26.1<br>.04296 | 17300.0<br>23.89612 | 586.6<br>.96552 | 1297.5<br>1.79221 | 0.00000 | 19184.1<br>26.65385 | .00445871<br>.00334553 | .00390212 | 0.00000 | 19184.1<br>26.65385 | .00445871<br>.00334553 | .00390212 |
| ANTELOPE VALLEY-EAST KERN WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 207.3<br>.34120 | 138400.0<br>191.16896 | 3586.9<br>5.90377 | 10380.0<br>14.33767 | 0.00000 | 152366.9<br>211.41040 | .03541263<br>.02653571 | .03097417 | 0.00000 | 152366.9<br>211.41040 | .03541263<br>.02653571 | .03097417 |
| UPPER SANTA CLARA VALLEY WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 63.0<br>.10369 | 41500.0<br>57.32306 | 1649.9<br>2.54835 | 3112.5<br>4.36411 | 0.00000 | 46262.4<br>64.23612 | .01075216<br>.00806276 | .00940746 | 0.00000 | 46262.4<br>64.23612 | .01075216<br>.00806276 | .00940746 |
| VENTURA COUNTY FLOOD CONTROL DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 30.4<br>.05004 | 20000.0<br>27.62557 | 795.2<br>1.22825 | 1500.0<br>2.10347 | 0.00000 | 22295.2<br>30.95729 | .00518178<br>.00388568 | .00453375 | 0.00000 | 22295.2<br>30.95729 | .00518178<br>.00388568 | .00453375 |
| KERN COUNTY WATER AGENCY - MUNICIPAL & INDUSTRIAL | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 210.3<br>.34614 | 142000.0<br>258.90686 | 2061.0<br>3.39228 | 0.0<br>0.00000 | 0.00000 | 144061.0<br>262.29914 | .03348220<br>.03292314 | .03320267 | 0.00000 | 144061.0<br>262.29914 | .03348220<br>.03292314 | .03320267 |
| KERN COUNTY WATER AGENCY - AGRICULTURAL | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 1495.5<br>2.46149 | 1011400.0<br>3017.57433 | 12811.2<br>21.08636 | 0.0<br>0.00000 | 0.00000 | 1024211.2<br>3038.66069 | .23804389<br>.38140522 | .30972455 | 0.00000 | 1024211.2<br>3038.66069 | .23804389<br>.38140522 | .30972455 |
| FUTURE CONTRACTOR - NUCLEAR | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 52.2<br>.08592 | 35000.0<br>48.34475 | 741.6<br>1.22061 | 0.0<br>0.00000 | 0.00000 | 35741.6<br>49.56536 | .00830695<br>.00622132 | .00726414 | 0.00000 | 35741.6<br>49.56536 | .00830695<br>.00622132 | .00726414 |
| SANTA BARBARA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 87.9<br>.14468 | 57700.0<br>79.69977 | 2495.6<br>3.77690 | 4327.5<br>6.10693 | 0.00000 | 64523.1<br>89.58360 | .01499625<br>.01124431 | .01312028 | 0.00000 | 64523.1<br>89.58360 | .01499625<br>.01124431 | .01312028 |
| SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 37.6<br>.06189 | 25000.0<br>34.53197 | 784.2<br>1.22445 | 1875.0<br>2.61585 | 0.00000 | 27659.2<br>38.37227 | .00642846<br>.00481639 | .00562243 | 0.00000 | 27659.2<br>38.37227 | .00642846<br>.00481639 | .00562243 |
| DEVIL'S DEN WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 18.8<br>.03094 | 12700.0<br>37.89123 | 161.5<br>.76581 | 0.0<br>0.00000 | 0.00000 | 12861.5<br>38.15704 | .00298923<br>.00478938 | .00388930 | 0.00000 | 12861.5<br>38.15704 | .00298923<br>.00478938 | .00388930 |
| DUDLEY RIDGE WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 84.7<br>.13941 | 57700.0<br>172.15151 | 300.9<br>.49526 | 0.0<br>0.00000 | 0.00000 | 58000.9<br>172.64677 | .01348038<br>.02167020 | .01757529 | 0.00000 | 58000.9<br>172.64677 | .01348038<br>.02167020 | .01757529 |
| TULARE LAKE BASIN WATER STORAGE DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 161.3<br>.26549 | 110000.0<br>328.19179 | 469.9<br>.77342 | 0.0<br>0.00000 | 0.00000 | 110469.9<br>328.96521 | .02567506<br>.04129090 | .03348298 | 0.00000 | 110469.9<br>328.96521 | .02567506<br>.04129090 | .03348298 |
| HACIENDA WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 12.5<br>.02057 | 8500.0<br>25.36027 | 44.4<br>.07307 | 0.0<br>0.00000 | 0.00000 | 8544.4<br>25.43334 | .00198586<br>.00319233 | .00258910 | 0.00000 | 8544.4<br>25.43334 | .00198586<br>.00319233 | .00258910 |
| EMPIRE WEST SIDE IRRIGATION DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 4.4<br>.00724 | 3000.0<br>8.95069 | 10.5<br>.01728 | 0.0<br>0.00000 | 0.00000 | 3010.5<br>8.96797 | .00069969<br>.00112564 | .00091266 | 0.00000 | 3010.5<br>8.96797 | .00069969<br>.00112564 | .00091266 |
| KINGS COUNTY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 5.9<br>.00971 | 4000.0<br>7.29315 | 14.1<br>.02321 | 0.0<br>0.00000 | 0.00000 | 4014.1<br>7.31636 | .00093294<br>.00091833 | .00092564 | 0.00000 | 4014.1<br>7.31636 | .00093294<br>.00091833 | .00092564 |
| TOTAL | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 6000.0<br>9.87559 | 3964500.0<br>7468.63957 | 144600.0<br>226.62164 | 193215.0<br>271.75274 | 0.00000 | 4302815.0<br>7967.01395 | 1.00000000<br>1.00000000 | 1.00000000 | 0.00000 | 4302815.0<br>7967.01395 | 1.00000000<br>1.00000000 | 1.00000000 |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(in units as shown)

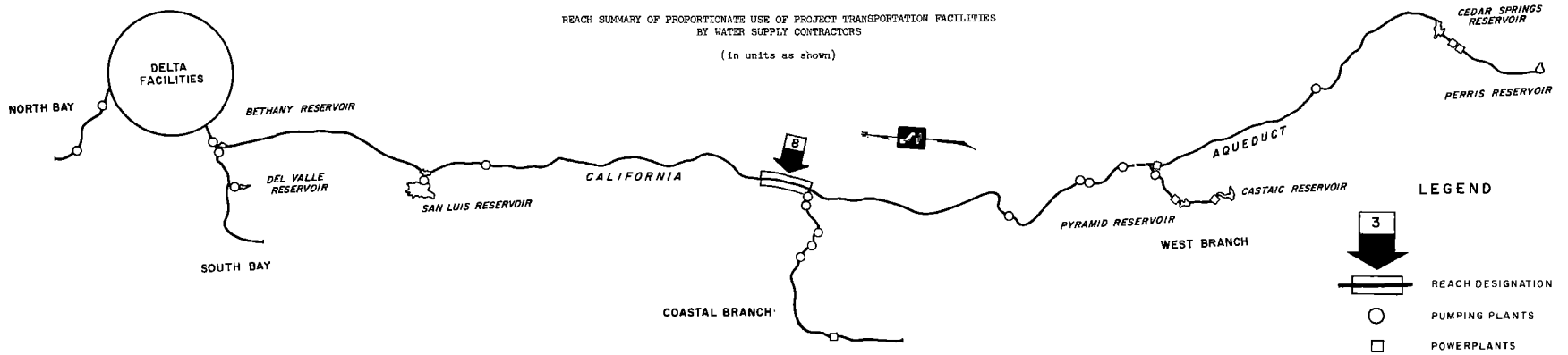



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 7 - ARROYO PASAJERO TO KETTLEMAN CITY | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF | 0.0 | 4322.2 | 2011500.0 | 99756.3 | 150862.5 | 0.00000 | 2262118.8 | .52648860 | .46085183 | 0.00000 | 2262118.8 | .52648860 | .46085183 |
| | CAPACITY, CFS | 0.00000 | 7.11405 | 2778.44186 | 153.94471 | 212.39436 | | 3144.78093 | .39521506 | | | 3144.78093 | .39521506 | |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 212.8 | 98000.0 | 5938.7 | 7350.0 | 0.00000 | 111288.7 | .02590148 | .02269696 | 0.00000 | 111288.7 | .02590148 | .02269696 |
| | CAPACITY, CFS | 0.00000 | .35025 | 135.36530 | 9.46524 | 10.27353 | | 155.10407 | .01949244 | | | 155.10407 | .01949244 | |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 10.0 | 4600.0 | 278.8 | 345.0 | 0.00000 | 5223.8 | .00121579 | .00106538 | 0.00000 | 5223.8 | .00121579 | .00106538 |
| | CAPACITY, CFS | 0.00000 | .01646 | 6.35388 | .44435 | .48223 | | 7.28046 | .00091496 | | | 7.28046 | .00091496 | |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 62.5 | 28800.0 | 1745.1 | 2160.0 | 0.00000 | 32705.1 | .00761183 | .00667010 | 0.00000 | 32705.1 | .00761183 | .00667010 |
| | CAPACITY, CFS | 0.00000 | .10287 | 39.78062 | 2.78139 | 3.01916 | | 45.58137 | .00572836 | | | 45.58137 | .00572836 | |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY, AF | 0.0 | 37.6 | 17300.0 | 1048.5 | 1297.5 | 0.00000 | 19646.0 | .00457244 | .00400674 | 0.00000 | 19646.0 | .00457244 | .00400674 |
| | CAPACITY, CFS | 0.00000 | .06189 | 23.89612 | 1.67115 | 1.81359 | | 27.38086 | .00344104 | | | 27.38086 | .00344104 | |
| CRESTLINE-LAKE ARROWHEAD WATER AGENCY | QUANTITY, AF | 0.0 | 12.6 | 5800.0 | 351.5 | 435.0 | 0.00000 | 6586.5 | .00153295 | .00134330 | 0.00000 | 6586.5 | .00153295 | .00134330 |
| | CAPACITY, CFS | 0.00000 | .02074 | 8.01142 | .56023 | .60802 | | 9.17967 | .00115364 | | | 9.17967 | .00115364 | |
| COACHELLA VALLEY COUNTY WATER DISTRICT | QUANTITY, AF | 0.0 | 49.6 | 23100.0 | 1110.7 | 1732.5 | 0.00000 | 25943.2 | .00603805 | .00528924 | 0.00000 | 25943.2 | .00603805 | .00528924 |
| | CAPACITY, CFS | 0.00000 | .08164 | 31.90754 | 1.82814 | 2.39307 | | 36.12875 | .00454042 | | | 36.12875 | .00454042 | |
| DESERT WATER AGENCY | QUANTITY, AF | 0.0 | 81.7 | 38100.0 | 1832.1 | 2857.5 | 0.00000 | 42789.6 | .00995891 | .00872384 | 0.00000 | 42789.6 | .00995891 | .00872384 |
| | CAPACITY, CFS | 0.00000 | .13447 | 52.62671 | 3.01549 | 3.94700 | | 59.58920 | .00748877 | | | 59.58920 | .00748877 | |
| MOJAVE WATER AGENCY | QUANTITY, AF | 0.0 | 109.0 | 50800.0 | 2443.1 | 3810.0 | 0.00000 | 57053.1 | .01327862 | .01163186 | 0.00000 | 57053.1 | .01327862 | .01163186 |
| | CAPACITY, CFS | 0.00000 | .17941 | 70.16895 | 4.02118 | 5.26267 | | 79.45280 | .00998510 | | | 79.45280 | .00998510 | |
| LITTLEROCK CREEK IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 4.9 | 2300.0 | 79.6 | 172.5 | 0.00000 | 2552.1 | .00059398 | .00051982 | 0.00000 | 2552.1 | .00059398 | .00051982 |
| | CAPACITY, CFS | 0.00000 | .00806 | 3.17694 | .13100 | .23827 | | 3.54621 | .00044566 | | | 3.54621 | .00044566 | |
| PALMDALE IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 36.6 | 17300.0 | 560.5 | 1297.5 | 0.00000 | 19158.0 | .00445886 | .00390157 | 0.00000 | 19158.0 | .00445886 | .00390157 |
| | CAPACITY, CFS | 0.00000 | .06024 | 23.89612 | .92256 | 1.79221 | | 26.61089 | .00334428 | | | 26.61089 | .00334428 | |
| ANTELOPE VALLEY-EAST KERN WATER AGENCY | QUANTITY, AF | 0.0 | 290.3 | 138400.0 | 3379.6 | 10380.0 | 0.00000 | 152159.6 | .03541383 | .03096980 | 0.00000 | 152159.6 | .03541383 | .03096980 |
| | CAPACITY, CFS | 0.00000 | .47781 | 191.16896 | 5.66757 | 14.33767 | | 211.06920 | .02652577 | | | 211.06920 | .02652577 | |
| UPPER SANTA CLARA VALLEY WATER AGENCY | QUANTITY, AF | 0.0 | 88.2 | 41500.0 | 1586.9 | 3112.5 | 0.00000 | 46199.4 | .01075251 | .00940612 | 0.00000 | 46199.4 | .01075251 | .00940612 |
| | CAPACITY, CFS | 0.00000 | .14517 | 57.32306 | 2.44466 | 4.36471 | | 64.13243 | .00805974 | | | 64.13243 | .00805974 | |
| VENTURA COUNTY FLOOD CONTROL DISTRICT | QUANTITY, AF | 0.0 | 42.5 | 20000.0 | 764.8 | 1500.0 | 0.00000 | 22264.8 | .00518194 | .00453308 | 0.00000 | 22264.8 | .00518194 | .00453308 |
| | CAPACITY, CFS | 0.00000 | .06995 | 27.62557 | 1.17821 | 2.10347 | | 30.90725 | .00388422 | | | 30.90725 | .00388422 | |
| KERN COUNTY WATER AGENCY - MUNICIPAL & INDUSTRIAL | QUANTITY, AF | 0.0 | 294.5 | 142000.0 | 1850.7 | 0.0 | 0.00000 | 143850.7 | .03348001 | .03320025 | 0.00000 | 143850.7 | .03348001 | .03320025 |
| | CAPACITY, CFS | 0.00000 | .48473 | 196.09686 | 3.04614 | 0.00000 | | 261.95300 | .03292050 | | | 261.95300 | .03292050 | |
| KERN COUNTY WATER AGENCY - AGRICULTURAL | QUANTITY, AF | 0.0 | 2093.7 | 1011600.0 | 11315.7 | 0.0 | 0.00000 | 1022715.7 | .23802824 | .30979874 | 0.00000 | 1022715.7 | .23802824 | .30979874 |
| | CAPACITY, CFS | 0.00000 | 3.44609 | 3017.57433 | 18.62487 | 0.00000 | | 3036.19920 | .38156924 | | | 3036.19920 | .38156924 | |
| FUTURE CONTRACTOR - NUCLEAR | QUANTITY, AF | 0.0 | 73.1 | 35000.0 | 689.4 | 0.0 | 0.00000 | 35689.4 | .00830640 | .00726232 | 0.00000 | 35689.4 | .00830640 | .00726232 |
| | CAPACITY, CFS | 0.00000 | .12032 | 48.34475 | 1.13469 | 0.00000 | | 49.47944 | .00621825 | | | 49.47944 | .00621825 | |
| SANTA BARBARA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | QUANTITY, AF | 0.0 | 123.0 | 57700.0 | 2407.7 | 4327.5 | 0.00000 | 64435.2 | .01499674 | .01311841 | 0.00000 | 64435.2 | .01499674 | .01311841 |
| | CAPACITY, CFS | 0.00000 | .20245 | 79.69977 | 3.63222 | 6.10693 | | 89.43892 | .01124009 | | | 89.43892 | .01124009 | |
| SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | QUANTITY, AF | 0.0 | 52.7 | 25000.0 | 746.6 | 1875.0 | 0.00000 | 27621.6 | .00642869 | .00562164 | 0.00000 | 27621.6 | .00642869 | .00562164 |
| | CAPACITY, CFS | 0.00000 | .08674 | 34.53197 | 1.16256 | 2.61585 | | 38.31038 | .00481459 | | | 38.31038 | .00481459 | |
| DEVIL'S DEN WATER DISTRICT | QUANTITY, AF | 0.0 | 26.3 | 12700.0 | 142.7 | 0.0 | 0.00000 | 12842.7 | .00298903 | .00389023 | 0.00000 | 12842.7 | .00298903 | .00389023 |
| | CAPACITY, CFS | 0.00000 | .04329 | 17.89123 | .23487 | 0.00000 | | 18.12610 | .00479143 | | | 18.12610 | .00479143 | |
| DUDLEY RIDGE WATER DISTRICT | QUANTITY, AF | 0.0 | 118.6 | 57700.0 | 216.2 | 0.0 | 0.00000 | 57916.2 | .01347949 | .01757953 | 0.00000 | 57916.2 | .01347949 | .01757953 |
| | CAPACITY, CFS | 0.00000 | .19521 | 172.15151 | .35585 | 0.00000 | | 172.50736 | .02167957 | | | 172.50736 | .02167957 | |
| TULARE LAKE BASIN WATER STORAGE DISTRICT | QUANTITY, AF | 61050.0 | 225.8 | 110000.0 | 308.6 | 0.0 | 0.00000 | 110308.6 | .02567337 | .03349108 | 0.00000 | 110308.6 | .02567337 | .03349108 |
| | CAPACITY, CFS | 182.14644 | .37165 | 328.19179 | .50793 | 0.00000 | | 328.69972 | .04130879 | | | 328.69972 | .04130879 | |
| HACIENDA WATER DISTRICT | QUANTITY, AF | 0.0 | 17.5 | 8500.0 | 31.9 | 0.0 | 0.00000 | 8531.9 | .00198573 | .00258972 | 0.00000 | 8531.9 | .00198573 | .00258972 |
| | CAPACITY, CFS | 0.00000 | .02880 | 25.36027 | .05250 | 0.00000 | | 25.41277 | .00319371 | | | 25.41277 | .00319371 | |
| EMPIRE WEST SIDE IRRIGATION DISTRICT | QUANTITY, AF | 3000.0 | 6.1 | 3000.0 | 6.1 | 0.0 | 0.00000 | 3006.1 | .00069964 | .00091288 | 0.00000 | 3006.1 | .00069964 | .00091288 |
| | CAPACITY, CFS | 8.95069 | .01004 | 8.95069 | .01004 | 0.00000 | | 8.96073 | .00112612 | | | 8.96073 | .00112612 | |
| KINGS COUNTY | QUANTITY, AF | 4000.0 | 8.2 | 4000.0 | 8.2 | 0.0 | 0.00000 | 4008.2 | .00093287 | .00092556 | 0.00000 | 4008.2 | .00093287 | .00092556 |
| | CAPACITY, CFS | 7.29315 | .01350 | 7.29315 | .01350 | 0.00000 | | 7.30665 | .00091825 | | | 7.30665 | .00091825 | |
| TOTAL | QUANTITY, AF | 68050.0 | 8400.0 | 3964500.0 | 138600.0 | 103515.0 | 0.00000 | 4296615.0 | 1.00000000 | 1.00000000 | 0.00000 | 4296615.0 | 1.00000000 | 1.00000000 |
| | CAPACITY, CFS | 198.39028 | 13.82583 | 7468.63957 | 216.74605 | 271.75274 | | 7957.19836 | 1.00000000 | | | 7957.19836 | 1.00000000 | |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(In units as shown)

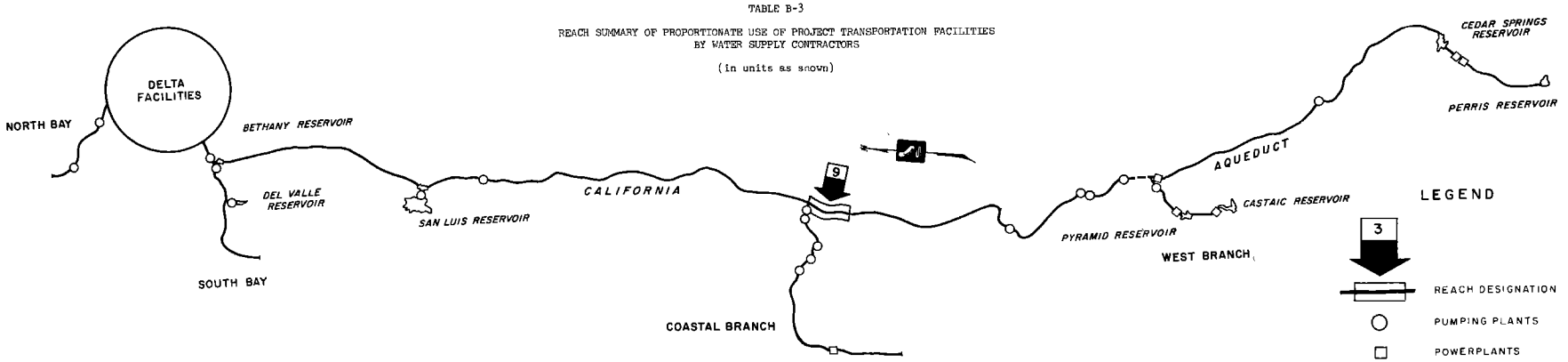



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 8 - KETTLEMAN CITY TO AVENAL GAP | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 3558.1<br>5.85639 | 2011500.0<br>2778.44186 | 95434.1<br>146.83066 | 150662.5<br>212.39436 | 0.00000 | 2257796.6<br>3137.66688 | .53500197<br>.40512568 | .47006382 | 237.57992 | 2257796.6<br>3375.24880 | .53500197<br>.42283068 | .47891632 |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 175.2<br>.28837 | 98000.0<br>135.36530 | 5725.9<br>9.11499 | 7350.0<br>10.27353 | 0.00000 | 111075.9<br>154.75382 | .02632027<br>.01998133 | .02315080 | 0.00000 | 111075.9<br>154.75382 | .02632027<br>.01998063 | .02285345 |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 8.2<br>.01350 | 4600.0<br>6.35388 | 268.8<br>.42789 | 345.0<br>.48223 | 0.00000 | 5213.8<br>7.26400 | .00123545<br>.00093791 | .00108668 | 0.00000 | 5213.8<br>7.26400 | .00123545<br>.00090999 | .00107272 |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 51.5<br>.08477 | 28800.0<br>39.78082 | 1682.6<br>2.67852 | 2160.0<br>3.01916 | 0.00000 | 32642.6<br>45.47850 | .00773491<br>.00587204 | .00680348 | 0.00000 | 32642.6<br>45.47850 | .00773491<br>.00569727 | .00671609 |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 30.9<br>.05086 | 17300.0<br>23.89612 | 1010.9<br>1.60926 | 1297.5<br>1.81359 | 0.00000 | 19608.4<br>27.31897 | .00464636<br>.00352734 | .00408685 | 0.00000 | 19608.4<br>27.31897 | .00464636<br>.00342236 | .00403436 |
| CRESTLINE-LAKE ARROWHEAD WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 10.4<br>.01712 | 5800.0<br>8.01142 | 338.9<br>.53949 | 435.0<br>.60802 | 0.00000 | 6573.9<br>9.15893 | .00155774<br>.00118257 | .00137015 | 0.00000 | 6573.9<br>9.15893 | .00155774<br>.00114736 | .00135256 |
| COACHELLA VALLEY COUNTY WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 40.8<br>.06715 | 23100.0<br>31.90754 | 1061.1<br>1.74650 | 1732.5<br>2.39307 | 0.00000 | 25893.6<br>36.04711 | .00613568<br>.00465429 | .00539499 | 0.00000 | 25893.6<br>36.04711 | .00613568<br>.00451576 | .00532573 |
| DESERT WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 67.3<br>.11077 | 38100.0<br>52.62671 | 1750.4<br>2.88102 | 2857.5<br>3.94700 | 0.00000 | 42707.9<br>59.45473 | .01011996<br>.00767661 | .00889828 | 0.00000 | 42707.9<br>59.45473 | .01011996<br>.00744813 | .00878405 |
| MOJAVE WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 89.7<br>.14764 | 50800.0<br>70.16895 | 2334.1<br>3.84177 | 3810.0<br>5.26267 | 0.00000 | 56944.1<br>79.27339 | .01349334<br>.01023553 | .01186443 | 0.00000 | 56944.1<br>79.27339 | .01349334<br>.00993089 | .01171211 |
| LITTLEROCK CREEK IRRIGATION DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 4.0<br>.00658 | 2300.0<br>3.17694 | 74.7<br>.12294 | 172.5<br>.23827 | 0.00000 | 2547.2<br>3.53815 | .00060358<br>.00045683 | .00053021 | 0.00000 | 2547.2<br>3.53815 | .00060358<br>.00044324 | .00052341 |
| PALMDALE IRRIGATION DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 30.1<br>.04954 | 17300.0<br>23.89612 | 523.9<br>.86232 | 1297.5<br>1.79221 | 0.00000 | 19121.4<br>26.55065 | .00453096<br>.00342814 | .00397955 | 0.00000 | 19121.4<br>26.55065 | .00453096<br>.00332611 | .00392853 |
| ANTELOPE VALLEY-EAST KERN WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 238.9<br>.39321 | 138400.0<br>191.16896 | 3089.3<br>5.08476 | 10380.0<br>14.33767 | 0.00000 | 151869.3<br>210.59139 | .03598656<br>.02719090 | .03158874 | 0.00000 | 151869.3<br>210.59139 | .03598658<br>.02638163 | .03118410 |
| UPPER SANTA CLARA VALLEY WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 72.6<br>.11950 | 41500.0<br>57.32306 | 1498.7<br>2.29949 | 3112.5<br>4.36471 | 0.00000 | 46111.2<br>63.98726 | .01092640<br>.00826183 | .00959412 | 0.00000 | 46111.2<br>63.98726 | .01092640<br>.00801594 | .00947117 |
| VENTURA COUNTY FLOOD CONTROL DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 35.0<br>.05761 | 20000.0<br>27.62557 | 722.3<br>1.10826 | 1500.0<br>2.10347 | 0.00000 | 22222.3<br>30.83730 | .00526574<br>.00398162 | .00462368 | 0.00000 | 22222.3<br>30.83730 | .00526574<br>.00386311 | .00456443 |
| KERN COUNTY WATER AGENCY - MUNICIPAL & INDUSTRIAL | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 242.4<br>.39897 | 142000.0<br>256.90686 | 1556.2<br>2.56141 | 0.0<br>0.00000 | 0.00000 | 143556.2<br>261.46827 | .03401673<br>.03375996 | .03388834 | 0.00000 | 143556.2<br>261.46827 | .03401673<br>.03275518 | .03338595 |
| KERN COUNTY WATER AGENCY - AGRICULTURAL | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 1732.6<br>2.83693 | 1011600.0<br>3017.57433 | 9722.0<br>15.17878 | 0.0<br>0.00000 | 0.00000 | 1020622.0<br>3032.75311 | .24184410<br>.39157954 | .31671182 | 0.00000 | 1020622.0<br>3032.75311 | .24184410<br>.37992512 | .31088461 |
| FUTURE CONTRACTOR - NUCLEAR | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 60.2<br>.09909 | 35000.0<br>48.34475 | 616.3<br>1.01437 | 0.0<br>0.00000 | 0.00000 | 35616.3<br>49.35912 | .00843955<br>.00637309 | .00740632 | 0.00000 | 35616.3<br>49.35912 | .00843955<br>.00618341 | .00731148 |
| SANTA BARBARA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 101.3<br>.16673 | 57700.0<br>79.69977 | 2284.7<br>3.47977 | 4327.5<br>6.10693 | 0.00000 | 64312.2<br>89.23647 | .01523926<br>.01152193 | .01338060 | 0.00000 | 64312.2<br>89.23647 | .01523926<br>.01117901 | .01320914 |
| SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 43.4<br>.07143 | 25000.0<br>34.53197 | 693.9<br>1.07582 | 1875.0<br>2.61585 | 0.00000 | 27568.9<br>38.22364 | .00653266<br>.00493532 | .00573399 | 0.00000 | 27568.9<br>38.22364 | .00653266<br>.00476843 | .00566054 |
| DEVIL'S DEN WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 21.6<br>.03555 | 12700.0<br>17.89123 | 116.4<br>.19158 | 0.0<br>0.00000 | 0.00000 | 12816.4<br>18.08281 | .00303694<br>.00491713 | .00397704 | 0.00000 | 12816.4<br>18.08281 | .00303694<br>.00477079 | .00390386 |
| DUDLEY RIDGE WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 57700.0<br>172.19151 | 97.6<br>.16064 | 57700.0<br>172.19151 | 97.6<br>.16064 | 0.0<br>0.00000 | 0.00000 | 57797.6<br>172.31215 | .01369558<br>.02224840 | .01797199 | 0.00000 | 57797.6<br>172.31215 | .01369558<br>.02156623 | .01764091 |
| TULARE LAKE BASIN WATER STORAGE DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 48950.0<br>146.04535 | 82.8<br>.13628 | 48950.0<br>146.04535 | 82.8<br>.13628 | 0.0<br>0.00000 | 0.00000 | 49032.8<br>146.18163 | .01161969<br>.01887451 | .01524660 | 0.00000 | 49032.8<br>146.18163 | .01161969<br>.01831276 | .01496573 |
| HACIENDA WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 8500.0<br>25.36027 | 14.4<br>.02370 | 8500.0<br>25.36027 | 14.4<br>.02370 | 0.0<br>0.00000 | 0.00000 | 8514.4<br>25.38397 | .00201755<br>.00327750 | .00264752 | 0.00000 | 8514.4<br>25.38397 | .00201755<br>.00317995 | .00259875 |
| TOTAL | QUANTITY, AF<br>CAPACITY, CFS | 115150.0<br>343.55713 | 6800.0<br>11.19233 | 3896450.0<br>7270.24929 | 130200.0<br>202.92022 | 193515.0<br>271.75974 | 0.00000 | 4220165.0<br>7744.92225 | 1.00000000<br>1.00000000 | 1.00000000 | 237.57992 | 4220165.0<br>7982.90217 | 1.00000000<br>1.00000000 | 1.00000000 |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(In units as shown)

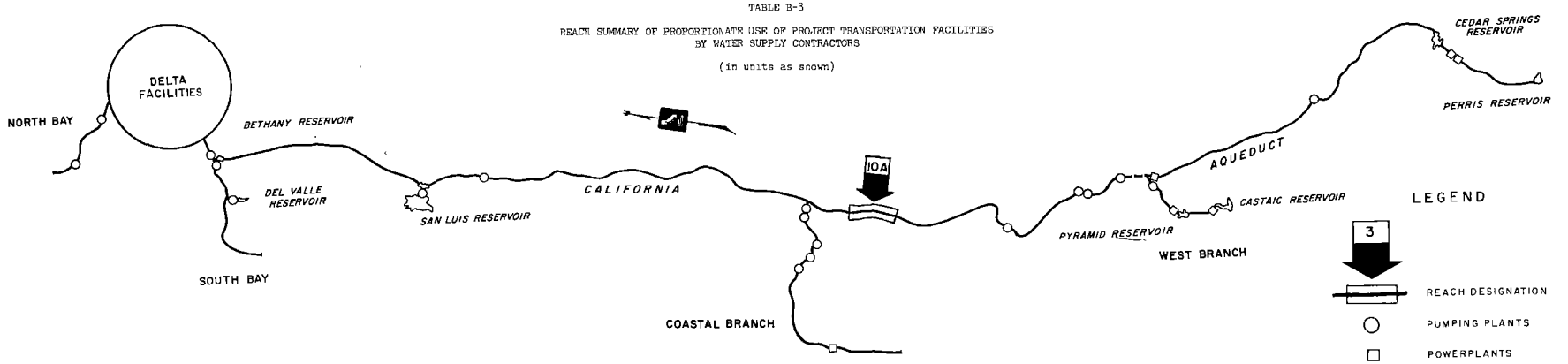



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 9 - AVENAL GAP TO TWISSELMAN ROAD | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF | 0.0 | 3622.8 | 2011500.0 | 91876.0 | 150862.5 | 0.00000 | 2254238.5 | .57754894 | .51390394 | 237.57992 | 2254238.5 | .57754894 | .52298253 |
| | CAPACITY, CFS | 0.00000 | 5.96288 | 2778.44186 | 140.97427 | 212.39436 | | 3131.81049 | .45025894 | | | 3369.39041 | .46841612 | |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 178.4 | 98000.0 | 5550.7 | 7350.0 | 0.00000 | 110900.7 | .02841340 | .02531041 | 0.00000 | 110900.7 | .02841340 | .02494367 |
| | CAPACITY, CFS | 0.00000 | .29363 | 135.36530 | 8.82662 | 10.27353 | | 154.46545 | .02220743 | | | 154.46545 | .02147395 | |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 8.4 | 4600.0 | 260.6 | 345.0 | 0.00000 | 5205.6 | .00133370 | .00118805 | 0.00000 | 5205.6 | .00133370 | .00117084 |
| | CAPACITY, CFS | 0.00000 | .01362 | 6.35388 | .41439 | .48223 | | 7.25050 | .00104240 | | | 7.25050 | .00100797 | |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 52.4 | 28800.0 | 1631.1 | 2160.0 | 0.00000 | 32591.1 | .00835003 | .00743813 | 0.00000 | 32591.1 | .00835003 | .00733036 |
| | CAPACITY, CFS | 0.00000 | .08625 | 39.78082 | 2.59375 | 3.01916 | | 45.39373 | .00652624 | | | 45.39373 | .00631068 | |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY, AF | 0.0 | 31.5 | 17300.0 | 980.0 | 1297.5 | 0.00000 | 19577.5 | .00501587 | .00446810 | 0.00000 | 19577.5 | .00501587 | .00440336 |
| | CAPACITY, CFS | 0.00000 | .05185 | 23.89612 | 1.55840 | 1.81359 | | 27.26811 | .00392032 | | | 27.26811 | .00379084 | |
| CRESTLINE-LAKE ARROWHEAD WATER AGENCY | QUANTITY, AF | 0.0 | 10.6 | 5800.0 | 328.5 | 435.0 | 0.00000 | 6563.5 | .00168161 | .00149796 | 0.00000 | 6563.5 | .00168161 | .00147626 |
| | CAPACITY, CFS | 0.00000 | .01745 | 8.01142 | .52237 | .60802 | | 9.14181 | .00131432 | | | 9.14181 | .00127091 | |
| COACHELLA VALLEY COUNTY WATER DISTRICT | QUANTITY, AF | 0.0 | 41.5 | 23100.0 | 1020.3 | 1732.5 | 0.00000 | 25852.8 | .00662364 | .00589823 | 0.00000 | 25852.8 | .00662364 | .00581280 |
| | CAPACITY, CFS | 0.00000 | .06831 | 31.90754 | 1.67935 | 2.39307 | | 35.97996 | .00517282 | | | 35.97996 | .00500197 | |
| DESERT WATER AGENCY | QUANTITY, AF | 0.0 | 68.5 | 38100.0 | 1683.1 | 2857.5 | 0.00000 | 42640.6 | .01092477 | .00972831 | 0.00000 | 42640.6 | .01092477 | .00958741 |
| | CAPACITY, CFS | 0.00000 | .11275 | 52.62671 | 2.77025 | 3.94700 | | 59.34396 | .00853185 | | | 59.34396 | .00825006 | |
| MOJAVE WATER AGENCY | QUANTITY, AF | 0.0 | 91.4 | 50800.0 | 2244.4 | 3810.0 | 0.00000 | 56854.4 | .01456643 | .01297115 | 0.00000 | 56854.4 | .01456643 | .01278328 |
| | CAPACITY, CFS | 0.00000 | .15044 | 70.16895 | 3.69413 | 5.26267 | | 79.12575 | .01137587 | | | 79.12575 | .01100014 | |
| LITTLEROCK CREEK IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 4.1 | 2300.0 | 70.7 | 172.5 | 0.00000 | 2543.2 | .00065158 | .00057966 | 0.00000 | 2543.2 | .00065158 | .00057127 |
| | CAPACITY, CFS | 0.00000 | .00675 | 3.17694 | .11636 | .23827 | | 3.53157 | .00050773 | | | 3.53157 | .00049096 | |
| PALMDALE IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 30.7 | 17300.0 | 493.8 | 1297.5 | 0.00000 | 19091.3 | .00489130 | .00435068 | 0.00000 | 19091.3 | .00489130 | .00428776 |
| | CAPACITY, CFS | 0.00000 | .05053 | 23.89612 | .81278 | 1.79221 | | 26.50111 | .00381005 | | | 26.50111 | .00368421 | |
| ANTELOPE VALLEY-EAST KERN WATER AGENCY | QUANTITY, AF | 0.0 | 243.3 | 138400.0 | 2850.4 | 10380.0 | 0.00000 | 151630.4 | .03884859 | .03453434 | 0.00000 | 151630.4 | .03884859 | .03403528 |
| | CAPACITY, CFS | 0.00000 | .40045 | 191.16896 | 4.69155 | 14.33767 | | 210.19818 | .03022010 | | | 210.19818 | .02922197 | |
| UPPER SANTA CLARA VALLEY WATER AGENCY | QUANTITY, AF | 0.0 | 79.9 | 41500.0 | 1426.1 | 3112.5 | 0.00000 | 46038.6 | .01179536 | .01048880 | 0.00000 | 46038.6 | .01179536 | .01033716 |
| | CAPACITY, CFS | 0.00000 | .12163 | 57.32306 | 2.17999 | 4.36471 | | 63.86776 | .00918224 | | | 63.86776 | .00847896 | |
| VENTURA COUNTY FLOOD CONTROL DISTRICT | QUANTITY, AF | 0.0 | 35.6 | 20000.0 | 687.3 | 1500.0 | 0.00000 | 22187.3 | .00568451 | .00505485 | 0.00000 | 22187.3 | .00568451 | .00498177 |
| | CAPACITY, CFS | 0.00000 | .05859 | 27.62557 | 1.05065 | 2.10347 | | 30.77969 | .00442518 | | | 30.77969 | .00427903 | |
| KERN COUNTY WATER AGENCY - MUNICIPAL & INDUSTRIAL | QUANTITY, AF | 0.0 | 246.8 | 142000.0 | 1313.8 | 0.0 | 0.00000 | 143313.8 | .03671782 | .03712582 | 0.00000 | 143313.8 | .03671782 | .03650597 |
| | CAPACITY, CFS | 0.00000 | .40622 | 258.90686 | 2.16244 | 0.00000 | | 261.06930 | .03753381 | | | 261.06930 | .03629412 | |
| KERN COUNTY WATER AGENCY - AGRICULTURAL | QUANTITY, AF | 47300.0 | 1598.9 | 921500.0 | 6827.1 | 0.0 | 0.00000 | 928327.1 | .23784277 | .31736569 | 0.00000 | 928327.1 | .23784277 | .31081135 |
| | CAPACITY, CFS | 141.12247 | 2.63168 | 2749.35213 | 11.23694 | 0.00000 | | 2760.58907 | .39688861 | | | 2760.58907 | .38377993 | |
| FUTURE CONTRACTOR - NUCLEAR | QUANTITY, AF | 0.0 | 61.2 | 35000.0 | 556.1 | 0.0 | 0.00000 | 35556.1 | .00910968 | .00909588 | 0.00000 | 35556.1 | .00910968 | .00797893 |
| | CAPACITY, CFS | 0.00000 | .10073 | 48.34475 | .91528 | 0.00000 | | 49.26003 | .00708209 | | | 49.26003 | .00684818 | |
| TOTAL | QUANTITY, AF | 47300.0 | 6400.0 | 3596000.0 | 119900.0 | 187312.5 | 0.00000 | 3903112.5 | 1.00000000 | 1.00000000 | 237.57992 | 3903112.5 | 1.00000000 | 1.00000000 |
| | CAPACITY, CFS | 141.12247 | 10.53396 | 6506.34699 | 186.10952 | 263.02996 | | 6955.57647 | 1.00000000 | | | 7193.10639 | 1.00000000 | |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(in units as shown)

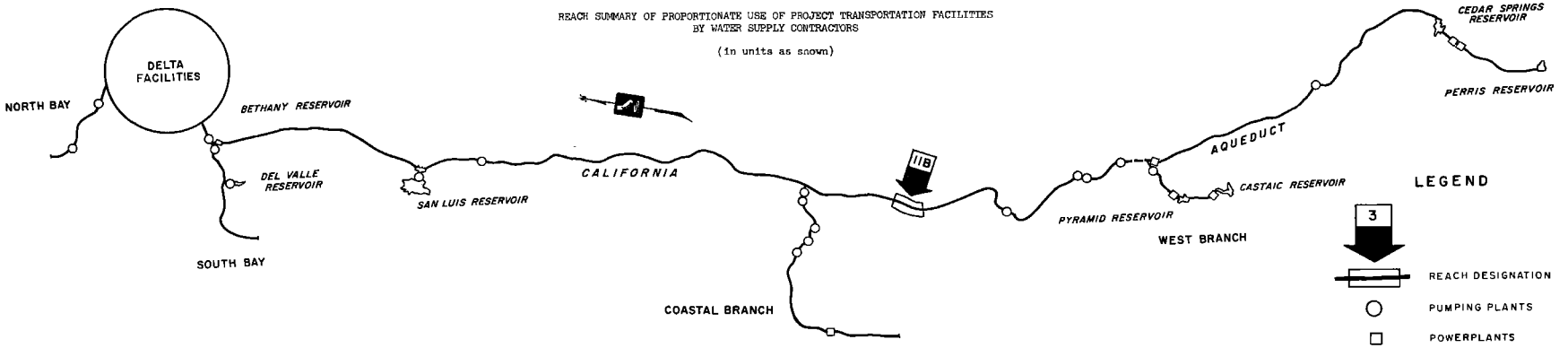



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 10A - TWISSELMAN ROAD TO NEAR LOST HILLS | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF | 0.0 | 3726.9 | 2011500.0 | 88253.2 | 150862.5 | 0.00000 | 2250615.7 | .58466472 | .52204167 | 237.57992 | 2250615.7 | .58466472 | .53116127 |
| | CAPACITY, CFS | 0.00000 | 6.13422 | 2778.44186 | 135.01139 | 212.39436 | | 3125.84761 | .45941863 | | | 3363.42753 | .47765782 | |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 183.5 | 98000.0 | 5372.3 | 7350.0 | 0.00000 | 110722.3 | .02876343 | .02571135 | 0.00000 | 110722.3 | .02876343 | .02532909 |
| | CAPACITY, CFS | 0.00000 | .30203 | 135.36530 | 8.54290 | 10.27353 | | 154.17182 | .02265926 | | | 154.17182 | .02189474 | |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 8.6 | 4600.0 | 252.2 | 345.0 | 0.00000 | 5197.2 | .00135013 | .00120687 | 0.00000 | 5197.2 | .00135013 | .00118892 |
| | CAPACITY, CFS | 0.00000 | .01415 | 6.35388 | .40057 | .48223 | | 7.23668 | .00106360 | | | 7.23668 | .00102772 | |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 53.9 | 28800.0 | 1578.7 | 2160.0 | 0.00000 | 32538.7 | .00845290 | .00755596 | 0.00000 | 32538.7 | .00845290 | .00744363 |
| | CAPACITY, CFS | 0.00000 | .08872 | 39.78082 | 2.50750 | 3.01916 | | 45.30748 | .00665903 | | | 45.30748 | .00643435 | |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY, AF | 0.0 | 32.4 | 17300.0 | 948.5 | 1297.5 | 0.00000 | 19546.0 | .00507766 | .00453887 | 0.00000 | 19546.0 | .00507766 | .00447139 |
| | CAPACITY, CFS | 0.00000 | .05333 | 23.89612 | 1.50655 | 1.81359 | | 27.21626 | .00400009 | | | 27.21626 | .00386512 | |
| CRESTLINE-LAKE ARROWHEAD WATER AGENCY | QUANTITY, AF | 0.0 | 10.9 | 5800.0 | 317.9 | 435.0 | 0.00000 | 6552.9 | .00170231 | .00152168 | 0.00000 | 6552.9 | .00170231 | .00149906 |
| | CAPACITY, CFS | 0.00000 | .01794 | 8.01142 | .50492 | .60802 | | 9.12436 | .00134104 | | | 9.12436 | .00129580 | |
| COACHELLA VALLEY COUNTY WATER DISTRICT | QUANTITY, AF | 0.0 | 42.7 | 23100.0 | 978.8 | 1732.5 | 0.00000 | 25811.3 | .00670526 | .00599167 | 0.00000 | 25811.3 | .00670526 | .00590263 |
| | CAPACITY, CFS | 0.00000 | .07028 | 31.90754 | 1.61104 | 2.39307 | | 35.91165 | .00527808 | | | 35.91165 | .00510000 | |
| DESERT WATER AGENCY | QUANTITY, AF | 0.0 | 70.5 | 38100.0 | 1614.6 | 2857.5 | 0.00000 | 42572.1 | .01105937 | .00988241 | 0.00000 | 42572.1 | .01105937 | .00973555 |
| | CAPACITY, CFS | 0.00000 | .11604 | 52.62671 | 2.66750 | 3.94700 | | 59.23121 | .00870545 | | | 59.23121 | .00841173 | |
| MOJAVE WATER AGENCY | QUANTITY, AF | 0.0 | 94.0 | 50800.0 | 2153.0 | 3810.0 | 0.00000 | 56763.0 | .01474589 | .01317661 | 0.00000 | 56763.0 | .01474589 | .01298079 |
| | CAPACITY, CFS | 0.00000 | .15472 | 70.16895 | 3.54369 | 5.26267 | | 78.97531 | .01160733 | | | 78.97531 | .01121569 | |
| LITTLEROCK CREEK IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 4.2 | 2300.0 | 66.6 | 172.5 | 0.00000 | 2539.1 | .00065961 | .00058883 | 0.00000 | 2539.1 | .00065961 | .00058009 |
| | CAPACITY, CFS | 0.00000 | .00691 | 3.17694 | .10961 | .23827 | | 3.52482 | .00051806 | | | 3.52482 | .00050058 | |
| PALMDALE IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 31.5 | 17300.0 | 463.1 | 1297.5 | 0.00000 | 19060.6 | .00495156 | .00441955 | 0.00000 | 19060.6 | .00495156 | .00435397 |
| | CAPACITY, CFS | 0.00000 | .05185 | 23.89612 | .76225 | 1.79221 | | 26.45058 | .00388755 | | | 26.45058 | .00375638 | |
| ANTELOPE VALLEY-EAST KERN WATER AGENCY | QUANTITY, AF | 0.0 | 250.3 | 138400.0 | 2607.1 | 10380.0 | 0.00000 | 151387.1 | .03932733 | .03508108 | 0.00000 | 151387.1 | .03932733 | .03456090 |
| | CAPACITY, CFS | 0.00000 | .41198 | 191.16896 | 4.29110 | 14.33767 | | 209.79773 | .03083483 | | | 209.79773 | .02979447 | |
| UPPER SANTA CLARA VALLEY WATER AGENCY | QUANTITY, AF | 0.0 | 76.1 | 41500.0 | 1252.2 | 3117.5 | 0.00000 | 45964.7 | .01194070 | .01065487 | 0.00000 | 45964.7 | .01194070 | .01049681 |
| | CAPACITY, CFS | 0.00000 | .12526 | 57.32306 | 2.05836 | 4.36411 | | 63.74613 | .00936903 | | | 63.74613 | .00909292 | |
| VENTURA COUNTY FLOOD CONTROL DISTRICT | QUANTITY, AF | 0.0 | 36.7 | 20000.0 | 651.7 | 1500.0 | 0.00000 | 22151.7 | .00575457 | .00513489 | 0.00000 | 22151.7 | .00575457 | .00505871 |
| | CAPACITY, CFS | 0.00000 | .06041 | 27.62557 | .99206 | 2.10347 | | 30.72110 | .00451521 | | | 30.72110 | .00436286 | |
| KERN COUNTY WATER AGENCY - MUNICIPAL & INDUSTRIAL | QUANTITY, AF | 0.0 | 253.9 | 142000.0 | 1067.0 | 0.0 | 0.00000 | 143067.0 | .03716593 | .03773833 | 0.00000 | 143067.0 | .03716593 | .03709203 |
| | CAPACITY, CFS | 0.00000 | .41750 | 258.90686 | 1.75622 | 0.00000 | | 260.66308 | .03831072 | | | 260.66308 | .03701812 | |
| KERN COUNTY WATER AGENCY - AGRICULTURAL | QUANTITY, AF | 265700.0 | 1560.9 | 874200.0 | 5228.2 | 0.0 | 0.00000 | 879428.2 | .22845777 | .30653236 | 0.00000 | 879428.2 | .22845777 | .30004405 |
| | CAPACITY, CFS | 792.73235 | 2.56913 | 2608.22986 | 8.60526 | 0.00000 | | 2616.83492 | .38460695 | | | 2616.83492 | .37163033 | |
| FUTURE CONTRACTOR - NUCLEAR | QUANTITY, AF | 0.0 | 63.0 | 35000.0 | 494.9 | 0.0 | 0.00000 | 35494.9 | .00922086 | .00822300 | 0.00000 | 35494.9 | .00922086 | .00810111 |
| | CAPACITY, CFS | 0.00000 | .10369 | 48.34475 | .81455 | 0.00000 | | 49.15930 | .00722514 | | | 49.15930 | .00698137 | |
| TOTAL | QUANTITY, AF | 265700.0 | 6500.0 | 3548700.0 | 113400.0 | 187312.5 | 0.00000 | 3849412.5 | 1.00000000 | 1.00000000 | 237.57992 | 3849412.5 | 1.00000000 | 1.00000000 |
| | CAPACITY, CFS | 792.73235 | 10.69856 | 6365.22452 | 175.66556 | 263.02996 | | 6803.92004 | 1.00000000 | | | 7041.49996 | 1.00000000 | |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(in units as shown)

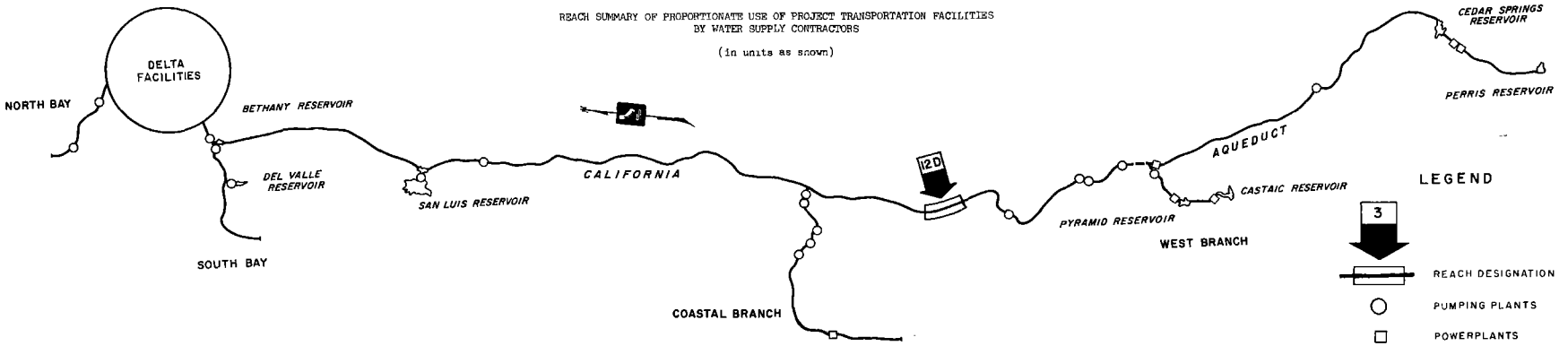



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 11B - NEAR LOST HILLS TO SEVENTH STANDARD ROAD | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF | 0.0 | 2411.4 | 2011500.0 | 84526.3 | 150862.5 | 0.00000 | 2246888.8 | .62811164 | .57401074 | 237.57992 | 2246888.8 | .62811164 | .58315298 |
| | CAPACITY, CFS | 0.00000 | 3.96900 | 2778.44186 | 128.87717 | 212.39436 | | 3119.71339 | .51990983 | | | 3357.29331 | .93819432 | |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 118.7 | 98000.0 | 5188.8 | 7350.0 | 0.00000 | 110538.8 | .03090082 | .02827185 | 0.00000 | 110538.8 | .03090082 | .02778354 |
| | CAPACITY, CFS | 0.00000 | .19537 | 135.36530 | 8.23096 | 10.27353 | | 153.86979 | .02564287 | | | 153.86979 | .02466625 | |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 5.6 | 4600.0 | 243.6 | 345.0 | 0.00000 | 5188.6 | .00145046 | .00132706 | 0.00000 | 5188.6 | .00145046 | .00130414 |
| | CAPACITY, CFS | 0.00000 | .00922 | 6.35388 | .38642 | .48223 | | 7.22253 | .00120366 | | | 7.22253 | .00115781 | |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 34.9 | 28800.0 | 1524.8 | 2160.0 | 0.00000 | 32484.8 | .00908104 | .00830844 | 0.00000 | 32484.8 | .00908104 | .00616494 |
| | CAPACITY, CFS | 0.00000 | .05744 | 39.78082 | 2.41878 | 3.01916 | | 45.21876 | .00753585 | | | 45.21876 | .00724884 | |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY, AF | 0.0 | 21.0 | 17300.0 | 916.1 | 1297.5 | 0.00000 | 19513.6 | .00545497 | .00499088 | 0.00000 | 19513.6 | .00545497 | .00490468 |
| | CAPACITY, CFS | 0.00000 | .03457 | 23.89612 | 1.45322 | 1.81359 | | 27.16293 | .00452679 | | | 27.16293 | .00435438 | |
| CRESTLINE-LAKE ARROWHEAD WATER AGENCY | QUANTITY, AF | 0.0 | 7.0 | 5800.0 | 307.0 | 435.0 | 0.00000 | 6542.0 | .00182880 | .00167320 | 0.00000 | 6542.0 | .00182880 | .00164431 |
| | CAPACITY, CFS | 0.00000 | .01152 | 8.01142 | .48698 | .60802 | | 9.10642 | .00151761 | | | 9.10642 | .00145981 | |
| COACHELLA VALLEY COUNTY WATER DISTRICT | QUANTITY, AF | 0.0 | 27.7 | 23100.0 | 936.1 | 1732.5 | 0.00000 | 25768.6 | .00720354 | .00658831 | 0.00000 | 25768.6 | .00720354 | .00647456 |
| | CAPACITY, CFS | 0.00000 | .04559 | 31.90754 | 1.54076 | 2.39307 | | 35.84137 | .00597307 | | | 35.84137 | .00574559 | |
| DESERT WATER AGENCY | QUANTITY, AF | 0.0 | 45.6 | 38100.0 | 1544.1 | 2857.5 | 0.00000 | 42501.6 | .01188121 | .01086647 | 0.00000 | 42501.6 | .01188121 | .01067886 |
| | CAPACITY, CFS | 0.00000 | .07505 | 52.62671 | 2.54146 | 3.94700 | | 59.11517 | .00985173 | | | 59.11517 | .00947652 | |
| MOJAVE WATER AGENCY | QUANTITY, AF | 0.0 | 60.8 | 50800.0 | 2059.0 | 3810.0 | 0.00000 | 56669.0 | .01584167 | .01448868 | 0.00000 | 56669.0 | .01584167 | .01423854 |
| | CAPACITY, CFS | 0.00000 | .10007 | 70.16895 | 3.38897 | 5.26267 | | 78.82059 | .01313569 | | | 78.82059 | .01263541 | |
| LITTLEROCK CREEK IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 2.7 | 2300.0 | 62.4 | 172.5 | 0.00000 | 2534.9 | .00070862 | .00064745 | 0.00000 | 2534.9 | .00070862 | .00063628 |
| | CAPACITY, CFS | 0.00000 | .00444 | 3.17694 | .10270 | .23827 | | 3.51791 | .00058627 | | | 3.51791 | .00056394 | |
| PALMDALE IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 20.4 | 17300.0 | 431.6 | 1297.5 | 0.00000 | 19029.1 | .00531953 | .00485948 | 0.00000 | 19029.1 | .00531953 | .00477570 |
| | CAPACITY, CFS | 0.00000 | .03358 | 23.89612 | .71040 | 1.79221 | | 26.39873 | .00439943 | | | 26.39873 | .00423188 | |
| ANTELOPE VALLEY-EAST KERN WATER AGENCY | QUANTITY, AF | 0.0 | 161.9 | 138400.0 | 2356.8 | 10380.0 | 0.00000 | 151136.8 | .04224988 | .03857233 | 0.00000 | 151136.8 | .04224988 | .03790784 |
| | CAPACITY, CFS | 0.00000 | .26648 | 191.18896 | 3.87912 | 14.33767 | | 209.38575 | .03489478 | | | 209.38575 | .03356580 | |
| UPPER SANTA CLARA VALLEY WATER AGENCY | QUANTITY, AF | 0.0 | 49.2 | 41500.0 | 1276.1 | 3117.5 | 0.00000 | 45888.6 | .01282803 | .01171532 | 0.00000 | 45888.6 | .01282803 | .01151342 |
| | CAPACITY, CFS | 0.00000 | .08098 | 57.32306 | 1.93310 | 4.36471 | | 63.62087 | .01060261 | | | 63.62087 | .01019881 | |
| VENTURA COUNTY FLOOD CONTROL DISTRICT | QUANTITY, AF | 0.0 | 23.7 | 20000.0 | 615.0 | 1500.0 | 0.00000 | 22115.0 | .00618219 | .00564594 | 0.00000 | 22115.0 | .00618219 | .00554864 |
| | CAPACITY, CFS | 0.00000 | .03901 | 27.62557 | .93165 | 2.10347 | | 30.66069 | .00510970 | | | 30.66069 | .00491509 | |
| KERN COUNTY WATER AGENCY - MUNICIPAL & INDUSTRIAL | QUANTITY, AF | 0.0 | 164.3 | 142000.0 | 813.1 | 0.0 | 0.00000 | 142813.1 | .03992301 | .04164684 | 0.00000 | 142813.1 | .03992301 | .04082094 |
| | CAPACITY, CFS | 0.00000 | .27043 | 258.90686 | 1.33832 | 0.00000 | | 260.24518 | .04337066 | | | 260.24518 | .04171887 | |
| KERN COUNTY WATER AGENCY - AGRICULTURAL | QUANTITY, AF | 126400.0 | 704.3 | 608500.0 | 3667.3 | 0.0 | 0.00000 | 612167.3 | .17112970 | .23734693 | 0.00000 | 612167.3 | .17112970 | .23156623 |
| | CAPACITY, CFS | 377.12220 | 1.15923 | 1815.49731 | 6.03613 | 0.00000 | | 1821.53344 | .30356416 | | | 1821.53344 | .29200277 | |
| FUTURE CONTRACTOR - NUCLEAR | QUANTITY, AF | 0.0 | 40.8 | 35000.0 | 431.9 | 0.0 | 0.00000 | 35431.9 | .00990489 | .00904008 | 0.00000 | 35431.9 | .00990489 | .00888440 |
| | CAPACITY, CFS | 0.00000 | .06715 | 48.34475 | .71086 | 0.00000 | | 49.05561 | .00817527 | | | 49.05561 | .00786391 | |
| TOTAL | QUANTITY, AF | 126400.0 | 3900.0 | 3283000.0 | 106900.0 | 187312.5 | 0.00000 | 3577212.5 | 1.00000000 | 1.00000000 | 237.57992 | 3577212.5 | 1.00000000 | 1.00000000 |
| | CAPACITY, CFS | 377.12220 | 6.41913 | 5572.49217 | 164.96700 | 263.02996 | | 6000.48913 | 1.00000000 | | | 6238.06905 | 1.00000000 | |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(in units as shown)

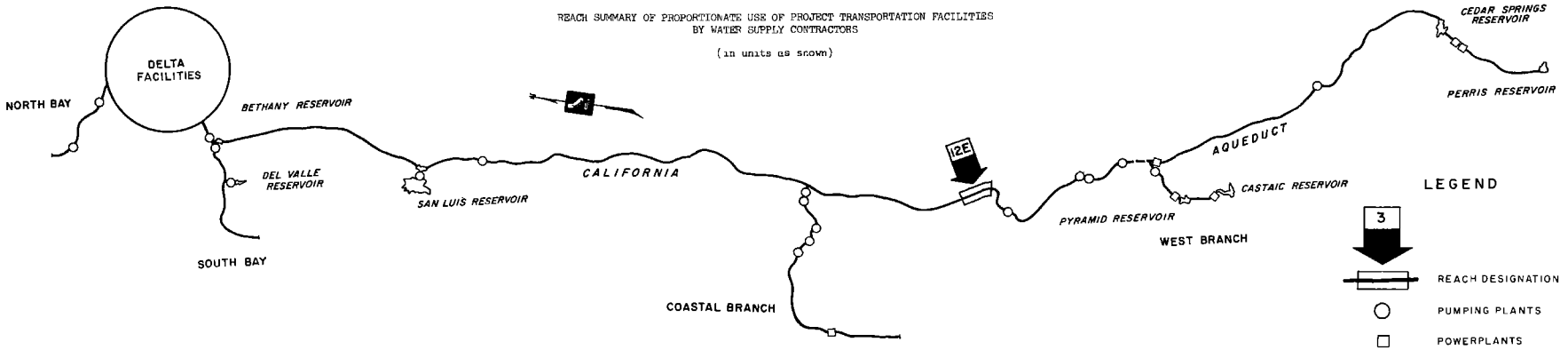



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING[1] | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 12D - SEVENTH STANDARD ROAD TO ELK HILLS ROAD | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF | 0.0 | 3789.5 | 2011500.0 | 82114.9 | 150862.5 | 0.00000 | 2244477.4 | .65115590 | .60293004 | 237.57992 | 2244477.4 | .65115590 | .61196520 |
| | CAPACITY, CFS | 0.00000 | 6.23726 | 2778.44186 | 124.90817 | 212.39436 | | 3115.74439 | .55470417 | | | 3353.32431 | .57277452 | |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 186.6 | 98000.0 | 5070.1 | 7350.0 | 0.00000 | 110420.1 | .03203450 | .02969678 | 0.00000 | 110420.1 | .03203450 | .02914166 |
| | CAPACITY, CFS | 0.00000 | .30713 | 135.36530 | 8.03559 | 10.27353 | | 153.67442 | .02735906 | | | 153.67442 | .02624882 | |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 8.7 | 4600.0 | 238.0 | 345.0 | 0.00000 | 5183.0 | .00150367 | .00139393 | 0.00000 | 5183.0 | .00150367 | .00136788 |
| | CAPACITY, CFS | 0.00000 | .01432 | 6.35388 | .37720 | .48223 | | 7.21331 | .00128421 | | | 7.21331 | .00123209 | |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 54.8 | 28800.0 | 1489.9 | 2160.0 | 0.00000 | 32449.9 | .00941419 | .00872719 | 0.00000 | 32449.9 | .00941419 | .00856405 |
| | CAPACITY, CFS | 0.00000 | .09020 | 39.78082 | 2.36134 | 3.01916 | | 45.16132 | .00804019 | | | 45.16132 | .00771391 | |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY, AF | 0.0 | 32.9 | 17300.0 | 895.1 | 1297.5 | 0.00000 | 19492.6 | .00565509 | .00524241 | 0.00000 | 19492.6 | .00565509 | .00514441 |
| | CAPACITY, CFS | 0.00000 | .05415 | 23.89612 | 1.41865 | 1.81359 | | 27.12836 | .00482973 | | | 27.12836 | .00463374 | |
| CRESTLINE-LAKE ARROWHEAD WATER AGENCY | QUANTITY, AF | 0.0 | 11.0 | 5800.0 | 300.0 | 435.0 | 0.00000 | 6535.0 | .00189590 | .00175754 | 0.00000 | 6535.0 | .00189590 | .00172469 |
| | CAPACITY, CFS | 0.00000 | .01811 | 8.01142 | .47546 | .60802 | | 9.09490 | .00161919 | | | 9.09490 | .00155348 | |
| COACHELLA VALLEY COUNTY WATER DISTRICT | QUANTITY, AF | 0.0 | 43.4 | 23100.0 | 908.4 | 1732.5 | 0.00000 | 25740.9 | .00746781 | .00692032 | 0.00000 | 25740.9 | .00746781 | .00679101 |
| | CAPACITY, CFS | 0.00000 | .07143 | 31.90754 | 1.49517 | 2.39307 | | 35.79578 | .00637282 | | | 35.79578 | .00611420 | |
| DESERT WATER AGENCY | QUANTITY, AF | 0.0 | 71.7 | 36100.0 | 1498.5 | 2857.5 | 0.00000 | 42456.0 | .01231711 | .01141409 | 0.00000 | 42456.0 | .01231711 | .01120082 |
| | CAPACITY, CFS | 0.00000 | .11801 | 52.62671 | 2.46641 | 3.94700 | | 59.04012 | .01051107 | | | 59.04012 | .01008452 | |
| MOJAVE WATER AGENCY | QUANTITY, AF | 0.0 | 95.6 | 50800.0 | 1998.2 | 3810.0 | 0.00000 | 56608.2 | .01642287 | .01521885 | 0.00000 | 56608.2 | .01642287 | .01493448 |
| | CAPACITY, CFS | 0.00000 | .15735 | 70.16895 | 3.28890 | 5.26267 | | 78.72052 | .01401482 | | | 78.72052 | .01344609 | |
| LITTLEROCK CREEK IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 4.3 | 2300.0 | 59.7 | 172.5 | 0.00000 | 2532.2 | .00073463 | .00068007 | 0.00000 | 2532.2 | .00073463 | .00066738 |
| | CAPACITY, CFS | 0.00000 | .00708 | 3.17694 | .09826 | .23827 | | 3.51347 | .00062551 | | | 3.51347 | .00060013 | |
| PALMDALE IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 32.1 | 17300.0 | 411.2 | 1297.5 | 0.00000 | 19008.7 | .00551470 | .00510428 | 0.00000 | 19008.7 | .00551470 | .00500904 |
| | CAPACITY, CFS | 0.00000 | .05284 | 23.89612 | .67682 | 1.79221 | | 26.36515 | .00469386 | | | 26.36515 | .00450338 | |
| ANTELOPE VALLEY-EAST KERN WATER AGENCY | QUANTITY, AF | 0.0 | 254.5 | 138400.0 | 2194.9 | 10380.0 | 0.00000 | 150974.9 | .04380004 | .04051505 | 0.00000 | 150974.9 | .04380004 | .03975964 |
| | CAPACITY, CFS | 0.00000 | .41889 | 191.16896 | 3.61264 | 14.33767 | | 209.11927 | .03723005 | | | 209.11927 | .03571924 | |
| UPPER SANTA CLARA VALLEY WATER AGENCY | QUANTITY, AF | 0.0 | 77.3 | 41500.0 | 1226.9 | 3112.5 | 0.00000 | 45839.4 | .01329868 | .01230543 | 0.00000 | 45839.4 | .01329868 | .01207590 |
| | CAPACITY, CFS | 0.00000 | .12723 | 57.32306 | 1.85212 | 4.36471 | | 63.53989 | .01131217 | | | 63.53989 | .01085312 | |
| VENTURA COUNTY FLOOD CONTROL DISTRICT | QUANTITY, AF | 0.0 | 37.3 | 20000.0 | 591.3 | 1500.0 | 0.00000 | 22091.3 | .00640901 | .00593033 | 0.00000 | 22091.3 | .00640901 | .00581972 |
| | CAPACITY, CFS | 0.00000 | .06139 | 27.62557 | .89264 | 2.10347 | | 30.62168 | .00545166 | | | 30.62168 | .00523043 | |
| KERN COUNTY WATER AGENCY - MUNICIPAL & INDUSTRIAL | QUANTITY, AF | 0.0 | 258.2 | 142000.0 | 648.8 | 0.0 | 0.00000 | 142648.8 | .04138451 | .04383425 | 0.00000 | 142648.8 | .04138451 | .04289514 |
| | CAPACITY, CFS | 0.00000 | .42498 | 258.90686 | 1.06789 | | | 259.97475 | .04628399 | | | 259.97475 | .04440576 | |
| KERN COUNTY WATER AGENCY - AGRICULTURAL | QUANTITY, AF | 3600.0 | 878.0 | 482100.0 | 2963.0 | 0.0 | 0.00000 | 485063.0 | .14072391 | .19883493 | 0.00000 | 485063.0 | .14072391 | .19362143 |
| | CAPACITY, CFS | 10.74082 | 1.44513 | 1438.37511 | 4.87690 | | | 1443.25201 | .25694595 | | | 1443.25201 | .24651895 | |
| FUTURE CONTRACTOR - NUCLEAR | QUANTITY, AF | 0.0 | 64.1 | 35000.0 | 391.1 | 0.0 | 0.00000 | 35391.1 | .01026748 | .00949451 | 0.00000 | 35391.1 | .01026748 | .00931755 |
| | CAPACITY, CFS | 0.00000 | .10550 | 48.34475 | .64371 | | | 48.98846 | .00872155 | | | 48.98846 | .00836762 | |
| TOTAL | QUANTITY, AF | 3600.0 | 5900.0 | 3156600.0 | 103000.0 | 187312.5 | 0.00000 | 3446912.5 | 1.00000000 | 1.00000000 | 237.57992 | 3446912.5 | 1.00000000 | 1.00000000 |
| | CAPACITY, CFS | 10.74082 | 9.71100 | 5195.36997 | 158.54787 | 263.02996 | | 5616.94780 | 1.00000000 | | | 5854.52772 | 1.00000000 | |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(in units as shown)

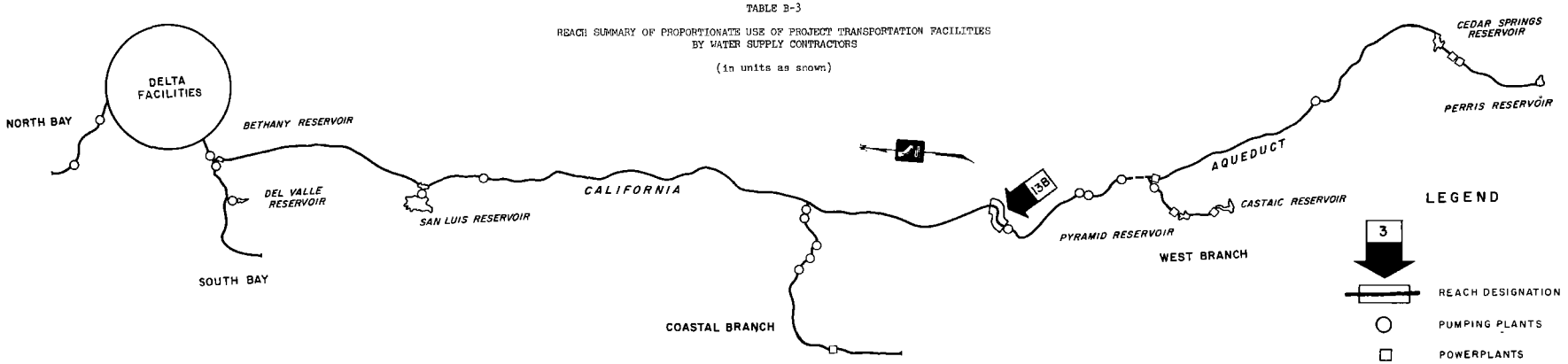



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 12E - ELK HILLS ROAD TO TUPMAN ROAD | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF | 0.0 | 2314.8 | 2011500.0 | 78325.4 | 150862.5 | -0.00000 | 2240687.9 | .65185307 | | 237.57992 | 2240687.9 | .65185307 | |
| | CAPACITY, CFS | 0.00000 | 3.81000 | 2778.44186 | 118.67091 | 212.39436 | | 3109.50713 | .55561679 | .60373493 | | 3347.08705 | .57571332 | .61278320 |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 114.0 | 98000.0 | 4883.5 | 7350.0 | | 110233.5 | .03206874 | | | 110233.5 | .03206874 | |
| | CAPACITY, CFS | 0.00000 | .18764 | 135.36530 | 7.72846 | 10.27353 | 0.00000 | 153.36729 | .02740416 | .02973645 | 0.00000 | 153.36729 | .02648619 | .02917847 |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 5.4 | 4600.0 | 229.3 | 345.0 | | 5174.3 | .00150529 | | | 5174.3 | .00150529 | |
| | CAPACITY, CFS | 0.00000 | .00889 | 6.35388 | .36288 | .48223 | 0.00000 | 7.19899 | .00128634 | .00139581 | 0.00000 | 7.19899 | .00123396 | .00136962 |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 33.5 | 28800.0 | 1435.1 | 2160.0 | | 32395.1 | .00942427 | | | 32395.1 | .00942427 | |
| | CAPACITY, CFS | 0.00000 | .05514 | 39.78082 | 2.27114 | 3.01916 | 0.00000 | 45.07112 | .00805346 | .00873886 | 0.00000 | 45.07112 | .00772549 | .00857488 |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY, AF | 0.0 | 20.1 | 17300.0 | 862.2 | 1297.5 | | 19459.7 | .00566115 | | | 19459.7 | .00566115 | |
| | CAPACITY, CFS | 0.00000 | .03308 | 23.89612 | 1.36450 | 1.81359 | 0.00000 | 27.07421 | .00483771 | .00524943 | 0.00000 | 27.07421 | .00464070 | .00515093 |
| CRESTLINE-LAKE ARROWHEAD WATER AGENCY | QUANTITY, AF | 0.0 | 6.7 | 5800.0 | 289.0 | 435.0 | | 6524.0 | .00189794 | | | 6524.0 | .00189794 | |
| | CAPACITY, CFS | 0.00000 | .01103 | 8.01142 | .45735 | .60802 | 0.00000 | 9.07679 | .00162187 | .00175991 | 0.00000 | 9.07679 | .00155582 | .00172688 |
| COACHELLA VALLEY COUNTY WATER DISTRICT | QUANTITY, AF | 0.0 | 26.5 | 23100.0 | 865.0 | 1732.5 | | 25697.5 | .00747583 | | | 25697.5 | .00747583 | |
| | CAPACITY, CFS | 0.00000 | .04362 | 31.90754 | 1.42374 | 2.39307 | 0.00000 | 35.72435 | .00638334 | .00692959 | 0.00000 | 35.72435 | .00612339 | .00679961 |
| DESERT WATER AGENCY | QUANTITY, AF | 0.0 | 43.8 | 38100.0 | 1426.8 | 2857.5 | | 42384.3 | .01233029 | | | 42384.3 | .01233029 | |
| | CAPACITY, CFS | 0.00000 | .07209 | 52.62671 | 2.94840 | 3.94700 | 0.00000 | 58.92211 | .01052859 | .01142934 | 0.00000 | 58.92211 | .01009965 | .01121497 |
| MOJAVE WATER AGENCY | QUANTITY, AF | 0.0 | 58.4 | 50800.0 | 1902.6 | 3810.0 | | 56512.6 | .01644045 | | | 56512.6 | .01644045 | |
| | CAPACITY, CFS | 0.00000 | .09612 | 70.16895 | 3.13155 | 5.26267 | 0.00000 | 78.56317 | .01403792 | .01523916 | 0.00000 | 78.56317 | .01346626 | .01495335 |
| LITTLEROCK CREEK IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 2.6 | 2300.0 | 55.4 | 172.5 | | 2527.9 | .00073541 | | | 2527.9 | .00073541 | |
| | CAPACITY, CFS | 0.00000 | .00428 | 3.17694 | .09118 | .23827 | 0.00000 | 3.50639 | .00062653 | .00068097 | 0.00000 | 3.50639 | .00060102 | .00066821 |
| PALMDALE IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 19.6 | 17300.0 | 379.1 | 1297.5 | | 18976.6 | .00552061 | | | 18976.6 | .00552061 | |
| | CAPACITY, CFS | 0.00000 | .03226 | 23.89612 | .62398 | 1.79221 | 0.00000 | 26.31231 | .00470157 | .00511109 | 0.00000 | 26.31231 | .00431011 | .00501336 |
| ANTELOPE VALLEY-EAST KERN WATER AGENCY | QUANTITY, AF | 0.0 | 155.5 | 138400.0 | 1940.4 | 10380.0 | | 150720.4 | .04384705 | | | 150720.4 | .04384705 | |
| | CAPACITY, CFS | 0.00000 | .25594 | 191.16896 | 3.19375 | 14.33767 | 0.00000 | 208.70038 | .03729126 | .04056916 | 0.00000 | 208.70038 | .03577265 | .03980985 |
| UPPER SANTA CLARA VALLEY WATER AGENCY | QUANTITY, AF | 0.0 | 47.2 | 41500.0 | 1149.6 | 3112.5 | | 45762.1 | .01331295 | | | 45762.1 | .01331295 | |
| | CAPACITY, CFS | 0.00000 | .07769 | 57.32306 | 1.72489 | 4.36471 | 0.00000 | 63.41266 | .01133078 | .01232186 | 0.00000 | 63.41266 | .01086936 | .01209115 |
| VENTURA COUNTY FLOOD CONTROL DISTRICT | QUANTITY, AF | 0.0 | 22.8 | 20000.0 | 554.0 | 1500.0 | | 22054.0 | .00641587 | | | 22054.0 | .00641587 | |
| | CAPACITY, CFS | 0.00000 | .03753 | 27.62557 | .83125 | 2.10347 | 0.00000 | 30.56029 | .00546061 | .00593824 | 0.00000 | 30.56029 | .00523824 | .00582706 |
| KERN COUNTY WATER AGENCY - MUNICIPAL & INDUSTRIAL | QUANTITY, AF | 94500.0 | 157.7 | 142000.0 | 390.6 | 0.0 | | 142390.6 | .04142377 | | | 142390.6 | .04142377 | |
| | CAPACITY, CFS | 172.30069 | .25956 | 258.90686 | .64291 | 0.00000 | 0.00000 | 259.54977 | .04637719 | .04390048 | 0.00000 | 259.54977 | .04448858 | .04295618 |
| KERN COUNTY WATER AGENCY - AGRICULTURAL | QUANTITY, AF | 213200.0 | 532.3 | 478500.0 | 2085.0 | 0.0 | | 480585.0 | .13981010 | | | 480585.0 | .13981010 | |
| | CAPACITY, CFS | 636.09536 | .87613 | 1427.63429 | 3.43177 | 0.00000 | 0.00000 | 1431.06606 | .25570751 | .19775881 | 0.00000 | 1431.06606 | .24529439 | .19255224 |
| FUTURE CONTRACTOR - NUCLEAR | QUANTITY, AF | 0.0 | 39.1 | 35000.0 | 327.0 | 0.0 | | 35327.0 | .01027721 | | | 35327.0 | .01027721 | |
| | CAPACITY, CFS | 0.00000 | .06435 | 48.34475 | .53821 | 0.00000 | 0.00000 | 48.88296 | .00873457 | .00950589 | 0.00000 | 48.88296 | .00837887 | .00932804 |
| TOTAL | QUANTITY, AF | 307700.0 | 3600.0 | 3153000.0 | 97100.0 | 187312.5 | 0.00000 | 3437412.5 | 1.00000000 | | 237.57992 | 3437412.5 | 1.00000000 | |
| | CAPACITY, CFS | 808.39605 | 5.92535 | 5184.62915 | 148.83687 | 263.02990 | | 5596.49598 | 1.00000000 | 1.00000000 | | 5834.07590 | 1.00000000 | 1.00000000 |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(in units as shown)

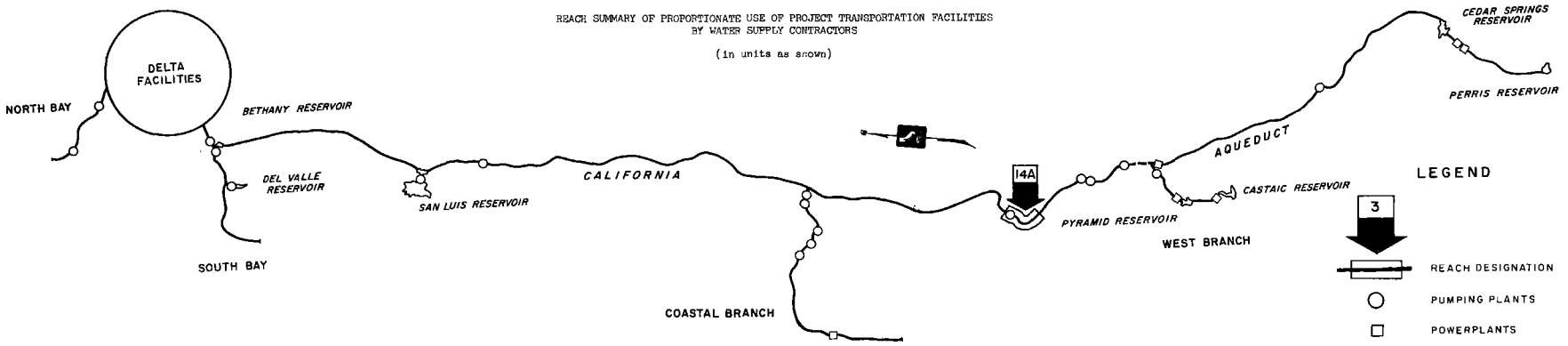



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 13B - TUPMAN ROAD TO BUENA VISTA PUMPING PLANT | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF | 0.0 | 3977.8 | 2011500.0 | 76010.6 | 150862.5 | | 2238373.1 | .71602449 | | | 2238373.1 | .71602449 | |
| | CAPACITY, CFS | 0.00000 | 6.54719 | 2778.44186 | 114.86091 | 212.39436 | 0.00000 | 3105.69713 | .64943198 | .68272823 | 237.57992 | 3343.27705 | .66602401 | .69102425 |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 195.8 | 98000.0 | 4769.5 | 7350.0 | | 110119.5 | .03522570 | | | 110119.5 | .03522570 | |
| | CAPACITY, CFS | 0.00000 | .32227 | 135.36530 | 7.54082 | 10.27353 | 0.00000 | 153.17965 | .03203128 | .03362854 | 0.00000 | 153.17965 | .03051537 | .03287053 |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 9.2 | 4600.0 | 223.9 | 345.0 | | 5168.9 | .00165346 | | | 5168.9 | .00165346 | |
| | CAPACITY, CFS | 0.00000 | .01514 | 6.35388 | .35399 | .48223 | 0.00000 | 7.19010 | .00150352 | .00157849 | 0.00000 | 7.19010 | .00143236 | .00154291 |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 57.6 | 28800.0 | 1401.6 | 2160.0 | | 32361.6 | .01035203 | | | 32361.6 | .01035203 | |
| | CAPACITY, CFS | 0.00000 | .09480 | 39.78082 | 2.21600 | 3.01916 | 0.00000 | 45.01598 | .00941329 | .00988266 | 0.00000 | 45.01598 | .00896777 | .00965990 |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY, AF | 0.0 | 34.6 | 17300.0 | 842.1 | 1297.5 | | 19439.6 | .00621846 | | | 19439.6 | .00621846 | |
| | CAPACITY, CFS | 0.00000 | .05695 | 23.89612 | 1.33142 | 1.81359 | 0.00000 | 27.04113 | .00565457 | .00593651 | 0.00000 | 27.04113 | .00538694 | .00580270 |
| CRESTLINE-LAKE ARROWHEAD WATER AGENCY | QUANTITY, AF | 0.0 | 11.6 | 5800.0 | 282.3 | 435.0 | | 6517.3 | .00208479 | | | 6517.3 | .00208479 | |
| | CAPACITY, CFS | 0.00000 | .01909 | 8.01142 | .44632 | .60802 | 0.00000 | 9.06576 | .00189574 | .00199027 | 0.00000 | 9.06576 | .00180602 | .00194541 |
| COACHELLA VALLEY COUNTY WATER DISTRICT | QUANTITY, AF | 0.0 | 45.6 | 23100.0 | 838.5 | 1732.5 | | 25671.0 | .00821180 | | | 25671.0 | .00821180 | |
| | CAPACITY, CFS | 0.00000 | .07505 | 31.90754 | 1.38012 | 2.39307 | 0.00000 | 35.68073 | .00746119 | .00783649 | 0.00000 | 35.68073 | .00710806 | .00765993 |
| DESERT WATER AGENCY | QUANTITY, AF | 0.0 | 75.2 | 38100.0 | 1383.0 | 2857.5 | | 42340.5 | .01354414 | | | 42340.5 | .01354414 | |
| | CAPACITY, CFS | 0.00000 | .12377 | 52.62671 | 2.27631 | 3.94700 | 0.00000 | 58.85002 | .01230612 | .01292513 | 0.00000 | 58.85002 | .01172368 | .01263391 |
| MOJAVE WATER AGENCY | QUANTITY, AF | 0.0 | 100.3 | 50800.0 | 1844.2 | 3810.0 | | 56454.2 | .01805891 | | | 56454.2 | .01805891 | |
| | CAPACITY, CFS | 0.00000 | .16509 | 70.16895 | 3.01543 | 5.26267 | 0.00000 | 78.46705 | .01640624 | .01723358 | 0.00000 | 78.46705 | .01563165 | .01684528 |
| LITTLEROCK CREEK IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 4.5 | 2300.0 | 52.8 | 172.5 | | 2525.3 | .00080781 | | | 2525.3 | .00080781 | |
| | CAPACITY, CFS | 0.00000 | .00741 | 3.17694 | .08690 | .23827 | 0.00000 | 3.50211 | .00073233 | .00077007 | 0.00000 | 3.50211 | .00069767 | .00075274 |
| PALMDALE IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 33.7 | 17300.0 | 359.5 | 1297.5 | | 18957.0 | .00606408 | | | 18957.0 | .00606408 | |
| | CAPACITY, CFS | 0.00000 | .05547 | 23.89612 | .59172 | 1.79221 | 0.00000 | 26.28005 | .00549542 | .00577975 | 0.00000 | 26.28005 | .00523533 | .00564970 |
| ANTELOPE VALLEY-EAST KERN WATER AGENCY | QUANTITY, AF | 0.0 | 267.1 | 138400.0 | 1784.9 | 10380.0 | | 150264.9 | .04816362 | | | 150264.9 | .04816362 | |
| | CAPACITY, CFS | 0.00000 | .43963 | 191.16896 | 2.93781 | 14.33767 | 0.00000 | 208.44444 | .04358779 | .04587571 | 0.00000 | 208.44444 | .04152483 | .04484423 |
| UPPER SANTA CLARA VALLEY WATER AGENCY | QUANTITY, AF | 0.0 | 81.2 | 41500.0 | 1102.4 | 3112.5 | | 45714.9 | .01462356 | | | 45714.9 | .01462356 | |
| | CAPACITY, CFS | 0.00000 | .13365 | 57.32306 | 1.64720 | 4.36471 | 0.00000 | 63.33497 | .01324397 | .01393377 | 0.00000 | 63.33497 | .01261714 | .01362035 |
| VENTURA COUNTY FLOOD CONTROL DISTRICT | QUANTITY, AF | 0.0 | 39.1 | 20000.0 | 531.2 | 1500.0 | | 22031.2 | .00704748 | | | 22031.2 | .00704748 | |
| | CAPACITY, CFS | 0.00000 | .06436 | 27.62557 | .79372 | 2.10347 | 0.00000 | 30.52276 | .00638261 | .00671504 | 0.00000 | 30.52276 | .00608053 | .00656400 |
| KERN COUNTY WATER AGENCY - MUNICIPAL & INDUSTRIAL | QUANTITY, AF | 25000.0 | 91.0 | 47500.0 | 232.9 | 0.0 | | 47732.9 | .01526909 | | | 47732.9 | .01526909 | |
| | CAPACITY, CFS | 45.58219 | .14978 | 86.60617 | .38935 | 0.00000 | 0.00000 | 86.98952 | .01819037 | .01672973 | 0.00000 | 86.98952 | .01732644 | .01629927 |
| KERN COUNTY WATER AGENCY - AGRICULTURAL | QUANTITY, AF | 34700.0 | 508.5 | 265300.0 | 1552.7 | 0.0 | | 266852.7 | .08536247 | | | 266852.7 | .08536247 | |
| | CAPACITY, CFS | 103.52959 | .83696 | 791.53893 | 2.55564 | 0.00000 | 0.00000 | 794.09457 | .15850303 | .12570775 | 0.00000 | 794.09457 | .15819390 | .12177819 |
| FUTURE CONTRACTOR - NUCLEAR | QUANTITY, AF | 0.0 | 67.2 | 35000.0 | 287.9 | 0.0 | | 35287.9 | .01128811 | | | 35287.9 | .01128811 | |
| | CAPACITY, CFS | 0.00000 | .11061 | 48.34475 | .47386 | 0.00000 | 0.00000 | 48.81861 | .01020845 | .01074828 | 0.00000 | 48.81861 | .00972530 | .01050670 |
| TOTAL | QUANTITY, AF | 59700.0 | 5600.0 | 2845300.0 | 93500.0 | 187312.5 | | 3126112.5 | 1.00000000 | | | 3126112.6 | 1.00000000 | |
| | CAPACITY, CFS | 149.11178 | 9.21722 | 4376.23910 | 142.91152 | 263.02996 | 0.00000 | 4782.17458 | 1.00000000 | 1.00000000 | 237.57992 | 5019.75450 | 1.00000000 | 1.00000000 |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(in units as shown)

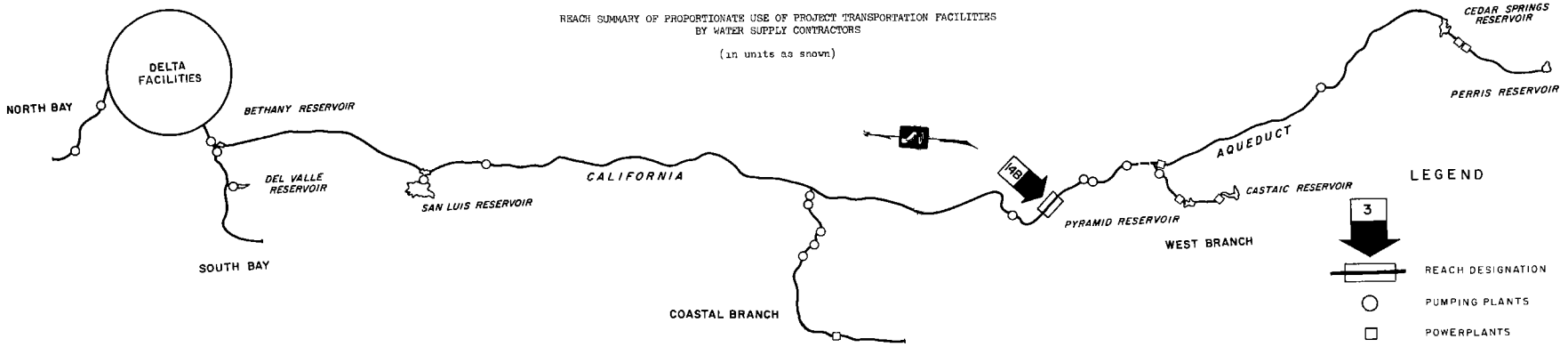



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 14A - BUENA VISTA PUMPING PLANT TO SANTIAGO CREEK | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF | 0.0 | 3697.9 | 2011500.0 | 72032.8 | 150862.5 | | 2234395.3 | .73000071 | | | 2234395.3 | .73000071 | |
| | CAPACITY, CFS | 0.00000 | 6.08649 | 2778.44186 | 108.31372 | 212.99436 | 0.00000 | 3099.14994 | .67025377 | .70012724 | 237.57992 | 3336.72986 | .68656861 | .70818465 |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 182.1 | 98000.0 | 4573.7 | 7350.0 | | 109923.7 | .03591324 | | | 109923.7 | .03591324 | |
| | CAPACITY, CFS | 0.00000 | .29972 | 135.36530 | 7.21855 | 10.27353 | 0.00000 | 152.85738 | .03305850 | .03448587 | 0.00000 | 152.85738 | .03144291 | .03367808 |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 8.5 | 4600.0 | 214.7 | 345.0 | | 5159.7 | .00168573 | | | 5159.7 | .00168573 | |
| | CAPACITY, CFS | 0.00000 | .01399 | 6.35388 | .33885 | .48223 | 0.00000 | 7.17496 | .00155173 | .00161873 | 0.00000 | 7.17496 | .00147590 | .00158081 |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 53.5 | 28800.0 | 1344.0 | 2160.0 | | 32304.0 | .01055406 | | | 32304.0 | .01055406 | |
| | CAPACITY, CFS | 0.00000 | .08806 | 39.78082 | 2.12120 | 3.01916 | 0.00000 | 44.92118 | .00971511 | .01013459 | 0.00000 | 44.92118 | .00924033 | .00989720 |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY, AF | 0.0 | 32.1 | 17300.0 | 807.5 | 1297.5 | | 19405.0 | .00633982 | | | 19405.0 | .00633982 | |
| | CAPACITY, CFS | 0.00000 | .05283 | 23.89612 | 1.27447 | 1.81359 | 0.00000 | 26.98418 | .00583587 | .00608785 | 0.00000 | 26.98418 | .00555087 | .00594525 |
| CRESTLINE-LAKE ARROWHEAD WATER AGENCY | QUANTITY, AF | 0.0 | 10.8 | 5800.0 | 270.7 | 435.0 | | 6505.7 | .00212548 | | | 6505.7 | .00212548 | |
| | CAPACITY, CFS | 0.00000 | .01778 | 8.01142 | .42723 | .60802 | 0.00000 | 9.04667 | .00195653 | .00204100 | 0.00000 | 9.04667 | .00186071 | .00199320 |
| COACHELLA VALLEY COUNTY WATER DISTRICT | QUANTITY, AF | 0.0 | 42.4 | 23100.0 | 792.9 | 1732.5 | | 25625.4 | .00837209 | | | 25625.4 | .00837209 | |
| | CAPACITY, CFS | 0.00000 | .06979 | 31.90754 | 1.30607 | 2.39307 | 0.00000 | 35.60568 | .00770045 | .00803627 | 0.00000 | 35.60568 | .00732412 | .00784611 |
| DESERT WATER AGENCY | QUANTITY, AF | 0.0 | 69.9 | 38100.0 | 1307.8 | 2857.5 | | 42265.3 | .01380852 | | | 42265.3 | .01380852 | |
| | CAPACITY, CFS | 0.00000 | .11505 | 52.62671 | 2.15254 | 3.94700 | 0.00000 | 58.72625 | .01270074 | .01324563 | 0.00000 | 58.72625 | .01208005 | .01294429 |
| MOJAVE WATER AGENCY | QUANTITY, AF | 0.0 | 93.3 | 50800.0 | 1743.9 | 3810.0 | | 56353.9 | .01841142 | | | 56353.9 | .01841142 | |
| | CAPACITY, CFS | 0.00000 | .15357 | 70.16895 | 2.87034 | 5.26267 | 0.00000 | 78.30196 | .01693438 | .01767290 | 0.00000 | 78.30196 | .01610679 | .01725910 |
| LITTLEROCK CREEK IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 4.2 | 2300.0 | 48.3 | 172.5 | | 2520.8 | .00082357 | | | 2520.8 | .00082357 | |
| | CAPACITY, CFS | 0.00000 | .00691 | 3.17694 | .07949 | .23827 | 0.00000 | 3.49470 | .00075580 | .00078969 | 0.00000 | 3.49470 | .00071886 | .00077122 |
| PALMDALE IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 31.3 | 17300.0 | 325.8 | 1297.5 | | 18923.3 | .00618244 | | | 18923.3 | .00618244 | |
| | CAPACITY, CFS | 0.00000 | .05152 | 23.89612 | .53625 | 1.79221 | 0.00000 | 26.22458 | .00567160 | .00592702 | 0.00000 | 26.22458 | .00539442 | .00578843 |
| ANTELOPE VALLEY-EAST KERN WATER AGENCY | QUANTITY, AF | 0.0 | 248.3 | 138400.0 | 1517.8 | 10380.0 | | 150297.8 | .04910388 | | | 150297.8 | .04910388 | |
| | CAPACITY, CFS | 0.00000 | .40868 | 191.16896 | 2.49818 | 14.33767 | 0.00000 | 208.00481 | .04496524 | .04704456 | 0.00000 | 208.00481 | .04278680 | .04594534 |
| UPPER SANTA CLARA VALLEY WATER AGENCY | QUANTITY, AF | 0.0 | 75.5 | 41500.0 | 1021.2 | 3112.5 | | 45633.7 | .01490902 | | | 45633.7 | .01490902 | |
| | CAPACITY, CFS | 0.00000 | .12427 | 57.32306 | 1.51355 | 4.36471 | 0.00000 | 63.20132 | .01366856 | .01428879 | 0.00000 | 63.20132 | .01300056 | .01395479 |
| VENTURA COUNTY FLOOD CONTROL DISTRICT | QUANTITY, AF | 0.0 | 36.4 | 20000.0 | 492.1 | 1500.0 | | 21992.1 | .00718505 | | | 21992.1 | .00718505 | |
| | CAPACITY, CFS | 0.00000 | .05991 | 27.62557 | .72936 | 2.10347 | 0.00000 | 30.45840 | .00658724 | .00688615 | 0.00000 | 30.45840 | .00626532 | .00672519 |
| KERN COUNTY WATER AGENCY - MUNICIPAL & INDUSTRIAL | QUANTITY, AF | 0.0 | 40.2 | 22500.0 | 141.9 | 0.0 | | 22641.9 | .00739735 | | | 22641.9 | .00739735 | |
| | CAPACITY, CFS | 0.00000 | .06617 | 41.02398 | .23357 | 0.00000 | 0.00000 | 41.25755 | .00692278 | .00816006 | 0.00000 | 41.25755 | .00648672 | .00794603 |
| KERN COUNTY WATER AGENCY - AGRICULTURAL | QUANTITY, AF | 0.0 | 411.1 | 230600.0 | 1044.2 | 0.0 | | 231644.2 | .07568063 | | | 231644.2 | .07568063 | |
| | CAPACITY, CFS | 0.00000 | .67664 | 688.00934 | 1.71868 | 0.00000 | 0.00000 | 689.72802 | .14916761 | .11242412 | 0.00000 | 689.72802 | .14187773 | .10877916 |
| FUTURE CONTRACTOR - NUCLEAR | QUANTITY, AF | 0.0 | 62.5 | 35000.0 | 220.7 | 0.0 | | 35220.7 | .01150698 | | | 35220.7 | .01130698 | |
| | CAPACITY, CFS | 0.00000 | .10287 | 48.34475 | .36325 | 0.00000 | 0.00000 | 48.70800 | .01053409 | .01102053 | 0.00000 | 48.70800 | .01001926 | .01076319 |
| TOTAL | QUANTITY, AF | 0.0 | 5100.0 | 2785600.0 | 87900.0 | 187312.5 | | 3060812.5 | 1.00000000 | | | 3060812.5 | 1.00000000 | |
| | CAPACITY, CFS | 0.00000 | 8.39425 | 4227.12132 | 133.69430 | 283.02796 | 0.00000 | 4623.84558 | 1.00000000 | 1.00000000 | 237.57992 | 4861.42550 | 1.00000000 | 1.00000000 |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(in units as shown)

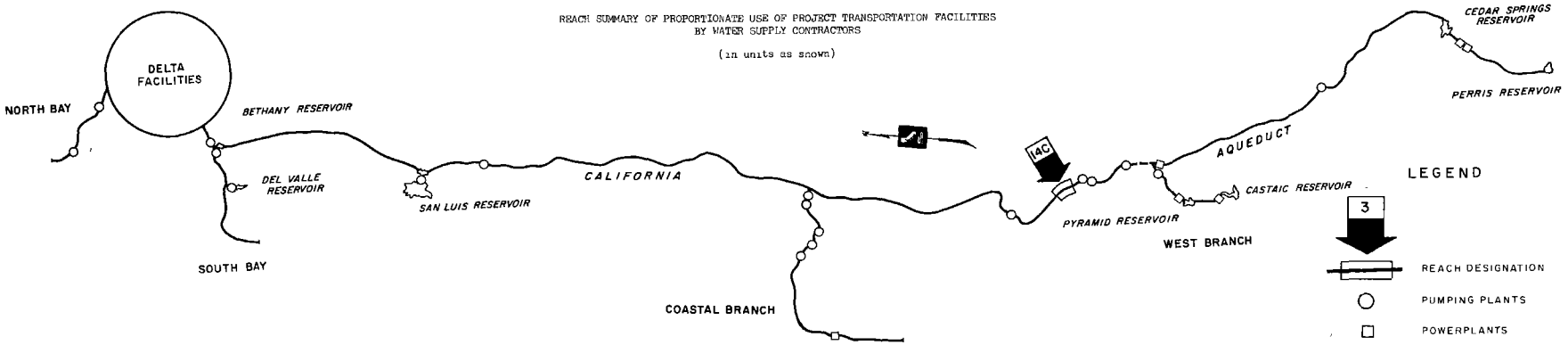



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 14B - SANTIAGO CREEK TO OLD RIVER ROAD | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF | 0.0 | 2537.8 | 2011500.0 | 68334.9 | 150862.5 | | 2230697.4 | .73000843 | .70008149 | 237.57992 | 2230697.4 | .73000843 | .70815529 |
| | CAPACITY, CFS | 0.00000 | 4.17704 | 2778.44186 | 107.27723 | 212.39436 | 0.00000 | 3092.09345 | .81015406 | | | 3329.84337 | .82920182 | |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 124.9 | 98000.0 | 4391.6 | 7350.0 | | 109741.6 | .03591355 | .03448364 | 0.00000 | 109741.6 | .03574139 | .03367457 |
| | CAPACITY, CFS | 0.00000 | .20558 | 135.36530 | 6.91883 | 10.27655 | 0.00000 | 152.55766 | .03502368 | | | 152.55766 | .03145594 | |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 5.9 | 4600.0 | 206.2 | 345.0 | | 5151.2 | .00168576 | .00161864 | 0.00000 | 5151.2 | .00168576 | .00158066 |
| | CAPACITY, CFS | 0.00000 | .00971 | 6.35388 | .32486 | .48225 | 0.00000 | 7.16097 | .00155152 | | | 7.16097 | .00147557 | |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 36.7 | 28800.0 | 1290.5 | 2160.0 | | 32250.5 | .01055417 | .01013394 | 0.00000 | 32250.5 | .01055417 | .00989617 |
| | CAPACITY, CFS | 0.00000 | .06040 | 39.78082 | 2.03314 | 3.01916 | 0.00000 | 44.83312 | .00971570 | | | 44.83312 | .00923817 | |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY, AF | 0.0 | 22.0 | 17300.0 | 775.4 | 1297.5 | | 19372.9 | .00633990 | .00608747 | 0.00000 | 19372.9 | .00633990 | .00594464 |
| | CAPACITY, CFS | 0.00000 | .03621 | 23.89612 | 1.22164 | 1.81359 | 0.00000 | 26.93135 | .00583504 | | | 26.93135 | .00554939 | |
| CRESTLINE-LAKE ARROWHEAD WATER AGENCY | QUANTITY, AF | 0.0 | 7.4 | 5800.0 | 259.9 | 435.0 | | 6494.9 | .00212549 | .00204086 | 0.00000 | 6494.9 | .00212549 | .00199298 |
| | CAPACITY, CFS | 0.00000 | .01218 | 8.01142 | .40945 | .60802 | 0.00000 | 9.02889 | .00195621 | | | 9.02889 | .00186048 | |
| COACHELLA VALLEY COUNTY WATER DISTRICT | QUANTITY, AF | 0.0 | 29.1 | 23100.0 | 750.5 | 1732.5 | | 25583.0 | .00837219 | .00803576 | 0.00000 | 25583.0 | .00837219 | .00784780 |
| | CAPACITY, CFS | 0.00000 | .04790 | 31.90754 | 1.23528 | 2.39307 | 0.00000 | 35.53589 | .00769933 | | | 35.53589 | .00732441 | |
| DESERT WATER AGENCY | QUANTITY, AF | 0.0 | 48.0 | 38100.0 | 1237.9 | 2857.5 | | 42195.4 | .01380869 | .01325380 | 0.00000 | 42195.4 | .01380869 | .01294297 |
| | CAPACITY, CFS | 0.00000 | .07900 | 52.62671 | 2.04749 | 3.94770 | 0.00000 | 58.61120 | .01259897 | | | 58.61120 | .01207724 | |
| MOJAVE WATER AGENCY | QUANTITY, AF | 0.0 | 64.0 | 50800.0 | 1650.6 | 5810.0 | | 56260.6 | .01841161 | .01767176 | 0.00000 | 56260.6 | .01841161 | .01726731 |
| | CAPACITY, CFS | 0.00000 | .10534 | 70.16895 | 2.71677 | 5.26267 | 0.00000 | 78.14839 | .01693191 | | | 78.14839 | .01610301 | |
| LITTLEROCK CREEK IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 2.9 | 2300.0 | 44.1 | 172.5 | | 2516.6 | .00082357 | .00078963 | 0.00000 | 2516.6 | .00082357 | .00077113 |
| | CAPACITY, CFS | 0.00000 | .00477 | 3.17694 | .07258 | .23827 | 0.00000 | 3.48779 | .00075568 | | | 3.48779 | .00071668 | |
| PALMDALE IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 21.5 | 17300.0 | 294.5 | 1297.5 | | 18892.0 | .00618252 | .00592663 | 0.00000 | 18892.0 | .00618252 | .00578783 |
| | CAPACITY, CFS | 0.00000 | .03539 | 23.89612 | .48473 | 1.79221 | 0.00000 | 26.17306 | .00567075 | | | 26.17306 | .00539314 | |
| ANTELOPE VALLEY-EAST KERN WATER AGENCY | QUANTITY, AF | 0.0 | 170.4 | 138400.0 | 1269.5 | 10380.0 | | 150049.5 | .04910459 | .04704155 | 0.00000 | 150049.5 | .04910459 | .04594059 |
| | CAPACITY, CFS | 0.00000 | .28047 | 191.16896 | 2.08950 | 14.33767 | 0.00000 | 207.59613 | .04497851 | | | 207.59613 | .04277635 | |
| UPPER SANTA CLARA VALLEY WATER AGENCY | QUANTITY, AF | 0.0 | 51.8 | 41500.0 | 945.7 | 3112.5 | | 45558.2 | .01490919 | .01428784 | 0.00000 | 45558.2 | .01490919 | .01395332 |
| | CAPACITY, CFS | 0.00000 | .08526 | 57.32306 | 1.38928 | 4.36471 | 0.00000 | 63.07705 | .01366650 | | | 63.07705 | .01299745 | |
| VENTURA COUNTY FLOOD CONTROL DISTRICT | QUANTITY, AF | 0.0 | 25.0 | 20000.0 | 455.7 | 1500.0 | | 21955.7 | .00718513 | .00688569 | 0.00000 | 21955.7 | .00718513 | .00672447 |
| | CAPACITY, CFS | 0.00000 | .04115 | 27.62557 | .66945 | 2.10347 | 0.00000 | 30.39849 | .00658624 | | | 30.39849 | .00626461 | |
| KERN COUNTY WATER AGENCY - MUNICIPAL & INDUSTRIAL | QUANTITY, AF | 0.0 | 27.6 | 22500.0 | 101.7 | 0.0 | | 22601.7 | .00739654 | .00892467 | 0.00000 | 22601.7 | .00739654 | .00794215 |
| | CAPACITY, CFS | 0.00000 | .04543 | 31.02398 | .14740 | 0.00000 | 0.00000 | 41.19138 | .00892467 | | | 41.19138 | .00864776 | |
| KERN COUNTY WATER AGENCY - AGRICULTURAL | QUANTITY, AF | 60700.0 | 282.1 | 230600.0 | 633.1 | 0.0 | | 231233.1 | .07567240 | .11248235 | 0.00000 | 231233.1 | .07567240 | .10482805 |
| | CAPACITY, CFS | 181.10220 | .46432 | 688.00934 | 1.04204 | 0.00000 | 0.00000 | 689.85138 | .14929231 | | | 689.85138 | .14195571 | |
| FUTURE CONTRACTOR - NUCLEAR | QUANTITY, AF | 0.0 | 42.9 | 35000.0 | 158.2 | 0.0 | | 35158.2 | .01150573 | .01101834 | 0.00000 | 35158.2 | .01150573 | .01076057 |
| | CAPACITY, CFS | 0.00000 | .07061 | 48.34475 | .26038 | 0.00000 | 0.00000 | 48.60513 | .01053096 | | | 48.60513 | .01001542 | |
| TOTAL | QUANTITY, AF | 60700.0 | 3500.0 | 2785600.0 | 82800.0 | 187312.5 | | 3055712.5 | 1.00000000 | 1.00000000 | 237.57992 | 3055712.5 | 1.00000000 | 1.00000000 |
| | CAPACITY, CFS | 181.10220 | 5.76076 | 4227.12132 | 125.30005 | 283.02996 | 0.00000 | 4615.45133 | 1.00000000 | | | 4853.03125 | 1.00000000 | |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(in units as shown)

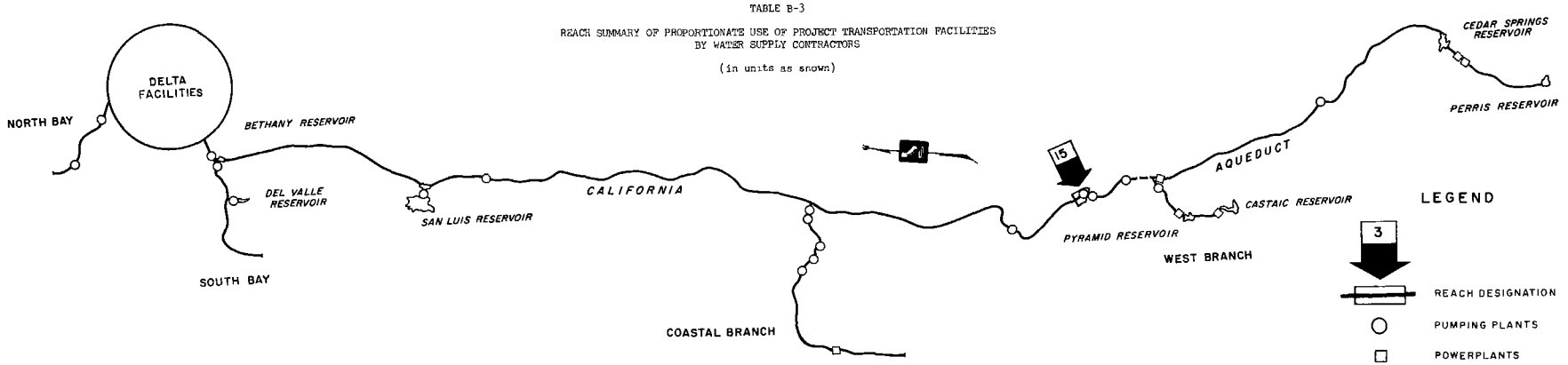



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 14C - OLD RIVER ROAD TO WHEELER RIDGE PUMPING PLANT (1) | | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 2148.3<br>3.53595 | 2011500.0<br>2778.44186 | 65797.1<br>98.05019 | 150862.5<br>212.39436 | 0.00000 | 2228159.6<br>3088.88641 | .74482711<br>.69748781 | .72115745 | 237.57992 | 2228159.6<br>3326.46633 | .74482711<br>.71289035 | .72885872 |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 105.8<br>.17414 | 98000.0<br>135.36530 | 4266.7<br>6.71325 | 7350.0<br>10.27353 | 0.00000 | 109616.7<br>152.35208 | .03664257<br>.03440195 | .03552226 | 0.00000 | 109616.7<br>152.35208 | .03664257<br>.03265056 | .03464646 |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 5.0<br>.00823 | 4600.0<br>6.35388 | 200.3<br>.31515 | 345.0<br>.48223 | 0.00000 | 5145.3<br>7.15126 | .00171997<br>.00161479 | .00166738 | 0.00000 | 5145.3<br>7.15126 | .00171997<br>.00153258 | .00162627 |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 31.1<br>.05119 | 28800.0<br>39.78082 | 1253.8<br>1.97274 | 2160.0<br>3.01916 | 0.00000 | 32213.8<br>44.77272 | .01076840<br>.01010993 | .01043916 | 0.00000 | 32213.8<br>44.77272 | .01076840<br>.00959518 | .01018179 |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 18.7<br>.03078 | 17300.0<br>23.89612 | 753.4<br>1.18543 | 1297.5<br>1.81359 | 0.00000 | 19350.9<br>26.89514 | .00646860<br>.00607307 | .00627084 | 0.00000 | 19350.9<br>26.89514 | .00646860<br>.00576386 | .00611673 |
| CRESTLINE-LAKE ARROWHEAD WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 6.2<br>.01020 | 5800.0<br>8.01142 | 252.5<br>.39727 | 435.0<br>.60802 | 0.00000 | 6487.5<br>9.01671 | .00216864<br>.00203602 | .00210233 | 0.00000 | 6487.5<br>9.01671 | .00216864<br>.00193236 | .00205050 |
| COACHELLA VALLEY COUNTY WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 24.6<br>.04049 | 23100.0<br>31.90754 | 721.4<br>1.18738 | 1732.5<br>2.39307 | 0.00000 | 25553.9<br>35.48799 | .00854213<br>.00801539 | .00827776 | 0.00000 | 25553.9<br>35.48799 | .00854213<br>.00760936 | .00807376 |
| DESERT WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 40.6<br>.06682 | 38100.0<br>52.62671 | 1189.9<br>1.95849 | 2857.5<br>3.94700 | 0.00000 | 42147.4<br>58.53220 | .01408899<br>.01321690 | .01365295 | 0.00000 | 42147.4<br>58.53220 | .01408899<br>.01254345 | .01331647 |
| MOJAVE WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 54.2<br>.08921 | 50800.0<br>70.16895 | 1586.6<br>2.61143 | 3810.0<br>5.26267 | 0.00000 | 56196.6<br>78.04305 | .01878535<br>.01762256 | .01820395 | 0.00000 | 56196.6<br>78.04305 | .01878535<br>.01672356 | .01775952 |
| LITTLEROCK CREEK IRRIGATION DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 2.4<br>.00395 | 2300.0<br>3.17694 | 41.2<br>.06781 | 172.5<br>.23827 | 0.00000 | 2513.7<br>3.46302 | .00084028<br>.00078848 | .00081338 | 0.00000 | 2513.7<br>3.46302 | .00084028<br>.00074844 | .00079338 |
| PALMDALE IRRIGATION DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 18.2<br>.02996 | 17300.0<br>23.89612 | 273.0<br>.44934 | 1297.5<br>1.79221 | 0.00000 | 18870.5<br>26.13767 | .00630801<br>.00590203 | .00610502 | 0.00000 | 18870.5<br>26.13767 | .00630801<br>.00565155 | .00597477 |
| ANTELOPE VALLEY-EAST KERN WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 144.3<br>.23751 | 138400.0<br>191.16896 | 1099.1<br>1.80903 | 10380.0<br>14.33767 | 0.00000 | 149879.1<br>207.31566 | .05010144<br>.04681303 | .04845724 | 0.00000 | 149879.1<br>207.31566 | .05010144<br>.04442933 | .04726549 |
| UPPER SANTA CLARA VALLEY WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 43.8<br>.07209 | 41500.0<br>57.32306 | 893.9<br>1.47102 | 3112.5<br>4.30471 | 0.00000 | 45506.4<br>62.99179 | .01521184<br>.01422390 | .01471787 | 0.00000 | 45506.4<br>62.99179 | .01521184<br>.01349966 | .01435576 |
| VENTURA COUNTY FLOOD CONTROL DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 21.1<br>.03473 | 20000.0<br>27.62557 | 430.7<br>.62830 | 1500.0<br>2.10347 | 0.00000 | 21930.7<br>30.35734 | .00733097<br>.00685486 | .00709292 | 0.00000 | 21930.7<br>30.35734 | .00733097<br>.00650584 | .00691641 |
| KERN COUNTY WATER AGENCY - MUNICIPAL & INDUSTRIAL | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 23.3<br>.03835 | 22500.0<br>41.02398 | 74.1<br>.12197 | 0.0<br>0.00000 | 0.00000 | 22574.1<br>41.14595 | .00754605<br>.00929099 | .00841852 | 0.00000 | 22574.1<br>41.14595 | .00754605<br>.00881793 | .00818195 |
| KERN COUNTY WATER AGENCY - AGRICULTURAL | QUANTITY, AF<br>CAPACITY, CFS | 32500.0<br>96.96576 | 176.1<br>.28985 | 169900.0<br>506.90714 | 351.0<br>.57772 | 0.0<br>0.00000 | 0.00000 | 170251.0<br>507.48486 | .05691154<br>.11459292 | .08575223 | 0.00000 | 170251.0<br>507.48486 | .05691154<br>.10873037 | .08243486 |
| FUTURE CONTRACTOR - NUCLEAR | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 36.3<br>.05975 | 35000.0<br>48.34475 | 115.3<br>.18977 | 0.0<br>0.00000 | 0.00000 | 35115.3<br>48.53452 | .01173831<br>.01095937 | .01134884 | 0.00000 | 35115.3<br>48.53452 | .01173831<br>.01040136 | .01106984 |
| TOTAL | QUANTITY, AF<br>CAPACITY, CFS | 32500.0<br>96.96576 | 2900.0<br>4.77320 | 2724900.0<br>4046.01912 | 79300.0<br>119.53929 | 187312.5<br>263.02996 | 0.00000 | 2991512.5<br>4426.58637 | 1.00000000<br>1.00000000 | 1.00000000 | 237.57992 | 2991512.5<br>4666.16629 | 1.00000000<br>1.00000000 | 1.00000000 |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(in units as shown)

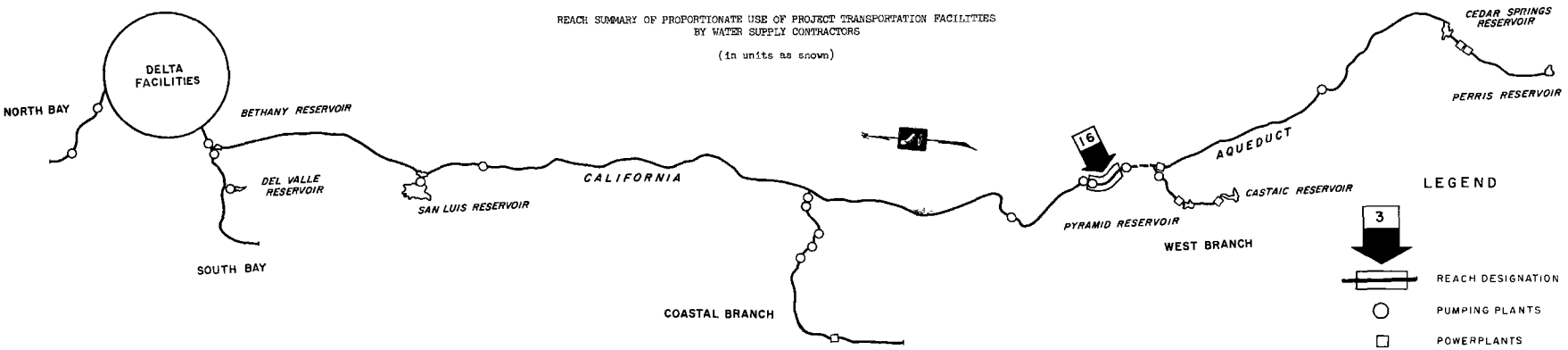



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 15 - WHEELER RIDGE PUMPING PLANT TO WIND GAP PUMPING PLANT | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF | 0.0 | 674.5 | 2011500.0 | 63648.8 | 150862.5 | | 2226011.3 | .75301982 | | | 2226011.3 | .75301982 | |
| | CAPACITY, CFS | 0.00000 | 1.11018 | 2778.44186 | 94.51424 | 212.39436 | 0.00000 | 3085.35046 | .71307091 | .73304536 | 237.57992 | 3322.93038 | .72800566 | .74051274 |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 33.2 | 98000.0 | 4160.9 | 7350.0 | | 109510.9 | .03704558 | | | 109510.9 | .03704558 | |
| | CAPACITY, CFS | 0.00000 | .05465 | 135.36530 | 6.53911 | 10.27353 | 0.00000 | 152.17794 | .03517061 | .03610810 | 0.00000 | 152.17794 | .03333997 | .03519278 |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 1.6 | 4600.0 | 195.3 | 345.0 | | 5140.3 | .00173887 | | | 5140.3 | .00173887 | |
| | CAPACITY, CFS | 0.00000 | .00263 | 6.35388 | .30692 | .48223 | 0.00000 | 7.14303 | .00165086 | .00169487 | 0.00000 | 7.14303 | .00156493 | .00165190 |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 9.8 | 28800.0 | 1222.7 | 2160.0 | | 32182.7 | .01088683 | | | 32182.7 | .01088683 | |
| | CAPACITY, CFS | 0.00000 | .01613 | 39.78082 | 1.92155 | 3.01916 | 0.00000 | 44.72153 | .01033582 | .01061132 | 0.00000 | 44.72153 | .00979784 | .01034233 |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY, AF | 0.0 | 5.9 | 17300.0 | 734.7 | 1297.5 | | 19332.2 | .00653974 | | | 19332.2 | .00653974 | |
| | CAPACITY, CFS | 0.00000 | .00971 | 23.89612 | 1.15465 | 1.81359 | 0.00000 | 26.86436 | .00620876 | .00637425 | 0.00000 | 26.86436 | .00588559 | .00621266 |
| CRESTLINE-LAKE ARROWHEAD WATER AGENCY | QUANTITY, AF | 0.0 | 2.0 | 5800.0 | 246.3 | 435.0 | | 6481.3 | .00219251 | | | 6481.3 | .00219251 | |
| | CAPACITY, CFS | 0.00000 | .00329 | 8.01142 | .38707 | .60802 | 0.00000 | 9.00651 | .00208154 | .00213702 | 0.00000 | 9.00651 | .00197320 | .00208295 |
| COACHELLA VALLEY COUNTY WATER DISTRICT | QUANTITY, AF | 0.0 | 7.7 | 23100.0 | 696.8 | 1732.5 | | 25529.3 | .00863610 | | | 25529.3 | .00863610 | |
| | CAPACITY, CFS | 0.00000 | .01268 | 31.90754 | 1.14689 | 2.39307 | 0.00000 | 35.44750 | .00819245 | .00841428 | 0.00000 | 35.44750 | .00776603 | .00820107 |
| DESERT WATER AGENCY | QUANTITY, AF | 0.0 | 12.7 | 38100.0 | 1149.3 | 2857.5 | | 42106.8 | .01424398 | | | 42106.8 | .01424398 | |
| | CAPACITY, CFS | 0.00000 | .02090 | 52.62671 | 1.89167 | 3.94700 | 0.00000 | 58.46538 | .01351223 | .01387810 | 0.00000 | 58.46538 | .01280891 | .01352645 |
| MOJAVE WATER AGENCY | QUANTITY, AF | 0.0 | 17.0 | 50800.0 | 1532.4 | 3810.0 | | 56142.4 | .01899197 | | | 56142.4 | .01899197 | |
| | CAPACITY, CFS | 0.00000 | .02798 | 70.16895 | 2.52222 | 5.26267 | 0.00000 | 77.95384 | .01801631 | .01850414 | 0.00000 | 77.95384 | .01707855 | .01803526 |
| LITTLEROCK CREEK IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | .8 | 2300.0 | 38.8 | 172.5 | | 2511.3 | .00084953 | | | 2511.3 | .00084953 | |
| | CAPACITY, CFS | 0.00000 | .00132 | 3.17694 | .06386 | .23827 | 0.00000 | 3.47907 | .00080407 | .00082680 | 0.00000 | 3.47907 | .00076221 | .00080587 |
| PALMDALE IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 5.7 | 17300.0 | 254.8 | 1297.5 | | 18852.3 | .00637740 | | | 18852.3 | .00637740 | |
| | CAPACITY, CFS | 0.00000 | .00938 | 23.89612 | .41938 | 1.79221 | 0.00000 | 26.10771 | .00603386 | .00620564 | 0.00000 | 26.10771 | .00571982 | .00604861 |
| ANTELOPE VALLEY-EAST KERN WATER AGENCY | QUANTITY, AF | 0.0 | 45.3 | 138400.0 | 954.8 | 10380.0 | | 149734.8 | .05065260 | | | 149734.8 | .05065260 | |
| | CAPACITY, CFS | 0.00000 | .07456 | 191.16896 | 1.57157 | 14.33767 | 0.00000 | 207.07815 | .04785888 | .04925574 | 0.00000 | 207.07815 | .04536781 | .04801021 |
| UPPER SANTA CLARA VALLEY WATER AGENCY | QUANTITY, AF | 0.0 | 13.8 | 41500.0 | 850.1 | 3112.5 | | 45462.6 | .01537918 | | | 45462.6 | .01537918 | |
| | CAPACITY, CFS | 0.00000 | .02272 | 57.32306 | 1.23193 | 4.36471 | 0.00000 | 62.91970 | .01454169 | .01496044 | 0.00000 | 62.91970 | .01316479 | .01458199 |
| VENTURA COUNTY FLOOD CONTROL DISTRICT | QUANTITY, AF | 0.0 | 6.6 | 20000.0 | 409.6 | 1500.0 | | 21909.6 | .00741163 | | | 21909.6 | .00741163 | |
| | CAPACITY, CFS | 0.00000 | .01086 | 27.62557 | .59357 | 2.10347 | 0.00000 | 30.32261 | .00700801 | .00720982 | 0.00000 | 30.32261 | .00664324 | .00702743 |
| KERN COUNTY WATER AGENCY - MUNICIPAL & INDUSTRIAL | QUANTITY, AF | 0.0 | 7.3 | 22500.0 | 50.8 | 0.0 | | 22550.8 | .00762853 | | | 22550.8 | .00762853 | |
| | CAPACITY, CFS | 0.00000 | .01202 | 41.02398 | .08362 | 0.00000 | 0.00000 | 41.10760 | .00950058 | .00856456 | 0.00000 | 41.10760 | .00900606 | .00831730 |
| KERN COUNTY WATER AGENCY - AGRICULTURAL | QUANTITY, AF | 70000.0 | 44.7 | 137400.0 | 174.9 | 0.0 | | 137574.9 | .04653913 | | | 137574.9 | .04653913 | |
| | CAPACITY, CFS | 208.84932 | .07357 | 409.94138 | .28787 | 0.00000 | 0.00000 | 410.22925 | .09481015 | .07067464 | 0.00000 | 410.22925 | .08987525 | .06820719 |
| FUTURE CONTRACTOR - NUCLEAR | QUANTITY, AF | 0.0 | 11.4 | 35000.0 | 79.0 | 0.0 | | 35079.0 | .01186660 | | | 35079.0 | .01186660 | |
| | CAPACITY, CFS | 0.00000 | .01876 | 48.34475 | .13002 | 0.00000 | 0.00000 | 48.47477 | .01120325 | .01153492 | 0.00000 | 48.47477 | .01062012 | .01124336 |
| TOTAL | QUANTITY, AF | 70000.0 | 900.0 | 2692400.0 | 76400.0 | 187312.5 | | 2956112.5 | 1.00000000 | | | 2956112.5 | 1.00000000 | |
| | CAPACITY, CFS | 208.84932 | 1.48134 | 3949.05336 | 114.76609 | 263.02996 | 0.00000 | 4326.84941 | 1.00000000 | 1.00000000 | 237.57992 | 4564.42933 | 1.00000000 | 1.00000000 |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES BY WATER SUPPLY CONTRACTORS

(in units as shown)

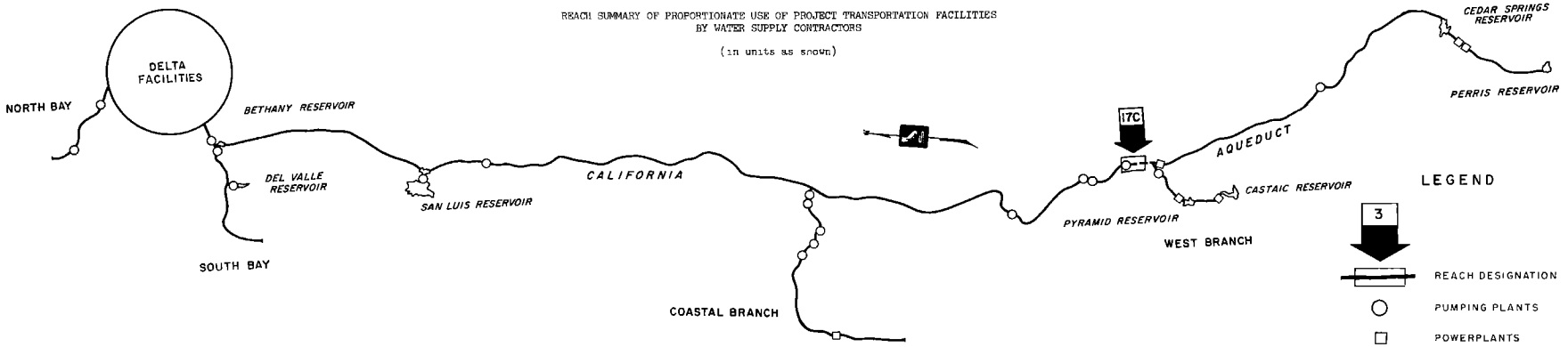



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 16 - WIND GAP PUMPING PLANT TO TEHACHAPI PUMPING PLANT | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 3998.4<br>6.58109 | 2011500.0<br>2778.44186 | 62974.3<br>93.40406 | 150862.5<br>212.39436 | 0.00000 | 2225336.8<br>3084.24028 | .77129043<br>.74923509 | .76026275 | 237.57992 | 2229335.0<br>3321.82020 | .77129043<br>.76231799 | .76710421 |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 196.8<br>.32392 | 98000.0<br>135.36530 | 4127.7<br>6.48446 | 7350.0<br>10.27353 | 0.00000 | 109477.7<br>152.12329 | .03794442<br>.03695435 | .03744938 | 0.00000 | 109477.7<br>152.12329 | .03794442<br>.03695435 | .03644118 |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 9.2<br>.01514 | 4600.0<br>6.35388 | 193.7<br>.30429 | 345.0<br>.48223 | 0.00000 | 5138.7<br>7.14040 | .00178105<br>.00173457 | .00175781 | 0.00000 | 5138.7<br>7.14040 | .00178105<br>.00173457 | .00171049 |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 57.8<br>.09513 | 28800.0<br>39.78082 | 1212.9<br>1.90542 | 2160.0<br>3.01916 | 0.00000 | 32172.9<br>44.70540 | .01115096<br>.01086000 | .01100548 | 0.00000 | 32172.9<br>44.70540 | .01115096<br>.01086000 | .01070920 |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 34.8<br>.05728 | 17300.0<br>23.89612 | 728.8<br>1.14494 | 1297.5<br>1.81359 | 0.00000 | 19326.3<br>26.85465 | .00669840<br>.00652363 | .00661101 | 0.00000 | 19326.3<br>26.85465 | .00669840<br>.00652363 | .00643304 |
| CRESTLINE-LAKE ARROWHEAD WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 11.7<br>.01926 | 5800.0<br>8.01142 | 244.3<br>.38378 | 435.0<br>.60802 | 0.00000 | 6479.3<br>9.00322 | .00224569<br>.00218710 | .00221639 | 0.00000 | 6479.3<br>9.00322 | .00224569<br>.00218710 | .00215673 |
| COACHELLA VALLEY COUNTY WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 45.9<br>.07555 | 23100.0<br>31.90754 | 689.1<br>1.13421 | 1732.5<br>2.39307 | 0.00000 | 25521.6<br>35.43482 | .00884566<br>.00860796 | .00872681 | 0.00000 | 25521.6<br>35.43482 | .00884566<br>.00860796 | .00849196 |
| DESERT WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 75.6<br>.12443 | 38100.0<br>52.62671 | 1136.6<br>1.87077 | 2857.5<br>3.94700 | 0.00000 | 42094.1<br>58.44448 | .01458960<br>.01419755 | .01439358 | 0.00000 | 42094.1<br>58.44448 | .01458960<br>.01419755 | .01400623 |
| MOJAVE WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 100.8<br>.16591 | 50800.0<br>70.16895 | 1515.4<br>2.49424 | 3810.0<br>5.26267 | 0.00000 | 56125.4<br>77.92586 | .01945278<br>.01893004 | .01919141 | 0.00000 | 56125.4<br>77.92586 | .01945278<br>.01769713 | .01867495 |
| LITTLEROCK CREEK IRRIGATION DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 4.5<br>.00741 | 2300.0<br>3.17694 | 38.0<br>.06254 | 172.5<br>.23827 | 0.00000 | 2510.5<br>3.47775 | .00087013<br>.00084483 | .00085748 | 0.00000 | 2510.5<br>3.47775 | .00087013<br>.00079873 | .00083443 |
| PALMDALE IRRIGATION DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 33.8<br>.05563 | 17300.0<br>23.89612 | 248.1<br>.41000 | 1297.5<br>1.79221 | 0.00000 | 18846.6<br>26.09833 | .00653214<br>.00633990 | .00643602 | 0.00000 | 18846.6<br>26.09833 | .00653214<br>.00599397 | .00626305 |
| ANTELOPE VALLEY-EAST KERN WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 268.5<br>.44193 | 138400.0<br>191.16896 | 909.5<br>1.49696 | 10380.0<br>14.33767 | 0.00000 | 149689.5<br>207.00359 | .05188162<br>.05028608 | .05108385 | 0.00000 | 149689.5<br>207.00359 | .05188162<br>.04734224 | .04971193 |
| UPPER SANTA CLARA VALLEY WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 81.6<br>.13431 | 41500.0<br>57.32306 | 836.3<br>1.20921 | 3112.5<br>4.36471 | 0.00000 | 45448.8<br>62.89698 | .01575232<br>.01527917 | .01551575 | 0.00000 | 45448.8<br>62.89698 | .01575232<br>.01444548 | .01509885 |
| VENTURA COUNTY FLOOD CONTROL DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 39.3<br>.06469 | 20000.0<br>27.62557 | 403.0<br>.58271 | 1500.0<br>2.10347 | 0.00000 | 21903.0<br>30.31175 | .00759147<br>.00736344 | .00747746 | 0.00000 | 21903.0<br>30.31175 | .00759147<br>.00696166 | .00727656 |
| KERN COUNTY WATER AGENCY - MUNICIPAL & INDUSTRIAL | QUANTITY, AF<br>CAPACITY, CFS | 17500.0<br>31.90754 | 43.5<br>.07160 | 22500.0<br>41.02398 | 43.5<br>.07160 | 0.0<br>0.00000 | 0.00000 | 22543.5<br>41.09558 | .00781346<br>.00998309 | .00889829 | 0.00000 | 22543.5<br>41.09558 | .00781346<br>.00943837 | .00862592 |
| KERN COUNTY WATER AGENCY - AGRICULTURAL | QUANTITY, AF<br>CAPACITY, CFS | 67400.0<br>201.09206 | 130.2<br>.21430 | 67400.0<br>201.09206 | 130.2<br>.21430 | 0.0<br>0.00000 | 0.00000 | 67530.2<br>201.30636 | .02340562<br>.04890209 | .03615386 | 0.00000 | 67530.2<br>201.30636 | .02340562<br>.04623376 | .03461969 |
| FUTURE CONTRACTOR - NUCLEAR | QUANTITY, AF<br>CAPACITY, CFS | 35000.0<br>48.34475 | 67.6<br>.11126 | 35000.0<br>48.34475 | 67.6<br>.11126 | 0.0<br>0.00000 | 0.00000 | 35067.6<br>48.45601 | .01215425<br>.01177111 | .01196268 | 0.00000 | 35067.6<br>48.45601 | .01215425<br>.01112883 | .01164154 |
| TOTAL | QUANTITY, AF<br>CAPACITY, CFS | 119900.0<br>281.34435 | 5200.0<br>8.55884 | 2622400.0<br>3740.20404 | 75500.0<br>113.28475 | 187312.5<br>269.02996 | 0.00000 | 2885212.5<br>4116.51875 | 1.00000000<br>1.00000000 | 1.00000000 | 237.57992 | 2885212.5<br>4354.09867 | 1.00000000<br>1.00000000 | 1.00000000 |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(in units as shown)

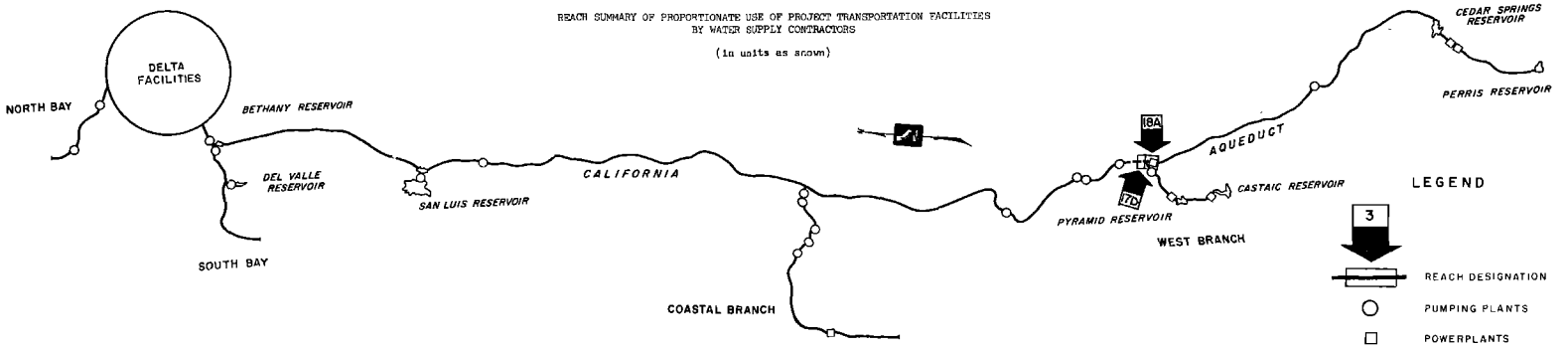



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 17C - TEHACHAPI PUMPING PLANT TO SOUTH PORTAL TEHACHAPI TUNNEL NO. 3 | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF | 0.0 | 0.0 | 2011500.0 | 58975.9 | 150862.5 | | 2221338.4 | .80479995 | | | 2221338.4 | .80479995 | |
| | CAPACITY, CFS | 0.00000 | 0.00000 | 2778.44186 | 86.82297 | 212.39436 | 0.00000 | 3077.66919 | .80427708 | .80453851 | 237.57992 | 3315.23911 | .81571842 | .81025918 |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 0.0 | 98000.0 | 3930.9 | 7350.0 | | 109280.9 | .03959292 | | | 109280.9 | .03959292 | |
| | CAPACITY, CFS | 0.00000 | 0.00000 | 135.36530 | 6.16054 | 10.27353 | 0.00000 | 151.79937 | .03966935 | .03963114 | 0.00000 | 151.79937 | .03725041 | .03847166 |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 0.0 | 4600.0 | 184.5 | 345.0 | | 5129.5 | .00185844 | | | 5129.5 | .00185844 | |
| | CAPACITY, CFS | 0.00000 | 0.00000 | 6.35388 | .28915 | .48223 | 0.00000 | 7.12526 | .00186203 | .00186023 | 0.00000 | 7.12526 | .00175316 | .00180591 |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 0.0 | 28800.0 | 1155.1 | 2160.0 | | 32115.1 | .01163543 | | | 32115.1 | .01163543 | |
| | CAPACITY, CFS | 0.00000 | 0.00000 | 39.78082 | 1.81029 | 3.01916 | 0.00000 | 44.61027 | .01165789 | .01164666 | 0.00000 | 44.61027 | .01097641 | .01130592 |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY, AF | 0.0 | 0.0 | 17300.0 | 694.0 | 1297.5 | | 19291.5 | .00698939 | | | 19291.5 | .00698939 | |
| | CAPACITY, CFS | 0.00000 | 0.00000 | 23.89612 | 1.08766 | 1.81359 | 0.00000 | 26.79737 | .00700289 | .00699614 | 0.00000 | 26.79737 | .00659352 | .00679146 |
| CRESTLINE-LAKE ARROWHEAD WATER AGENCY | QUANTITY, AF | 0.0 | 0.0 | 5800.0 | 232.6 | 435.0 | | 6467.6 | .00234324 | | | 6467.6 | .00234324 | |
| | CAPACITY, CFS | 0.00000 | 0.00000 | 8.01142 | .36452 | .60802 | 0.00000 | 8.98396 | .00234776 | .00234550 | 0.00000 | 8.98395 | .00221051 | .00227888 |
| COACHELLA VALLEY COUNTY WATER DISTRICT | QUANTITY, AF | 0.0 | 0.0 | 23100.0 | 643.7 | 1732.5 | | 25475.7 | .00922995 | | | 25475.7 | .00922995 | |
| | CAPACITY, CFS | 0.00000 | 0.00000 | 31.90754 | 1.00866 | 2.39807 | 0.00000 | 35.35927 | .00924035 | .00923515 | 0.00000 | 35.35927 | .00870019 | .00896507 |
| DESERT WATER AGENCY | QUANTITY, AF | 0.0 | 0.0 | 38100.0 | 1061.0 | 2857.5 | | 42018.5 | .01522347 | | | 42018.5 | .01522347 | |
| | CAPACITY, CFS | 0.00000 | 0.00000 | 52.62671 | 1.74634 | 3.94700 | 0.00000 | 58.32005 | .01524063 | .01523205 | 0.00000 | 58.32005 | .01434972 | .01478659 |
| MOJAVE WATER AGENCY | QUANTITY, AF | 0.0 | 0.0 | 50600.0 | 1414.6 | 3810.0 | | 56024.6 | .02029794 | | | 56024.6 | .02029794 | |
| | CAPACITY, CFS | 0.00000 | 0.00000 | 70.16895 | 2.32833 | 5.26267 | 0.00000 | 77.75995 | .02032082 | .02030938 | 0.00000 | 77.75995 | .01913295 | .01971545 |
| LITTLEROCK CREEK IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 0.0 | 2300.0 | 33.5 | 172.5 | | 2506.0 | .00090793 | | | 2506.0 | .00090793 | |
| | CAPACITY, CFS | 0.00000 | 0.00000 | 3.17694 | .05513 | .23827 | 0.00000 | 3.47034 | .00090690 | .00090742 | 0.00000 | 3.47034 | .00085386 | .00088091 |
| PALMDALE IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 0.0 | 17300.0 | 215.3 | 1297.5 | | 18812.8 | .00681595 | | | 18812.8 | .00681595 | |
| | CAPACITY, CFS | 0.00000 | 0.00000 | 23.89612 | .35437 | 1.79221 | 0.00000 | 26.04270 | .00680567 | .00681081 | 0.00000 | 26.04270 | .00640184 | .00661189 |
| ANTELOPE VALLEY-EAST KERN WATER AGENCY | QUANTITY, AF | 0.0 | 0.0 | 138400.0 | 641.0 | 10380.0 | | 149421.0 | .05413584 | | | 149421.0 | .05413584 | |
| | CAPACITY, CFS | 0.00000 | 0.00000 | 191.16896 | 1.05503 | 14.33767 | 0.00000 | 206.56166 | .05398025 | .05405804 | 0.00000 | 206.56166 | .05082473 | .05248029 |
| UPPER SANTA CLARA VALLEY WATER AGENCY | QUANTITY, AF | 0.0 | 0.0 | 41500.0 | 754.7 | 3112.5 | | 45367.2 | .01643672 | | | 45367.2 | .01643672 | |
| | CAPACITY, CFS | 0.00000 | 0.00000 | 57.32308 | 1.07490 | 4.36471 | 0.00000 | 62.76267 | .01640161 | .01641917 | 0.00000 | 62.76267 | .01544283 | .01593977 |
| VENTURA COUNTY FLOOD CONTROL DISTRICT | QUANTITY, AF | 0.0 | 0.0 | 20000.0 | 363.7 | 1500.0 | | 21863.7 | .00792141 | | | 21863.7 | .00792141 | |
| | CAPACITY, CFS | 0.00000 | 0.00000 | 27.62557 | .51802 | 2.10347 | 0.00000 | 30.24706 | .00790439 | .00791285 | 0.00000 | 30.24706 | .00744232 | .00768184 |
| KERN COUNTY WATER AGENCY - MUNICIPAL & INDUSTRIAL | QUANTITY, AF | 5000.0 | 0.0 | 5000.0 | 0.0 | 0.0 | | 5000.0 | .00181152 | | | 5000.0 | .00181152 | |
| | CAPACITY, CFS | 9.11644 | 0.00000 | 9.11644 | 0.00000 | 0.00000 | 0.00000 | 9.11644 | .00238238 | .00209695 | 0.00000 | 9.11644 | .00224311 | .00202742 |
| TOTAL | QUANTITY, AF | 5000.0 | 0.0 | 2502500.0 | 70300.0 | 187312.5 | | 2760112.5 | 1.00000000 | | | 2760112.5 | 1.00000000 | |
| | CAPACITY, CFS | 9.11644 | 0.00000 | 3458.85969 | 104.72591 | 263.02996 | 0.00000 | 3826.61556 | 1.00000000 | 1.00000000 | 237.57992 | 4064.19548 | 1.00000000 | 1.00000000 |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(In units as shown)

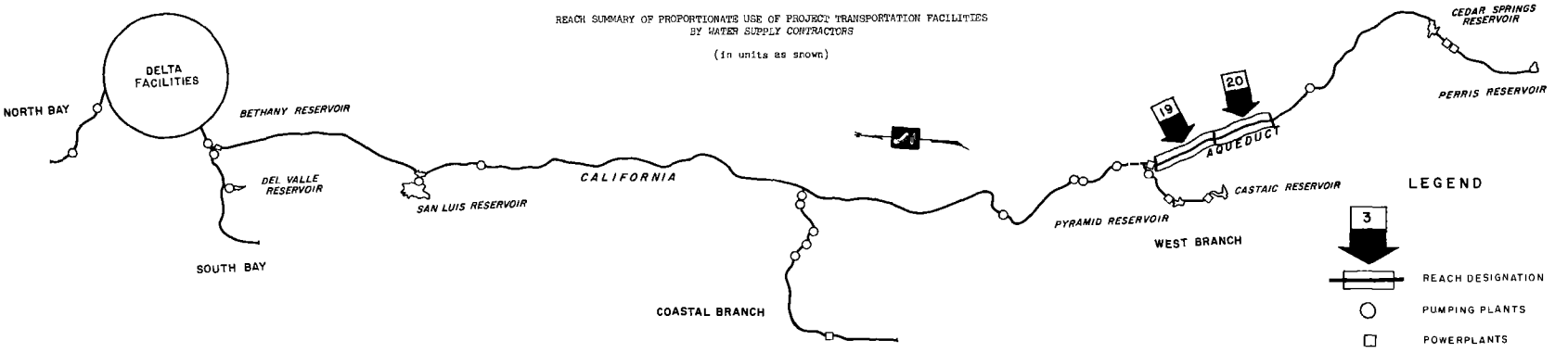



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 17D - SOUTH PORTAL TEHACHAPI TUNNEL NO. 3 TO JUNCTION, WEST BRANCH, CALIFORNIA AQUEDUCT | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 241.9<br>.39815 | 2011500.0<br>2778.44186 | 58975.9<br>86.87967 | 150882.5<br>212.39436 | 0.00000 | 2221338.4<br>3077.69919 | .80626051<br>.80619775 | .80622912 | 237.57992 | 2221338.4<br>3315.29911 | .80626051<br>.81755224 | .81190639 |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 11.9<br>.01959 | 98000.0<br>135.36530 | 3930.9<br>6.16054 | 7350.0<br>10.27353 | 0.00000 | 109280.9<br>151.79937 | .03966477<br>.03976409 | .03971443 | 0.00000 | 109280.9<br>151.79937 | .03966477<br>.03743438 | .03854957 |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | .6<br>.00099 | 4600.0<br>6.35388 | 184.5<br>.28915 | 345.0<br>.48223 | 0.00000 | 5129.5<br>7.12526 | .00186181<br>.00186447 | .00186414 | 0.00000 | 5129.5<br>7.12526 | .00186181<br>.00179712 | .00180947 |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 3.5<br>.00576 | 28800.0<br>39.78082 | 1155.1<br>1.81029 | 2160.0<br>3.01916 | 0.00000 | 32115.1<br>44.61027 | .01165655<br>.01168573 | .01167114 | 0.00000 | 32115.1<br>44.61027 | .01165655<br>.01100108 | .01132882 |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 2.1<br>.00346 | 17300.0<br>23.89612 | 694.0<br>1.08766 | 1297.5<br>1.81359 | 0.00000 | 19291.5<br>26.79737 | .00700207<br>.00701961 | .00701084 | 0.00000 | 19291.5<br>26.79737 | .00700207<br>.00660835 | .00680521 |
| CRESTLINE-LAKE ARROWHEAD WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | .7<br>.00119 | 5800.0<br>8.01142 | 232.6<br>.36452 | 435.0<br>.60802 | 0.00000 | 6467.6<br>8.98396 | .00234749<br>.00235336 | .00235043 | 0.00000 | 6467.6<br>8.98396 | .00234749<br>.00221548 | .00228149 |
| COACHELLA VALLEY COUNTY WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 2.8<br>.00461 | 23100.0<br>31.90754 | 643.2<br>1.05866 | 1732.5<br>2.39307 | 0.00000 | 25475.7<br>35.35927 | .00924670<br>.00926242 | .00925456 | 0.00000 | 25475.7<br>35.35927 | .00924670<br>.00871975 | .00898322 |
| DESERT WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 4.6<br>.00757 | 38100.0<br>52.62671 | 1061.0<br>1.74634 | 2857.5<br>3.94700 | 0.00000 | 42018.5<br>58.32005 | .01525110<br>.01527703 | .01526407 | 0.00000 | 42018.5<br>58.32005 | .01525110<br>.01438198 | .01481654 |
| MOJAVE WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 6.1<br>.01004 | 50800.0<br>70.16895 | 1414.6<br>2.32833 | 3810.0<br>5.26267 | 0.00000 | 56024.6<br>77.75995 | .02033478<br>.02036934 | .02035206 | 0.00000 | 56024.6<br>77.75995 | .02033478<br>.01917594 | .01975536 |
| LITTLEROCK CREEK IRRIGATION DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | .3<br>.00049 | 2300.0<br>3.17694 | 33.5<br>.05513 | 172.5<br>.23827 | 0.00000 | 2506.0<br>3.47034 | .00090958<br>.00090906 | .00090932 | 0.00000 | 2506.0<br>3.47034 | .00090958<br>.00085580 | .00088269 |
| PALMDALE IRRIGATION DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 2.0<br>.00329 | 17300.0<br>23.89612 | 215.3<br>.35437 | 1297.5<br>1.79221 | 0.00000 | 18812.8<br>26.04270 | .00682833<br>.00682193 | .00682513 | 0.00000 | 18812.8<br>26.04270 | .00682833<br>.00642224 | .00662528 |
| ANTELOPE VALLEY-EAST KERN WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 16.2<br>.02666 | 138400.0<br>191.16896 | 641.0<br>1.05503 | 10380.0<br>14.33767 | 0.00000 | 149421.0<br>206.56166 | .05423408<br>.05410916 | .05417162 | 0.00000 | 149421.0<br>206.56166 | .05423408<br>.05093930 | .05258654 |
| UPPER SANTA CLARA VALLEY WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 4.9<br>.00807 | 41500.0<br>57.32306 | 754.7<br>1.07490 | 3112.5<br>4.36471 | 0.00000 | 45367.2<br>62.76267 | .01646655<br>.01644078 | .01645367 | 0.00000 | 45367.2<br>62.76267 | .01646655<br>.01547754 | .01597205 |
| VENTURA COUNTY FLOOD CONTROL DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 2.4<br>.00395 | 20000.0<br>27.62557 | 363.7<br>.51802 | 1500.0<br>2.10347 | 0.00000 | 21863.7<br>30.24706 | .00793568<br>.00792327 | .00792947 | 0.00000 | 21863.7<br>30.24706 | .00793568<br>.00745906 | .00769737 |
| TOTAL | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 300.0<br>.49378 | 2497500.0<br>3449.74325 | 70300.0<br>104.72591 | 187312.5<br>263.02996 | 0.00000 | 2755112.5<br>3817.49912 | 1.00000000<br>1.00000000 | 1.00000000 | 237.57992 | 2755112.5<br>4055.07904 | 1.00000000<br>1.00000000 | 1.00000000 |
| REACH 18A - JUNCTION, WEST BRANCH, CALIFORNIA AQUEDUCT THRU COTTONWOOD POWERPLANT | | | | | | | | | | | | | | |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 460.3<br>.75762 | 556500.0<br>768.68153 | 32445.1<br>49.02067 | 41737.5<br>59.36631 | 0.00000 | 630682.6<br>877.06851 | .57482407<br>.57557410 | .57519909 | 0.00000 | 630682.6<br>877.06851 | .57482407<br>.57557410 | .57519909 |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 79.7<br>.13118 | 98000.0<br>135.36530 | 3919.0<br>6.14095 | 7350.0<br>10.27353 | 0.00000 | 109269.0<br>151.77978 | .09959122<br>.09960512 | .09959817 | 0.00000 | 109269.0<br>151.77978 | .09959122<br>.09960512 | .09959817 |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 3.7<br>.00609 | 4600.0<br>6.35388 | 183.9<br>.28816 | 345.0<br>.48223 | 0.00000 | 5128.9<br>7.12427 | .00467464<br>.00467529 | .00467496 | 0.00000 | 5128.9<br>7.12427 | .00467464<br>.00467529 | .00467496 |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 23.4<br>.03852 | 28800.0<br>39.78082 | 1151.6<br>1.80453 | 2160.0<br>3.01916 | 0.00000 | 32111.6<br>44.60451 | .02926753<br>.02927160 | .02926957 | 0.00000 | 32111.6<br>44.60451 | .02926753<br>.02927160 | .02926957 |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 14.1<br>.02321 | 17300.0<br>23.89612 | 691.9<br>1.08420 | 1297.5<br>1.81359 | 0.00000 | 19289.4<br>26.79391 | .01758027<br>.01758344 | .01758220 | 0.00000 | 19289.4<br>26.79391 | .01758027<br>.01758344 | .01758220 |
| CRESTLINE-LAKE ARROWHEAD WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 4.7<br>.00774 | 5800.0<br>8.01142 | 231.9<br>.36337 | 435.0<br>.60802 | 0.00000 | 6466.9<br>8.98281 | .00589414<br>.00589495 | .00589454 | 0.00000 | 6466.9<br>8.98281 | .00589414<br>.00589495 | .00589454 |
| COACHELLA VALLEY COUNTY WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 18.5<br>.03049 | 23100.0<br>31.90754 | 640.4<br>1.05405 | 1732.5<br>2.39307 | 0.00000 | 25472.9<br>35.35466 | .02321681<br>.02320141 | .02320911 | 0.00000 | 25472.9<br>35.35466 | .02321681<br>.02320141 | .02320911 |
| DESERT WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 30.6<br>.05037 | 38100.0<br>52.62671 | 1056.4<br>1.73877 | 2857.5<br>3.94700 | 0.00000 | 42013.9<br>58.31248 | .03829280<br>.03826742 | .03828011 | 0.00000 | 42013.9<br>58.31248 | .03829280<br>.03826742 | .03828011 |
| MOJAVE WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 40.8<br>.06719 | 50800.0<br>70.16895 | 1408.5<br>2.31829 | 3810.0<br>5.26267 | 0.00000 | 56018.5<br>77.74991 | .05105703<br>.05102319 | .05104011 | 0.00000 | 56018.5<br>77.74991 | .05105703<br>.05102319 | .05104011 |
| LITTLEROCK CREEK IRRIGATION DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 1.8<br>.00296 | 2300.0<br>3.17694 | 33.2<br>.05464 | 172.5<br>.23827 | 0.00000 | 2505.7<br>3.46985 | .00228377<br>.00227708 | .00228043 | 0.00000 | 2505.7<br>3.46985 | .00228377<br>.00227708 | .00228043 |
| PALMDALE IRRIGATION DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 13.7<br>.02255 | 17300.0<br>23.89612 | 213.3<br>.35108 | 1297.5<br>1.79221 | 0.00000 | 18810.8<br>26.03941 | .01714476<br>.01708830 | .01711653 | 0.00000 | 18810.8<br>26.03941 | .01714476<br>.01708830 | .01711653 |
| ANTELOPE VALLEY-EAST KERN WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 108.7<br>.17891 | 138400.0<br>191.16896 | 624.8<br>1.02837 | 10380.0<br>14.33767 | 0.00000 | 149404.8<br>206.53500 | .13617226<br>.13553810 | .13585518 | 0.00000 | 149404.8<br>206.53500 | .13617226<br>.13553810 | .13585518 |
| TOTAL | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 800.0<br>1.31675 | 981000.0<br>1355.03429 | 42600.0<br>65.94708 | 73575.0<br>103.53373 | 0.00000 | 1097175.0<br>1523.81510 | 1.00000000<br>1.00000000 | 1.00000000 | 0.00000 | 1097175.0<br>1523.81510 | 1.00000000<br>1.00000000 | 1.00000000 |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(In units as shown)

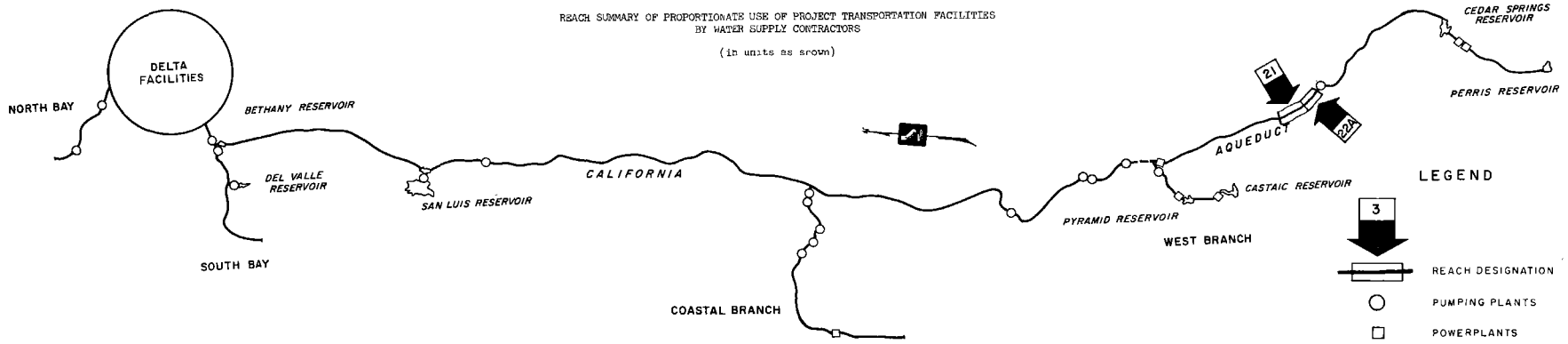



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 19 - COTTONWOOD POWERPLANT TO FAIRMONT | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF | 0.0 | 2186.4 | 556500.0 | 31984.8 | 41737.5 | 0.00000 | 630222.3 | .57482367 | .57519897 | 0.00000 | 630222.3 | .57482367 | .57519897 |
| | CAPACITY, CFS | 0.00000 | 3.59866 | 768.68153 | 48.26305 | 59.36631 | | 876.31089 | .57557428 | | | 876.31089 | .57557428 | |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 378.4 | 98000.0 | 3839.3 | 7350.0 | 0.00000 | 109189.3 | .09959120 | .09959815 | 0.00000 | 109189.3 | .09959120 | .09959815 |
| | CAPACITY, CFS | 0.00000 | .62282 | 135.36530 | 6.00977 | 10.27353 | | 151.64860 | .09960510 | | | 151.64860 | .09960510 | |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 17.7 | 4600.0 | 180.2 | 345.0 | 0.00000 | 5125.2 | .00467468 | .00467500 | 0.00000 | 5125.2 | .00467468 | .00467500 |
| | CAPACITY, CFS | 0.00000 | .02913 | 6.35388 | .28207 | .48223 | | 7.11818 | .00467533 | | | 7.11818 | .00467533 | |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 111.2 | 28800.0 | 1128.2 | 2160.0 | 0.00000 | 32088.2 | .02926754 | .02926958 | 0.00000 | 32088.2 | .02926754 | .02926958 |
| | CAPACITY, CFS | 0.00000 | .18303 | 39.78082 | 1.76601 | 3.01916 | | 44.56599 | .02927162 | | | 44.56599 | .02927162 | |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY, AF | 0.0 | 66.8 | 17300.0 | 677.8 | 1297.5 | 0.00000 | 19275.3 | .01758094 | .01758217 | 0.00000 | 19275.3 | .01758094 | .01758217 |
| | CAPACITY, CFS | 0.00000 | .10995 | 23.89612 | 1.06099 | 1.81349 | | 26.77070 | .01758340 | | | 26.77070 | .01758340 | |
| CRESTLINE-LAKE ARROWHEAD WATER AGENCY | QUANTITY, AF | 0.0 | 22.4 | 5800.0 | 227.2 | 435.0 | 0.00000 | 6462.2 | .00589415 | .00589456 | 0.00000 | 6462.2 | .00589415 | .00589456 |
| | CAPACITY, CFS | 0.00000 | .03687 | 8.01142 | .35563 | .60802 | | 8.97507 | .00589496 | | | 8.97507 | .00589496 | |
| COACHELLA VALLEY COUNTY WATER DISTRICT | QUANTITY, AF | 0.0 | 88.1 | 23100.0 | 621.9 | 1732.5 | 0.00000 | 25454.4 | .02321687 | .02320918 | 0.00000 | 25454.4 | .02321687 | .02320918 |
| | CAPACITY, CFS | 0.00000 | .14501 | 31.90754 | 1.07360 | 2.39307 | | 35.32421 | .02320148 | | | 35.32421 | .02320148 | |
| DESERT WATER AGENCY | QUANTITY, AF | 0.0 | 145.4 | 38100.0 | 1025.8 | 2857.5 | 0.00000 | 41983.3 | .03829283 | .03828013 | 0.00000 | 41983.3 | .03829283 | .03828013 |
| | CAPACITY, CFS | 0.00000 | .23932 | 52.62671 | 1.68840 | 3.94700 | | 58.26211 | .03826744 | | | 58.26211 | .03826744 | |
| MOJAVE WATER AGENCY | QUANTITY, AF | 0.0 | 193.8 | 50800.0 | 1367.7 | 3810.0 | 0.00000 | 55977.7 | .05105707 | .05104015 | 0.00000 | 55977.7 | .05105707 | .05104015 |
| | CAPACITY, CFS | 0.00000 | .31898 | 70.16895 | 2.25114 | 5.26267 | | 77.68276 | .05102321 | | | 77.68276 | .05102321 | |
| LITTLEROCK CREEK IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 8.7 | 2300.0 | 91.4 | 172.5 | 0.00000 | 2503.9 | .00228380 | .00228045 | 0.00000 | 2503.9 | .00228380 | .00228045 |
| | CAPACITY, CFS | 0.00000 | .01432 | 3.17694 | .05168 | .23827 | | 3.46689 | .00227710 | | | 3.46689 | .00227710 | |
| PALMDALE IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 65.0 | 17300.0 | 199.6 | 1297.5 | 0.00000 | 18797.1 | .01714477 | .01711652 | 0.00000 | 18797.1 | .01714477 | .01711652 |
| | CAPACITY, CFS | 0.00000 | .10699 | 23.89612 | .32853 | 1.79221 | | 26.01686 | .01708827 | | | 26.01686 | .01708827 | |
| ANTELOPE VALLEY-EAST KERN WATER AGENCY | QUANTITY, AF | 138400.0 | 516.1 | 138400.0 | 516.1 | 10380.0 | 0.00000 | 149296.1 | .13617248 | .13565514 | 0.00000 | 149296.1 | .13617248 | .13565514 |
| | CAPACITY, CFS | 191.16896 | .84946 | 191.16896 | .84946 | 14.33767 | | 206.35609 | .13553781 | | | 206.35609 | .13553781 | |
| TOTAL | QUANTITY, AF | 138400.0 | 3800.0 | 981000.0 | 41800.0 | 73575.0 | 0.00000 | 1096375.0 | 1.00000000 | 1.00000000 | 0.00000 | 1096375.0 | 1.00000000 | 1.00000000 |
| | CAPACITY, CFS | 191.16896 | 6.25454 | 1355.03429 | 63.93033 | 103.53373 | | 1522.49835 | 1.00000000 | | | 1522.49835 | 1.00000000 | |
| REACH 20 - FAIRMONT TO PALMDALE | | | | | | | | | | | | | | |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF | 0.0 | 4527.4 | 556500.0 | 29788.4 | 41737.5 | 0.00000 | 628035.9 | .66543677 | .66562732 | 0.00000 | 628035.9 | .66543677 | .66562732 |
| | CAPACITY, CFS | 0.00000 | 7.45179 | 768.68153 | 44.66439 | 59.36631 | | 872.71223 | .66581786 | | | 872.71223 | .66581786 | |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 783.5 | 98000.0 | 3460.9 | 7350.0 | 0.00000 | 108810.9 | .11529082 | .11525642 | 0.00000 | 108810.9 | .11529082 | .11525642 |
| | CAPACITY, CFS | 0.00000 | 1.28959 | 135.36530 | 5.38695 | 10.27353 | | 151.02578 | .11522201 | | | 151.02578 | .11522201 | |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 36.8 | 4600.0 | 162.5 | 345.0 | 0.00000 | 5107.5 | .00541166 | .00541005 | 0.00000 | 5107.5 | .00541166 | .00541005 |
| | CAPACITY, CFS | 0.00000 | .06057 | 6.35388 | .25294 | .48223 | | 7.08905 | .00540844 | | | 7.08905 | .00540844 | |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 230.3 | 28800.0 | 1017.0 | 2160.0 | 0.00000 | 31977.0 | .03388130 | .03387118 | 0.00000 | 31977.0 | .03388130 | .03387118 |
| | CAPACITY, CFS | 0.00000 | .37906 | 39.78082 | 1.58298 | 3.01916 | | 44.38296 | .03386107 | | | 44.38296 | .03386107 | |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY, AF | 0.0 | 138.3 | 17300.0 | 611.0 | 1297.5 | 0.00000 | 19208.5 | .02035241 | .02034634 | 0.00000 | 19208.5 | .02035241 | .02034634 |
| | CAPACITY, CFS | 0.00000 | .22763 | 23.89612 | .95104 | 1.81349 | | 26.66075 | .02034027 | | | 26.66075 | .02034027 | |
| CRESTLINE-LAKE ARROWHEAD WATER AGENCY | QUANTITY, AF | 0.0 | 46.4 | 5800.0 | 204.8 | 435.0 | 0.00000 | 6439.8 | .00682330 | .00682126 | 0.00000 | 6439.8 | .00682330 | .00682126 |
| | CAPACITY, CFS | 0.00000 | .07637 | 8.01142 | .31876 | .60802 | | 8.93820 | .00681922 | | | 8.93820 | .00681922 | |
| COACHELLA VALLEY COUNTY WATER DISTRICT | QUANTITY, AF | 0.0 | 182.5 | 23100.0 | 533.8 | 1732.5 | 0.00000 | 25366.3 | .02687692 | .02685808 | 0.00000 | 25366.3 | .02687692 | .02685808 |
| | CAPACITY, CFS | 0.00000 | .30038 | 31.90754 | .87859 | 2.39307 | | 35.17920 | .02683925 | | | 35.17920 | .02683925 | |
| DESERT WATER AGENCY | QUANTITY, AF | 0.0 | 301.0 | 38100.0 | 880.4 | 2857.5 | 0.00000 | 41837.9 | .04432944 | .04429837 | 0.00000 | 41837.9 | .04432944 | .04429837 |
| | CAPACITY, CFS | 0.00000 | .49543 | 52.62671 | 1.44908 | 3.94700 | | 58.02279 | .04426730 | | | 58.02279 | .04426730 | |
| MOJAVE WATER AGENCY | QUANTITY, AF | 0.0 | 401.3 | 50800.0 | 1173.9 | 3810.0 | 0.00000 | 55783.9 | .05910595 | .05906453 | 0.00000 | 55783.9 | .05910595 | .05906453 |
| | CAPACITY, CFS | 0.00000 | .66051 | 70.16895 | 1.93216 | 5.26267 | | 77.36378 | .05902311 | | | 77.36378 | .05902311 | |
| LITTLEROCK CREEK IRRIGATION DISTRICT | QUANTITY, AF | 0.0 | 17.9 | 2300.0 | 22.7 | 172.5 | 0.00000 | 2495.2 | .00264379 | .00263893 | 0.00000 | 2495.2 | .00264379 | .00263893 |
| | CAPACITY, CFS | 0.00000 | .02946 | 3.17694 | .03736 | .23827 | | 3.45257 | .00263407 | | | 3.45257 | .00263407 | |
| PALMDALE IRRIGATION DISTRICT | QUANTITY, AF | 17300.0 | 134.6 | 17300.0 | 134.6 | 1297.5 | 0.00000 | 18732.1 | .01984764 | .01980752 | 0.00000 | 18732.1 | .01984764 | .01980752 |
| | CAPACITY, CFS | 23.89612 | .22154 | 23.89612 | .22154 | 1.79221 | | 25.90987 | .01976740 | | | 25.90987 | .01976740 | |
| TOTAL | QUANTITY, AF | 17300.0 | 6800.0 | 842600.0 | 38000.0 | 63195.0 | 0.00000 | 943795.0 | 1.00000000 | 1.00000000 | 0.00000 | 943795.0 | 1.00000000 | 1.00000000 |
| | CAPACITY, CFS | 23.89612 | 11.19233 | 1163.86933 | 57.67579 | 89.19606 | | 1310.73718 | 1.00000000 | | | 1310.73718 | 1.00000000 | |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(in units as shown)

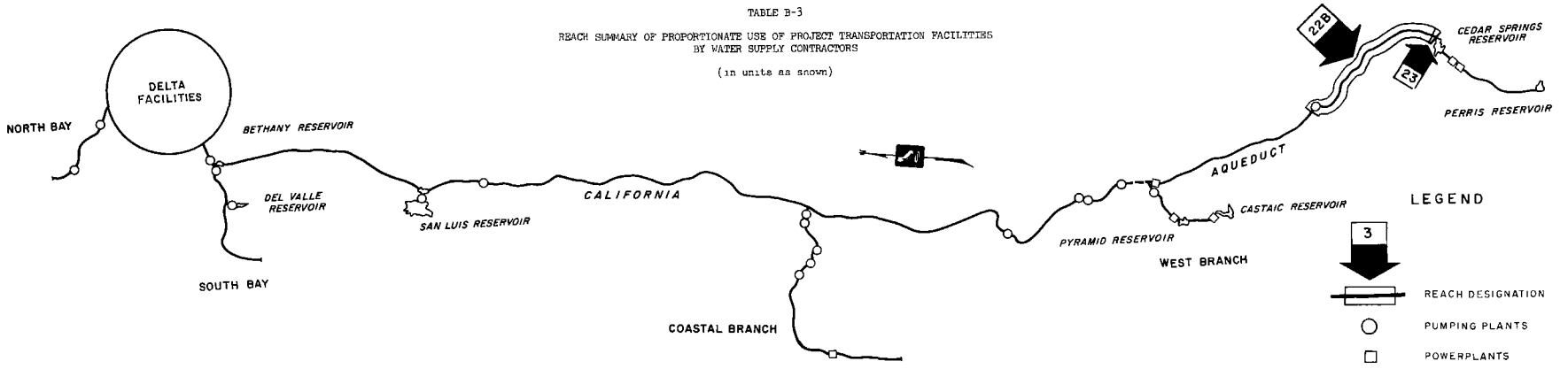



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 21 - PALMDALE TO LITTLEROCK CREEK | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 1222.6<br>2.01232 | 556500.0<br>768.68153 | 25271.0<br>37.21260 | 41737.5<br>59.36631 | 0.00000 | 623508.5<br>865.26044 | .67890919<br>.67924482 | .67907700 | 0.00000 | 623508.5<br>865.26044 | .67890919<br>.67924482 | .67907700 |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 211.6<br>.34828 | 98000.0<br>135.36530 | 2677.4<br>4.09736 | 7350.0<br>10.27353 | 0.00000 | 108027.4<br>149.73619 | .11762597<br>.11754557 | .11758577 | 0.00000 | 108027.4<br>149.73619 | .11762597<br>.11754557 | .11758577 |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 9.9<br>.01630 | 4600.0<br>6.35388 | 125.7<br>.19237 | 345.0<br>.48223 | 0.00000 | 5070.7<br>7.02848 | .00552125<br>.00551748 | .00551937 | 0.00000 | 5070.7<br>7.02848 | .00552125<br>.00551748 | .00551937 |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 62.2<br>.10238 | 28800.0<br>39.78082 | 786.7<br>1.20392 | 2160.0<br>3.01916 | 0.00000 | 31746.7<br>44.00390 | .03436749<br>.03454384 | .03455567 | 0.00000 | 31746.7<br>44.00390 | .03436749<br>.03454384 | .03455567 |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 37.4<br>.06156 | 17300.0<br>23.89612 | 472.7<br>.72341 | 1297.5<br>1.81359 | 0.00000 | 19070.2<br>26.43312 | .02076465<br>.02075047 | .02075756 | 0.00000 | 19070.2<br>26.43312 | .02076465<br>.02075047 | .02075756 |
| CRESTLINE-LAKE ARROWHEAD WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 12.5<br>.02057 | 5800.0<br>8.01142 | 158.4<br>.24239 | 435.0<br>.60802 | 0.00000 | 6393.4<br>8.86183 | .00696147<br>.00695670 | .00695908 | 0.00000 | 6393.4<br>8.86183 | .00696147<br>.00695670 | .00695908 |
| COACHELLA VALLEY COUNTY WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 49.3<br>.08114 | 23100.0<br>31.90754 | 351.3<br>.57821 | 1732.5<br>2.39307 | 0.00000 | 25183.8<br>34.87882 | .02742146<br>.02738049 | .02740098 | 0.00000 | 25183.8<br>34.87882 | .02742146<br>.02738049 | .02740098 |
| DESERT WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 81.3<br>.13381 | 38100.0<br>52.62671 | 579.4<br>.95365 | 2857.5<br>3.94700 | 0.00000 | 41536.9<br>57.52736 | .04522758<br>.04516000 | .04519379 | 0.00000 | 41536.9<br>57.52736 | .04522758<br>.04516000 | .04519379 |
| MOJAVE WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 108.4<br>.17842 | 50800.0<br>70.16895 | 772.6<br>1.27165 | 3810.0<br>5.26267 | 0.00000 | 55382.6<br>76.70327 | .06030352<br>.06021343 | .06025847 | 0.00000 | 55382.6<br>76.70327 | .06030352<br>.06021343 | .06025847 |
| LITTLEROCK CREEK IRRIGATION DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 2300.0<br>3.17694 | 4.8<br>.00790 | 2300.0<br>3.17694 | 4.8<br>.00790 | 172.5<br>.23827 | 0.00000 | 2477.3<br>3.42311 | .00269742<br>.00268720 | .00269231 | 0.00000 | 2477.3<br>3.42311 | .00269742<br>.00268720 | .00269231 |
| TOTAL | QUANTITY, AF<br>CAPACITY, CFS | 2300.0<br>3.17694 | 1800.0<br>2.96268 | 825300.0<br>1139.96921 | 31200.0<br>46.48346 | 61897.5<br>87.40385 | 0.00000 | 918397.5<br>1273.85652 | 1.00000000<br>1.00000000 | 1.00000000 | 0.00000 | 918397.5<br>1273.85652 | 1.00000000<br>1.00000000 | 1.00000000 |
| REACH 22A - LITTLEROCK CREEK TO PEARBLOSSOM PUMPING PLANT | | | | | | | | | | | | | | |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 476.7<br>.78462 | 556500.0<br>768.68153 | 24068.4<br>35.20028 | 41737.5<br>59.36631 | 0.00000 | 622285.9<br>863.24812 | .68074487<br>.68107509 | .68090998 | 0.00000 | 622285.9<br>863.24812 | .68074487<br>.68107509 | .68090998 |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 82.5<br>.13579 | 98000.0<br>135.36530 | 2465.8<br>3.74908 | 7350.0<br>10.27353 | 0.00000 | 107815.8<br>149.38791 | .11794426<br>.11786227 | .11790327 | 0.00000 | 107815.8<br>149.38791 | .11794426<br>.11786227 | .11790327 |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 3.9<br>.00642 | 4600.0<br>6.35388 | 115.8<br>.17607 | 345.0<br>.48223 | 0.00000 | 5060.8<br>7.01218 | .00553622<br>.00553239 | .00553431 | 0.00000 | 5060.8<br>7.01218 | .00553622<br>.00553239 | .00553431 |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 24.2<br>.03983 | 28800.0<br>39.78082 | 724.5<br>1.10154 | 2160.0<br>3.01916 | 0.00000 | 31684.5<br>43.90152 | .03466101<br>.03463689 | .03464895 | 0.00000 | 31684.5<br>43.90152 | .03466101<br>.03463689 | .03464895 |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 14.6<br>.02403 | 17300.0<br>23.89612 | 435.3<br>.66185 | 1297.5<br>1.81359 | 0.00000 | 19032.8<br>26.37156 | .02082079<br>.02080632 | .02081355 | 0.00000 | 19032.8<br>26.37156 | .02082079<br>.02080632 | .02081355 |
| CRESTLINE-LAKE ARROWHEAD WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 4.9<br>.00806 | 5800.0<br>8.01142 | 145.9<br>.22182 | 435.0<br>.60802 | 0.00000 | 6380.9<br>8.84126 | .00698034<br>.00697547 | .00697790 | 0.00000 | 6380.9<br>8.84126 | .00698034<br>.00697547 | .00697790 |
| COACHELLA VALLEY COUNTY WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 19.2<br>.03160 | 23100.0<br>31.90754 | 302.0<br>.49707 | 1732.5<br>2.39307 | 0.00000 | 25134.5<br>34.79768 | .02749569<br>.02745425 | .02747497 | 0.00000 | 25134.5<br>34.79768 | .02749569<br>.02745425 | .02747497 |
| DESERT WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 31.7<br>.05218 | 38100.0<br>52.62671 | 498.1<br>.81984 | 2857.5<br>3.94700 | 0.00000 | 41455.6<br>57.39355 | .04535003<br>.04528167 | .04531585 | 0.00000 | 41455.6<br>57.39355 | .04535003<br>.04528167 | .04531585 |
| MOJAVE WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 42.3<br>.06962 | 50800.0<br>70.16895 | 664.2<br>1.09323 | 3810.0<br>5.26267 | 0.00000 | 55274.2<br>76.52485 | .06046679<br>.06037565 | .06042122 | 0.00000 | 55274.2<br>76.52485 | .06046679<br>.06037565 | .06042122 |
| TOTAL | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 700.0<br>1.15215 | 823000.0<br>1136.79227 | 29400.0<br>43.52078 | 61725.0<br>87.16558 | 0.00000 | 914125.0<br>1267.47863 | 1.00000000<br>1.00000000 | 1.00000000 | 0.00000 | 914125.0<br>1267.47863 | 1.00000000<br>1.00000000 | 1.00000000 |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(in units as shown)

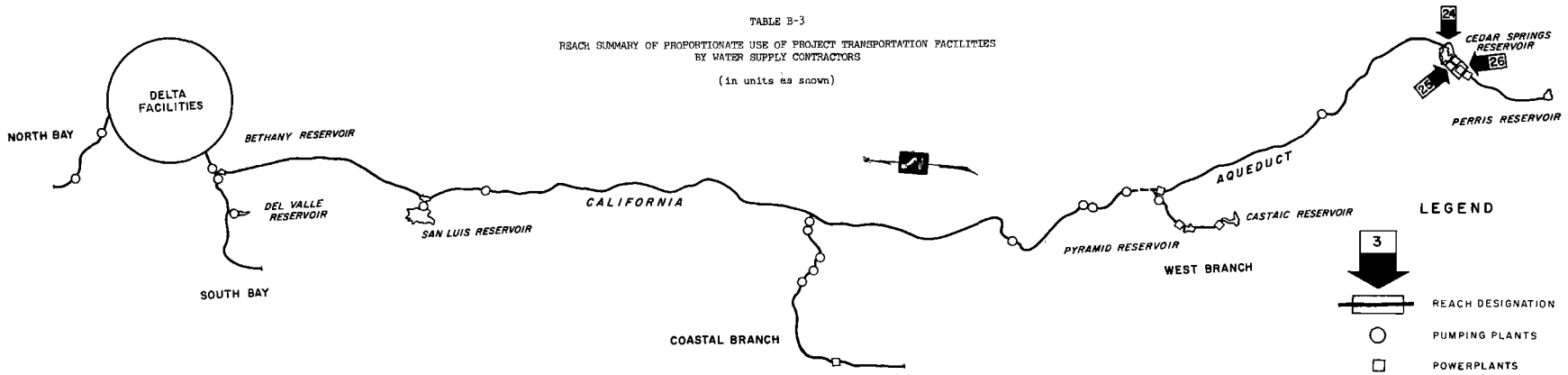



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 22B - PEARBLOSSOM PUMPING PLANT TO WEST FORK MOJAVE RIVER | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 7015.1<br>11.54638 | 556500.0<br>768.68153 | 23871.7<br>34.41566 | 41737.5<br>59.36631 | 0.00000 | 621809.2<br>862.46350 | .68074467<br>.68107515 | .68090991 | 0.00000 | 621809.2<br>862.46350 | .68074467<br>.68107515 | .68090991 |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 1214.0<br>1.99816 | 98000.0<br>135.36530 | 2383.3<br>3.61329 | 7350.0<br>10.27353 | 0.00000 | 107733.3<br>149.25212 | .11794433<br>.11786228 | .11790330 | 0.00000 | 107733.3<br>149.25212 | .11794433<br>.11786228 | .11790330 |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 57.0<br>.09382 | 4600.0<br>6.35388 | 111.9<br>.16965 | 345.0<br>.48223 | 0.00000 | 5056.9<br>7.00576 | .00553620<br>.00553235 | .00553427 | 0.00000 | 5056.9<br>7.00576 | .00553620<br>.00553235 | .00553427 |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 356.7<br>.58710 | 28800.0<br>39.78082 | 700.3<br>1.06171 | 2160.0<br>3.01916 | 0.00000 | 31660.3<br>43.86169 | .03466108<br>.03463695 | .03464902 | 0.00000 | 31660.3<br>43.86169 | .03466108<br>.03463695 | .03464902 |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 214.3<br>.35272 | 17300.0<br>23.89612 | 420.7<br>.63782 | 1297.5<br>1.81359 | 0.00000 | 19018.2<br>26.34753 | .02082076<br>.02080627 | .02081351 | 0.00000 | 19018.2<br>26.34753 | .02082076<br>.02080627 | .02081351 |
| CRESTLINE-LAKE ARROWHEAD WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 71.8<br>.11818 | 5800.0<br>8.01142 | 141.0<br>.21376 | 435.0<br>.60802 | 0.00000 | 6376.0<br>8.83320 | .00698032<br>.00697545 | .00697789 | 0.00000 | 6376.0<br>8.83320 | .00698032<br>.00697545 | .00697789 |
| COACHELLA VALLEY COUNTY WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 23100.0<br>31.90754 | 282.8<br>.46547 | 23100.0<br>31.90754 | 282.8<br>.46547 | 1732.5<br>2.39307 | 0.00000 | 25115.3<br>34.76608 | .02749574<br>.02745428 | .02747501 | 0.00000 | 25115.3<br>34.76608 | .02749574<br>.02745428 | .02747501 |
| DESERT WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 38100.0<br>52.62671 | 466.4<br>.76766 | 38100.0<br>52.62671 | 466.4<br>.76766 | 2857.5<br>3.94700 | 0.00000 | 41423.9<br>57.34137 | .04535008<br>.04528166 | .04531588 | 0.00000 | 41423.9<br>57.34137 | .04535008<br>.04528166 | .04531588 |
| MOJAVE WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 50800.0<br>70.16895 | 621.9<br>1.02361 | 50800.0<br>70.16895 | 621.9<br>1.02361 | 3810.0<br>5.26267 | 0.00000 | 55231.9<br>76.45523 | .06046682<br>.06037561 | .06042121 | 0.00000 | 55231.9<br>76.45523 | .06046682<br>.06037561 | .06042121 |
| TOTAL | QUANTITY, AF<br>CAPACITY, CFS | 112000.0<br>154.70320 | 10300.0<br>16.95310 | 823000.0<br>1136.79227 | 28700.0<br>42.36863 | 61725.0<br>87.16558 | 0.00000 | 913425.0<br>1266.32648 | 1.00000000<br>1.00000000 | 1.00000000 | 0.00000 | 913425.0<br>1266.32648 | 1.00000000<br>1.00000000 | 1.00000000 |
| REACH 23 - WEST FORK MOJAVE RIVER TO CEDAR SPRINGS RESERVOIR | | | | | | | | | | | | | | |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 0.0<br>0.00000 | 556500.0<br>768.68153 | 16556.6<br>22.86928 | 41737.5<br>59.36631 | 0.00000 | 614794.1<br>850.91712 | .78545351<br>.72483759 | .75514555 | 0.00000 | 614794.1<br>850.91712 | .78545351<br>.72483759 | .75514555 |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 0.0<br>0.00000 | 98000.0<br>135.36530 | 1169.3<br>1.61513 | 7350.0<br>10.27353 | 0.00000 | 106519.3<br>147.25396 | .13608777<br>.12543549 | .13076163 | 0.00000 | 106519.3<br>147.25396 | .13608777<br>.12543549 | .13076163 |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 0.0<br>0.00000 | 4600.0<br>6.35388 | 54.9<br>.07583 | 345.0<br>.48223 | 0.00000 | 4999.9<br>6.91194 | .00638781<br>.00588781 | .00613781 | 0.00000 | 4999.9<br>6.91194 | .00638781<br>.00588781 | .00613781 |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 0.0<br>0.00000 | 28800.0<br>39.78082 | 343.6<br>.47461 | 2160.0<br>3.01916 | 0.00000 | 31303.6<br>43.27459 | .03999310<br>.03686264 | .03842787 | 0.00000 | 31303.6<br>43.27459 | .03999310<br>.03686264 | .03842787 |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 0.0<br>0.00000 | 17300.0<br>23.89612 | 206.4<br>.28510 | 1297.5<br>1.81359 | 0.00000 | 18803.9<br>25.99481 | .02402364<br>.02214319 | .02308341 | 0.00000 | 18803.9<br>25.99481 | .02402364<br>.02214319 | .02308341 |
| CRESTLINE-LAKE ARROWHEAD WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 0.0<br>0.00000 | 5800.0<br>8.01142 | 69.2<br>.09558 | 435.0<br>.60802 | 0.00000 | 6304.2<br>8.71502 | .00805417<br>.00742372 | .00773895 | 0.00000 | 6304.2<br>8.71502 | .00805417<br>.00742372 | .00773895 |
| COACHELLA VALLEY COUNTY WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 0.0<br>0.00000 | 0.0<br>0.00000 | 0.0<br>0.00000 | 0.0<br>2.39307 | 31.90754 | 0.0<br>34.30061 | .00000000<br>.02921832 | .01460916 | 0.00000 | 0.0<br>34.30061 | .00000000<br>.02921832 | .01460916 |
| DESERT WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 0.0<br>0.00000 | 0.0<br>0.00000 | 0.0<br>0.00000 | 0.0<br>3.94700 | 52.62671 | 0.0<br>56.57371 | .00000000<br>.04819124 | .02409562 | 0.00000 | 0.0<br>56.57371 | .00000000<br>.04819124 | .02409562 |
| TOTAL | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 0.0<br>0.00000 | 711000.0<br>982.08907 | 18400.0<br>25.41553 | 53325.0<br>81.90291 | 84.53425 | 782725.0<br>1173.94176 | 1.00000000<br>1.00000000 | 1.00000000 | 0.00000 | 782725.0<br>1173.94176 | 1.00000000<br>1.00000000 | 1.00000000 |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(in units as shown)

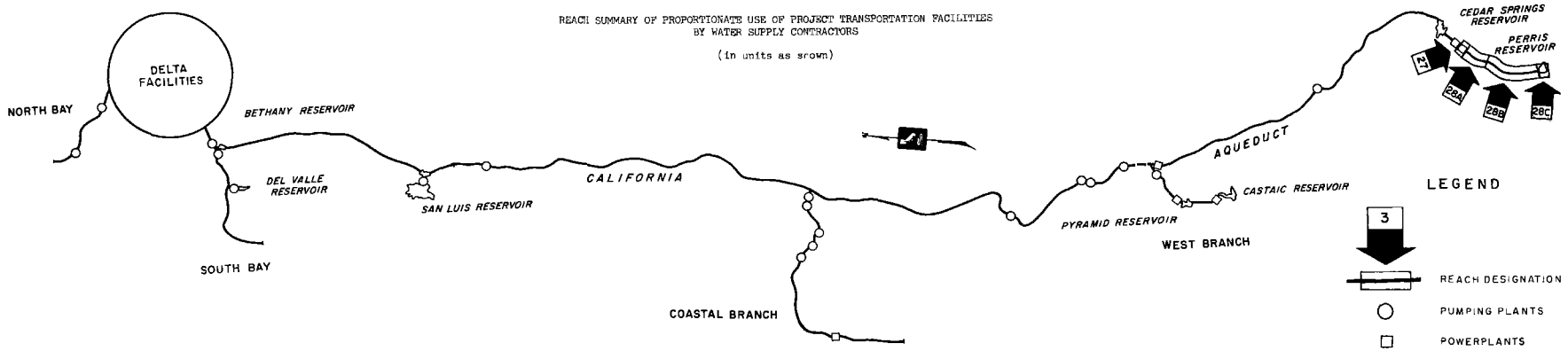



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 24 - CEDAR SPRINGS DAM AND RESERVOIR | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF | 0.0 | 6756.6 | 556500.0 | 16556.6 | 41737.5 | | 614794.1 | .78545351 | | | 614794.1 | .78545351 | |
| | CAPACITY, AF | 118843.0 | 1794.0 | 118843.0 | 1794.0 | | | 120637.0 | .68156497 | .73350924 | | 120637.0 | .68156497 | .73350924 |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 1169.3 | 98000.0 | 1169.3 | 7350.0 | | 106519.3 | .13608777 | | | 106519.3 | .13608777 | |
| | CAPACITY, AF | 31918.0 | 482.0 | 31918.0 | 482.0 | | | 32400.0 | .18305085 | .15956931 | | 32400.0 | .18305085 | .15956931 |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 54.9 | 4600.0 | 54.9 | 345.0 | | 4999.9 | .00638781 | | | 4999.9 | .00638781 | |
| | CAPACITY, AF | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | .00000000 | .00319391 | | 0.0 | .00000000 | .00319391 |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 343.6 | 28800.0 | 343.6 | 2160.0 | | 31303.6 | .03999310 | | | 31303.6 | .03999310 | |
| | CAPACITY, AF | 4608.0 | 70.0 | 4608.0 | 70.0 | | | 4678.0 | .02642938 | .03321124 | | 4678.0 | .02642938 | .03321124 |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY, AF | 0.0 | 206.4 | 17300.0 | 206.4 | 1297.5 | | 18803.9 | .02402364 | | | 18803.9 | .02402364 | |
| | CAPACITY, AF | 3363.0 | 51.0 | 3363.0 | 51.0 | | | 3414.0 | .01928814 | .02165588 | | 3414.0 | .01928814 | .02165588 |
| CRESTLINE-LAKE ARROWHEAD WATER AGENCY | QUANTITY, AF | 5800.0 | 69.2 | 5800.0 | 69.2 | 435.0 | | 6304.2 | .00805417 | | | 6304.2 | .00805417 | |
| | CAPACITY, AF | 1875.0 | 28.0 | 1875.0 | 28.0 | | | 1903.0 | .01075141 | .00940279 | | 1903.0 | .01075141 | .00940279 |
| FUTURE CONTRACTOR - CEDAR SPRINGS | QUANTITY, AF | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | .00000000 | | | 0.0 | .00000000 | |
| | CAPACITY, AF | 6961.0 | 105.0 | 6961.0 | 105.0 | | | 7066.0 | .03992090 | .01996045 | | 7066.0 | .03992090 | .01996045 |
| COACHELLA VALLEY COUNTY WATER DISTRICT | QUANTITY, AF | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | .00000000 | | | 0.0 | .00000000 | |
| | CAPACITY, AF | 2566.0 | 39.0 | 2566.0 | 39.0 | | | 2605.0 | .01471751 | .00735876 | | 2605.0 | .01471751 | .00735876 |
| DESERT WATER AGENCY | QUANTITY, AF | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | .00000000 | | | 0.0 | .00000000 | |
| | CAPACITY, AF | 4233.0 | 64.0 | 4233.0 | 64.0 | | | 4297.0 | .02427684 | .01213842 | | 4297.0 | .02427684 | .01213842 |
| TOTAL | QUANTITY, AF | 5800.0 | 8600.0 | 711000.0 | 18400.0 | 53325.0 | | 782725.0 | 1.00000000 | | | 782725.0 | 1.00000000 | |
| | CAPACITY, AF | 174367.0 | 2633.0 | 174367.0 | 2633.0 | | | 177000.0 | 1.00000000 | 1.00000000 | | 177000.0 | 1.00000000 | 1.00000000 |
| REACH 25 - CEDAR SPRINGS RESERVOIR TO SOUTH PORTAL SAN BERNARDINO TUNNEL | | | | | | | | | | | | | | |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF | 0.0 | 0.0 | 556500.0 | 9800.0 | 20437.5 | | 586737.5 | .79743335 | | | 586737.5 | .79743335 | |
| | CAPACITY, CFS | 0.00000 | 0.00000 | 894.21213 | 13.53653 | 29.24512 | 0.00000 | 936.99378 | .77966757 | .78855046 | 0.00000 | 936.99378 | .77966757 | .78855046 |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 0.0 | 98000.0 | 0.0 | 0.0 | | 98000.0 | .13319153 | | | 98000.0 | .13319153 | |
| | CAPACITY, CFS | 0.00000 | 0.00000 | 178.68220 | 0.00000 | 0.00000 | 0.00000 | 178.68220 | .14868051 | .14093602 | 0.00000 | 178.68220 | .14868051 | .14093602 |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 0.0 | 4600.0 | 0.0 | 345.0 | | 4945.0 | .00672074 | | | 4945.0 | .00672074 | |
| | CAPACITY, CFS | 0.00000 | 0.00000 | 6.35388 | 0.00000 | .47654 | 0.00000 | 6.83042 | .00568356 | .00620215 | 0.00000 | 6.83042 | .00568356 | .00620215 |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 0.0 | 28800.0 | 0.0 | 0.0 | | 28800.0 | .03914200 | | | 28800.0 | .03914200 | |
| | CAPACITY, CFS | 0.00000 | 0.00000 | 47.73699 | 0.00000 | 0.00000 | 0.00000 | 47.73699 | .03972170 | .03943185 | 0.00000 | 47.73699 | .03972170 | .03943185 |
| SAN GORGONIO PASS WATER AGENCY | QUANTITY, AF | 17300.0 | 0.0 | 17300.0 | 0.0 | 0.0 | | 17300.0 | .02351238 | | | 17300.0 | .02351238 | |
| | CAPACITY, CFS | 31.54288 | 0.00000 | 31.54288 | 0.00000 | 0.00000 | 0.00000 | 31.54288 | .02624666 | .02487952 | 0.00000 | 31.54288 | .02624666 | .02487952 |
| TOTAL | QUANTITY, AF | 17300.0 | 0.0 | 705200.0 | 9800.0 | 20782.5 | | 735782.5 | 1.00000000 | | | 735782.5 | 1.00000000 | |
| | CAPACITY, CFS | 31.54288 | 0.00000 | 1158.52808 | 13.53653 | 29.72166 | 0.00000 | 1201.78627 | 1.00000000 | 1.00000000 | 0.00000 | 1201.78627 | 1.00000000 | 1.00000000 |
| REACH 26 - SOUTH PORTAL SAN BERNARDINO TUNNEL THRU UPPER DEVIL CANYON POWERPLANT | | | | | | | | | | | | | | |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF | 0.0 | 0.0 | 556500.0 | 9800.0 | 20437.5 | | 586737.5 | .81663437 | | | 586737.5 | .81663437 | |
| | CAPACITY, CFS | 0.00000 | 0.00000 | 894.21213 | 13.53653 | 29.24512 | 0.00000 | 936.99378 | .80068282 | .80865859 | 0.00000 | 936.99378 | .80068282 | .80865859 |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 0.0 | 98000.0 | 0.0 | 0.0 | | 98000.0 | .13639859 | | | 98000.0 | .13639859 | |
| | CAPACITY, CFS | 0.00000 | 0.00000 | 178.68220 | 0.00000 | 0.00000 | 0.00000 | 178.68220 | .15268807 | .14454333 | 0.00000 | 178.68220 | .15268807 | .14454333 |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 0.0 | 4600.0 | 0.0 | 345.0 | | 4945.0 | .00688256 | | | 4945.0 | .00688256 | |
| | CAPACITY, CFS | 0.00000 | 0.00000 | 6.35388 | 0.00000 | .47654 | 0.00000 | 6.83042 | .00583675 | .00635966 | 0.00000 | 6.83042 | .00583675 | .00635966 |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY, AF | 0.0 | 0.0 | 28800.0 | 0.0 | 0.0 | | 28800.0 | .04008448 | | | 28800.0 | .04008448 | |
| | CAPACITY, CFS | 0.00000 | 0.00000 | 47.73699 | 0.00000 | 0.00000 | 0.00000 | 47.73699 | .04079236 | .04043842 | 0.00000 | 47.73699 | .04079236 | .04043842 |
| TOTAL | QUANTITY, AF | 0.0 | 0.0 | 687900.0 | 9800.0 | 20782.5 | | 718482.5 | 1.00000000 | | | 718482.5 | 1.00000000 | |
| | CAPACITY, CFS | 0.00000 | 0.00000 | 1126.98520 | 13.53653 | 29.72166 | 0.00000 | 1170.24339 | 1.00000000 | 1.00000000 | 0.00000 | 1170.24339 | 1.00000000 | 1.00000000 |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(in units as shown)

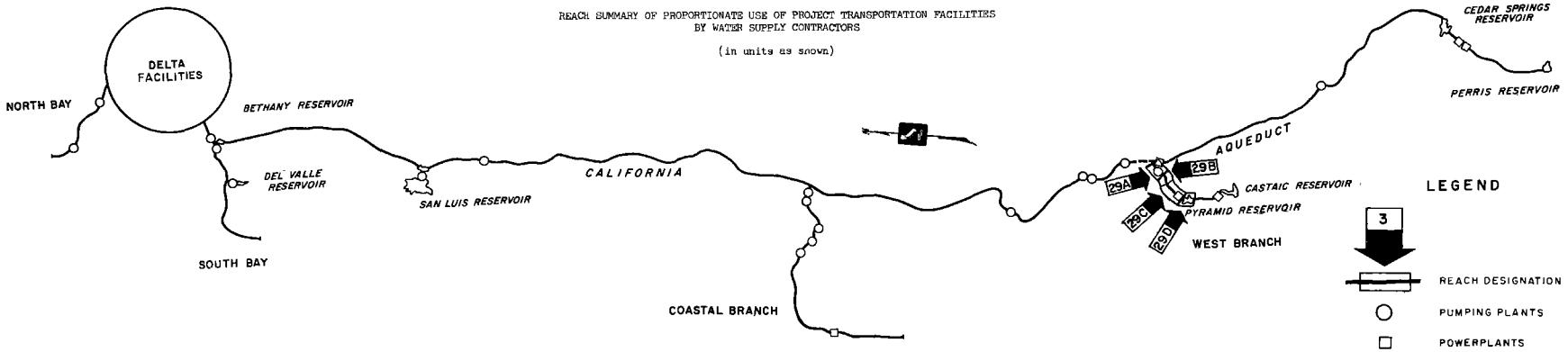



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF: OPERATIONAL LOSSES | FOR COMPENSATION OF: SCHEDULED OUTAGES | FOR COMPENSATION OF: DOWNSTREAM REGULATION | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| REACH 27 - UPPER DEVIL CANYON POWERPLANT THRU LOWER DEVIL CANYON POWERPLANT | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY: AF<br>CAPACITY: CFS | 284000.0<br>517.81372 | 0.0<br>0.00000 | 556500.0<br>894.21213 | 9800.0<br>13.53653 | 20437.5<br>29.24512 | 0.00000 | 586737.5<br>936.99378 | .81663437<br>.80068282 | .80865859 | 0.00000 | 586737.5<br>936.99378 | .81663437<br>.80068282 | .80865859 |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY: AF<br>CAPACITY: CFS | 0.0<br>0.00000 | 0.0<br>0.00000 | 98000.0<br>178.68220 | 0.0<br>0.00000 | 0.0<br>0.00000 | 0.00000 | 98000.0<br>178.68220 | .13639859<br>.15268807 | .14454333 | 0.00000 | 98000.0<br>178.68220 | .13639859<br>.15268807 | .14454333 |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY: AF<br>CAPACITY: CFS | 0.0<br>0.00000 | 0.0<br>0.00000 | 4600.0<br>6.35388 | 0.0<br>0.00000 | 345.0<br>.47654 | 0.00000 | 4945.0<br>6.83042 | .00688256<br>.00583675 | .00635966 | 0.00000 | 4945.0<br>6.83042 | .00688256<br>.00583675 | .00635966 |
| SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT | QUANTITY: AF<br>CAPACITY: CFS | 28800.0<br>47.73699 | 0.0<br>0.00000 | 28800.0<br>47.73699 | 0.0<br>0.00000 | 0.0<br>0.00000 | 0.00000 | 28800.0<br>47.73699 | .04008448<br>.04079236 | .04043842 | 0.00000 | 28800.0<br>47.73699 | .04008448<br>.04079236 | .04043842 |
| TOTAL | QUANTITY: AF<br>CAPACITY: CFS | 312800.0<br>565.55071 | 0.0<br>0.00000 | 687900.0<br>1126.98820 | 9800.0<br>13.53653 | 20787.5<br>29.72166 | 0.00000 | 718482.5<br>1170.24339 | 1.00000000<br>1.00000000 | 1.00000000 | 0.00000 | 718482.5<br>1170.24339 | 1.00000000<br>1.00000000 | 1.00000000 |
| REACH 28A - LOWER DEVIL CANYON POWERPLANT TO MILL STREET | | | | | | | | | | | | | | |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY: AF<br>CAPACITY: CFS | 0.0<br>0.00000 | 0.0<br>0.00000 | 272500.0<br>376.39841 | 9800.0<br>13.53653 | 20437.5<br>29.24512 | 0.00000 | 302737.5<br>419.18006 | .74624244<br>.69321173 | .71972709 | 0.00000 | 302737.5<br>419.18006 | .74624244<br>.69321173 | .71972709 |
| SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT | QUANTITY: AF<br>CAPACITY: CFS | 98000.0<br>178.68220 | 0.0<br>0.00000 | 98000.0<br>178.68220 | 0.0<br>0.00000 | 0.0<br>0.00000 | 0.00000 | 98000.0<br>178.68220 | .24156822<br>.29549258 | .26853040 | 0.00000 | 98000.0<br>178.68220 | .24156822<br>.29549258 | .26853040 |
| BIG BEAR MUNICIPAL WATER DISTRICT | QUANTITY: AF<br>CAPACITY: CFS | 4600.0<br>6.35388 | 0.0<br>0.00000 | 4600.0<br>6.35388 | 0.0<br>0.00000 | 345.0<br>.47654 | 0.00000 | 4945.0<br>6.83042 | .01218934<br>.01129569 | .01174251 | 0.00000 | 4945.0<br>6.83042 | .01218934<br>.01129569 | .01174251 |
| TOTAL | QUANTITY: AF<br>CAPACITY: CFS | 102600.0<br>185.03608 | 0.0<br>0.00000 | 375100.0<br>561.43449 | 9800.0<br>13.53653 | 20787.5<br>29.72166 | 0.00000 | 405682.5<br>604.69268 | 1.00000000<br>1.00000000 | 1.00000000 | 0.00000 | 405682.5<br>604.69268 | 1.00000000<br>1.00000000 | 1.00000000 |
| REACH 28B - MILL STREET TO PERRIS RESERVOIR | | | | | | | | | | | | | | |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY: AF<br>CAPACITY: CFS | 0.0<br>0.00000 | 0.0<br>0.00000 | 272500.0<br>376.39841 | 9800.0<br>13.53653 | 20437.5<br>29.24512 | 0.00000 | 302737.5<br>419.18006 | 1.00000000<br>1.00000000 | 1.00000000 | 0.00000 | 302737.5<br>419.18006 | 1.00000000<br>1.00000000 | 1.00000000 |
| TOTAL | QUANTITY: AF<br>CAPACITY: CFS | 0.0<br>0.00000 | 0.0<br>0.00000 | 272500.0<br>376.39841 | 9800.0<br>13.53653 | 20437.5<br>29.24512 | 0.00000 | 302737.5<br>419.18006 | 1.00000000<br>1.00000000 | 1.00000000 | 0.00000 | 302737.5<br>419.18006 | 1.00000000<br>1.00000000 | 1.00000000 |
| REACH 28C - PERRIS DAM AND RESERVOIR | | | | | | | | | | | | | | |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY: AF<br>CAPACITY: AF | 272500.0<br>95999.0 | 9800.0<br>3001.0 | 272500.0<br>95999.0 | 9800.0<br>3001.0 | 20437.5 | | 302737.5<br>99000.0 | 1.00000000<br>1.00000000 | 1.00000000 | | 302737.5<br>99000.0 | 1.00000000<br>1.00000000 | 1.00000000 |
| TOTAL | QUANTITY: AF<br>CAPACITY: AF | 272500.0<br>95999.0 | 9800.0<br>3001.0 | 272500.0<br>95999.0 | 9800.0<br>3001.0 | 20437.5 | | 302737.5<br>99000.0 | 1.00000000<br>1.00000000 | 1.00000000 | | 302737.5<br>99000.0 | 1.00000000<br>1.00000000 | 1.00000000 |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(in units as shown)

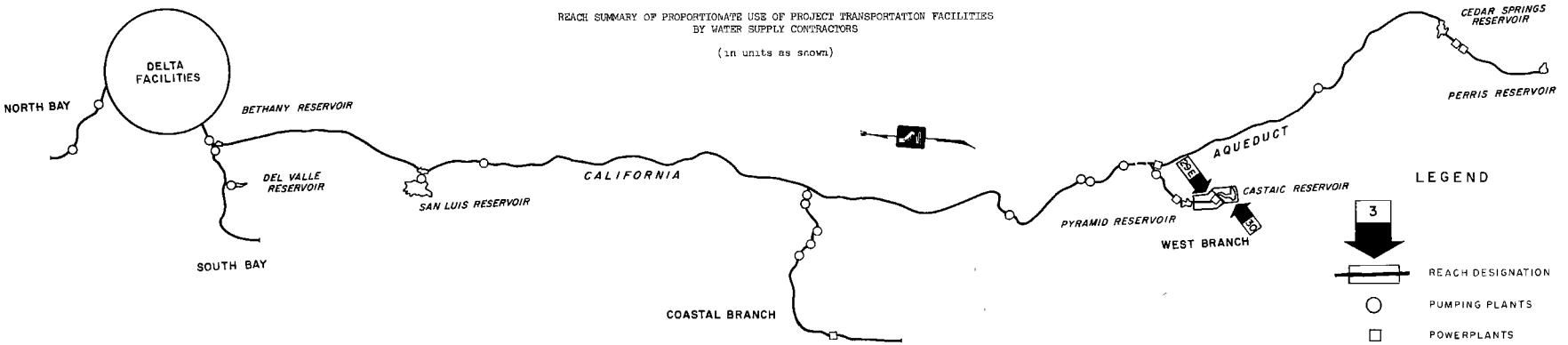



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF: OPERATIONAL LOSSES | FOR COMPENSATION OF: SCHEDULED OUTAGES | FOR COMPENSATION OF: DOWNSTREAM REGULATION | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| REACH 29A - JUNCTION, WEST BRANCH, CALIFORNIA AQUEDUCT THRU OSO PUMPING PLANT | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF | 0.0 | 479.7 | 1455000.0 | 26288.9 | 109125.0 | 0.00000 | 1590413.9 | .95944614 | .95944614 | 808.95961 | 1590413.9 | .95944614 | .95855958 |
| | CAPACITY, CFS | 0.00000 | .78956 | 2009.76033 | 37.40415 | 153.02805 | | 2200.19253 | .95944614 | | | 3009.15214 | .95767302 | |
| ANTELOPE VALLEY-EAST KERN WATER AGENCY | QUANTITY, AF | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00000 | 0.0 | .00000000 | .00000000 | 40.00000 | 0.0 | .00000000 | .00636507 |
| | CAPACITY, CFS | 0.00000 | .00000 | 0.00000 | 0.00000 | 0.00000 | | 0.00000 | .00000000 | | | 40.00000 | .01273014 | |
| UPPER SANTA CLARA VALLEY WATER AGENCY | QUANTITY, AF | 0.0 | 13.7 | 41500.0 | 749.8 | 3112.5 | 0.00000 | 45362.3 | .02736563 | .02736563 | 0.00000 | 45362.3 | .02736563 | .02366875 |
| | CAPACITY, CFS | 0.00000 | .02255 | 57.32306 | 1.06683 | 4.36471 | | 62.75460 | .02736563 | | | 62.75460 | .01997187 | |
| VENTURA COUNTY FLOOD CONTROL DISTRICT | QUANTITY, AF | 0.0 | 6.6 | 20000.0 | 361.3 | 1500.0 | 0.00000 | 21861.3 | .01318823 | .01318823 | 0.00000 | 21861.3 | .01318823 | .01140660 |
| | CAPACITY, CFS | 0.00000 | .01086 | 27.62557 | .51407 | 2.10347 | | 30.24311 | .01318823 | | | 30.24311 | .00962497 | |
| TOTAL | QUANTITY, AF | 0.0 | 500.0 | 1516500.0 | 27400.0 | 113737.5 | 0.00000 | 1657637.5 | 1.00000000 | 1.00000000 | 848.95961 | 1657637.5 | 1.00000000 | 1.00000000 |
| | CAPACITY, CFS | 0.00000 | .82297 | 2094.70896 | 38.98505 | 159.49623 | | 2293.19024 | 1.00000000 | | | 3142.14985 | 1.00000000 | |
| REACH 29B - OSO PUMPING PLANT TO STATE ROUTE 138 | | | | | | | | | | | | | | |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF | 0.0 | 2398.6 | 1455000.0 | 25809.2 | 109125.0 | 0.00000 | 1589934.2 | .95944615 | .95944616 | 808.95961 | 1589934.2 | .95944615 | .96473525 |
| | CAPACITY, CFS | 0.00000 | 3.94793 | 2009.76033 | 36.61459 | 153.02805 | | 2199.40297 | .95944616 | | | 3008.36258 | .97002434 | |
| UPPER SANTA CLARA VALLEY WATER AGENCY | QUANTITY, AF | 0.0 | 68.4 | 41500.0 | 736.1 | 3112.5 | 0.00000 | 45348.6 | .02736562 | .02736562 | 0.00000 | 45348.6 | .02736562 | .02379656 |
| | CAPACITY, CFS | 0.00000 | .11258 | 57.32306 | 1.04428 | 4.36471 | | 62.73205 | .02736562 | | | 62.73205 | .02022749 | |
| VENTURA COUNTY FLOOD CONTROL DISTRICT | QUANTITY, AF | 0.0 | 33.0 | 20000.0 | 354.7 | 1500.0 | 0.00000 | 21854.7 | .01318823 | .01318822 | 0.00000 | 21854.7 | .01318823 | .01146819 |
| | CAPACITY, CFS | 0.00000 | .05432 | 27.62557 | .50321 | 2.10347 | | 30.23225 | .01318822 | | | 30.23225 | .00974817 | |
| TOTAL | QUANTITY, AF | 0.0 | 2500.0 | 1516500.0 | 26900.0 | 113737.5 | 0.00000 | 1657137.5 | 1.00000000 | 1.00000000 | 808.95961 | 1657137.5 | 1.00000000 | 1.00000000 |
| | CAPACITY, CFS | 0.00000 | 4.11483 | 2094.70896 | 38.16208 | 159.49623 | | 2292.36727 | 1.00000000 | | | 3101.32688 | 1.00000000 | |
| REACH 29C - STATE ROUTE 138 THRU PYRAMID POWERPLANT | | | | | | | | | | | | | | |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF | 0.0 | 1247.3 | 1455000.0 | 23410.6 | 109125.0 | 0.00000 | 1587535.6 | .95944616 | .95944617 | 808.95961 | 1587535.6 | .95944616 | .96474229 |
| | CAPACITY, CFS | 0.00000 | 2.05297 | 2009.76033 | 32.66666 | 153.02805 | | 2195.45504 | .95944617 | | | 3004.41465 | .97003841 | |
| UPPER SANTA CLARA VALLEY WATER AGENCY | QUANTITY, AF | 0.0 | 35.6 | 41500.0 | 667.7 | 3112.5 | 0.00000 | 45280.2 | .02736563 | .02736563 | 0.00000 | 45280.2 | .02736563 | .02379182 |
| | CAPACITY, CFS | 0.00000 | .05859 | 57.32306 | .93170 | 4.36471 | | 62.61947 | .02736563 | | | 62.61947 | .02021801 | |
| VENTURA COUNTY FLOOD CONTROL DISTRICT | QUANTITY, AF | 0.0 | 17.1 | 20000.0 | 321.7 | 1500.0 | 0.00000 | 21821.7 | .01318821 | .01318820 | 0.00000 | 21821.7 | .01318821 | .01146589 |
| | CAPACITY, CFS | 0.00000 | .02815 | 27.62557 | .44889 | 2.10347 | | 30.17793 | .01318820 | | | 30.17793 | .00974356 | |
| TOTAL | QUANTITY, AF | 0.0 | 1300.0 | 1516500.0 | 24400.0 | 113737.5 | 0.00000 | 1654637.5 | 1.00000000 | 1.00000000 | 808.95961 | 1654637.5 | 1.00000000 | 1.00000000 |
| | CAPACITY, CFS | 0.00000 | 2.13971 | 2094.70896 | 34.04725 | 159.49623 | | 2288.25244 | 1.00000000 | | | 3097.21205 | 1.00000000 | |
| REACH 29D - PYRAMID DAM AND RESERVOIR | | | | | | | | | | | | | | |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF | 0.0 | 6620.2 | 1455000.0 | 22163.3 | 109125.0 | | 1586288.3 | .95944615 | .96139486 | | 1586288.3 | .95944615 | .96139486 |
| | CAPACITY, AF | 123295.0 | 2036.0 | 123295.0 | 2036.0 | | | 125331.0 | .96334358 | | | 125331.0 | .96334358 | |
| UPPER SANTA CLARA VALLEY WATER AGENCY | QUANTITY, AF | 0.0 | 188.8 | 41500.0 | 632.1 | 3112.5 | | 45244.6 | .02736562 | .02775660 | | 45244.6 | .02736562 | .02775660 |
| | CAPACITY, AF | 3603.0 | 59.0 | 3603.0 | 59.0 | | | 3662.0 | .02814758 | | | 3662.0 | .02814758 | |
| VENTURA COUNTY FLOOD CONTROL DISTRICT | QUANTITY, AF | 0.0 | 91.0 | 20000.0 | 304.6 | 1500.0 | | 21804.6 | .01318823 | .01084854 | | 21804.6 | .01318823 | .01084854 |
| | CAPACITY, AF | 1089.0 | 18.0 | 1089.0 | 18.0 | | | 1107.0 | .00850884 | | | 1107.0 | .00850884 | |
| TOTAL | QUANTITY, AF | 0.0 | 6900.0 | 1516500.0 | 23100.0 | 113737.5 | | 1653337.5 | 1.00000000 | 1.00000000 | | 1653337.5 | 1.00000000 | 1.00000000 |
| | CAPACITY, AF | 127987.0 | 2113.0 | 127987.0 | 2113.0 | | | 130100.0 | 1.00000000 | | | 130100.0 | 1.00000000 | |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(in units as shown)

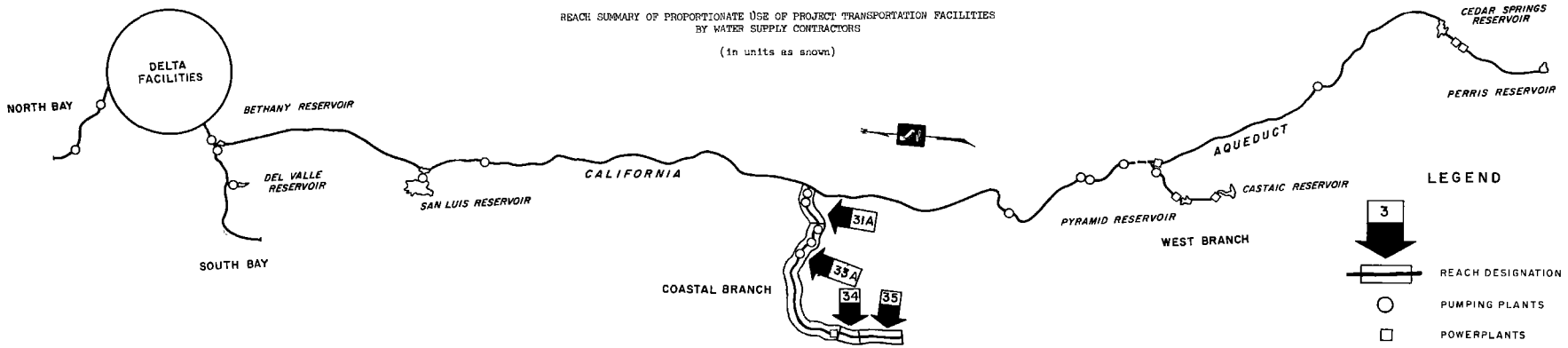



| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 29E - PYRAMID RESERVOIR THRU CASTAIC POWERPLANT | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 96.0<br>.15801 | 1455000.0<br>2009.76033 | 15543.1<br>21.49476 | 109165.0<br>152.33228 | 0.00000 | 1579976.1<br>2183.58737 | .95944819<br>.95944819 | .95944819 | 568.95961 | 1579976.1<br>2752.54698 | .95944819<br>.95944819 | .96479330 |
| UPPER SANTA CLARA VALLEY WATER AGENCY | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 2.7<br>.00444 | 41500.0<br>57.32306 | 443.3<br>.61303 | 3112.5<br>4.34487 | 0.00000 | 45055.8<br>62.28096 | .02736563<br>.02736563 | .02736563 | 0.00000 | 45055.8<br>62.28096 | .02736563<br>.02736563 | .02771745 |
| VENTURA COUNTY FLOOD CONTROL DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 1.3<br>.00214 | 20000.0<br>27.62557 | 213.6<br>.29539 | 1500.0<br>2.09391 | 0.00000 | 21713.6<br>30.01487 | .01318823<br>.01318823 | .01318823 | 0.00000 | 21713.6<br>30.01487 | .01318823<br>.01318823 | .01145701 |
| TOTAL | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 100.0<br>.16459 | 1516500.0<br>2094.70896 | 16200.0<br>22.40318 | 113737.5<br>158.77106 | 0.00000 | 1646437.5<br>2275.88420 | 1.00000000<br>1.00000000 | 1.00000000 | 568.95961 | 1646437.5<br>3064.84291 | 1.00000000<br>1.00000000 | .98650680 |
| REACH 30 - CASTAIC DAM AND RESERVOIR | | | | | | | | | | | | | | |
| THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | QUANTITY, AF<br>CAPACITY, AF | 1455000.0<br>317009.0 | 15447.1<br>4749.0 | 1455000.0<br>317009.0 | 15447.1<br>4749.0 | 109125.0 | | 1579572.1<br>321758.0 | .95944610<br>.96334750 | .96139680 | | 1579572.1<br>321758.0 | .95944610<br>.96334750 | .96139680 |
| UPPER SANTA CLARA VALLEY WATER AGENCY | QUANTITY, AF<br>CAPACITY, AF | 41500.0<br>9262.0 | 440.6<br>139.0 | 41500.0<br>9262.0 | 440.6<br>139.0 | 3112.5 | | 45053.1<br>9401.0 | .02736565<br>.02814671 | .02775618 | | 45053.1<br>9401.0 | .02736565<br>.02814671 | .02775618 |
| VENTURA COUNTY FLOOD CONTROL DISTRICT | QUANTITY, AF<br>CAPACITY, AF | 20000.0<br>2799.0 | 212.3<br>42.0 | 20000.0<br>2799.0 | 212.3<br>42.0 | 1500.0 | | 21712.3<br>2841.0 | .01318825<br>.00850599 | .01084712 | | 21712.3<br>2841.0 | .01318825<br>.00850599 | .01084712 |
| TOTAL | QUANTITY, AF<br>CAPACITY, AF | 1516500.0<br>329070.0 | 16100.0<br>4930.0 | 1516500.0<br>329070.0 | 16100.0<br>4930.0 | 113737.5 | | 1646337.5<br>334000.0 | 1.00000000<br>1.00000000 | 1.00000000 | | 1646337.5<br>334000.0 | 1.00000000<br>1.00000000 | 1.00000000 |

TABLE B-3

REACH SUMMARY OF PROPORTIONATE USE OF PROJECT TRANSPORTATION FACILITIES
BY WATER SUPPLY CONTRACTORS

(in units as shown)




| WATER SUPPLY CONTRACTOR | MEASURE OF USE | MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH | ESTIMATED OPERATIONAL LOSSES WITHIN REACH | CAPACITY PROVIDED IN REACH | | | | | PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS | | CAPACITY PROVIDED IN REACH | | PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FOR DELIVERY OF ENTITLEMENTS | FOR COMPENSATION OF | | | SUBTOTAL | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS | FOR REQUESTED EXCESS PEAKING | TOTAL FOR WATER SUPPLY CONTRACTORS | RATIOS OF TOTAL REACH USE | AVERAGE OF RATIOS |
| | | | | | OPERATIONAL LOSSES | SCHEDULED OUTAGES | DOWNSTREAM REGULATION | | | | | | | |
| REACH 31A - AVENAL GAP TO DEVIL'S DEN PUMPING PLANT | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| KERN COUNTY WATER AGENCY - AGRICULTURAL | QUANTITY, AF<br>CAPACITY, CFS | 89900.0<br>268.22220 | 671.3<br>1.10491 | 89900.0<br>268.22220 | 671.3<br>1.10491 | 0.0<br>0.00000 | 0.00000 | 90571.3<br>269.32711 | .46422419<br>.61971788 | .54197103 | 0.00000 | 90571.3<br>269.32711 | .46422419<br>.61971788 | .54197103 |
| SANTA BARBARA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 443.8<br>.73047 | 57700.0<br>79.69977 | 2183.4<br>3.26304 | 4327.5<br>6.10693 | 0.00000 | 64210.9<br>89.06974 | .32911367<br>.20494821 | .26703094 | 0.00000 | 64210.9<br>89.06974 | .32911367<br>.20494821 | .26703094 |
| SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 190.1<br>.31269 | 25000.0<br>34.53197 | 650.5<br>1.00439 | 1875.0<br>2.61585 | 0.00000 | 27525.5<br>38.15221 | .14108225<br>.08778770 | .11443498 | 0.00000 | 27525.5<br>38.15221 | .14108225<br>.08778770 | .11443498 |
| DEVIL'S DEN WATER DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 12700.0<br>37.89123 | 94.8<br>.15603 | 12700.0<br>37.89123 | 94.8<br>.15603 | 0.0<br>0.00000 | 0.00000 | 12794.8<br>38.04726 | .06557989<br>.08754621 | .07656305 | 0.00000 | 12794.8<br>38.04726 | .06557989<br>.08754621 | .07656305 |
| TOTAL | QUANTITY, AF<br>CAPACITY, CFS | 102600.0<br>306.11343 | 1400.0<br>2.30430 | 185300.0<br>420.34517 | 3600.0<br>5.52837 | 6202.5<br>8.72278 | 0.00000 | 195102.5<br>434.59632 | 1.00000000<br>1.00000000 | 1.00000000 | 0.00000 | 195102.5<br>434.59632 | 1.00000000<br>1.00000000 | 1.00000000 |
| REACH 33A - DEVIL'S DEN PUMPING PLANT THRU SAN LUIS OBISPO POWERPLANT | | | | | | | | | | | | | | |
| SANTA BARBARA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 490.1<br>.80667 | 57700.0<br>79.69977 | 1739.6<br>2.53257 | 4327.5<br>6.10693 | 0.00000 | 63767.1<br>88.33927 | .69994896<br>.70011299 | .70003097 | 0.00000 | 63767.1<br>88.33927 | .69994896<br>.70011299 | .70003097 |
| SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 10000.0<br>13.81279 | 209.9<br>.34548 | 25000.0<br>34.53197 | 460.4<br>.69150 | 1875.0<br>2.61585 | 0.00000 | 27335.4<br>37.83932 | .30005104<br>.29988701 | .29996903 | 0.00000 | 27335.4<br>37.83932 | .30005104<br>.29988701 | .29996903 |
| TOTAL | QUANTITY, AF<br>CAPACITY, CFS | 10000.0<br>13.81279 | 700.0<br>1.15215 | 82700.0<br>114.23174 | 2200.0<br>3.22407 | 6202.5<br>8.72278 | 0.00000 | 91102.5<br>126.17859 | 1.00000000<br>1.00000000 | 1.00000000 | 0.00000 | 91102.5<br>126.17859 | 1.00000000<br>1.00000000 | 1.00000000 |
| REACH 34 - SAN LUIS OBISPO POWERPLANT TO ARROYO GRANDE | | | | | | | | | | | | | | |
| SANTA BARBARA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 0.0<br>0.00000 | 397.2<br>.54864 | 57700.0<br>79.69977 | 1949.5<br>1.72590 | 4327.5<br>6.10693 | 0.00000 | 63277.0<br>87.53260 | .79441323<br>.79446756 | .79444039 | 0.00000 | 63277.0<br>87.53260 | .79441323<br>.79446756 | .79444039 |
| SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 5000.0<br>6.90639 | 102.8<br>.14200 | 15000.0<br>20.71918 | 250.5<br>.34602 | 1125.0<br>1.57989 | 0.00000 | 16375.5<br>22.64509 | .20558677<br>.20553244 | .20555961 | 0.00000 | 16375.5<br>22.64509 | .20558677<br>.20553244 | .20555961 |
| TOTAL | QUANTITY, AF<br>CAPACITY, CFS | 5000.0<br>6.90639 | 500.0<br>.69064 | 72700.0<br>100.41895 | 2200.0<br>3.07192 | 5452.5<br>7.68682 | 0.00000 | 79652.5<br>110.17769 | 1.00000000<br>1.00000000 | 1.00000000 | 0.00000 | 79652.5<br>110.17769 | 1.00000000<br>1.00000000 | 1.00000000 |
| REACH 35 - ARROYO GRANDE TO SANTA MARIA TERMINUS | | | | | | | | | | | | | | |
| SANTA BARBARA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 57700.0<br>79.69977 | 852.3<br>1.17726 | 57700.0<br>79.69977 | 852.3<br>1.17726 | 4327.5<br>6.06578 | 0.00000 | 62879.8<br>86.94281 | .85228965<br>.85228958 | .85228962 | 0.00000 | 62879.8<br>86.94281 | .85228965<br>.85228958 | .85228962 |
| SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT | QUANTITY, AF<br>CAPACITY, CFS | 10000.0<br>13.81279 | 147.7<br>.20402 | 10000.0<br>13.81279 | 147.7<br>.20402 | 750.0<br>1.05126 | 0.00000 | 10897.7<br>15.06807 | .14771035<br>.14771042 | .14771038 | 0.00000 | 10897.7<br>15.06807 | .14771035<br>.14771042 | .14771038 |
| TOTAL | QUANTITY, AF<br>CAPACITY, CFS | 67700.0<br>93.51256 | 1000.0<br>1.38128 | 67700.0<br>93.51256 | 1000.0<br>1.38128 | 5077.5<br>7.11704 | 0.00000 | 73777.5<br>102.01088 | 1.00000000<br>1.00000000 | 1.00000000 | 0.00000 | 73777.5<br>102.01088 | 1.00000000<br>1.00000000 | 1.00000000 |

TABLE B-4

ANNUAL QUANTITIES DELIVERED FROM EACH REACH FOR EACH CONTRACTOR

(in acre-feet)



| CALENDAR YEAR | NORTH BAY AQUEDUCT | | TOTAL NORTH BAY AQUEDUCT 1/ | SOUTH BAY AQUEDUCT | | | | | | | | TOTAL SOUTH BAY AQUEDUCT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Reach 2 | Reach 3 | | Reach 1 | | Reach 2 | Reach 4 | Reach 6 | Reach 7 | Reach 8 | Reach 9 | |
| | SC FC & WCD | NC FC & WCD 1/ | | AC FC & WCD | ACWD | AC FC & WCD | AC FC & WCD | AC FC & WCD | ACWD | ACWD | SCC FC & WD | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
| 1962 | 0 | 0 | 0 | 141 | 8,412 | 353 | 0 | 0 | 0 | 0 | 0 | 8,906 |
| 63 | 0 | 0 | 0 | 814 | 10,914 | 917 | 0 | 0 | 0 | 0 | 0 | 12,645 |
| 64 | 0 | 0 | 0 | 248 | 19,238 | 1,425 | 0 | 0 | 0 | 0 | 0 | 20,911 |
| 65 | 0 | 0 | 0 | 637 | 15,280 | 1,830 | 138 | 0 | 1,127 | 0 | 15,014 | 34,026 |
| 66 | 0 | 0 | 0 | 2,000 | 0 | 1,920 | 280 | 0 | 19,120 | 0 | 37,610 | 60,930 |
| 67 | 0 | 0 | 0 | 1,394 | 0 | 2,106 | 500 | 0 | 14,300 | 0 | 50,600 | 68,900 |
| 68 | 0 | 900 | 900 | 2,100 | 0 | 4,900 | 500 | 0 | 15,000 | 0 | 88,000 | 110,500 |
| 69 | 0 | 1,900 | 1,900 | 2,600 | 0 | 5,700 | 500 | 0 | 15,500 | 0 | 88,000 | 112,300 |
| 1970 | 0 | 2,800 | 2,800 | 3,300 | 0 | 6,200 | 0 | 500 | 15,700 | 500 | 88,000 | 114,200 |
| 71 | 0 | 3,800 | 3,800 | 3,400 | 0 | 6,300 | 0 | 1,500 | 16,000 | 1,000 | 88,000 | 116,200 |
| 72 | 0 | 4,800 | 4,800 | 3,500 | 0 | 6,400 | 0 | 2,500 | 16,400 | 1,500 | 88,000 | 118,300 |
| 73 | 0 | 5,800 | 5,800 | 3,500 | 0 | 6,600 | 0 | 3,500 | 16,800 | 2,000 | 88,000 | 120,400 |
| 74 | 0 | 6,700 | 6,700 | 0 | 0 | 10,300 | 0 | 4,500 | 17,100 | 2,500 | 88,000 | 122,400 |
| 75 | 0 | 7,700 | 7,700 | 0 | 0 | 10,500 | 0 | 5,500 | 17,500 | 3,000 | 88,000 | 124,500 |
| 76 | 0 | 8,600 | 8,600 | 0 | 0 | 10,700 | 0 | 6,500 | 17,800 | 3,500 | 88,000 | 126,500 |
| 77 | 0 | 9,600 | 9,600 | 0 | 0 | 10,900 | 0 | 7,500 | 18,200 | 4,000 | 88,000 | 128,600 |
| 78 | 0 | 10,500 | 10,500 | 0 | 0 | 11,200 | 0 | 8,400 | 18,600 | 4,500 | 88,000 | 130,700 |
| 79 | 0 | 11,500 | 11,500 | 0 | 0 | 11,500 | 0 | 9,300 | 18,900 | 5,000 | 88,000 | 132,700 |
| 1980 | 6,750 | 12,500 | 19,250 | 0 | 0 | 11,900 | 0 | 10,100 | 19,800 | 5,000 | 88,000 | 134,800 |
| 81 | 8,000 | 13,750 | 21,750 | 0 | 0 | 12,200 | 0 | 10,800 | 21,000 | 5,000 | 88,000 | 137,000 |
| 82 | 9,400 | 15,000 | 24,400 | 0 | 0 | 12,400 | 0 | 11,600 | 22,200 | 5,000 | 88,000 | 139,200 |
| 83 | 10,800 | 16,250 | 27,050 | 0 | 0 | 12,600 | 0 | 12,400 | 23,400 | 5,000 | 88,000 | 141,400 |
| 84 | 12,100 | 17,500 | 29,600 | 0 | 0 | 12,800 | 0 | 13,200 | 24,600 | 5,000 | 88,000 | 143,600 |
| 85 | 14,000 | 18,750 | 32,750 | 0 | 0 | 13,000 | 0 | 14,000 | 25,800 | 5,000 | 88,000 | 145,800 |
| 86 | 16,500 | 20,000 | 36,500 | 0 | 0 | 13,200 | 0 | 14,800 | 27,100 | 5,000 | 88,000 | 148,100 |
| 87 | 20,000 | 21,250 | 41,250 | 0 | 0 | 13,400 | 0 | 15,600 | 28,300 | 5,000 | 88,000 | 150,300 |
| 88 | 27,000 | 22,500 | 49,500 | 0 | 0 | 13,600 | 0 | 16,400 | 29,500 | 5,000 | 88,000 | 152,500 |
| 89 | 34,500 | 23,750 | 58,250 | 0 | 0 | 13,800 | 0 | 17,200 | 30,700 | 5,000 | 90,000 | 156,700 |
| 1990 | 37,800 2/ | 25,000 | 62,800 | 0 | 0 | 14,000 | 0 | 18,000 | 31,900 | 5,000 | 92,000 | 160,900 |
| 91 | 37,800 | 25,000 | 62,800 | 0 | 0 | 14,200 | 0 | 19,800 | 33,400 | 5,000 | 94,000 | 166,400 |
| 92 | 37,800 | 25,000 | 62,800 | 0 | 0 | 14,400 | 0 | 21,600 | 34,900 | 5,000 | 96,000 | 171,900 |
| 93 | 37,800 | 25,000 | 62,800 | 0 | 0 | 14,700 | 0 | 23,300 | 36,400 | 5,000 | 98,000 | 177,400 |
| 94 | 37,800 | 25,000 | 62,800 | 0 | 0 | 15,000 | 0 | 25,000 | 37,000 | 5,000 | 100,000 | 182,000 |
| 95 | 37,800 | 25,000 | 62,800 | 0 | 0 | 15,300 | 0 | 26,700 | 37,000 | 5,000 | 100,000 | 184,000 |
| 96 | 37,800 | 25,000 | 62,800 | 0 | 0 | 16,000 | 0 | 28,000 | 37,000 | 5,000 | 100,000 | 186,000 |
| 97 | 37,800 | 25,000 | 62,800 | 0 | 0 | 17,000 | 0 | 29,000 | 37,000 | 5,000 | 100,000 | 188,000 |
| 98 | 37,800 | 25,000 | 62,800 | 0 | 0 | 17,000 | 0 | 29,000 | 37,000 | 5,000 | 100,000 | 188,000 |
| 99 | 37,800 | 25,000 | 62,800 | 0 | 0 | 17,000 | 0 | 29,000 | 37,000 | 5,000 | 100,000 | 188,000 |
| 2000 3/ | 37,800 | 25,000 | 62,800 | 0 | 0 | 17,000 | 0 | 29,000 | 37,000 | 5,000 | 100,000 | 188,000 |

1/ Between 1968 and 1979 inclusive, annual quantities delivered are nonproject water pumped thru an interim facility.
2/ Solano County Flood Control and Water Conservation District (SCFC&WCD) has contracted for 42,000 acre-feet per year. The District will take 4,200 acre-feet from the Delta thru their own facilities.
3/ And thereafter for the remainder of the project repayment period.

Note: Abbreviations for titles of contractors are shown in Table B-1.

TABLE B-4 (Continued)

ANNUAL QUANTITIES DELIVERED FROM EACH REACH FOR EACH CONTRACTOR

(in acre-feet)



| CALENDAR YEAR | CALIFORNIA AQUEDUCT | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | NORTH SAN JOAQUIN DIVISION | SAN LUIS DIVISION | | | SOUTH SAN JOAQUIN DIVISION | | | | | | |
| | Reach 2 | Reach 7 | | | Reach 8 | | | Reach 9 | Reach 10A | Reach 11B | Reach 12D |
| | OFWD | EWSID | KC | TLBWSD | TLBWSD | HWD | DRWD | KCWA (Ag.) | KCWA (Ag.) | KCWA (Ag.) | KCWA (Ag.) |
| | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) | (21) | (22) | (23) |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 63 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 67 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 68 | 2,300 | 3,000 | 1,600 | 14,930 | 11,970 | 1,300 | 11,500 | 20,100 | 16,300 | 22,600 | 0 |
| 69 | 2,500 | 3,000 | 1,800 | 16,262 | 13,038 | 1,600 | 13,600 | 21,400 | 20,400 | 24,900 | 0 |
| 1970 | 2,600 | 3,000 | 2,100 | 17,649 | 14,151 | 2,000 | 15,700 | 21,400 | 29,200 | 34,000 | 0 |
| 71 | 2,800 | 3,000 | 2,300 | 18,981 | 15,219 | 2,300 | 17,900 | 21,400 | 48,600 | 34,100 | 0 |
| 72 | 2,900 | 3,000 | 2,600 | 20,368 | 16,332 | 2,600 | 20,000 | 22,300 | 69,700 | 39,200 | 0 |
| 73 | 3,100 | 3,000 | 2,800 | 21,700 | 17,400 | 2,900 | 22,000 | 22,300 | 56,900 | 44,300 | 0 |
| 74 | 3,200 | 3,000 | 3,000 | 23,865 | 19,135 | 3,300 | 24,100 | 22,300 | 30,200 | 49,600 | 0 |
| 75 | 3,400 | 3,000 | 3,300 | 26,030 | 20,870 | 3,600 | 26,200 | 25,900 | 43,900 | 54,700 | 0 |
| 76 | 3,500 | 3,000 | 3,500 | 28,194 | 22,606 | 3,900 | 28,300 | 29,900 | 55,300 | 58,800 | 1,700 |
| 77 | 3,700 | 3,000 | 3,800 | 30,414 | 24,386 | 4,200 | 30,400 | 31,600 | 72,400 | 67,000 | 1,900 |
| 78 | 3,900 | 3,000 | 4,000 | 32,578 | 26,122 | 4,600 | 32,500 | 33,400 | 87,600 | 74,300 | 2,100 |
| 79 | 4,000 | 3,000 | 4,000 | 34,743 | 27,857 | 4,900 | 34,600 | 35,200 | 97,800 | 81,700 | 2,300 |
| 1980 | 4,200 | 3,000 | 4,000 | 36,908 | 29,592 | 5,200 | 36,700 | 35,200 | 118,700 | 89,000 | 2,600 |
| 81 | 4,300 | 3,000 | 4,000 | 39,072 | 31,328 | 5,600 | 38,800 | 35,200 | 134,900 | 93,600 | 2,700 |
| 82 | 4,500 | 3,000 | 4,000 | 41,236 | 33,064 | 5,900 | 41,000 | 35,200 | 150,000 | 96,800 | 2,800 |
| 83 | 4,600 | 3,000 | 4,000 | 43,401 | 34,799 | 6,200 | 42,900 | 37,200 | 213,800 | 102,900 | 3,000 |
| 84 | 4,800 | 3,000 | 4,000 | 45,566 | 36,534 | 6,500 | 45,100 | 39,500 | 226,100 | 107,100 | 3,100 |
| 85 | 4,900 | 3,000 | 4,000 | 47,730 | 38,270 | 6,900 | 47,200 | 41,900 | 237,900 | 112,400 | 3,200 |
| 86 | 5,100 | 3,000 | 4,000 | 49,950 | 40,050 | 7,200 | 49,300 | 44,200 | 220,200 | 115,200 | 3,300 |
| 87 | 5,200 | 3,000 | 4,000 | 52,114 | 41,786 | 7,500 | 51,400 | 46,500 | 235,900 | 118,000 | 3,400 |
| 88 | 5,400 | 3,000 | 4,000 | 54,279 | 43,521 | 7,800 | 53,500 | 46,500 | 246,800 | 120,800 | 3,500 |
| 89 | 5,600 | 3,000 | 4,000 | 56,444 | 45,256 | 8,200 | 55,600 | 46,800 | 246,800 | 123,600 | 3,500 |
| 1990 | 5,700 | 3,000 | 4,000 | 61,050 | 48,950 | 8,500 | 57,700 | 47,300 | 265,700 | 126,400 | 3,600 |
| 91 | 5,700 | 3,000 | 4,000 | 61,050 | 48,950 | 8,500 | 57,700 | 47,300 | 265,700 | 126,400 | 3,600 |
| 92 | 5,700 | 3,000 | 4,000 | 61,050 | 48,950 | 8,500 | 57,700 | 47,300 | 265,700 | 126,400 | 3,600 |
| 93 | 5,700 | 3,000 | 4,000 | 61,050 | 48,950 | 8,500 | 57,700 | 47,300 | 265,700 | 126,400 | 3,600 |
| 94 | 5,700 | 3,000 | 4,000 | 61,050 | 48,950 | 8,500 | 57,700 | 47,300 | 265,700 | 126,400 | 3,600 |
| 95 | 5,700 | 3,000 | 4,000 | 61,050 | 48,950 | 8,500 | 57,700 | 47,300 | 265,700 | 126,400 | 3,600 |
| 96 | 5,700 | 3,000 | 4,000 | 61,050 | 48,950 | 8,500 | 57,700 | 47,300 | 265,700 | 126,400 | 3,600 |
| 97 | 5,700 | 3,000 | 4,000 | 61,050 | 48,950 | 8,500 | 57,700 | 47,300 | 265,700 | 126,400 | 3,600 |
| 98 | 5,700 | 3,000 | 4,000 | 61,050 | 48,950 | 8,500 | 57,700 | 47,300 | 265,700 | 126,400 | 3,600 |
| 99 | 5,700 | 3,000 | 4,000 | 61,050 | 48,950 | 8,500 | 57,700 | 47,300 | 265,700 | 126,400 | 3,600 |
| 2000 1/ | 5,700 | 3,000 | 4,000 | 61,050 | 48,950 | 8,500 | 57,700 | 47,300 | 265,700 | 126,400 | 3,600 |

1/ And thereafter for the remainder of the project repayment period.

TABLE B-4 (Continued)

ANNUAL QUANTITIES DELIVERED FROM EACH REACH FOR EACH CONTRACTOR

(in acre-feet)



| CALENDAR YEAR | CALIFORNIA AQUEDUCT (Continued) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | SOUTH SAN JOAQUIN DIVISION (Continued) | | | | | | | | | | | TEHACHAPI DIVISION |
| | Reach 12E | | Reach 13B | | Reach 14A | Reach 14B | Reach 14C | Reach 15 | Reach 16 | | | Reach 17C |
| | KCWA (Ag.) | KCWA (M&I) | KCWA (Ag.) | KCWA (M&I) | KCWA (Ag.) | KCWA (Ag.) | KCWA (Ag.) | KCWA (Ag.) | KCWA (Ag.) | KCWA (M&I) | Nuclear[1] | KCWA (M&I) |
| | (24) | (25) | (26) | (27) | (28) | (29) | (30) | (31) | (32) | (33) | (34) | (35) |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 63 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 67 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 68 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1970 | 3,200 | 14,000 | 0 | 14,300 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 71 | 6,000 | 14,000 | 2,400 | 14,800 | 1,000 | 3,000 | 4,000 | 6,000 | 6,000 | 0 | 0 | 0 |
| 72 | 29,100 | 21,000 | 5,500 | 15,300 | 2,700 | 5,500 | 4,400 | 9,500 | 13,000 | 0 | 0 | 2,500 |
| 73 | 65,900 | 24,000 | 12,300 | 15,900 | 3,000 | 4,300 | 3,400 | 6,700 | 16,000 | 0 | 17,500 | 2,500 |
| 74 | 103,600 | 25,000 | 18,300 | 16,400 | 3,100 | 6,200 | 5,000 | 10,800 | 19,000 | 0 | 17,500 | 2,500 |
| 75 | 105,700 | 28,000 | 17,800 | 16,900 | 4,200 | 7,000 | 6,000 | 12,400 | 20,000 | 3,500 | 17,500 | 2,500 |
| 76 | 111,200 | 29,000 | 17,800 | 17,000 | 4,200 | 8,000 | 6,500 | 16,400 | 30,000 | 3,500 | 17,500 | 2,500 |
| 77 | 116,800 | 30,000 | 17,800 | 18,000 | 5,500 | 9,000 | 7,000 | 18,900 | 34,200 | 7,000 | 17,500 | 2,500 |
| 78 | 121,100 | 33,000 | 17,800 | 18,500 | 6,900 | 11,000 | 10,000 | 23,100 | 35,000 | 8,000 | 17,500 | 2,500 |
| 79 | 125,800 | 36,000 | 17,600 | 19,100 | 7,300 | 14,500 | 11,600 | 25,000 | 35,000 | 9,000 | 17,500 | 2,500 |
| 1980 | 136,700 | 38,000 | 19,900 | 19,600 | 8,000 | 15,800 | 12,600 | 27,200 | 35,000 | 10,000 | 17,500 | 2,500 |
| 81 | 154,400 | 45,000 | 23,200 | 20,100 | 8,600 | 17,000 | 13,600 | 28,200 | 37,700 | 11,000 | 17,500 | 2,500 |
| 82 | 164,700 | 53,000 | 26,400 | 20,700 | 9,500 | 19,000 | 15,200 | 32,700 | 41,100 | 12,000 | 17,500 | 2,500 |
| 83 | 141,000 | 59,000 | 20,800 | 21,200 | 10,300 | 20,500 | 16,400 | 35,300 | 44,500 | 13,000 | 35,000 | 2,500 |
| 84 | 152,000 | 65,000 | 22,400 | 21,700 | 11,100 | 22,100 | 17,700 | 38,100 | 50,000 | 14,000 | 35,000 | 2,500 |
| 85 | 156,600 | 70,000 | 23,600 | 22,300 | 12,900 | 25,900 | 20,700 | 44,500 | 53,000 | 15,000 | 35,000 | 2,500 |
| 86 | 189,400 | 76,000 | 29,400 | 22,800 | 14,000 | 27,900 | 22,300 | 48,000 | 60,000 | 16,000 | 35,000 | 2,500 |
| 87 | 201,000 | 81,000 | 30,900 | 23,300 | 14,900 | 29,700 | 23,800 | 51,200 | 63,000 | 17,000 | 35,000 | 2,500 |
| 88 | 206,800 | 93,000 | 32,300 | 23,900 | 15,600 | 31,000 | 26,000 | 55,500 | 66,500 | 18,000 | 35,000 | 2,500 |
| 89 | 208,300 | 94,500 | 33,300 | 24,400 | 17,300 | 40,000 | 30,100 | 66,200 | 67,400 | 19,000 | 35,000 | 2,500 |
| 1990 | 213,200 | 94,500 | 34,700 | 25,000 | 20,000 | 40,700 | 32,500 | 70,000 | 67,400 | 20,000 | 35,000 | 2,500 |
| 91 | 213,200 | 94,500 | 34,700 | 25,000 | 20,000 | 40,700 | 32,500 | 70,000 | 67,400 | 20,000 | 35,000 | 2,500 |
| 92 | 213,200 | 94,500 | 34,700 | 25,000 | 20,000 | 40,700 | 32,500 | 70,000 | 67,400 | 20,000 | 35,000 | 2,500 |
| 93 | 213,200 | 94,500 | 34,700 | 25,000 | 20,000 | 40,700 | 32,500 | 70,000 | 67,400 | 20,000 | 35,000 | 2,500 |
| 94 | 213,200 | 94,500 | 34,700 | 25,000 | 20,000 | 40,700 | 32,500 | 70,000 | 67,400 | 20,000 | 35,000 | 2,500 |
| 95 | 213,200 | 94,500 | 34,700 | 25,000 | 20,000 | 40,700 | 32,500 | 70,000 | 67,400 | 20,000 | 35,000 | 2,500 |
| 96 | 213,200 | 94,500 | 34,700 | 25,000 | 20,000 | 40,700 | 32,500 | 70,000 | 67,400 | 20,000 | 35,000 | 2,500 |
| 97 | 213,200 | 94,500 | 34,700 | 25,000 | 20,000 | 40,700 | 32,500 | 70,000 | 67,400 | 20,000 | 35,000 | 2,500 |
| 98 | 213,200 | 94,500 | 34,700 | 25,000 | 20,000 | 40,700 | 32,500 | 70,000 | 67,400 | 20,000 | 35,000 | 2,500 |
| 99 | 213,200 | 94,500 | 34,700 | 25,000 | 20,000 | 40,700 | 32,500 | 70,000 | 67,400 | 20,000 | 35,000 | 2,500 |
| 2000[2] | 213,200 | 94,500 | 34,700 | 25,000 | 20,000 | 40,700 | 32,500 | 70,000 | 67,400 | 20,000 | 35,000 | 2,500 |

1/ For use on a nuclear powerplant of the pressurized or boiling water type, such as now commercially available.
2/ And thereafter for the remainder of the project repayment period.

TABLE B-4 (Continued)

ANNUAL QUANTITIES DELIVERED FROM EACH REACH FOR EACH CONTRACTOR

(in acre-feet)



| Calendar Year | CALIFORNIA AQUEDUCT (Continued) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MOJAVE DIVISION (Continued) | | | | | | | SANTA ANA DIVISION | | | | | |
| | Reach 19 | Reach 20 | Reach 21 | Reach 22B | | | Reach 24 | Reach 25 | Reach 27 | | Reach 28A | | Reach 28C |
| | AVEKWA | PID | LCID | MWA | CVCWD | DWA | CLAWA | SGPWA | SGVMWD | MWD-SC | BBMWD | SBVMWD | MWD-SC |
| | (36) | (37) | (38) | (39) | (40) | (41) | (42) | (43) | (44) | (45) | (46) | (47) | (48) |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 63 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 67 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 68 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1970 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 71 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 72 | 20,000 | 1,620 | 170 | 8,400 | 5,200 | 8,000 | 580 | 1,000 | 10,600 | 39,600 | 4,600 | 45,541 | 35,000 |
| 73 | 25,000 | 2,940 | 290 | 10,700 | 5,800 | 9,000 | 870 | 1,700 | 11,500 | 49,900 | 4,600 | 47,559 | 45,000 |
| 74 | 30,000 | 4,260 | 400 | 13,100 | 6,400 | 10,000 | 1,160 | 2,400 | 12,300 | 55,200 | 4,600 | 49,806 | 50,000 |
| 75 | 35,000 | 5,580 | 520 | 15,400 | 7,000 | 11,000 | 1,450 | 3,100 | 13,100 | 68,100 | 4,600 | 51,826 | 62,500 |
| 76 | 44,000 | 6,900 | 640 | 17,800 | 7,600 | 12,000 | 1,740 | 3,800 | 14,000 | 80,900 | 4,600 | 53,842 | 75,000 |
| 77 | 50,000 | 8,220 | 730 | 20,200 | 8,421 | 13,000 | 2,030 | 4,500 | 14,800 | 93,800 | 4,600 | 55,860 | 87,500 |
| 78 | 57,000 | 9,340 | 920 | 22,500 | 9,242 | 14,000 | 2,320 | 5,200 | 15,700 | 106,600 | 4,600 | 57,878 | 100,000 |
| 79 | 63,000 | 10,260 | 1,040 | 24,900 | 10,063 | 15,000 | 2,610 | 5,900 | 16,600 | 119,500 | 4,600 | 60,010 | 112,500 |
| 1980 | 69,200 | 11,180 | 1,150 | 27,200 | 10,884 | 17,000 | 2,900 | 6,800 | 17,400 | 132,300 | 4,600 | 61,913 | 125,000 |
| 81 | 75,000 | 11,700 | 1,270 | 29,600 | 12,105 | 19,000 | 3,190 | 7,800 | 18,300 | 157,600 | 4,600 | 64,161 | 150,000 |
| 82 | 81,300 | 12,320 | 1,380 | 31,900 | 13,326 | 21,000 | 3,480 | 8,800 | 19,100 | 183,000 | 4,600 | 64,161 | 175,000 |
| 83 | 87,700 | 12,940 | 1,500 | 34,300 | 14,547 | 23,000 | 3,770 | 9,800 | 19,900 | 208,300 | 4,600 | 64,161 | 200,000 |
| 84 | 94,000 | 13,560 | 1,610 | 36,700 | 15,768 | 25,000 | 4,060 | 10,800 | 20,700 | 233,700 | 4,600 | 64,161 | 225,000 |
| 85 | 100,400 | 14,180 | 1,730 | 39,000 | 16,989 | 27,000 | 4,350 | 11,800 | 21,800 | 259,300 | 4,600 | 64,161 | 250,000 |
| 86 | 106,700 | 14,800 | 1,840 | 41,400 | 18,210 | 29,000 | 4,640 | 12,900 | 23,200 | 282,300 | 4,600 | 66,179 | 272,500 |
| 87 | 113,000 | 15,420 | 1,960 | 43,700 | 19,431 | 31,500 | 4,930 | 14,000 | 24,600 | 282,900 | 4,600 | 72,462 | 272,500 |
| 88 | 119,400 | 16,040 | 2,070 | 46,000 | 20,652 | 34,000 | 5,220 | 15,100 | 26,000 | 283,500 | 4,600 | 78,745 | 272,500 |
| 89 | 125,700 | 16,660 | 2,190 | 48,500 | 21,873 | 36,500 | 5,510 | 16,200 | 27,400 | 284,000 | 4,600 | 84,915 | 272,500 |
| 1990 | 132,100 | 17,300 | 2,300 | 50,800 | 23,100 | 38,100 | 5,800 | 17,300 | 28,800 | 284,000 | 4,600 | 91,198 | 272,500 |
| 91 | 138,400 | 17,300 | 2,300 | 50,800 | 23,100 | 38,100 | 5,800 | 17,300 | 28,800 | 284,000 | 4,600 | 98,000 | 272,500 |
| 92 | 138,400 | 17,300 | 2,300 | 50,800 | 23,100 | 38,100 | 5,800 | 17,300 | 28,800 | 284,000 | 4,600 | 98,000 | 272,500 |
| 93 | 138,400 | 17,300 | 2,300 | 50,800 | 23,100 | 38,100 | 5,800 | 17,300 | 28,800 | 284,000 | 4,600 | 98,000 | 272,500 |
| 94 | 138,400 | 17,300 | 2,300 | 50,800 | 23,100 | 38,100 | 5,800 | 17,300 | 28,800 | 284,000 | 4,600 | 98,000 | 272,500 |
| 95 | 138,400 | 17,300 | 2,300 | 50,800 | 23,100 | 38,100 | 5,800 | 17,300 | 28,800 | 284,000 | 4,600 | 98,000 | 272,500 |
| 96 | 138,400 | 17,300 | 2,300 | 50,800 | 23,100 | 38,100 | 5,800 | 17,300 | 28,800 | 284,000 | 4,600 | 98,000 | 272,500 |
| 97 | 138,400 | 17,300 | 2,300 | 50,800 | 23,100 | 38,100 | 5,800 | 17,300 | 28,800 | 284,000 | 4,600 | 98,000 | 272,500 |
| 98 | 138,400 | 17,300 | 2,300 | 50,800 | 23,100 | 38,100 | 5,800 | 17,300 | 28,800 | 284,000 | 4,600 | 98,000 | 272,500 |
| 99 | 138,400 | 17,300 | 2,300 | 50,800 | 23,100 | 38,100 | 5,800 | 17,300 | 28,800 | 284,000 | 4,600 | 98,000 | 272,500 |
| 2000[1/] | 138,400 | 17,300 | 2,300 | 50,800 | 23,100 | 38,100 | 5,800 | 17,300 | 28,800 | 284,000 | 4,600 | 98,000 | 272,500 |

1/ And thereafter for the remainder of the project repayment period.

TABLE B-4 (Continued)

ANNUAL QUANTITIES DELIVERED FROM EACH REACH FOR EACH CONTRACTOR

(in acre-feet)



| Calendar Year | CALIFORNIA AQUEDUCT (continued) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | WEST BRANCH, CALIFORNIA AQUEDUCT | | | COASTAL BRANCH, CALIFORNIA AQUEDUCT | | | | | | TOTAL CALIFORNIA AQUEDUCT |
| | Reach 30 | | | Reach 31A | | Reach 33A | Reach 34 | Reach 35 | | |
| | USCVWA | VCFCD | MWD-SC | DDWD | KCWA (Ag.) | SLOC FC&WCD | SLOC FC&WCD | SLOC FC&WCD | SBC FC&WCD | |
| | (49) | (50) | (51) | (52) | (53) | (54) | (55) | (56) | (57) | (58) |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 63 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 67 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 68 | 0 | 0 | 0 | 3,700 | 28,000 | 0 | 0 | 0 | 0 | 137,300 |
| 69 | 0 | 0 | 0 | 4,700 | 29,000 | 0 | 0 | 0 | 0 | 152,200 |
| 1970 | 0 | 0 | 0 | 5,700 | 29,000 | 0 | 0 | 0 | 0 | 208,000 |
| 71 | 1,600 | 0 | 254,200 | 6,700 | 29,000 | 0 | 0 | 0 | 0 | 515,300 |
| 72 | 3,700 | 0 | 280,000 | 7,700 | 31,000 | 0 | 0 | 0 | 0 | 810,211 |
| 73 | 5,700 | 0 | 360,000 | 8,700 | 33,000 | 0 | 0 | 0 | 0 | 990,159 |
| 74 | 7,500 | 0 | 450,000 | 9,700 | 35,000 | 0 | 0 | 0 | 0 | 1,150,926 |
| 75 | 9,500 | 0 | 525,000 | 10,700 | 37,000 | 0 | 0 | 0 | 0 | 1,313,776 |
| 76 | 11,400 | 0 | 600,000 | 11,700 | 41,000 | 0 | 0 | 0 | 0 | 1,489,222 |
| 77 | 13,400 | 0 | 675,000 | 12,700 | 44,000 | 0 | 0 | 0 | 0 | 1,665,761 |
| 78 | 15,300 | 0 | 750,000 | 12,700 | 50,000 | 0 | 0 | 0 | 0 | 1,841,800 |
| 79 | 17,700 | 0 | 825,000 | 12,700 | 63,500 | 0 | 0 | 0 | 0 | 2,015,883 |
| 1980 | 20,100 | 1,000 | 900,000 | 12,700 | 63,700 | 400 | 200 | 400 | 1,200 | 2,195,127 |
| 81 | 22,100 | 2,000 | 950,000 | 12,700 | 63,700 | 400 | 200 | 400 | 2,300 | 2,379,426 |
| 82 | 24,600 | 3,000 | 1,000,000 | 12,700 | 63,700 | 800 | 400 | 800 | 4,600 | 2,561,767 |
| 83 | 26,900 | 4,000 | 1,050,000 | 12,700 | 63,700 | 1,200 | 600 | 1,200 | 6,900 | 2,767,018 |
| 84 | 29,100 | 5,000 | 1,100,000 | 12,700 | 68,200 | 1,800 | 900 | 1,800 | 10,400 | 2,952,459 |
| 85 | 30,900 | 6,000 | 1,150,000 | 12,700 | 72,600 | 3,000 | 1,500 | 3,000 | 17,300 | 3,141,710 |
| 86 | 32,900 | 8,000 | 1,205,000 | 12,700 | 77,000 | 4,000 | 2,000 | 4,000 | 23,100 | 3,331,769 |
| 87 | 35,300 | 10,000 | 1,305,000 | 12,700 | 81,400 | 5,000 | 2,500 | 5,000 | 28,800 | 3,528,803 |
| 88 | 37,400 | 13,000 | 1,405,000 | 12,700 | 85,900 | 6,200 | 3,100 | 6,200 | 35,800 | 3,724,327 |
| 89 | 39,300 | 16,000 | 1,455,000 | 12,700 | 88,600 | 8,000 | 4,000 | 8,000 | 46,100 | 3,861,048 |
| 1990 | 41,500 | 20,000 | 1,455,000 | 12,700 | 89,900 | 10,000 | 5,000 | 10,000 | 57,700 | 3,957,098 |
| 91 | 41,500 | 20,000 | 1,455,000 | 12,700 | 89,900 | 10,000 | 5,000 | 10,000 | 57,700 | 3,970,200 |
| 92 | 41,500 | 20,000 | 1,455,000 | 12,700 | 89,900 | 10,000 | 5,000 | 10,000 | 57,700 | 3,970,200 |
| 93 | 41,500 | 20,000 | 1,455,000 | 12,700 | 89,900 | 10,000 | 5,000 | 10,000 | 57,700 | 3,970,200 |
| 94 | 41,500 | 20,000 | 1,455,000 | 12,700 | 89,900 | 10,000 | 5,000 | 10,000 | 57,700 | 3,970,200 |
| 95 | 41,500 | 20,000 | 1,455,000 | 12,700 | 89,900 | 10,000 | 5,000 | 10,000 | 57,700 | 3,970,200 |
| 96 | 41,500 | 20,000 | 1,455,000 | 12,700 | 89,900 | 10,000 | 5,000 | 10,000 | 57,700 | 3,970,200 |
| 97 | 41,500 | 20,000 | 1,455,000 | 12,700 | 89,900 | 10,000 | 5,000 | 10,000 | 57,700 | 3,970,200 |
| 98 | 41,500 | 20,000 | 1,455,000 | 12,700 | 89,900 | 10,000 | 5,000 | 10,000 | 57,700 | 3,970,200 |
| 99 | 41,500 | 20,000 | 1,455,000 | 12,700 | 89,900 | 10,000 | 5,000 | 10,000 | 57,700 | 3,970,200 |
| 2000 1/ | 41,500 | 20,000 | 1,455,000 | 12,700 | 89,900 | 10,000 | 5,000 | 10,000 | 57,700 | 3,970,200 |

1/ And thereafter for the remainder of the project repayment period.

TABLE B-5

ANNUAL QUANTITIES CONVEYED
THROUGH EACH PUMPING AND POWER RECOVERY PLANT

(in acre-feet)



| CALENDAR YEAR | NORTH BAY AQUEDUCT | | | | | | | | | | SOUTH BAY AQUEDUCT | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | CALHOUN PUMPING PLANT | | | | | CORDELIA PUMPING PLANT | | | | | SOUTH BAY PUMPING PLANT | | | | |
| | Const. water | Operat'l losses | Deliveries: Water supply | Deliveries: Recreation | Total | Const. water | Operat'l losses | Deliveries: Water supply[1] | Deliveries: Recreation | Total[1] | Const. water | Operat'l losses | Deliveries: Water supply | Deliveries: Recreation | Total |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 272 | 8,906 | 0 | 9,187 |
| 63 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 71 | 185 | 12,645 | 0 | 12,901 |
| 64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 171 | 152 | 20,911 | 0 | 21,234 |
| 65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 93 | 729 | 33,944 | 0 | 34,766 |
| 66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,230 | 60,930 | 0 | 62,160 |
| 67 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,230 | 68,900 | 0 | 70,130 |
| 68 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 900 | 0 | 907 | 0 | 1,230 | 110,500 | 0 | 111,730 |
| 69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,900 | 0 | 1,900 | 10,000 | 4,730 | 112,300 | 0 | 127,030 |
| 1970 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,800 | 0 | 2,800 | 0 | 4,730 | 114,200 | 0 | 118,930 |
| 71 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,800 | 0 | 3,800 | 0 | 4,730 | 116,200 | 0 | 120,930 |
| 72 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,800 | 0 | 4,800 | 0 | 4,730 | 118,300 | 0 | 123,030 |
| 73 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,800 | 0 | 5,800 | 0 | 4,730 | 120,400 | 0 | 125,130 |
| 74 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,700 | 0 | 6,700 | 0 | 4,730 | 122,400 | 0 | 127,130 |
| 75 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,700 | 0 | 7,700 | 0 | 4,730 | 124,500 | 0 | 129,230 |
| 76 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8,600 | 0 | 8,600 | 0 | 4,730 | 126,500 | 0 | 131,230 |
| 77 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9,600 | 0 | 9,600 | 0 | 4,730 | 128,600 | 0 | 133,330 |
| 78 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10,500 | 0 | 10,500 | 0 | 4,730 | 130,700 | 0 | 135,430 |
| 79 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11,500 | 0 | 11,500 | 0 | 4,730 | 132,700 | 0 | 137,430 |
| 1980 | 120 | 1,400 | 19,250 | 0 | 20,770 | 0 | 0 | 12,500 | 0 | 12,500 | 0 | 4,730 | 134,800 | 0 | 139,530 |
| 81 | 0 | 1,400 | 21,750 | 0 | 23,150 | 0 | 0 | 13,750 | 0 | 13,750 | 0 | 4,730 | 137,000 | 0 | 141,730 |
| 82 | 0 | 1,400 | 24,400 | 0 | 25,800 | 0 | 0 | 15,000 | 0 | 15,000 | 0 | 4,730 | 139,200 | 0 | 143,930 |
| 83 | 0 | 1,400 | 27,050 | 0 | 28,450 | 0 | 0 | 16,250 | 0 | 16,250 | 0 | 4,730 | 141,400 | 0 | 146,130 |
| 84 | 0 | 1,400 | 29,600 | 0 | 31,000 | 0 | 0 | 17,500 | 0 | 17,500 | 0 | 4,730 | 143,600 | 0 | 148,330 |
| 85 | 0 | 1,400 | 32,750 | 0 | 34,150 | 0 | 0 | 18,750 | 0 | 18,750 | 0 | 4,730 | 145,800 | 0 | 150,530 |
| 86 | 0 | 1,400 | 36,500 | 0 | 37,900 | 0 | 0 | 20,000 | 0 | 20,000 | 0 | 4,730 | 148,100 | 0 | 152,830 |
| 87 | 0 | 1,400 | 41,250 | 0 | 42,650 | 0 | 0 | 21,250 | 0 | 21,250 | 0 | 4,730 | 150,300 | 0 | 155,030 |
| 88 | 0 | 1,400 | 49,500 | 0 | 50,900 | 0 | 0 | 22,500 | 0 | 22,500 | 0 | 4,730 | 152,500 | 0 | 157,230 |
| 89 | 0 | 1,400 | 58,250 | 0 | 59,650 | 0 | 0 | 23,750 | 0 | 23,750 | 0 | 4,730 | 156,700 | 0 | 161,430 |
| 1990 | 0 | 1,400 | 62,800 | 0 | 64,200 | 0 | 0 | 25,000 | 0 | 25,000 | 0 | 4,730 | 160,900 | 0 | 165,630 |
| 91 | 0 | 1,400 | 62,800 | 0 | 64,200 | 0 | 0 | 25,000 | 0 | 25,000 | 0 | 4,730 | 166,400 | 0 | 171,130 |
| 92 | 0 | 1,400 | 62,800 | 0 | 64,200 | 0 | 0 | 25,000 | 0 | 25,000 | 0 | 4,730 | 171,900 | 0 | 176,630 |
| 93 | 0 | 1,400 | 62,800 | 0 | 64,200 | 0 | 0 | 25,000 | 0 | 25,000 | 0 | 4,730 | 177,400 | 0 | 182,130 |
| 94 | 0 | 1,400 | 62,800 | 0 | 64,200 | 0 | 0 | 25,000 | 0 | 25,000 | 0 | 4,730 | 182,000 | 0 | 186,730 |
| 95 | 0 | 1,400 | 62,800 | 0 | 64,200 | 0 | 0 | 25,000 | 0 | 25,000 | 0 | 4,730 | 184,000 | 0 | 188,730 |
| 96 | 0 | 1,400 | 62,800 | 0 | 64,200 | 0 | 0 | 25,000 | 0 | 25,000 | 0 | 4,730 | 186,000 | 0 | 190,730 |
| 97 | 0 | 1,400 | 62,800 | 0 | 64,200 | 0 | 0 | 25,000 | 0 | 25,000 | 0 | 4,730 | 188,000 | 0 | 192,730 |
| 98 | 0 | 1,400 | 62,800 | 0 | 64,200 | 0 | 0 | 25,000 | 0 | 25,000 | 0 | 4,730 | 188,000 | 0 | 192,730 |
| 99 | 0 | 1,400 | 62,800 | 0 | 64,200 | 0 | 0 | 25,000 | 0 | 25,000 | 0 | 4,730 | 188,000 | 0 | 192,730 |
| 2000[2] | 0 | 1,400 | 62,800 | 0 | 64,200 | 0 | 0 | 25,000 | 0 | 25,000 | 0 | 4,730 | 188,000 | 0 | 192,730 |

1/ Between 1968 and 1979 inclusive, annual quantities delivered are nonproject water pumped thru an interim facility.
2/ And thereafter for the remainder of the project repayment period.

TABLE B-5 (Continued)

ANNUAL QUANTITIES CONVEYED
THROUGH EACH PUMPING AND POWER RECOVERY PLANT

(in acre-feet)



| CALENDAR YEAR | CALIFORNIA AQUEDUCT | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NORTH SAN JOAQUIN DIVISION | | | | | SAN LUIS DIVISION | | | | | SOUTH SAN JOAQUIN DIVISION | | | |
| | DELTA PUMPING PLANT | | | | | DOS AMIGOS PUMPING PLANT | | | | | BUENA VISTA PUMPING PLANT | | | |
| | Const. water | Operat'l losses | Deliveries: Water supply | Deliveries: Recreation | Total | Const. water | Operat'l losses | Deliveries: Water supply | Deliveries: Recreation | Total | Const. water | Operat'l losses | Deliveries: Water supply | Deliveries: Recreation | Total |
| | (16) | (17) | (18) | (19) | (20) | (21) | (22) | (23) | (24) | (25) | (26) | (27) | (28) | (29) | (30) |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 63 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 67 | 300 | 1,930 | 68,900 | 0 | 71,130 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 68 | 388,800 | 150,230 | 247,800 | 0 | 786,830 | 16,200 | 63,800 | 135,000 | 0 | 215,000 | 0 | 0 | 0 | 0 | 0 |
| 69 | 766,600 | 153,730 | 264,500 | 0 | 1,184,830 | 6,600 | 63,800 | 149,700 | 0 | 220,100 | 0 | 0 | 0 | 0 | 0 |
| 1970 | 44,200 | 176,430 | 322,200 | 0 | 542,830 | 44,200 | 86,500 | 205,400 | 0 | 336,100 | 44,200 | 7,600 | 0 | 0 | 51,800 |
| 71 | 106,000 | 221,030 | 631,500 | 9,500 | 968,030 | 106,000 | 131,100 | 512,500 | 9,500 | 759,100 | 106,000 | 52,200 | 275,800 | 0 | 434,000 |
| 72 | 270,000 | 239,830 | 928,511 | 29,500 | 1,467,841 | 270,000 | 149,900 | 807,311 | 29,500 | 1,256,711 | 270,000 | 71,000 | 501,611 | 20,000 | 862,611 |
| 73 | 238,800 | 248,730 | 1,110,559 | 29,500 | 1,627,589 | 238,800 | 158,800 | 987,059 | 29,500 | 1,414,159 | 238,800 | 79,900 | 633,959 | 20,000 | 972,659 |
| 74 | 116,100 | 254,830 | 1,273,326 | 29,500 | 1,673,756 | 116,100 | 164,900 | 1,147,726 | 29,500 | 1,458,226 | 116,100 | 86,000 | 761,226 | 20,000 | 983,326 |
| 75 | 0 | 256,730 | 1,438,276 | 29,500 | 1,724,506 | 0 | 166,800 | 1,310,376 | 29,500 | 1,506,676 | 0 | 87,900 | 886,776 | 20,000 | 994,676 |
| 76 | 0 | 256,730 | 1,615,722 | 29,500 | 1,901,952 | 0 | 166,800 | 1,485,722 | 29,500 | 1,682,022 | 0 | 87,900 | 1,022,822 | 20,000 | 1,130,722 |
| 77 | 0 | 256,730 | 1,794,361 | 29,500 | 2,080,591 | 0 | 166,800 | 1,662,061 | 29,500 | 1,858,361 | 0 | 87,900 | 1,153,661 | 20,000 | 1,261,561 |
| 78 | 0 | 256,730 | 1,972,500 | 29,500 | 2,258,730 | 0 | 166,800 | 1,837,900 | 29,500 | 2,034,200 | 0 | 87,900 | 1,284,600 | 20,000 | 1,392,500 |
| 79 | 0 | 256,730 | 2,148,583 | 29,500 | 2,434,813 | 0 | 166,800 | 2,011,883 | 29,500 | 2,208,183 | 0 | 87,900 | 1,411,083 | 20,000 | 1,518,983 |
| 1980 | 200 | 258,930 | 2,329,927 | 45,500 | 2,634,557 | 200 | 169,000 | 2,190,927 | 45,500 | 2,405,627 | 0 | 87,900 | 1,537,227 | 20,000 | 1,645,127 |
| 81 | 0 | 258,930 | 2,516,426 | 45,500 | 2,802,856 | 0 | 169,000 | 2,375,126 | 45,500 | 2,589,626 | 0 | 87,900 | 1,664,526 | 20,000 | 1,772,426 |
| 82 | 0 | 258,930 | 2,700,967 | 45,500 | 3,005,397 | 0 | 169,000 | 2,557,267 | 45,500 | 2,771,767 | 0 | 87,900 | 1,796,467 | 20,000 | 1,904,367 |
| 83 | 0 | 258,930 | 2,908,418 | 45,500 | 3,212,848 | 0 | 169,000 | 2,762,418 | 45,500 | 2,976,918 | 0 | 87,900 | 1,942,918 | 20,000 | 2,050,818 |
| 84 | 0 | 258,930 | 3,096,059 | 45,500 | 3,400,489 | 0 | 169,000 | 2,947,659 | 45,500 | 3,162,159 | 0 | 87,900 | 2,074,259 | 20,000 | 2,182,159 |
| 85 | 0 | 258,930 | 3,287,510 | 45,500 | 3,591,940 | 0 | 169,000 | 3,136,810 | 45,500 | 3,351,310 | 0 | 87,900 | 2,211,710 | 20,000 | 2,319,610 |
| 86 | 0 | 258,930 | 3,479,869 | 45,500 | 3,784,299 | 0 | 169,000 | 3,326,669 | 45,500 | 3,541,169 | 0 | 87,900 | 2,349,869 | 20,000 | 2,457,769 |
| 87 | 0 | 258,930 | 3,679,103 | 45,500 | 3,983,533 | 0 | 169,000 | 3,523,603 | 45,500 | 3,738,103 | 0 | 87,900 | 2,488,403 | 20,000 | 2,596,303 |
| 88 | 0 | 258,930 | 3,876,827 | 45,500 | 4,181,257 | 0 | 169,000 | 3,718,927 | 45,500 | 3,933,427 | 0 | 87,900 | 2,629,327 | 20,000 | 2,737,227 |
| 89 | 0 | 258,930 | 4,017,748 | 45,500 | 4,322,178 | 0 | 169,000 | 3,855,448 | 45,500 | 4,069,948 | 0 | 87,900 | 2,734,348 | 20,000 | 2,842,248 |
| 1990 | 0 | 258,930 | 4,117,998 | 45,500 | 4,422,428 | 0 | 169,000 | 3,951,398 | 45,500 | 4,165,898 | 0 | 87,900 | 2,772,498 | 20,000 | 2,880,398 |
| 91 | 0 | 258,930 | 4,136,600 | 45,500 | 4,441,030 | 0 | 169,000 | 3,964,500 | 45,500 | 4,179,000 | 0 | 87,900 | 2,785,600 | 20,000 | 2,893,500 |
| 92 | 0 | 258,930 | 4,142,100 | 45,500 | 4,446,530 | 0 | 169,000 | 3,964,500 | 45,500 | 4,179,000 | 0 | 87,900 | 2,785,600 | 20,000 | 2,893,500 |
| 93 | 0 | 258,930 | 4,147,600 | 45,500 | 4,452,030 | 0 | 169,000 | 3,964,500 | 45,500 | 4,179,000 | 0 | 87,900 | 2,785,600 | 20,000 | 2,893,500 |
| 94 | 0 | 258,930 | 4,152,200 | 45,500 | 4,456,630 | 0 | 169,000 | 3,964,500 | 45,500 | 4,179,000 | 0 | 87,900 | 2,785,600 | 20,000 | 2,893,500 |
| 95 | 0 | 258,930 | 4,154,200 | 45,500 | 4,458,630 | 0 | 169,000 | 3,964,500 | 45,500 | 4,179,000 | 0 | 87,900 | 2,785,600 | 20,000 | 2,893,500 |
| 96 | 0 | 258,930 | 4,516,200 | 45,500 | 4,460,630 | 0 | 169,000 | 3,964,500 | 45,500 | 4,179,000 | 0 | 87,900 | 2,785,600 | 20,000 | 2,893,500 |
| 97 | 0 | 258,930 | 4,158,200 | 45,500 | 4,462,630 | 0 | 169,000 | 3,964,500 | 45,500 | 4,179,000 | 0 | 87,900 | 2,785,600 | 20,000 | 2,893,500 |
| 98 | 0 | 258,930 | 4,158,200 | 45,500 | 4,462,630 | 0 | 169,000 | 3,964,500 | 45,500 | 4,179,000 | 0 | 87,900 | 2,785,600 | 20,000 | 2,893,500 |
| 99 | 0 | 258,930 | 4,158,200 | 45,500 | 4,462,630 | 0 | 169,000 | 3,964,500 | 45,500 | 4,179,000 | 0 | 87,900 | 2,785,600 | 20,000 | 2,893,500 |
| 2000 1/ | 0 | 258,930 | 4,158,200 | 45,500 | 4,462,630 | 0 | 169,000 | 3,964,500 | 45,500 | 4,179,000 | 0 | 87,900 | 2,785,600 | 20,000 | 2,893,500 |

1/ And thereafter for the remainder of the project repayment period.

TABLE B-5 (Continued)

ANNUAL QUANTITIES CONVEYED
THROUGH EACH PUMPING AND POWER RECOVERY PLANT

(in acre-feet)



| CALENDAR YEAR | CALIFORNIA AQUEDUCT (Continued) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | SOUTH SAN JOAQUIN DIVISION (Continued) | | | | | | | | | | TEHACHAPI DIVISION | | | | |
| | WHEELER RIDGE PUMPING PLANT | | | | | WIND GAP PUMPING PLANT | | | | | TEHACHAPI PUMPING PLANT | | | | |
| | Const. water | Operat'l losses | Deliveries | | Total | Const. water | Operat'l losses | Deliveries | | Total | Const. water | Operat'l losses | Deliveries | | Total |
| | | | Water supply | Recreation | | | | Water supply | Recreation | | | | Water supply | Recreation | |
| | (31) | (32) | (33) | (34) | (35) | (36) | (37) | (38) | (39) | (40) | (41) | (42) | (43) | (44) | (45) |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 63 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 67 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 68 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1970 | 39,500 | 3,900 | 0 | 0 | 43,400 | 39,100 | 3,600 | 0 | 0 | 42,700 | 37,000 | 1,900 | 0 | 0 | 38,900 |
| 71 | 106,000 | 40,700 | 267,800 | 0 | 414,500 | 106,000 | 39,800 | 261,800 | 0 | 407,600 | 106,000 | 34,600 | 255,800 | 0 | 396,400 |
| 72 | 270,000 | 59,500 | 489,011 | 20,000 | 838,511 | 270,000 | 58,600 | 479,511 | 20,000 | 828,111 | 270,000 | 53,400 | 466,511 | 20,000 | 809,911 |
| 73 | 238,800 | 68,400 | 623,259 | 20,000 | 950,459 | 238,800 | 67,500 | 616,559 | 20,000 | 942,859 | 238,800 | 62,300 | 583,059 | 20,000 | 904,159 |
| 74 | 116,100 | 74,500 | 746,926 | 20,000 | 957,526 | 116,100 | 73,600 | 736,126 | 20,000 | 945,826 | 116,100 | 68,400 | 699,626 | 20,000 | 904,126 |
| 75 | 0 | 76,400 | 869,576 | 20,000 | 965,976 | 0 | 75,500 | 857,176 | 20,000 | 952,676 | 0 | 70,300 | 816,176 | 20,000 | 906,476 |
| 76 | 0 | 76,400 | 1,004,122 | 20,000 | 1,100,522 | 0 | 75,500 | 987,722 | 20,000 | 1,083,222 | 0 | 70,300 | 936,722 | 20,000 | 1,027,022 |
| 77 | 0 | 76,400 | 1,132,161 | 20,000 | 1,228,561 | 0 | 75,500 | 1,113,261 | 20,000 | 1,208,761 | 0 | 70,300 | 1,054,561 | 20,000 | 1,144,861 |
| 78 | 0 | 76,400 | 1,256,700 | 20,000 | 1,353,100 | 0 | 75,500 | 1,233,600 | 20,000 | 1,329,100 | 0 | 70,300 | 1,173,100 | 20,000 | 1,263,400 |
| 79 | 0 | 76,400 | 1,377,683 | 20,000 | 1,474,083 | 0 | 75,500 | 1,352,683 | 20,000 | 1,448,183 | 0 | 70,300 | 1,291,183 | 20,000 | 1,381,483 |
| 1980 | 0 | 76,400 | 1,500,827 | 20,000 | 1,597,227 | 0 | 75,500 | 1,473,627 | 20,000 | 1,569,127 | 0 | 70,300 | 1,411,127 | 20,000 | 1,501,427 |
| 81 | 0 | 76,400 | 1,625,326 | 20,000 | 1,721,726 | 0 | 75,500 | 1,597,126 | 20,000 | 1,692,626 | 0 | 70,300 | 1,530,926 | 20,000 | 1,621,226 |
| 82 | 0 | 76,400 | 1,752,767 | 20,000 | 1,849,167 | 0 | 75,500 | 1,720,067 | 20,000 | 1,815,567 | 0 | 70,300 | 1,649,467 | 20,000 | 1,739,767 |
| 83 | 0 | 76,400 | 1,895,718 | 20,000 | 1,992,118 | 0 | 75,500 | 1,860,418 | 20,000 | 1,955,918 | 0 | 70,300 | 1,767,918 | 20,000 | 1,858,218 |
| 84 | 0 | 76,400 | 2,023,359 | 20,000 | 2,119,759 | 0 | 75,500 | 1,985,259 | 20,000 | 2,080,759 | 0 | 70,300 | 1,886,259 | 20,000 | 1,976,559 |
| 85 | 0 | 76,400 | 2,152,210 | 20,000 | 2,248,610 | 0 | 75,500 | 2,107,710 | 20,000 | 2,203,210 | 0 | 70,300 | 2,004,710 | 20,000 | 2,095,010 |
| 86 | 0 | 76,400 | 2,285,669 | 20,000 | 2,382,069 | 0 | 75,500 | 2,237,669 | 20,000 | 2,333,169 | 0 | 70,300 | 2,126,669 | 20,000 | 2,216,969 |
| 87 | 0 | 76,400 | 2,420,003 | 20,000 | 2,516,403 | 0 | 75,500 | 2,368,803 | 20,000 | 2,464,303 | 0 | 70,300 | 2,253,803 | 20,000 | 2,344,103 |
| 88 | 0 | 76,400 | 2,556,727 | 20,000 | 2,653,127 | 0 | 75,500 | 2,501,227 | 20,000 | 2,596,727 | 0 | 70,300 | 2,381,727 | 20,000 | 2,472,027 |
| 89 | 0 | 76,400 | 2,646,948 | 20,000 | 2,743,348 | 0 | 75,500 | 2,580,748 | 20,000 | 2,676,248 | 0 | 70,300 | 2,459,348 | 20,000 | 2,549,648 |
| 1990 | 0 | 76,400 | 2,679,298 | 20,000 | 2,775,698 | 0 | 75,500 | 2,609,298 | 20,000 | 2,704,798 | 0 | 70,300 | 2,486,898 | 20,000 | 2,577,198 |
| 91 | 0 | 76,400 | 2,692,400 | 20,000 | 2,788,800 | 0 | 75,500 | 2,622,400 | 20,000 | 2,717,900 | 0 | 70,300 | 2,500,000 | 20,000 | 2,590,300 |
| 92 | 0 | 76,400 | 2,692,400 | 20,000 | 2,788,800 | 0 | 75,500 | 2,622,400 | 20,000 | 2,717,900 | 0 | 70,300 | 2,500,000 | 20,000 | 2,590,300 |
| 93 | 0 | 76,400 | 2,692,400 | 20,000 | 2,788,800 | 0 | 75,500 | 2,622,400 | 20,000 | 2,717,900 | 0 | 70,300 | 2,500,000 | 20,000 | 2,590,300 |
| 94 | 0 | 76,400 | 2,692,400 | 20,000 | 2,788,800 | 0 | 75,500 | 2,622,400 | 20,000 | 2,717,900 | 0 | 70,300 | 2,500,000 | 20,000 | 2,590,300 |
| 95 | 0 | 76,400 | 2,692,400 | 20,000 | 2,788,800 | 0 | 75,500 | 2,622,400 | 20,000 | 2,717,900 | 0 | 70,300 | 2,500,000 | 20,000 | 2,590,300 |
| 96 | 0 | 76,400 | 2,692,400 | 20,000 | 2,788,800 | 0 | 75,500 | 2,622,400 | 20,000 | 2,717,900 | 0 | 70,300 | 2,500,000 | 20,000 | 2,590,300 |
| 97 | 0 | 76,400 | 2,692,400 | 20,000 | 2,788,800 | 0 | 75,500 | 2,622,400 | 20,000 | 2,717,900 | 0 | 70,300 | 2,500,000 | 20,000 | 2,590,300 |
| 98 | 0 | 76,400 | 2,692,400 | 20,000 | 2,788,800 | 0 | 75,500 | 2,622,400 | 20,000 | 2,717,900 | 0 | 70,300 | 2,500,000 | 20,000 | 2,590,300 |
| 99 | 0 | 76,400 | 2,692,400 | 20,000 | 2,788,800 | 0 | 75,500 | 2,622,400 | 20,000 | 2,717,900 | 0 | 70,300 | 2,500,000 | 20,000 | 2,590,300 |
| 2000 1/ | 0 | 76,400 | 2,692,400 | 20,000 | 2,788,800 | 0 | 75,500 | 2,622,400 | 20,000 | 2,717,900 | 0 | 70,300 | 2,500,000 | 20,000 | 2,590,300 |

1/ And thereafter for the remainder of the project repayment period.

TABLE B-5 (Continued)

ANNUAL QUANTITIES CONVEYED
THROUGH EACH PUMPING AND POWER RECOVERY PLANT

(in acre-feet)



| CALENDAR YEAR | CALIFORNIA AQUEDUCT (Continued) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MOJAVE DIVISION | | | | | | | | | | SANTA ANA DIVISION | | | | |
| | COTTONWOOD POWERPLANT | | | | | PEARBLOSSOM PUMPING PLANT | | | | | UPPER AND LOWER DEVIL CANYON POWERPLANTS | | | | |
| | | | Deliveries | | | | | Deliveries | | | | | Deliveries | | |
| | Const. water | Operat'l losses | Water supply | Recreation | Total | Const. water | Operat'l losses | Water supply | Recreation | Total | Const. water | Operat'l losses | Water supply | Recreation | Total |
| | (46) | (47) | (48) | (49) | (50) | (51) | (52) | (53) | (54) | (55) | (56) | (57) | (58) | (59) | (60) |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 63 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 67 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 68 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1970 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 71 | 38,800 | 21,200 | 0 | 0 | 60,000 | 36,000 | 13,200 | 0 | 0 | 49,200 | 6,000 | 0 | 0 | 0 | 6,000 |
| 72 | 128,000 | 36,400 | 180,311 | 15,000 | 359,711 | 128,000 | 23,300 | 158,521 | 11,000 | 320,821 | 65,000 | 8,500 | 135,341 | 6,000 | 214,841 |
| 73 | 74,300 | 39,100 | 214,859 | 15,000 | 343,259 | 74,300 | 26,000 | 186,629 | 11,000 | 297,929 | 28,000 | 9,800 | 158,559 | 6,000 | 202,359 |
| 74 | 48,700 | 39,900 | 239,626 | 15,000 | 343,226 | 48,700 | 26,800 | 204,966 | 11,000 | 291,466 | 0 | 9,800 | 171,906 | 6,000 | 187,706 |
| 75 | 0 | 41,800 | 279,176 | 15,000 | 335,976 | 0 | 28,700 | 238,076 | 11,000 | 277,776 | 0 | 9,800 | 200,126 | 6,000 | 215,926 |
| 76 | 0 | 41,800 | 322,822 | 15,000 | 379,622 | 0 | 28,700 | 271,282 | 11,000 | 310,982 | 0 | 9,800 | 228,342 | 6,000 | 244,142 |
| 77 | 0 | 41,800 | 363,661 | 15,000 | 420,461 | 0 | 28,700 | 304,711 | 11,000 | 344,411 | 0 | 9,800 | 256,560 | 6,000 | 272,360 |
| 78 | 0 | 41,800 | 405,300 | 15,000 | 462,100 | 0 | 28,700 | 338,040 | 11,000 | 377,740 | 0 | 9,800 | 284,778 | 6,000 | 300,578 |
| 79 | 0 | 41,800 | 445,983 | 15,000 | 502,783 | 0 | 28,700 | 371,683 | 11,000 | 411,383 | 0 | 9,800 | 313,210 | 6,000 | 329,010 |
| 1980 | 0 | 41,800 | 487,527 | 15,000 | 544,327 | 0 | 28,700 | 405,997 | 11,000 | 445,697 | 0 | 9,800 | 341,213 | 6,000 | 357,013 |
| 81 | 0 | 41,800 | 554,326 | 15,000 | 611,126 | 0 | 28,700 | 466,356 | 11,000 | 506,056 | 0 | 9,800 | 394,661 | 6,000 | 410,461 |
| 82 | 0 | 41,800 | 619,367 | 15,000 | 676,167 | 0 | 28,700 | 524,367 | 11,000 | 564,067 | 0 | 9,800 | 445,861 | 6,000 | 461,661 |
| 83 | 0 | 41,800 | 684,518 | 15,000 | 741,318 | 0 | 28,700 | 582,378 | 11,000 | 622,078 | 0 | 9,800 | 496,961 | 6,000 | 512,761 |
| 84 | 0 | 41,800 | 749,659 | 15,000 | 806,459 | 0 | 28,700 | 640,489 | 11,000 | 680,189 | 0 | 9,800 | 548,161 | 6,000 | 563,961 |
| 85 | 0 | 41,800 | 815,310 | 15,000 | 872,110 | 0 | 28,700 | 699,000 | 11,000 | 738,700 | 0 | 9,800 | 599,861 | 6,000 | 615,661 |
| 86 | 0 | 41,800 | 878,269 | 15,000 | 935,069 | 0 | 28,700 | 754,929 | 11,000 | 794,629 | 0 | 9,800 | 648,779 | 6,000 | 664,579 |
| 87 | 0 | 41,800 | 901,003 | 15,000 | 957,803 | 0 | 28,700 | 770,623 | 11,000 | 810,323 | 0 | 9,800 | 657,062 | 6,000 | 672,862 |
| 88 | 0 | 41,800 | 923,827 | 15,000 | 980,627 | 0 | 28,700 | 786,317 | 11,000 | 826,017 | 0 | 9,800 | 665,345 | 6,000 | 681,145 |
| 89 | 0 | 41,800 | 946,548 | 15,000 | 1,003,348 | 0 | 28,700 | 801,998 | 11,000 | 841,698 | 0 | 9,800 | 673,415 | 6,000 | 689,215 |
| 1990 | 0 | 41,800 | 967,898 | 15,000 | 1,024,698 | 0 | 28,700 | 816,198 | 11,000 | 855,898 | 0 | 9,800 | 681,098 | 6,000 | 696,898 |
| 91 | 0 | 41,800 | 981,000 | 15,000 | 1,037,800 | 0 | 28,700 | 823,000 | 11,000 | 862,700 | 0 | 9,800 | 687,900 | 6,000 | 703,700 |
| 92 | 0 | 41,800 | 981,000 | 15,000 | 1,037,800 | 0 | 28,700 | 823,000 | 11,000 | 862,700 | 0 | 9,800 | 687,900 | 6,000 | 703,700 |
| 93 | 0 | 41,800 | 981,000 | 15,000 | 1,037,800 | 0 | 28,700 | 823,000 | 11,000 | 862,700 | 0 | 9,800 | 687,900 | 6,000 | 703,700 |
| 94 | 0 | 41,800 | 981,000 | 15,000 | 1,037,800 | 0 | 28,700 | 823,000 | 11,000 | 862,700 | 0 | 9,800 | 687,900 | 6,000 | 703,700 |
| 95 | 0 | 41,800 | 981,000 | 15,000 | 1,037,800 | 0 | 28,700 | 823,000 | 11,000 | 862,700 | 0 | 9,800 | 687,900 | 6,000 | 703,700 |
| 96 | 0 | 41,800 | 981,000 | 15,000 | 1,037,800 | 0 | 28,700 | 823,000 | 11,000 | 862,700 | 0 | 9,800 | 687,900 | 6,000 | 703,700 |
| 97 | 0 | 41,800 | 981,000 | 15,000 | 1,037,800 | 0 | 28,700 | 823,000 | 11,000 | 862,700 | 0 | 9,800 | 687,900 | 6,000 | 703,700 |
| 98 | 0 | 41,800 | 981,000 | 15,000 | 1,037,800 | 0 | 28,700 | 823,000 | 11,000 | 862,700 | 0 | 9,800 | 687,900 | 6,000 | 703,700 |
| 99 | 0 | 41,800 | 981,000 | 15,000 | 1,037,800 | 0 | 28,700 | 823,000 | 11,000 | 862,700 | 0 | 9,800 | 687,900 | 6,000 | 703,700 |
| 2000[1/] | 0 | 41,800 | 981,000 | 15,000 | 1,037,800 | 0 | 28,700 | 823,000 | 11,000 | 862,700 | 0 | 9,800 | 687,900 | 6,000 | 703,700 |

1/ And thereafter for the remainder of the project repayment period.

TABLE B-5 (Continued)

ANNUAL QUANTITIES CONVEYED
THROUGH EACH PUMPING AND POWER RECOVERY PLANT

(in acre-feet)



| CALENDAR YEAR | CALIFORNIA AQUEDUCT (Continued) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | WEST BRANCH, CALIFORNIA AQUEDUCT | | | | | | | | | | | | | | |
| | OSO PUMPING PLANT | | | | | PYRAMID POWERPLANT | | | | | CASTAIC POWERPLANT | | | | |
| | Const. water | Operat'l losses | Deliveries | | Total | Const. water | Operat'l losses | Deliveries | | Total | Const. water | Operat'l losses | Deliveries | | Total |
| | | | Water supply | Recreation | | | | Water supply | Recreation | | | | Water supply | Recreation | |
| | (61) | (62) | (63) | (64) | (65) | (66) | (67) | (68) | (69) | (70) | (71) | (72) | (73) | (74) | (75) |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 63 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 67 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 68 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1970 | 36,500 | 1,900 | 0 | 0 | 38,400 | 36,000 | 1,400 | 0 | 0 | 37,400 | 19,200 | 300 | 0 | 0 | 19,500 |
| 71 | 67,200 | 10,900 | 255,800 | 0 | 333,900 | 67,200 | 7,100 | 255,800 | 0 | 330,100 | 67,200 | 7,100 | 255,800 | 0 | 330,100 |
| 72 | 142,000 | 15,400 | 283,700 | 5,000 | 446,100 | 142,000 | 11,600 | 283,700 | 5,000 | 442,300 | 142,000 | 11,600 | 283,700 | 5,000 | 442,300 |
| 73 | 164,500 | 21,600 | 365,700 | 5,000 | 556,800 | 164,500 | 17,800 | 365,700 | 5,000 | 553,000 | 50,800 | 12,500 | 365,700 | 5,000 | 434,000 |
| 74 | 67,400 | 26,900 | 457,500 | 5,000 | 556,800 | 67,400 | 23,100 | 457,500 | 5,000 | 553,000 | 40,100 | 16,200 | 457,500 | 5,000 | 518,800 |
| 75 | 0 | 26,900 | 534,500 | 5,000 | 566,400 | 0 | 23,100 | 534,500 | 5,000 | 562,600 | 0 | 16,200 | 534,500 | 5,000 | 555,700 |
| 76 | 0 | 26,900 | 611,400 | 5,000 | 643,300 | 0 | 23,100 | 611,400 | 5,000 | 639,500 | 0 | 16,200 | 611,400 | 5,000 | 632,600 |
| 77 | 0 | 26,900 | 688,400 | 5,000 | 720,300 | 0 | 23,100 | 688,400 | 5,000 | 716,500 | 0 | 16,200 | 688,400 | 5,000 | 709,600 |
| 78 | 0 | 26,900 | 765,300 | 5,000 | 797,200 | 0 | 23,100 | 765,300 | 5,000 | 793,400 | 0 | 16,200 | 765,300 | 5,000 | 786,500 |
| 79 | 0 | 26,900 | 842,700 | 5,000 | 874,600 | 0 | 23,100 | 842,700 | 5,000 | 870,800 | 0 | 16,200 | 842,700 | 5,000 | 863,900 |
| 1980 | 0 | 26,900 | 921,100 | 5,000 | 953,000 | 0 | 23,100 | 921,100 | 5,000 | 949,200 | 0 | 16,200 | 921,100 | 5,000 | 942,300 |
| 81 | 0 | 26,900 | 974,100 | 5,000 | 1,006,000 | 0 | 23,100 | 974,100 | 5,000 | 1,002,200 | 0 | 16,200 | 974,100 | 5,000 | 995,300 |
| 82 | 0 | 26,900 | 1,027,600 | 5,000 | 1,059,500 | 0 | 23,100 | 1,027,600 | 5,000 | 1,055,700 | 0 | 16,200 | 1,027,600 | 5,000 | 1,048,800 |
| 83 | 0 | 26,900 | 1,080,900 | 5,000 | 1,112,800 | 0 | 23,100 | 1,080,900 | 5,000 | 1,109,000 | 0 | 16,200 | 1,080,900 | 5,000 | 1,102,100 |
| 84 | 0 | 26,900 | 1,134,100 | 5,000 | 1,166,000 | 0 | 23,100 | 1,134,100 | 5,000 | 1,162,200 | 0 | 16,200 | 1,134,100 | 5,000 | 1,155,300 |
| 85 | 0 | 26,900 | 1,186,900 | 5,000 | 1,218,800 | 0 | 23,100 | 1,186,900 | 5,000 | 1,215,000 | 0 | 16,200 | 1,186,900 | 5,000 | 1,208,100 |
| 86 | 0 | 26,900 | 1,245,900 | 5,000 | 1,277,800 | 0 | 23,100 | 1,245,900 | 5,000 | 1,274,000 | 0 | 16,200 | 1,245,900 | 5,000 | 1,267,100 |
| 87 | 0 | 26,900 | 1,350,300 | 5,000 | 1,382,200 | 0 | 23,100 | 1,350,300 | 5,000 | 1,378,400 | 0 | 16,200 | 1,350,300 | 5,000 | 1,371,500 |
| 88 | 0 | 26,900 | 1,455,400 | 5,000 | 1,487,300 | 0 | 23,100 | 1,455,400 | 5,000 | 1,483,500 | 0 | 16,200 | 1,455,400 | 5,000 | 1,476,600 |
| 89 | 0 | 26,900 | 1,510,300 | 5,000 | 1,542,200 | 0 | 23,100 | 1,510,300 | 5,000 | 1,538,400 | 0 | 16,200 | 1,510,300 | 5,000 | 1,531,500 |
| 1990 | 0 | 26,900 | 1,516,500 | 5,000 | 1,548,400 | 0 | 23,100 | 1,516,500 | 5,000 | 1,544,600 | 0 | 16,200 | 1,516,500 | 5,000 | 1,537,700 |
| 91 | 0 | 26,900 | 1,516,500 | 5,000 | 1,548,400 | 0 | 23,100 | 1,516,500 | 5,000 | 1,544,600 | 0 | 16,200 | 1,516,500 | 5,000 | 1,537,700 |
| 92 | 0 | 26,900 | 1,516,500 | 5,000 | 1,548,400 | 0 | 23,100 | 1,516,500 | 5,000 | 1,544,600 | 0 | 16,200 | 1,516,500 | 5,000 | 1,537,700 |
| 93 | 0 | 26,900 | 1,516,500 | 5,000 | 1,548,400 | 0 | 23,100 | 1,516,500 | 5,000 | 1,544,600 | 0 | 16,200 | 1,516,500 | 5,000 | 1,537,700 |
| 94 | 0 | 26,900 | 1,516,500 | 5,000 | 1,548,400 | 0 | 23,100 | 1,516,500 | 5,000 | 1,544,600 | 0 | 16,200 | 1,516,500 | 5,000 | 1,537,700 |
| 95 | 0 | 26,900 | 1,516,500 | 5,000 | 1,548,400 | 0 | 23,100 | 1,516,500 | 5,000 | 1,544,600 | 0 | 16,200 | 1,516,500 | 5,000 | 1,537,700 |
| 96 | 0 | 26,900 | 1,516,500 | 5,000 | 1,548,400 | 0 | 23,100 | 1,516,500 | 5,000 | 1,544,600 | 0 | 16,200 | 1,516,500 | 5,000 | 1,537,700 |
| 97 | 0 | 26,900 | 1,516,500 | 5,000 | 1,548,400 | 0 | 23,100 | 1,516,500 | 5,000 | 1,544,600 | 0 | 16,200 | 1,516,500 | 5,000 | 1,537,700 |
| 98 | 0 | 26,900 | 1,516,500 | 5,000 | 1,548,400 | 0 | 23,100 | 1,516,500 | 5,000 | 1,544,600 | 0 | 16,200 | 1,516,500 | 5,000 | 1,537,700 |
| 99 | 0 | 26,900 | 1,516,500 | 5,000 | 1,548,400 | 0 | 23,100 | 1,516,500 | 5,000 | 1,544,600 | 0 | 16,200 | 1,516,500 | 5,000 | 1,537,700 |
| 2000 1/ | 0 | 26,900 | 1,516,500 | 5,000 | 1,548,400 | 0 | 23,100 | 1,516,500 | 5,000 | 1,544,600 | 0 | 16,200 | 1,516,500 | 5,000 | 1,537,700 |

1/ And thereafter for the remainder of the project repayment period.

TABLE B-5 (Continued)

ANNUAL QUANTITIES CONVEYED
THROUGH EACH PUMPING AND POWER RECOVERY PLANT

(in acre-feet)



| CALENDAR YEAR | CALIFORNIA AQUEDUCT (Continued) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | COASTAL BRANCH, CALIFORNIA AQUEDUCT | | | | | | | | | | | | | | |
| | LAS PERILLAS AND BADGER HILL PUMPING PLANTS | | | | | DEVIL'S DEN AND SAWTOOTH PUMPING PLANTS | | | | | POLONIO PUMPING PLANT AND SAN LUIS OBISPO POWERPLANT | | | | |
| | Const. water | Operat'l losses | Deliveries | | Total | Const. water | Operat'l losses | Deliveries | | Total | Const. water | Operat'l losses | Deliveries | | Total |
| | | | Water supply | Recreation | | | | Water supply | Recreation | | | | Water supply | Recreation | |
| | (76) | (77) | (78) | (79) | (80) | (81) | (82) | (83) | (84) | (85) | (86) | (87) | (88) | (89) | (90) |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 63 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 67 | 300 | 0 | 0 | 0 | 300 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 68 | 0 | 1,400 | 31,700 | 0 | 33,100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 69 | 0 | 1,400 | 33,700 | 0 | 35,100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1970 | 0 | 1,400 | 34,700 | 0 | 36,100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 71 | 0 | 1,400 | 35,700 | 0 | 37,100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 72 | 0 | 1,400 | 38,700 | 0 | 40,100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 73 | 0 | 1,400 | 41,700 | 0 | 43,100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 74 | 0 | 1,400 | 44,700 | 0 | 46,100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 75 | 0 | 1,400 | 47,700 | 0 | 49,100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 76 | 0 | 1,400 | 52,700 | 0 | 54,100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 77 | 0 | 1,400 | 56,700 | 0 | 58,100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 78 | 0 | 1,400 | 62,700 | 0 | 64,100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79 | 0 | 1,400 | 76,200 | 0 | 77,600 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1980 | 200 | 3,600 | 78,600 | 0 | 82,400 | 200 | 2,200 | 2,200 | 0 | 4,604 | 200 | 1,500 | 2,200 | 0 | 3,900 |
| 81 | 0 | 3,600 | 79,700 | 0 | 83,300 | 0 | 2,200 | 3,300 | 0 | 5,500 | 0 | 1,500 | 3,300 | 0 | 4,800 |
| 82 | 0 | 3,600 | 83,000 | 0 | 86,600 | 0 | 2,200 | 6,600 | 0 | 8,800 | 0 | 1,500 | 6,600 | 0 | 8,100 |
| 83 | 0 | 3,600 | 86,300 | 0 | 89,900 | 0 | 2,200 | 9,900 | 0 | 12,100 | 0 | 1,500 | 9,900 | 0 | 11,400 |
| 84 | 0 | 3,600 | 95,800 | 0 | 99,400 | 0 | 2,200 | 14,900 | 0 | 17,100 | 0 | 1,500 | 14,900 | 0 | 16,400 |
| 85 | 0 | 3,600 | 110,100 | 0 | 113,700 | 0 | 2,200 | 24,800 | 0 | 27,000 | 0 | 1,500 | 24,800 | 0 | 26,300 |
| 86 | 0 | 3,600 | 122,800 | 0 | 126,400 | 0 | 2,200 | 33,100 | 0 | 35,300 | 0 | 1,500 | 33,100 | 0 | 34,600 |
| 87 | 0 | 3,600 | 135,400 | 0 | 139,000 | 0 | 2,200 | 41,300 | 0 | 43,500 | 0 | 1,500 | 41,300 | 0 | 42,800 |
| 88 | 0 | 3,600 | 149,900 | 0 | 153,500 | 0 | 2,200 | 51,300 | 0 | 53,500 | 0 | 1,500 | 51,300 | 0 | 52,800 |
| 89 | 0 | 3,600 | 167,400 | 0 | 171,000 | 0 | 2,200 | 66,100 | 0 | 68,300 | 0 | 1,500 | 66,100 | 0 | 67,600 |
| 1990 | 0 | 3,600 | 185,300 | 0 | 188,900 | 0 | 2,200 | 82,700 | 0 | 84,900 | 0 | 1,500 | 82,700 | 0 | 84,200 |
| 91 | 0 | 3,600 | 185,300 | 0 | 188,900 | 0 | 2,200 | 82,700 | 0 | 84,900 | 0 | 1,500 | 82,700 | 0 | 84,200 |
| 92 | 0 | 3,600 | 185,300 | 0 | 188,900 | 0 | 2,200 | 82,700 | 0 | 84,900 | 0 | 1,500 | 82,700 | 0 | 84,200 |
| 93 | 0 | 3,600 | 185,300 | 0 | 188,900 | 0 | 2,200 | 82,700 | 0 | 84,900 | 0 | 1,500 | 82,700 | 0 | 84,200 |
| 94 | 0 | 3,600 | 185,300 | 0 | 188,900 | 0 | 2,200 | 82,700 | 0 | 84,900 | 0 | 1,500 | 82,700 | 0 | 84,200 |
| 95 | 0 | 3,600 | 185,300 | 0 | 188,900 | 0 | 2,200 | 82,700 | 0 | 84,900 | 0 | 1,500 | 82,700 | 0 | 84,200 |
| 96 | 0 | 3,600 | 185,300 | 0 | 188,900 | 0 | 2,200 | 82,700 | 0 | 84,900 | 0 | 1,500 | 82,700 | 0 | 84,200 |
| 97 | 0 | 3,600 | 185,300 | 0 | 188,900 | 0 | 2,200 | 82,700 | 0 | 84,900 | 0 | 1,500 | 82,700 | 0 | 84,200 |
| 98 | 0 | 3,600 | 185,300 | 0 | 188,900 | 0 | 2,200 | 82,700 | 0 | 84,900 | 0 | 1,500 | 82,700 | 0 | 84,200 |
| 99 | 0 | 3,600 | 185,300 | 0 | 188,900 | 0 | 2,200 | 82,700 | 0 | 84,900 | 0 | 1,500 | 82,700 | 0 | 84,200 |
| 2000 1/ | 0 | 3,600 | 185,300 | 0 | 188,900 | 0 | 2,200 | 82,700 | 0 | 84,900 | 0 | 1,500 | 82,700 | 0 | 84,200 |

1/ And thereafter for the remainder of the project repayment period.

TABLE B-6

ANNUAL REQUIRED ADVANCE OF FUNDS
FOR EXCESS CAPACITY IN THE CALIFORNIA AQUEDUCT



| REACH NUMBER AND DESCRIPTION | ITEM | ESTIMATED COSTS BY CALENDAR YEAR (IN DOLLARS) | | | | | | | TOTAL REACH VALUES |
|---|---|---|---|---|---|---|---|---|---|
| | | 1952-1965[1] | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 | |
| | THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA | | | | | | | | |
| 8 Kettleman City to Avenal Gap<br>Excess Capacity: 238 cfs<br>Total Reach Capacity: 7982 50217 cfs<br>Ratio. 0.02976259<br>Completion Date: 1967 | 1. Total Reach Cost[2]<br>2. Incremental Cost[2]<br>3. Computed Advance Payment<br>4. Advance Payment Credit[3]<br>5. Interest Credit[4] | 1,290,397<br>3,000<br>8,976<br>(-5,976)<br>(-650) | 4,853,000<br>50,000<br>149,607<br>(-99,607)<br>(-7,095) | 8,434,000<br>92,000<br>275,278<br>(-183,278)<br>(-6,415) | - 288,861<br>- 14,160 | | | | 14,577,397<br>145,000<br>433,861<br>- 288,861<br>- 14,160 |
| 9 Avenal Gap to Twisselman Road<br>Excess Capacity: 238 cfs<br>Total Reach Capacity. 7193 15639 cfs<br>Ratio 0.03302860<br>Completion Date. 1968 | 1 Total Reach Cost[2]<br>2. Incremental Cost[2]<br>3. Computed Advance Payment<br>4. Advance Payment Credit[3]<br>5. Interest Credit[4] | 1,128,985<br>5,000<br>20,933<br>(-15,933)<br>(-2,350) | 3,264,000<br>28,000<br>117,224<br>(-89,224)<br>(-9,700) | 5,124,000<br>43,000<br>180,021<br>(-137,021)<br>(-9,759) | 1,891,000<br>14,000<br>58,612<br>(-44,612)<br>(-1,561) | - 286,790<br>- 23,370 | | | 11,407,985<br>90,000<br>376,790<br>- 286,790<br>- 23,370 |
| 10A Twisselman Road to near Lost Hills<br>Excess Capacity: 238 cfs<br>Total Reach Capacity 7041.49996 cfs<br>Ratio: 0.03373996<br>Completion Date: 1968 | 1. Total Reach Cost[2]<br>2. Incremental Cost[2]<br>3. Computed Advance Payment<br>4. Advance Payment Credit[3]<br>5 Interest Credit[4] | 1,141,408<br>7,000<br>23,704<br>(-16,704)<br>(-2,464) | 3,420,000<br>37,000<br>125,290<br>(-88,290)<br>(-9,599) | 5,244,000<br>54,000<br>182,856<br>(-128,856)<br>(-9,178) | 1,937,000<br>19,000<br>64,338<br>(-45,338)<br>(-1,587) | - 279,188<br>- 22,828 | | | 11,742,408<br>117,000<br>396,188<br>- 279,188<br>- 22,828 |
| 11B Near Lost Hills to Seventh Standard Road<br>Excess Capacity: 238 cfs<br>Total Reach Capacity: 6238.06905 cfs<br>Ratio 0.03808549<br>Completion Date: 1968 | 1. Total Reach Cost[2]<br>2. Incremental Cost[2]<br>3. Computed Advance Payment<br>4 Advance Payment Credit[3]<br>5. Interest Credit[4] | 2,169,007<br>7,000<br>21,406<br>(-14,406)<br>(-2,125) | 2,865,000<br>44,000<br>134,550<br>(-90,550)<br>(-9,844) | 4,329,000<br>64,000<br>195,710<br>(-131,710)<br>(-9,381) | 1,637,000<br>22,000<br>67,275<br>(-45,275)<br>(-1,585) | - 281,941<br>- 22,935 | | | 11,000,007<br>137,000<br>418,941<br>- 281,941<br>- 22,935 |
| 12D Seventh Standard Road to Elk Hills Road<br>Excess Capacity: 238 cfs<br>Total Reach Capacity: 5854.52772 cfs<br>Ratio 0.04058054<br>Completion Date: 1969 | 1. Total Reach Cost[2]<br>2. Incremental Cost[2]<br>3. Computed Advance Payment<br>4 Advance Payment Credit[3]<br>5. Interest Credit[4] | 2,878,721<br>28,000<br>73,390<br>(-45,390)<br>(-8,519) | 1,896,000<br>33,000<br>86,496<br>(-53,496)<br>(-7,892) | 5 323,000<br>96,000<br>251,623<br>(-155,623)<br>(-16,919) | 2,450,000<br>40,000<br>104,843<br>(-64,843)<br>(-4,618) | 241,000<br>1,000<br>2,621<br>(-1,621)<br>(-57) | - 320,973<br>- 38,005 | | 12,788,721<br>198,000<br>518,973<br>- 320,973<br>- 38,005 |
| 12E Elk Hills Road to Tupman Road<br>Excess Capacity: 238 cfs<br>Total Reach Capacity 5834 07590 cfs<br>Ratio: 0.04072280<br>Completion Date: 1969 | 1. Total Reach Cost[2]<br>2. Incremental Cost[2]<br>3. Computed Advance Payment<br>4. Advance Payment Credit[3]<br>5. Interest Credit[4] | 1,087,357<br>18,000<br>39,306<br>(-21,306)<br>(-3,999) | 1,244,000<br>25,000<br>54,591<br>(-29,591)<br>(-4,365) | 3,833,000<br>75,000<br>163,774<br>(-88,774)<br>(-9,651) | 1,729,000<br>31,000<br>67,693<br>(-36,693)<br>(-2,613) | 150,000<br>1,000<br>2,184<br>(-1,184)<br>(-41) | - 177,548<br>- 20,669 | | 8,043,357<br>150,000<br>327,548<br>- 177,548<br>- 20,669 |
| 13B Tupman Road to Buena Vista Pumping Plant<br>Excess Capacity: 238 cfs<br>Total Reach Capacity 5019 75450 cfs<br>Ratio: 0 04732899<br>Completion Date: 1969 | 1. Total Reach Cost[2]<br>2. Incremental Cost[2]<br>3 Computed Advance Payment<br>4. Advance Payment Credit[3]<br>5. Interest Credit[4] | 1,419,840<br>1,000<br>4,794<br>(-3,794)<br>(-712) | 299,000<br>2,000<br>9,587<br>(-7,587)<br>(-1,119) | 2,716,000<br>19,000<br>91,079<br>(-72,079)<br>(-7,836) | 8,388,000<br>96,000<br>460,188<br>(-364,188)<br>(-25,939) | 5,003,000<br>58,000<br>278,031<br>(-220,031)<br>(-7,701) | - 667,679<br>- 43,307 | | 17,825,840<br>176,000<br>843,679<br>- 667,679<br>- 43,307 |
| 14A Buena Vista Pumping Plant to Santiago Creek<br>Excess Capacity: 238 cfs<br>Total Reach Capacity: 4861 42550 cfs<br>Ratio: 0.04887042<br>Completion Date: 1970 | 1 Total Reach Cost[2]<br>2. Incremental Cost[2]<br>3. Computed Advance Payment<br>4. Advance Payment Credit[3]<br>5 Interest Credit[4] | 5,197,079<br>58,000<br>200,376<br>(-142,376)<br>(-32,640) | 5,343,000<br>75,000<br>259,107<br>(-184,107)<br>(-34,554) | 4,693,000<br>58,000<br>200,376<br>(-142,376)<br>(-21,004) | 14,668,000<br>216,000<br>745,228<br>(-530,228)<br>(-57,645) | 13,956,000<br>212,000<br>732,408<br>(-520,408)<br>(-37,066) | 6,243,000<br>89,000<br>307,473<br>(-218,473)<br>(-7,647) | -1,737,968<br>- 190,565 | 50,050,079<br>708,000<br>2,445,968<br>-1,737,968<br>- 190,565 |
| 14B Santiago Creek to Old River Road<br>Excess Capacity: 238 cfs<br>Total Reach Capacity: 4853.03125 cfs<br>Ratio: 0.04895495<br>Completion Date: 1970 | 1 Total Reach Cost[2]<br>2. Incremental Cost[2]<br>3. Computed Advance Payment<br>4 Advance Payment Credit[3]<br>5. Interest Credit[4] | 2,701,801<br>37,000<br>105,990<br>(-68,990)<br>(-15,816) | 911,000<br>17,000<br>48,698<br>(-31,698)<br>(-5,949) | 1,263,000<br>11,000<br>31,511<br>(-20,511)<br>(-3,026) | 2,602,000<br>48,000<br>137,501<br>(-89,501)<br>(-9,730) | 4,762,000<br>97,000<br>277,865<br>(-180,865)<br>(-12,882) | 692,000<br>11,000<br>31,511<br>(-20,511)<br>(-718) | - 412,076<br>- 48,121 | 12,931,801<br>221,000<br>633,076<br>- 412,076<br>- 48,121 |
| 14C Old River Road to Wheeler Ridge Pumping Plant<br>Excess Capacity: 238 cfs<br>Total Reach Capacity: 4666.16829 cfs<br>Ratio: 0.05091542<br>Completion Date: 1970 | 1 Total Reach Cost[2]<br>2. Incremental Cost[2]<br>3. Computed Advance Payment<br>4. Advance Payment Credit[3]<br>5. Interest Credit[4] | 2,432,550<br>47,000<br>93,680<br>(-46,680)<br>(-10,702) | 849,000<br>23,000<br>45,844<br>(-22,844)<br>(-4,288) | 1,093,000<br>16,000<br>31,891<br>(-15,891)<br>(-2,344) | 2,114,000<br>59,000<br>117,599<br>(-58,599)<br>(-6,371) | 3,976,000<br>123,000<br>245,164<br>(-122,164)<br>(-8,701) | 575,000<br>14,000<br>27,905<br>(-13,905)<br>(-487) | - 280,083<br>- 32,893 | 11,039,550<br>282,000<br>562,083<br>- 280,083<br>- 32,893 |
| 15 Wheeler Ridge Pumping Plant to Wind Gap Pumping Plant<br>Excess Capacity: 238 cfs<br>Total Reach Capacity 4564.42933 cfs<br>Ratio: 0.05205030<br>Completion Date: 1970 | 1. Total Reach Cost[2]<br>2. Incremental Cost[2]<br>3 Computed Advance Payment<br>4. Advance Payment Credit[3]<br>5. Interest Credit[4] | 3,214,245<br>4,000<br>10,294<br>(-6,294)<br>(-1,443) | 630,000<br>10,000<br>25,736<br>(-15,736)<br>(-2,953) | 1,741,000<br>27,000<br>69,486<br>(-42,486)<br>(-6,268) | 11,214,000<br>251,000<br>645,964<br>(-394,964)<br>(-42,940) | 14,077,000<br>322,000<br>828,686<br>(-506,686)<br>(-36,089) | 6,256,000<br>137,000<br>352,578<br>(-215,578)<br>(-7,545) | -1,181,744<br>- 97,238 | 37,132,245<br>751,000<br>1,932,744<br>- 1,181,744<br>- 97,238 |
| 16 Wind Gap Pumping Plant to Tehachapi Pumping Plant<br>Excess Capacity: 238 cfs<br>Total Reach Capacity. 4354.09867 cfs<br>Ratio: 0 05456466<br>Completion Date: 1970 | 1 Total Reach Cost[2]<br>2. Incremental Cost[2]<br>3. Computed Advance Payment<br>4. Advance Payment Credit[3]<br>5. Interest Credit[4] | 4,309,951<br>18,000<br>42,971<br>(-24,971)<br>(-5,725) | 973,000<br>15,000<br>35,809<br>(-20,809)<br>(-3,906) | 3,050,000<br>35,000<br>83,555<br>(-48,555)<br>(-7,163) | 14,971,000<br>376,000<br>897,620<br>(-521,620)<br>(-56,709) | 23,095,000<br>605,000<br>1,444,310<br>(-839,310)<br>(-59,780) | 8,728,000<br>211,000<br>503,718<br>(-292,718)<br>(-10,245) | -1,747,983<br>- 143,528 | 55,126,951<br>1,260,000<br>3,007,983<br>- 1,747,983<br>- 143,528 |
| 17C Tehachapi Pumping Plant to South Portal Tehachapi Tunnel No 3<br>Excess Capacity: 238 cfs<br>Total Reach Capacity: 4064.19548 cfs<br>Ratio. 0.05845681<br>Completion Date: 1970 | 1. Total Reach Cost[2]<br>2. Incremental Cost[2]<br>3. Computed Advance Payment<br>4. Advance Payment Credit[3]<br>5. Interest Credit[4] | 6,863,212<br>31,000<br>46,196<br>(-15,196)<br>(-3,484 | 7,864,000<br>289,000<br>430,665<br>(-141,665)<br>(-26,589) | 35,577,000<br>1,445,000<br>2,153,325<br>(-708,325)<br>(-104,494 | 54,909,000<br>2,245,000<br>3,345,476<br>(-1,100,476)<br>(-119,641) | 47,761,000<br>1,965,000<br>2,928,224<br>(-963,224)<br>(-68,606) | 33,195,000<br>1,328,000<br>1,978,972<br>(-650,972)<br>(-22,784) | -3,579,858<br>- 345,598 | 186,169,212<br>7,303,000<br>10,882,858<br>- 3,579,858<br>- 345,598 |
| 17D South Portal Tehachapi Tunnel No 3 to Junction, West Branch, California Aqueduct<br>Excess Capacity: 238 cfs<br>Total Reach Capacity: 4055 07904 cfs<br>Ratio: 0.05858823<br>Completion Date: 1970 | 1. Total Reach Cost[2]<br>2. Incremental Cost[2]<br>3. Computed Advance Payment<br>4. Advance Payment Credit[3]<br>5 Interest Credit[4] | 4,745,691<br>98,000<br>155,499<br>(-57,499)<br>(-13,182) | 6,633,000<br>257,000<br>407,790<br>(-150,790)<br>(-28,301) | 12,939,000<br>501,000<br>794,952<br>(-293,952)<br>(-43,365) | 17,091,000<br>662,000<br>1,050,414<br>(-388,414)<br>(-42,228) | 6,616,000<br>254,000<br>403,029<br>(-149,029)<br>(-10,615) | 1,273,000<br>49,000<br>77,750<br>(-20,750)<br>(-1,006) | -1,068,434<br>- 138,697 | 49,317,691<br>1,821,000<br>2,889,434<br>- 1,068,434<br>- 138,697 |

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TABLE B-6

TABLE B-6 (CONTINUED)

ANNUAL REQUIRED ADVANCE OF FUNDS
FOR EXCESS CAPACITY IN THE CALIFORNIA AQUEDUCT



| REACH NUMBER AND DESCRIPTION | ITEM | ESTIMATED COSTS BY CALENDAR YEAR (IN DOLLARS) | | | | | | | TOTAL REACH VALUES |
|---|---|---|---|---|---|---|---|---|---|
| | | 1952-1965 1/ | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 | |
| | THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA (Continued) | | | | | | | | |
| 29A Junction, West Branch, California Aqueduct thru Oso Pumping Plant<br>Excess Capacity 809 cfs<br>Total Reach Capacity: 3142.14935<br>Ratio: 0.25745418<br>Completion Date: 1970 | 1. Total Reach Cost 2/ | 572,615 | 605,000 | 1,962,000 | 4,180,000 | 6,559,000 | 3,081,000 | | 16,959,615 |
| | 2. Incremental Cost 2/ | 15,000 | 51,000 | 195,000 | 462,000 | 724,000 | 326,000 | | 1,773,000 |
| | 3. Computed Advance Payment | 36,940 | 125,596 | 480,222 | 1,137,756 | 1,782,978 | 802,832 | | 4,366,324 |
| | 4. Advance Payment Credit 3/ | (-21,940) | (-74,596) | (-285,222) | (-675,756) | (-1,058,978) | (-476,832) | -2,593,324 | - 2,593,324 |
| | 5. Interest Credit 4/ | (-5,030) | (-14,001) | (-42,075) | (-73,467) | (-75,426) | (-16,689) | - 228,142 | - 228,142 |
| 29B Oso Pumping Plant to State Route 138<br>Excess Capacity: 809 cfs<br>Total Reach Capacity: 3101.32688 cfs<br>Ratio: 0.26084306<br>Completion Date: 1970 | 1. Total Reach Cost 2/ | 379,941 | 169,000 | 297,000 | 1,014,000 | 3,669,000 | 69,000 | | 5,597,941 |
| | 2. Incremental Cost 2/ | 2,000 | 20,000 | 52,000 | 92,000 | 337,000 | 2,000 | | 505,000 |
| | 3. Computed Advance Payment | 5,782 | 57,829 | 150,356 | 266,014 | 974,419 | 5,783 | | 1,460,183 |
| | 4. Advance Payment Credit 3/ | (-3,782) | (-37,829) | (-98,356) | (-174,014) | (-637,419) | (-3,783) | - 955,183 | - 955,183 |
| | 5. Interest Credit 4/ | (-867) | (-7,100) | (-14,510) | (-18,918) | (-45,400) | (-132) | - 87,302 | - 87,302 |
| 29C State Route 138 thru Pyramid Powerplant<br>Excess Capacity: 809 cfs<br>Total Reach Capacity: 3097.21205 cfs<br>Ratio: 0.26118961<br>Completion Date: 1970 | 1. Total Reach Cost 2/ | 1,542,101 | 1,520,000 | 10,321,000 | 19,476,000 | 20,031,000 | 4,731,000 | | 57,621,101 |
| | 2. Incremental Cost 2/ | 11,000 | 106,000 | 2,139,000 | 2,386,000 | 2,284,000 | 562,000 | | 7,488,000 |
| | 3. Computed Advance Payment | 22,109 | 213,048 | 4,299,148 | 4,795,590 | 4,590,581 | 1,129,557 | | 15,050,033 |
| | 4. Advance Payment Credit 3/ | (-11,109) | (-107,048) | (-2,160,148) | (-2,409,590) | (-2,306,581) | (-567,557) | -7,562,033 | - 7,562,033 |
| | 5. Interest Credit 4/ | (-2,547) | (-20,091) | (-318,672) | (-267,966) | (-164,286) | (-19,864) | - 792,616 | - 792,616 |
| 29E Pyramid reservoir thru Castaic Powerplant<br>Excess Capacity: 809 cfs<br>Total Reach Capacity: 3084.84281 cfs<br>Ratio 0.26223690<br>Completion Date: 1970 | 1 Total Reach Cost 2/ | 2,413,223 | 2,420,000 | 14,073,000 | 22,535,000 | 21,942,000 | 8,588,000 | | 71,971,223 |
| | 2. Incremental Cost 2/ | 63,000 | 301,000 | 2,040,000 | 3,393,000 | 3,303,000 | 1,244,000 | | 10,344,000 |
| | 3. Computed Advance Payment | 114,949 | 549,200 | 3,722,154 | 6,190,818 | 6,026,605 | 2,269,784 | | 18,873,510 |
| | 4. Advance Payment Credit 3/ | (-51,949) | (-248,200) | (-1,682,154) | (-2,797,818) | (-2,723,605) | (-1,025,784) | -8,529,510 | - 8,529,510 |
| | 5. Interest Credit 4/ | (-1,910) | (-46,584) | (-248,156) | (-304,173) | (-193,989) | (-35,902) | - 846,741 | - 846,741 |
| TOTALS | 1. Total Reach Cost 2/ | 45,488,124 | 45,778,000 | 122,012,000 | 182,756,000 | 171,838,000 | 73,431,000 | | 641,303,124 |
| | 2. Incremental Cost 2/ | 453,000 | 1,383,000 | 6,962,000 | 10,412,000 | 10,286,000 | 3,973,000 | | 33,469,000 |
| | 3. Computed Advance Payment | 1,027,295 | 2,876,667 | 13,357,317 | 20,153,929 | 20,517,105 | 7,487,863 | | 65,420,176 |
| | 4. Advance Payment Credits Applied 3/ | 0 | 0 | 0 | -288,861 | -847,919 | -1,166,200 | -29,648,196 | -31,951,176 |
| | 5. Interest Credits Applied 4/ | 0 | 0 | 0 | - 14,160 | - 69,133 | - 101,981 | - 2,951,441 | - 3,136,715 |
| | 6. Interest Charge 5/ | 36,705 | | | | | | | 36,705 |
| | 7. Adjusted Advance Payment | - | 3,940,667 | 13,357,317 | 19,850,908 | 19,600,053 | 6,219,682 | -32,599,637 | 30,368,990 |
| | 8. Advance Payments Received | - | 8,055,981 | | | | | | 8,055,981 |
| | 9. Current Underpayment or Overpayment | - | -4,115,314 | | | | | | - 4,115,314 |
| | 10. Annual Difference Capalitized to 1967 | - | - 147,040 | | | | | | - 147,040 |
| | 11. Net Required Advance of Funds | - | - | 9,094,963 | 19,850,908 | 19,600,053 | 6,219,682 | -32,599,637 | 22,165,969 |
| | ANTELOPE VALLEY - EAST KERN WATER AGENCY | | | | | | | | |
| 29A Junction, West Branch, California Aqueduct thru Oso Pumping Plant<br>Excess Capacity: 40 cfs<br>Total Reach Capacity: 3142.14985 cfs<br>Ratio: 0.01273014<br>Completion Date: 1970 | 1. Total Reach Cost 2/ | 572,615 | 550,000 | 1,782,000 | 3,797,000 | 5,958,000 | 4,300,000 | | 16,959,615 |
| | 2. Incremental Cost 2/ | 1,000 | 2,000 | 10,000 | 23,000 | 36,000 | 16,000 | | 88,000 |
| | 3. Computed Advance Payment | 2,453 | 4,907 | 24,534 | 56,428 | 88,322 | 39,254 | | 215,898 |
| | 4. Advance Payment Credit 3/ | (-1,453) | (-2,907) | (-14,534) | (-33,428) | (-52,322) | (-23,254) | - 127,898 | - 127,898 |
| | 5. Interest Credit 4/ | (-333) | (-546) | (-2,144) | (-3,634) | (-3,727) | (-814) | - 11,198 | - 11,198 |
| TOTALS | 1. Total Reach Cost 2/ | 572,615 | 550,000 | 1,782,000 | 3,797,000 | 5,958,000 | 4,300,000 | | 16,959,615 |
| | 2. Incremental Cost 2/ | 1,000 | 2,000 | 10,000 | 23,000 | 36,000 | 16,000 | | 88,000 |
| | 3. Computed Advance Payment | 2,453 | 4,907 | 24,534 | 56,428 | 88,322 | 39,254 | | 215,898 |
| | 4. Advance Payment Credits Applied 3/ | 0 | 0 | 0 | 0 | 0 | 0 | - 127,898 | - 127,898 |
| | 5. Interest Credits Applied 4/ | 0 | 0 | 0 | 0 | 0 | 0 | - 11,198 | - 11,198 |
| | 6. Interest Charge 5/ | 88 | | | | | | | 88 |
| | 7. Adjusted Advance Payment | - | 7,448 | 24,534 | 56,428 | 88,322 | 39,254 | - 139,096 | 76,890 |
| | 8 Advance Payments Received | - | 0 | | | | | | 0 |
| | 9. Current Underpayment or Overpayment | - | 7,448 | | | | | | 7,448 |
| | 10. Annual Difference Capalitized to 1967 | - | 266 | | | | | | 266 |
| | 11. Net Required Advance of funds | - | - | 32,248 | 56,428 | 88,322 | 39,254 | - 139,096 | 77,156 |
| TOTAL REQUIRED ADVANCE OF FUNDS | | - | - | 9,127,211 | 19,907,336 | 19,688,375 | 6,258,936 | -32,738,733 | 22,243,125 |

1/ Reach Costs during the period 1952 - 1965 are compounded to 1965 at 3.573 project interest rate.

2/ Reach Costs and Incremental Costs occurring after completion date are prorated for the period 1966 to the year of completion.

3/ The annual advance payment less the annual incremental cost. Values shown in parenthesis are not applied in year shown, but are applied in year following year of completion.

4/ Interest Credit on the Advance Payment Credit compounded to the year in which credits are applied (year after year of completion) at 3.5% per annum.

5/ Interest charge on 1952 - 1965 Advance Payment due, but not made in 1965. Interest is computed at the project interest rate, 3.573 percent.

TABLE B-7

ACTUAL AND PROJECTED CAPITAL COSTS
ALLOCATED TO TRANSPORTATION FOR EACH AQUEDUCT REACH

(in dollars)



| CALENDAR YEAR | NORTH BAY AQUEDUCT | | | | SOUTH BAY AQUEDUCT | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Reach 1 | Reach 2 | Reach 3 | Total | Reach 1 | Reach 2 | Reach 4 | Reach 5 | Reach 6 | Reach 7 | Reach 8 |
| 1952 | 0 | 0 | 0 | 0 | 62 | 22 | 18 | 59 | 5 | 43 | 41 |
| 1953 | 0 | 0 | 0 | 0 | 311 | 108 | 92 | 293 | 27 | 214 | 205 |
| 1954 | 0 | 0 | 0 | 0 | 1,016 | 352 | 300 | 955 | 88 | 698 | 671 |
| 1955 | 0 | 0 | 0 | 0 | 1,393 | 495 | 392 | 1,269 | 118 | 930 | 894 |
| 1956 | 0 | 0 | 0 | 0 | 18,221 | 6,332 | 4,972 | 15,875 | 1,465 | 11,589 | 11,137 |
| 1957 | 10,348 | 3,019 | 7,513 | 20,880 | 41,489 | 14,388 | 11,332 | 36,140 | 3,334 | 26,376 | 25,346 |
| 1958 | 15,183 | 4,429 | 21,269 | 40,881 | 161,331 | 70,567 | 6,660 | 21,231 | 1,959 | 15,500 | 14,895 |
| 1959 | 6,051 | 1,764 | 14,732 | 22,547 | 423,639 | 118,842 | 22,488 | 24,384 | 599 | 5,639 | 6,238 |
| 1960 | 11,140 | 3,247 | 4,571 | 18,958 | 1,163,362 | 57,455 | 70,464 | 100,235 | 1,273 | 11,985 | 13,269 |
| 1961 | 9,938 | 2,899 | 3,032 | 15,869 | 3,128,755 | 514,225 | 305,109 | 121,677 | 2,185 | 20,571 | 24,219 |
| 1962 | 3,406 | 993 | 1,664 | 6,063 | 1,438,076 | 180,814 | 876,065 | 61,568 | 19,221 | 180,996 | 161,094 |
| 1963 | 8,575 | 2,491 | 3,865 | 14,931 | 427,973 | 74,061 | 1,714,301 | 266,307 | 55,086 | 2,705,603 | 270,222 |
| 1964 | 19,004 | 9,393 | 53,263 | 81,660 | 2,524,753 | 45,499 | 153,852 | 410,415 | 52,379 | 944,760 | 3,003,158 |
| 1965 | 22,181 | 11,726 | 185,554 | 219,461 | 559,550 | 103,636 | 107,262 | 629,165 | 38,729 | 277,642 | 707,882 |
| 1966 | 84,000 | 53,000 | 587,000 | 724,000 | 144,000 | 0 | 140,000 | 6,109,000 | 22,000 | 60,000 | 92,000 |
| 1967 | 74,000 | 95,000 | 1,448,000 | 1,617,000 | 85,000 | 0 | 0 | 3,592,000 | 24,000 | 16,000 | 25,000 |
| 1968 | 131,000 | 135,000 | 25,000 | 291,000 | 97,000 | 0 | 0 | 1,674,000 | 0 | 0 | 0 |
| 1969 | 24,000 | 211,000 | 3,000 | 238,000 | 5,000 | 0 | 0 | 58,000 | 0 | 0 | 0 |
| 1970 | 22,000 | 10,000 | 2,000 | 34,000 | 4,000 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1971 | 22,000 | 11,000 | 1,000 | 34,000 | 342,000 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1972 | 21,000 | 10,000 | 1,000 | 32,000 | 342,000 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1973 | 203,000 | 10,000 | 184,000 | 397,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1974 | 199,000 | 10,000 | 180,000 | 389,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1975 | 19,000 | 10,000 | 0 | 29,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1976 | 74,000 | 57,000 | 35,000 | 166,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1977 | 87,000 | 58,000 | 75,000 | 220,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1978 | 990,000 | 880,000 | 400,000 | 2,270,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1979 | 1,475,000 | 1,316,000 | 796,000 | 3,587,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1980 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1981 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1982 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1983 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1984 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1985 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1986 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1987 | 0 | 0 | 0 | 0 | 12,000 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1988 | 0 | 0 | 0 | 0 | 100,000 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1989 | 0 | 0 | 0 | 0 | 160,000 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1990 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1991 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1992 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1993 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1994 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1995 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1996 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1997 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1998 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1999 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 3,530,826 | 2,905,961 | 4,032,463 | 10,469,250 | 11,180,931 | 1,186,796 | 3,413,307 | 13,122,573 | 222,468 | 4,278,546 | 4,356,271 |

TABLE B-7 (Continued)

ACTUAL AND PROJECTED CAPITAL COSTS
ALLOCATED TO TRANSPORTATION FOR EACH AQUEDUCT REACH

(in dollars)



| CALENDAR YEAR | SOUTH BAY AQUEDUCT (Continued) | | CALIFORNIA AQUEDUCT | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | NORTH SAN JOAQUIN DIVISION | | | SAN LUIS DIVISION | | | | | |
| | Reach 9 | Total | Reach 1 | Reach 2 | Subtotal | Reach 3 | Reach 4 | Reach 5 | Reach 6 | Reach 7 | Subtotal |
| 1952 | 83 | 333 | 4,132 | 4,964 | 9,096 | 1,339 | 3,200 | 3,630 | 923 | 1,139 | 10,231 |
| 1953 | 411 | 1,661 | 10,171 | 12,198 | 22,369 | 3,560 | 8,507 | 9,652 | 2,454 | 3,026 | 27,199 |
| 1954 | 1,345 | 5,425 | 12,680 | 15,123 | 27,803 | 4,240 | 10,131 | 11,494 | 2,922 | 3,604 | 32,391 |
| 1955 | 1,796 | 7,287 | 6,781 | 8,058 | 14,839 | 2,063 | 4,931 | 5,595 | 1,422 | 1,754 | 15,765 |
| 1956 | 29,570 | 99,161 | 10,052 | 8,079 | 18,131 | 2,663 | 5,113 | 5,800 | 1,475 | 1,818 | 16,869 |
| 1957 | 560,181 | 718,586 | 11,896 | 8,643 | 20,539 | 2,864 | 5,475 | 6,212 | 1,579 | 1,948 | 18,078 |
| 1958 | 549,512 | 841,655 | 22,633 | 26,309 | 48,942 | 10,559 | 23,321 | 26,654 | 6,721 | 8,521 | 75,776 |
| 1959 | 128,649 | 730,478 | 142,945 | 159,155 | 302,100 | 24,765 | 53,565 | 61,138 | 15,388 | 19,599 | 174,455 |
| 1960 | 261,586 | 1,679,629 | 175,656 | 204,038 | 379,694 | 29,553 | 56,502 | 61,633 | 16,025 | 24,964 | 188,677 |
| 1961 | 20,993 | 4,137,734 | 204,504 | 211,753 | 416,257 | 108,081 | 257,678 | 197,278 | 61,897 | 91,363 | 716,297 |
| 1962 | 270,386 | 3,188,220 | 388,420 | 763,125 | 1,151,545 | 429,505 | 587,511 | 448,135 | 141,882 | 203,770 | 1,810,803 |
| 1963 | 257,126 | 5,770,679 | 3,291,373 | 2,343,568 | 5,634,941 | 1,763,983 | 2,901,285 | 2,623,115 | 5,965 | -65,069 | 7,229,279 |
| 1964 | 2,966,594 | 10,101,410 | 5,537,286 | 3,367,938 | 8,905,224 | 2,512,397 | 4,942,062 | 2,396,341 | 576,165 | 1,131,305 | 11,558,270 |
| 1965 | 1,867,866 | 4,291,732 | 7,133,923 | 11,582,612 | 18,716,535 | 2,908,520 | 5,715,928 | 2,842,489 | 689,757 | 1,349,521 | 13,506,215 |
| 1966 | 432,000 | 6,999,000 | 10,075,056 | 28,118,406 | 38,193,462 | 5,938,478 | 4,487,218 | 3,710,940 | 1,380,158 | 2,201,240 | 17,718,034 |
| 1967 | 195,000 | 3,937,000 | 12,753,556 | 15,749,580 | 28,503,136 | 4,334,300 | 3,443,090 | 4,222,290 | 1,097,698 | 4,180,408 | 17,277,786 |
| 1968 | 0 | 1,771,000 | 2,889,858 | 595,114 | 3,484,972 | 2,659,994 | 359,406 | 2,309,354 | 19,480 | 30,194 | 5,378,428 |
| 1969 | 0 | 63,000 | 167,528 | 228,890 | 396,418 | 67,206 | 8,766 | 6,818 | 2,922 | 3,896 | 89,608 |
| 1970 | 0 | 4,000 | 10,714 | 7,792 | 18,506 | 1,948 | 5,844 | 4,870 | 1,948 | 2,922 | 17,532 |
| 1971 | 0 | 342,000 | 4,870 | 2,922 | 7,792 | 974 | 2,922 | 1,948 | 974 | 974 | 7,792 |
| 1972 | 0 | 342,000 | 5,844 | 3,896 | 9,740 | 974 | 2,922 | 2,922 | 974 | 974 | 8,766 |
| 1973 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1974 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1975 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1976 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1977 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1978 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1979 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1980 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1981 | 0 | 0 | 0 | 0 | 0 | 278,564 | 302,914 | 245,448 | 54,544 | 122,724 | 1,004,194 |
| 1982 | 0 | 0 | 0 | 0 | 0 | 556,154 | 605,828 | 491,870 | 108,114 | 244,474 | 2,006,440 |
| 1983 | 0 | 0 | 0 | 0 | 0 | 1,112,308 | 1,211,656 | 982,766 | 217,202 | 489,922 | 4,013,854 |
| 1984 | 0 | 0 | 0 | 0 | 0 | 834,718 | 907,768 | 737,318 | 162,658 | 367,198 | 3,009,660 |
| 1985 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1986 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1987 | 0 | 12,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1988 | 0 | 100,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1989 | 0 | 160,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1990 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1991 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1992 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1993 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1994 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1995 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1996 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1997 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1998 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1999 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 7,543,098 | 45,303,990 | 42,859,878 | 63,422,163 | 106,282,041 | 23,589,710 | 25,913,543 | 21,415,710 | 4,571,247 | 10,422,189 | 85,912,399 |

TABLE B-7 (Continued)

ACTUAL AND PROJECTED CAPITAL COSTS
ALLOCATED TO TRANSPORTATION FOR EACH AQUEDUCT REACH

(in dollars)



| CALENDAR YEAR | CALIFORNIA AQUEDUCT (Continued) SOUTH SAN JOAQUIN DIVISION | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Reach 8 | Reach 9 | Reach 10A | Reach 11B | Reach 12D | Reach 12E | Reach 13B | Reach 14A | Reach 14B | Reach 14C | Reach 15 |
| 1952 | 625 | 812 | 812 | 1,154 | 1,837 | 912 | 1,506 | 568 | 193 | 203 | 1,099 |
| 1953 | 2,301 | 2,990 | 2,990 | 4,248 | 6,757 | 3,353 | 5,542 | 2,090 | 708 | 744 | 4,043 |
| 1954 | 2,973 | 3,865 | 3,875 | 5,489 | 8,732 | 4,334 | 7,162 | 2,701 | 916 | 961 | 5,226 |
| 1955 | 1,383 | 1,799 | 1,799 | 2,555 | 4,065 | 2,017 | 3,333 | 1,257 | 427 | 447 | 2,432 |
| 1956 | 3,353 | 4,359 | 4,359 | 6,192 | 9,848 | 4,888 | 8,077 | 3,113 | 1,056 | 1,108 | 5,894 |
| 1957 | 9,333 | 12,132 | 12,132 | 17,234 | 27,414 | 13,606 | 22,484 | 9,456 | 3,205 | 3,365 | 16,405 |
| 1958 | 15,647 | 20,360 | 20,360 | 39,109 | 62,209 | 30,875 | 51,022 | 29,224 | 9,907 | 10,401 | 51,403 |
| 1959 | 17,661 | 22,716 | 22,716 | 59,214 | 94,191 | 46,748 | 77,252 | 53,753 | 18,168 | 19,077 | 94,647 |
| 1960 | 46,813 | 38,732 | 59,782 | 52,235 | 83,088 | 41,237 | 68,146 | 59,140 | 18,368 | 19,286 | 111,538 |
| 1961 | 77,949 | 40,280 | 76,765 | 79,480 | 126,427 | 62,747 | 103,691 | 116,010 | 40,541 | 42,568 | 186,260 |
| 1962 | 169,553 | 67,047 | 59,554 | 69,482 | 110,524 | 54,855 | 90,648 | 104,691 | 35,489 | 41,817 | 175,333 |
| 1963 | 179,820 | 88,102 | 60,679 | 101,047 | 160,731 | 80,394 | 132,852 | 260,367 | 107,021 | 112,552 | 426,562 |
| 1964 | 113,575 | 149,212 | 146,061 | 228,217 | 363,017 | 122,501 | 203,272 | 1,119,982 | 576,135 | 520,042 | 1,092,701 |
| 1965 | 538,574 | 587,446 | 571,271 | 1,354,505 | 1,581,112 | 507,186 | 498,775 | 3,111,611 | 1,729,474 | 1,496,655 | 760,776 |
| 1966 | 4,453,802 | 3,111,202 | 3,253,172 | 2,733,848 | 1,767,926 | 1,161,332 | 285,330 | 4,905,140 | 862,522 | 796,134 | 573,426 |
| 1967 | 7,737,090 | 4,886,440 | 4,991,320 | 4,133,966 | 4,960,034 | 3,578,474 | 2,594,242 | 4,315,312 | 1,207,474 | 1,038,842 | 1,584,996 |
| 1968 | 590,140 | 1,804,458 | 1,844,262 | 1,564,646 | 2,287,860 | 1,617,008 | 7,972,616 | 13,410,494 | 2,462,972 | 1,981,530 | 10,139,944 |
| 1969 | 14,610 | 120,750 | 122,724 | 36,012 | 227,890 | 142,178 | 4,754,534 | 12,796,952 | 4,498,332 | 3,713,586 | 12,722,224 |
| 1970 | 1,948 | 1,948 | 1,948 | 974 | 94,478 | 57,466 | 78,894 | 5,729,754 | 657,164 | 541,180 | 5,659,456 |
| 1971 | 974 | 974 | 974 | 974 | 93,504 | 56,492 | 76,946 | 1,786,588 | 59,414 | 49,674 | 1,558,438 |
| 1972 | 974 | 974 | 974 | 974 | 50,648 | 30,194 | 41,882 | 90,582 | 33,116 | 27,272 | 50,648 |
| 1973 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1974 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1975 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1976 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1977 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1978 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1979 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1980 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1981 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1982 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1983 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1984 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1985 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1986 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1987 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1988 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1989 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1990 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1991 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1992 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1993 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1994 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1995 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1996 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1997 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1998 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1999 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 13,979,098 | 10,966,598 | 11,258,529 | 10,491,555 | 12,122,292 | 7,618,797 | 17,078,206 | 47,908,785 | 12,322,602 | 10,417,444 | 35,223,451 |

TABLE B-7 (Continued)

ACTUAL AND PROJECTED CAPITAL COSTS
ALLOCATED TO TRANSPORTATION FOR EACH AQUEDUCT REACH

(in dollars)



| CALENDAR YEAR | CALIFORNIA AQUEDUCT (Continued) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | SOUTH SAN JOAQUIN DIVISION | | TEHACHAPI DIVISION | | | MOJAVE DIVISION | | | | | |
| | Reach 16 | Subtotal | Reach 17C | Reach 17D | Subtotal | Reach 18A | Reach 19 | Reach 20 | Reach 21 | Reach 22A | Reach 22B |
| 1952 | 4,173 | 13,894 | 7,879 | 3,656 | 11,535 | 4,477 | 1,664 | 3,779 | 6,334 | 160 | 2,381 |
| 1953 | 15,351 | 51,117 | 24,943 | 11,577 | 36,520 | 15,003 | 5,575 | 12,667 | 21,231 | 537 | 7,983 |
| 1954 | 19,838 | 66,072 | 45,907 | 21,306 | 67,213 | 16,617 | 6,174 | 14,032 | 23,520 | 594 | 8,843 |
| 1955 | 9,233 | 30,747 | 29,791 | 13,827 | 43,618 | 6,416 | 2,383 | 5,418 | 9,083 | 229 | 3,415 |
| 1956 | 22,374 | 74,621 | 36,806 | 17,083 | 53,889 | 5,647 | 2,098 | 4,767 | 7,990 | 202 | 3,004 |
| 1957 | 62,280 | 209,046 | 98,018 | 45,493 | 143,511 | 19,932 | 7,406 | 16,824 | 28,199 | 713 | 10,602 |
| 1958 | 128,396 | 468,913 | 137,310 | 63,729 | 201,039 | 32,795 | 12,186 | 27,680 | 46,396 | 1,173 | 17,443 |
| 1959 | 177,014 | 703,157 | 114,175 | 52,992 | 167,167 | 36,218 | 20,564 | 37,743 | 53,776 | 1,390 | 20,671 |
| 1960 | 147,578 | 745,943 | 132,799 | 61,636 | 194,435 | 34,046 | 27,556 | 84,323 | 127,367 | 3,692 | 54,914 |
| 1961 | 220,644 | 1,173,362 | 334,586 | 155,142 | 489,728 | 44,167 | 44,080 | 200,536 | 330,776 | 10,485 | 187,813 |
| 1962 | 206,533 | 1,185,526 | 320,539 | 148,763 | 469,302 | 79,610 | 43,152 | 78,680 | 119,710 | 6,543 | 167,426 |
| 1963 | 439,243 | 2,149,370 | 943,333 | 437,828 | 1,381,161 | 56,616 | 82,663 | 289,380 | 462,210 | 19,547 | 288,008 |
| 1964 | 1,523,419 | 6,158,134 | 1,295,413 | 1,177,847 | 2,473,260 | 453,449 | 210,449 | 221,044 | 269,546 | 97,020 | 251,805 |
| 1965 | 904,406 | 13,641,791 | 2,746,383 | 2,112,441 | 4,858,824 | 49,685 | 590,716 | 311,118 | 127,769 | 80,073 | 787,187 |
| 1966 | 867,470 | 24,771,304 | 6,207,412 | 6,219,126 | 12,426,538 | 1,045,102 | 997,376 | 1,272,044 | 205,514 | 177,268 | 1,048,024 |
| 1967 | 2,729,264 | 43,757,454 | 27,962,194 | 12,092,820 | 40,055,014 | 1,961,636 | 1,890,534 | 1,939,234 | 716,864 | 231,812 | 4,320,664 |
| 1968 | 13,210,028 | 58,885,958 | 43,143,926 | 15,972,946 | 59,116,872 | 1,238,928 | 4,456,050 | 8,286,792 | 2,898,624 | 1,241,850 | 3,322,314 |
| 1969 | 20,355,598 | 59,505,390 | 37,516,784 | 6,186,088 | 43,702,872 | 4,934,284 | 6,022,242 | 12,739,920 | 4,273,912 | 2,161,306 | 15,688,218 |
| 1970 | 7,709,958 | 20,535,168 | 26,107,480 | 1,189,928 | 27,297,408 | 1,439,572 | 1,159,060 | 447,066 | 125,646 | 106,166 | 28,580,082 |
| 1971 | 3,227,548 | 6,912,500 | 12,973,210 | 19,480 | 12,992,690 | 752,902 | 696,410 | 799,654 | 218,176 | 191,878 | 8,623,796 |
| 1972 | 152,892 | 481,130 | 4,886,838 | 9,740 | 4,896,578 | 15,584 | 122,724 | 141,230 | 38,960 | 34,090 | 1,347,042 |
| 1973 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1974 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1975 | 0 | 0 | 97,400 | 0 | 97,400 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1976 | 0 | 0 | 2,240,200 | 0 | 2,240,200 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1977 | 0 | 0 | 3,896,000 | 0 | 3,896,000 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1978 | 0 | 0 | 2,337,600 | 0 | 2,337,600 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1979 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1980 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1981 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1982 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1983 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1984 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1985 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1986 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1987 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1988 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1989 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1990 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1991 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1992 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1993 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1994 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1995 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1996 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1997 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1998 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1999 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 52,133,240 | 241,520,597 | 173,636,926 | 46,013,448 | 219,650,374 | 12,242,686 | 16,401,082 | 26,933,931 | 10,111,603 | 4,366,728 | 64,741,635 |

TABLE B-7 (Continued)

ACTUAL AND PROJECTED CAPITAL COSTS
ALLOCATED TO TRANSPORTATION FOR EACH AQUEDUCT REACH

(in dollars)



| CALENDAR YEAR | CALIFORNIA AQUEDUCT (Continued) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MOJAVE DIVISION (Continued) | | | SANTA ANA DIVISION | | | | | | | WEST BRANCH | |
| | Reach 23 | Reach 24 | Subtotal | Reach 25 | Reach 26 | Reach 27 | Reach 28A | Reach 28B | Reach 28C | Subtotal | Reach 29A | Reach 29B |
| 1952 | 1,969 | 2,640 | 23,404 | 3,648 | 3,239 | 2,889 | 2,337 | 7,321 | 3,322 | 22,756 | 362 | 325 |
| 1953 | 6,601 | 8,849 | 78,446 | 12,226 | 10,856 | 9,684 | 7,831 | 24,538 | 11,138 | 76,273 | 1,216 | 1,091 |
| 1954 | 7,313 | 9,803 | 86,896 | 13,543 | 12,026 | 10,728 | 8,675 | 27,182 | 12,339 | 84,493 | 1,349 | 1,211 |
| 1955 | 2,824 | 3,786 | 33,554 | 5,229 | 4,644 | 4,133 | 3,350 | 10,497 | 4,765 | 32,618 | 518 | 465 |
| 1956 | 2,484 | 3,330 | 29,522 | 4,600 | 4,085 | 3,644 | 2,947 | 9,234 | 4,191 | 28,701 | 454 | 407 |
| 1957 | 8,767 | 11,753 | 104,196 | 16,238 | 14,418 | 12,862 | 10,401 | 32,590 | 14,792 | 101,301 | 1,614 | 1,448 |
| 1958 | 14,425 | 19,338 | 171,436 | 26,716 | 23,723 | 21,161 | 17,113 | 53,622 | 24,339 | 166,674 | 2,655 | 2,382 |
| 1959 | 17,273 | 45,647 | 233,282 | 35,527 | 27,637 | 24,671 | 20,487 | 64,192 | 37,682 | 210,196 | 5,047 | 4,530 |
| 1960 | 29,727 | 98,306 | 459,931 | 74,320 | 52,527 | 47,326 | 45,922 | 143,890 | 74,105 | 438,090 | 7,648 | 6,863 |
| 1961 | 83,398 | 212,470 | 1,113,725 | 161,433 | 116,110 | 112,241 | 38,783 | 121,519 | 64,716 | 614,802 | 7,769 | 6,972 |
| 1962 | 63,826 | 103,082 | 662,029 | 59,580 | 58,488 | 71,545 | 39,104 | 122,528 | 60,651 | 411,896 | 31,992 | 28,711 |
| 1963 | 113,940 | 422,858 | 1,735,222 | 234,336 | 198,714 | 212,108 | 134,128 | 420,261 | 661,835 | 1,861,382 | 57,972 | 52,026 |
| 1964 | 40,148 | 320,002 | 1,863,463 | 69,994 | 174,366 | 174,760 | 100,363 | 147,888 | 121,814 | 789,185 | 105,960 | 95,128 |
| 1965 | 46,600 | 645,138 | 2,638,286 | 317,606 | 105,559 | 110,727 | 96,918 | 150,574 | 244,027 | 1,025,411 | 297,560 | 146,622 |
| 1966 | 36,038 | 1,786,316 | 6,567,682 | 335,056 | 298,044 | 352,588 | 76,946 | 143,178 | 273,694 | 1,479,506 | 486,700 | 140,710 |
| 1967 | 76,946 | 1,929,494 | 13,067,184 | 3,312,574 | 598,036 | 707,124 | 110,062 | 178,242 | 1,734,694 | 6,640,732 | 1,547,668 | 230,460 |
| 1968 | 74,998 | 5,594,656 | 27,114,212 | 9,689,352 | 2,587,918 | 3,028,166 | 764,590 | 5,695,952 | 3,050,568 | 24,816,546 | 3,252,278 | 874,208 |
| 1969 | 1,335,354 | 16,991,430 | 64,146,666 | 8,548,798 | 3,085,632 | 3,587,242 | 285,382 | 501,610 | 5,145,642 | 21,154,306 | 5,104,092 | 3,157,712 |
| 1970 | 5,386,220 | 14,659,674 | 51,903,486 | 3,500,556 | 3,301,860 | 3,834,638 | 10,492,902 | 8,905,282 | 11,855,528 | 41,890,766 | 2,411,226 | 64,232 |
| 1971 | 963,286 | 719,786 | 12,965,888 | 262,006 | 1,632,424 | 1,730,798 | 3,013,556 | 20,014,726 | 10,051,680 | 36,705,190 | 1,218,522 | 76,946 |
| 1972 | 1,948 | 1,072,374 | 2,773,952 | 7,792 | 95,452 | 69,154 | 12,662 | 58,440 | 927,248 | 1,170,748 | 94,452 | 35,064 |
| 1973 | 0 | 813,290 | 813,290 | 0 | 0 | 0 | 0 | 0 | 407,132 | 407,132 | 0 | 0 |
| 1974 | 0 | 760,694 | 760,694 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1975 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1976 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1977 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1978 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1979 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1980 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1981 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1982 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1983 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1984 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1985 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1986 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1987 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1988 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1989 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1990 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1991 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1992 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1993 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1994 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1995 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1996 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1997 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1998 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1999 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2001 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 8,314,085 | 46,234,716 | 189,346,446 | 26,691,130 | 12,405,758 | 14,128,189 | 15,284,459 | 36,833,266 | 34,785,902 | 140,128,704 | 14,637,054 | 4,927,513 |

TABLE B-7 (Continued)

ACTUAL AND PROJECTED CAPITAL COSTS
ALLOCATED TO TRANSPORTATION FOR EACH AQUEDUCT REACH

(in dollars)



| CALENDAR YEAR | CALIFORNIA AQUEDUCT (Continued) | | | | | | | | | | | GRAND TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | WEST BRANCH (Continued) | | | | | COASTAL BRANCH | | | | | Total | |
| | Reach 29C | Reach 29D | Reach 29E | Reach 30 | Subtotal | Reach 31A | Reach 33A | Reach 34 | Reach 35 | Subtotal | | |
| 1952 | 1,152 | 1,013 | 1,794 | 1,540 | 6,186 | 0 | 0 | 0 | 0 | 0 | 97,102 | 97,435 |
| 1953 | 3,866 | 3,398 | 6,017 | 5,166 | 20,754 | 0 | 0 | 0 | 0 | 0 | 312,678 | 314,339 |
| 1954 | 4,289 | 3,769 | 6,674 | 5,730 | 23,022 | 0 | 0 | 0 | 0 | 0 | 387,890 | 393,315 |
| 1955 | 1,647 | 1,447 | 2,564 | 2,262 | 8,903 | 0 | 0 | 0 | 0 | 0 | 180,044 | 187,331 |
| 1956 | 1,442 | 1,268 | 2,245 | 1,988 | 7,804 | 0 | 0 | 0 | 0 | 0 | 229,537 | 328,698 |
| 1957 | 5,131 | 4,510 | 7,986 | 6,856 | 27,545 | 0 | 0 | 0 | 0 | 0 | 624,216 | 1,363,682 |
| 1958 | 8,442 | 7,421 | 13,139 | 11,280 | 45,319 | 0 | 0 | 0 | 0 | 0 | 1,178,099 | 2,060,635 |
| 1959 | 16,048 | 14,106 | 24,978 | 32,697 | 97,406 | 17,329 | 28,599 | 4,526 | 4,526 | 54,980 | 1,942,743 | 2,695,768 |
| 1960 | 24,315 | 21,373 | 37,845 | 44,299 | 142,343 | 34,168 | 59,021 | 7,832 | 11,317 | 112,338 | 2,661,451 | 4,360,038 |
| 1961 | 24,701 | 21,712 | 38,446 | 88,038 | 187,638 | 18,691 | 35,600 | 2,466 | 5,896 | 62,653 | 4,774,462 | 8,928,065 |
| 1962 | 101,717 | 89,412 | 158,317 | 224,643 | 634,792 | 25,648 | 56,698 | 2,313 | 4,865 | 89,524 | 6,415,417 | 9,609,700 |
| 1963 | 184,320 | 162,023 | 286,885 | 210,689 | 953,915 | 45,335 | 101,874 | 4,692 | 10,230 | 162,131 | 21,107,401 | 26,893,011 |
| 1964 | 336,951 | 296,274 | 524,482 | 758,148 | 2,116,943 | 326,450 | 106,305 | 5,567 | 12,214 | 450,536 | 34,315,015 | 44,498,085 |
| 1965 | 706,552 | 422,702 | 1,066,478 | 2,717,392 | 5,357,306 | 705,071 | 51,484 | 3,222 | 8,107 | 767,884 | 60,512,252 | 65,023,445 |
| 1966 | 1,332,650 | 16,558 | 1,660,662 | 8,157,250 | 11,794,530 | 2,514,000 | 48,000 | 2,000 | 5,000 | 2,569,000 | 115,520,056 | 123,243,056 |
| 1967 | 7,655,584 | 468,494 | 8,740,440 | 16,258,982 | 34,901,628 | 7,569,000 | 61,000 | 2,000 | 7,000 | 7,639,000 | 191,841,934 | 197,395,934 |
| 1968 | 16,065,574 | 522,064 | 18,217,502 | 22,006,556 | 60,938,182 | 1,160,000 | 63,000 | 2,000 | 7,000 | 1,232,000 | 240,967,170 | 243,029,170 |
| 1969 | 16,689,586 | 1,251,590 | 17,747,426 | 39,193,760 | 83,144,166 | 133,000 | 64,000 | 2,000 | 7,000 | 206,000 | 272,345,426 | 272,646,426 |
| 1970 | 3,920,634 | 6,270,612 | 6,995,196 | 7,319,610 | 26,981,510 | 0 | 62,000 | 2,000 | 7,000 | 71,000 | 168,715,376 | 168,753,376 |
| 1971 | 1,287,066 | 13,609,702 | 763,524 | 1,172,696 | 18,128,456 | 0 | 65,000 | 2,000 | 24,000 | 91,000 | 87,811,308 | 88,187,308 |
| 1972 | 192,852 | 6,367,038 | 254,214 | 1,779,498 | 8,723,118 | 0 | 269,000 | 32,000 | 73,000 | 374,000 | 18,438,032 | 18,812,032 |
| 1973 | 0 | 1,541,842 | 0 | 469,468 | 2,011,310 | 0 | 358,000 | 59,000 | 245,000 | 662,000 | 3,893,732 | 4,290,732 |
| 1974 | 0 | 320,446 | 0 | 269,798 | 590,244 | 0 | 782,000 | 58,000 | 277,000 | 1,117,000 | 2,467,938 | 2,856,938 |
| 1975 | 0 | 0 | 0 | 0 | 0 | 0 | 2,082,000 | 58,000 | 263,000 | 2,403,000 | 2,500,400 | 2,529,400 |
| 1976 | 0 | 0 | 0 | 0 | 0 | 0 | 6,034,000 | 58,000 | 182,000 | 6,274,000 | 8,514,200 | 8,680,200 |
| 1977 | 0 | 0 | 0 | 0 | 0 | 25,000 | 7,327,000 | 443,000 | 239,000 | 8,034,000 | 11,930,000 | 12,150,000 |
| 1978 | 0 | 0 | 0 | 0 | 0 | 400,000 | 9,992,000 | 1,630,000 | 3,067,000 | 15,089,000 | 17,426,600 | 19,696,600 |
| 1979 | 0 | 0 | 0 | 0 | 0 | 150,000 | 4,312,000 | 429,000 | 3,002,000 | 7,893,000 | 7,893,000 | 11,480,000 |
| 1980 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1981 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,004,194 | 1,004,194 |
| 1982 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,006,440 | 2,006,440 |
| 1983 | 0 | 0 | 0 | 0 | 0 | 0 | 60,000 | 0 | 0 | 60,000 | 4,073,854 | 4,073,854 |
| 1984 | 0 | 0 | 0 | 0 | 0 | 0 | 765,000 | 0 | 0 | 765,000 | 3,774,660 | 3,774,660 |
| 1985 | 0 | 0 | 0 | 0 | 0 | 0 | 315,000 | 0 | 0 | 315,000 | 315,000 | 315,000 |
| 1986 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1987 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12,000 |
| 1988 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100,000 |
| 1989 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 160,000 |
| 1990 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1991 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1992 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1993 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1994 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1995 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1996 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1997 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1998 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1999 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 48,564,519 | 31,418,774 | 56,556,814 | 100,738,346 | 256,843,020 | 13,123,692 | 33,098,581 | 2,809,618 | 7,462,155 | 56,494,046 | 1,296,177,627 | 1,351,950,867 |

TABLE B-8

DIRECT ANNUAL OPERATING COSTS[1] OF PUMPING AND POWER RECOVERY PLANTS

(in dollars)



| CALENDAR YEAR | NORTH BAY AQUEDUCT | | SOUTH BAY AQUEDUCT | CALIFORNIA AQUEDUCT | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Reach 1 | Reach 3 | Reach 1 | Reach 1 | Reach 4 | Reach 14A | Reach 15 | Reach 16 | Reach 17C |
| | Calhoun Pumping Plant | Cordelia Pumping Plant | South Bay Pumping Plant[2] | Delta Pumping Plant | Dos Amigos Pumping Plant | Buena Vista Pumping Plant | Wheeler Ridge Pumping Plant | Wind Gap Pumping Plant | Tehachapi Pumping Plant |
| 1961 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 62 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 63 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 66 | 0 | 0 | 229,000 | 0 | 0 | 0 | 0 | 0 | 0 |
| 67 | 0 | 0 | 293,000 | 190,000 | 0 | 0 | 0 | 0 | 0 |
| 68 | 0 | 15,000 | 392,000 | 411,000 | 297,000 | 0 | 0 | 0 | 0 |
| 69 | 0 | 17,000 | 419,000 | 824,000 | 296,000 | 0 | 0 | 0 | 0 |
| 1970 | 0 | 19,000 | 451,000 | 515,000 | 290,000 | 93,000 | 159,000 | 313,000 | 430,000 |
| 71 | 0 | 21,000 | 440,000 | 802,000 | 512,000 | 537,000 | 625,000 | 1,293,000 | 3,486,000 |
| 72 | 0 | 21,000 | 455,000 | 1,262,000 | 716,000 | 916,000 | 1,056,000 | 2,243,000 | 6,769,000 |
| 73 | 0 | 21,000 | 458,000 | 1,210,000 | 911,000 | 1,017,000 | 1,176,000 | 2,514,000 | 7,499,000 |
| 74 | 0 | 25,000 | 488,000 | 1,392,000 | 981,000 | 938,000 | 1,104,000 | 2,331,000 | 6,396,000 |
| 75 | 0 | 32,000 | 437,000 | 1,403,000 | 953,000 | 886,000 | 1,032,000 | 2,197,000 | 6,100,000 |
| 76 | 0 | 33,000 | 439,000 | 1,355,000 | 987,000 | 933,000 | 1,087,000 | 2,299,000 | 6,551,000 |
| 77 | 0 | 34,000 | 445,000 | 1,588,000 | 1,123,000 | 1,071,000 | 1,388,000 | 2,677,000 | 7,908,000 |
| 78 | 0 | 35,000 | 429,000 | 1,395,000 | 1,254,000 | 1,299,000 | 1,540,000 | 3,008,000 | 9,151,000 |
| 79 | 0 | 40,000 | 441,000 | 1,472,000 | 1,412,000 | 1,468,000 | 1,740,000 | 3,432,000 | 10,694,000 |
| 1980 | 15,000 | 47,000 | 433,000 | 1,564,000 | 1,552,000 | 1,614,000 | 1,905,000 | 3,798,000 | 12,162,000 |
| 81 | 6,000 | 48,000 | 436,000 | 1,692,000 | 1,657,000 | 1,734,000 | 2,059,000 | 4,151,000 | 13,445,000 |
| 82 | 6,000 | 39,000 | 465,000 | 1,916,000 | 1,807,000 | 1,874,000 | 2,229,000 | 4,469,000 | 14,654,000 |
| 83 | 6,000 | 44,000 | 484,000 | 2,083,000 | 2,017,000 | 2,099,000 | 2,458,000 | 4,983,000 | 16,381,000 |
| 84 | 6,000 | 61,000 | 472,000 | 1,944,000 | 2,098,000 | 2,171,000 | 2,560,000 | 5,176,000 | 17,136,000 |
| 85 | 6,000 | 60,000 | 437,000 | 1,672,000 | 2,057,000 | 2,189,000 | 2,481,000 | 5,026,000 | 16,695,000 |
| 86 | 6,000 | 44,000 | 416,000 | 2,734,000 | 1,682,000 | 2,021,000 | 2,403,000 | 4,859,000 | 16,093,000 |
| 87 | 6,000 | 44,000 | 412,000 | 2,436,000 | 1,735,000 | 2,066,000 | 2,448,000 | 5,025,000 | 16,720,000 |
| 88 | 6,000 | 46,000 | 416,000 | 2,372,000 | 1,864,000 | 2,198,000 | 2,637,000 | 5,372,000 | 18,014,000 |
| 89 | 6,000 | 48,000 | 440,000 | 2,438,000 | 1,941,000 | 2,341,000 | 2,759,000 | 5,670,000 | 19,111,000 |
| 1990 | 6,000 | 50,000 | 454,000 | 2,742,000 | 2,348,000 | 2,514,000 | 2,759,000 | 5,651,000 | 19,104,000 |
| 91 | 6,000 | 50,000 | 458,000 | 2,747,000 | 2,365,000 | 2,536,000 | 2,889,000 | 5,676,000 | 19,156,000 |
| 92 | 6,000 | 50,000 | 465,000 | 2,813,000 | 2,365,000 | 2,536,000 | 2,889,000 | 5,676,000 | 19,156,000 |
| 93 | 6,000 | 50,000 | 469,000 | 2,815,000 | 2,365,000 | 2,536,000 | 2,889,000 | 5,676,000 | 19,156,000 |
| 94 | 6,000 | 50,000 | 474,000 | 2,817,000 | 2,365,000 | 2,536,000 | 2,889,000 | 5,676,000 | 19,156,000 |
| 95 | 6,000 | 50,000 | 476,000 | 2,817,000 | 2,365,000 | 2,536,000 | 2,889,000 | 5,676,000 | 19,156,000 |
| 96 | 6,000 | 50,000 | 478,000 | 2,819,000 | 2,365,000 | 2,536,000 | 2,889,000 | 5,676,000 | 19,156,000 |
| 97 | 6,000 | 50,000 | 480,000 | 2,819,000 | 2,365,000 | 2,536,000 | 2,889,000 | 5,676,000 | 19,156,000 |
| 98 | 6,000 | 50,000 | 480,000 | 2,819,000 | 2,365,000 | 2,536,000 | 2,889,000 | 5,676,000 | 19,156,000 |
| 99 | 6,000 | 50,000 | 480,000 | 2,819,000 | 2,365,000 | 2,536,000 | 2,889,000 | 5,676,000 | 19,156,000 |
| 2000[3] | 6,000 | 50,000 | 480,000 | 2,819,000 | 2,365,000 | 2,536,000 | 2,889,000 | 5,676,000 | 19,156,000 |

Footnotes on Sheet 2.

TABLE B-8 (Continued)

DIRECT ANNUAL OPERATING COSTS[1] OF PUMPING AND POWER RECOVERY PLANTS

(in dollars)



| CALENDAR YEAR | CALIFORNIA AQUEDUCT (Continued) | | | | | | | | GRAND TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| | Reach 18A | Reach 22B | Reaches 26, 27 | Reach 29A | Reach 29C | Reach 29E | Reach 31 | Reach 33 | |
| | Cottonwood Powerplant | Pearblossom Pumping Plant | Upper and Lower Devil Canyon Powerplants | Oso Pumping Plant | Pyramid Powerplant | Castaic Powerplant | Las Perillas and Badger Hill Pumping Plants | Devil's Den Sawtooth and Polonio PP's and San Luis Obispo Pwp | |
| 1961 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 62 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 63 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 229,000 |
| 67 | 0 | 0 | 0 | 0 | 0 | 0 | 16,000 | 0 | 499,000 |
| 68 | 0 | 0 | 0 | 0 | 0 | 0 | 166,000 | 0 | 1,281,000 |
| 69 | 0 | 0 | 0 | 0 | 0 | 0 | 155,000 | 0 | 1,711,000 |
| 1970 | 0 | 0 | 0 | 48,000 | - 66,000 | - 48,000 | 145,000 | 0 | 2,349,000 |
| 71 | - 24,000 | 173,000 | - 622,000 | 370,000 | - 611,000 | - 385,000 | 143,000 | 0 | 6,760,000 |
| 72 | - 81,000 | 837,000 | -1,050,000 | 448,000 | - 666,000 | - 709,000 | 152,000 | 0 | 12,369,000 |
| 73 | - 90,000 | 1,087,000 | - 624,000 | 499,000 | - 900,000 | -1,714,000 | 178,000 | 0 | 13,242,000 |
| 74 | - 98,000 | 906,000 | - 586,000 | 414,000 | -1,018,000 | -2,677,000 | 199,000 | 0 | 10,795,000 |
| 75 | - 99,000 | 664,000 | - 568,000 | 459,000 | -1,027,000 | -2,313,000 | 193,000 | 0 | 10,349,000 |
| 76 | -114,000 | 767,000 | - 753,000 | 477,000 | -1,176,000 | -2,814,000 | 194,000 | 0 | 10,265,000 |
| 77 | -143,000 | 744,000 | -1,446,000 | 528,000 | -1,535,000 | -2,886,000 | 199,000 | 0 | 11,695,000 |
| 78 | -176,000 | 986,000 | -1,701,000 | 698,000 | -1,602,000 | -3,387,000 | 225,000 | 0 | 13,154,000 |
| 79 | -172,000 | 1,161,000 | -1,895,000 | 784,000 | -1,742,000 | -3,898,000 | 259,000 | 0 | 15,196,000 |
| 1980 | -194,000 | 1,023,000 | -1,961,000 | 716,000 | -2,006,000 | -4,267,000 | 190,000 | 203,000 | 16,794,000 |
| 81 | -227,000 | 1,157,000 | -2,224,000 | 764,000 | -2,248,000 | -4,786,000 | 184,000 | 210,000 | 18,058,000 |
| 82 | -293,000 | 1,855,000 | -2,267,000 | 955,000 | -2,491,000 | -4,833,000 | 184,000 | 226,000 | 20,795,000 |
| 83 | -284,000 | 1,963,000 | -2,720,000 | 1,089,000 | -2,495,000 | -5,657,000 | 181,000 | 216,000 | 22,848,000 |
| 84 | -293,000 | 1,920,000 | -2,890,000 | 1,129,000 | -2,458,000 | -5,636,000 | 220,000 | 393,000 | 24,009,000 |
| 85 | -333,000 | 1,854,000 | -3,220,000 | 1,006,000 | -2,665,000 | -5,893,000 | 203,000 | 295,000 | 21,870,000 |
| 86 | -313,000 | 1,791,000 | -2,741,000 | 1,012,000 | -2,504,000 | -4,843,000 | 152,000 | 356,000 | 23,168,000 |
| 87 | -339,000 | 1,675,000 | -2,813,000 | 1,081,000 | -2,835,000 | -4,902,000 | 155,000 | 356,000 | 23,270,000 |
| 88 | -346,000 | 1,771,000 | -2,961,000 | 1,243,000 | -3,119,000 | -5,071,000 | 192,000 | 408,000 | 25,042,000 |
| 89 | -376,000 | 1,795,000 | -3,050,000 | 1,294,000 | -3,315,000 | -5,177,000 | 189,000 | 472,000 | 26,586,000 |
| 1990 | -373,000 | 1,863,000 | -3,231,000 | 1,307,000 | -3,260,000 | -5,390,000 | 257,000 | 529,000 | 27,330,000 |
| 91 | -365,000 | 1,926,000 | -3,265,000 | 1,279,000 | -3,190,000 | -5,398,000 | 261,000 | 537,000 | 27,668,000 |
| 92 | -365,000 | 1,926,000 | -3,265,000 | 1,279,000 | -3,190,000 | -5,398,000 | 261,000 | 537,000 | 27,741,000 |
| 93 | -365,000 | 1,926,000 | -3,265,000 | 1,279,000 | -3,190,000 | -5,398,000 | 261,000 | 537,000 | 27,747,000 |
| 94 | -365,000 | 1,926,000 | -3,265,000 | 1,279,000 | -3,190,000 | -5,398,000 | 261,000 | 537,000 | 27,754,000 |
| 95 | -365,000 | 1,926,000 | -3,265,000 | 1,279,000 | -3,190,000 | -5,398,000 | 261,000 | 537,000 | 27,756,000 |
| 96 | -365,000 | 1,926,000 | -3,265,000 | 1,279,000 | -3,190,000 | -5,398,000 | 261,000 | 537,000 | 27,760,000 |
| 97 | -365,000 | 1,926,000 | -3,265,000 | 1,279,000 | -3,190,000 | -5,398,000 | 261,000 | 537,000 | 27,762,000 |
| 98 | -365,000 | 1,926,000 | -3,265,000 | 1,279,000 | -3,190,000 | -5,398,000 | 261,000 | 537,000 | 27,762,000 |
| 99 | -365,000 | 1,926,000 | -3,265,000 | 1,279,000 | -3,190,000 | -5,398,000 | 261,000 | 537,000 | 27,762,000 |
| 2000[3] | -365,000 | 1,926,000 | -3,265,000 | 1,279,000 | -3,190,000 | -5,398,000 | 261,000 | 537,000 | 27,762,000 |

1/ Includes only the costs of the project transportation facilities for electrical power and energy, materials, supplies and replacements associated with the operation of electro-mechanical units, prior to allocation between construction water, losses, deliveries, recreation and excess capacity.

2/ The estimated costs of Del Valle Pumping Plant have been combined with those of the South Bay Pumping Plant to simplify the allocation procedure.

3/ And thereafter for the remainder of the project repayment period.

TABLE B-9

ACTUAL AND PROJECTED MINIMUM OPERATION, MAINTENANCE, POWER, AND REPLACEMENT COSTS ALLOCATED TO TRANSPORTATION FOR EACH AQUEDUCT REACH

(in dollars)



| CALENDAR YEAR | NORTH BAY AQUEDUCT | | | | SOUTH BAY AQUEDUCT | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Reach 1 | Reach 2 | Reach 3 | Total | Reach 1 | Reach 2 | Reach 4 | Reach 5 | Reach 6 | Reach 7 | Reach 8 |
| 1960 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1961 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1962 | 0 | 0 | 0 | 0 | 62,918 | 5,678 | 0 | 0 | 0 | 0 | 0 |
| 1963 | 0 | 0 | 0 | 0 | 134,818 | 17,798 | 0 | 0 | 0 | 0 | 0 |
| 1964 | 0 | 0 | 0 | 0 | 136,317 | 29,423 | 0 | 0 | 0 | 0 | 0 |
| 1965 | 0 | 0 | 0 | 0 | 236,619 | 22,579 | 43,910 | 0 | 1,856 | 6,188 | 3,197 |
| 1966 | 0 | 0 | 0 | 0 | 142,000 | 16,000 | 63,000 | 0 | 1,000 | 6,000 | 14,000 |
| 1967 | 0 | 0 | 0 | 0 | 136,000 | 17,000 | 66,000 | 0 | 1,000 | 7,000 | 14,000 |
| 1968 | 0 | 0 | 28,000 | 28,000 | 120,000 | 17,000 | 67,000 | 0 | 1,000 | 7,000 | 15,000 |
| 1969 | 0 | 0 | 28,000 | 28,000 | 138,000 | 18,000 | 68,000 | 8,000 | 1,000 | 7,000 | 15,000 |
| 1970 | 0 | 0 | 28,000 | 28,000 | 142,000 | 17,000 | 66,000 | 8,000 | 1,000 | 7,000 | 15,000 |
| 1971 | 0 | 0 | 28,000 | 28,000 | 141,000 | 17,000 | 67,000 | 8,000 | 1,000 | 7,000 | 15,000 |
| 1972 | 0 | 0 | 28,000 | 28,000 | 134,000 | 17,000 | 67,000 | 8,000 | 1,000 | 7,000 | 15,000 |
| 1973 | 0 | 0 | 27,000 | 27,000 | 132,000 | 17,000 | 66,000 | 9,000 | 1,000 | 7,000 | 14,000 |
| 1974 | 0 | 0 | 27,000 | 27,000 | 133,000 | 17,000 | 65,000 | 9,000 | 1,000 | 7,000 | 14,000 |
| 1975 | 0 | 0 | 27,000 | 27,000 | 130,000 | 17,000 | 65,000 | 9,000 | 1,000 | 7,000 | 14,000 |
| 1976 | 0 | 0 | 27,000 | 27,000 | 130,000 | 17,000 | 65,000 | 9,000 | 1,000 | 7,000 | 14,000 |
| 1977 | 0 | 0 | 27,000 | 27,000 | 130,000 | 17,000 | 65,000 | 9,000 | 1,000 | 7,000 | 14,000 |
| 1978 | 0 | 0 | 27,000 | 27,000 | 129,000 | 17,000 | 65,000 | 9,000 | 1,000 | 7,000 | 14,000 |
| 1979 | 0 | 0 | 27,000 | 27,000 | 129,000 | 17,000 | 65,000 | 9,000 | 1,000 | 7,000 | 14,000 |
| 1980 | 81,000 | 41,000 | 22,000 | 144,000 | 129,000 | 17,000 | 65,000 | 9,000 | 1,000 | 7,000 | 14,000 |
| 1981 | 80,000 | 41,000 | 22,000 | 143,000 | 129,000 | 17,000 | 65,000 | 9,000 | 1,000 | 7,000 | 14,000 |
| 1982 | 80,000 | 41,000 | 22,000 | 143,000 | 129,000 | 17,000 | 65,000 | 9,000 | 1,000 | 7,000 | 14,000 |
| 1983 | 80,000 | 41,000 | 22,000 | 143,000 | 130,000 | 17,000 | 65,000 | 9,000 | 1,000 | 7,000 | 14,000 |
| 1984 | 80,000 | 41,000 | 22,000 | 143,000 | 129,000 | 17,000 | 65,000 | 9,000 | 1,000 | 7,000 | 14,000 |
| 1985 | 80,000 | 41,000 | 22,000 | 143,000 | 128,000 | 17,000 | 65,000 | 9,000 | 1,000 | 7,000 | 14,000 |
| 1986 | 80,000 | 41,000 | 22,000 | 143,000 | 127,000 | 17,000 | 65,000 | 9,000 | 1,000 | 7,000 | 14,000 |
| 1987 | 80,000 | 41,000 | 22,000 | 143,000 | 127,000 | 17,000 | 65,000 | 9,000 | 1,000 | 7,000 | 14,000 |
| 1988 | 80,000 | 41,000 | 22,000 | 143,000 | 127,000 | 17,000 | 65,000 | 9,000 | 1,000 | 7,000 | 14,000 |
| 1989 | 80,000 | 41,000 | 22,000 | 143,000 | 127,000 | 17,000 | 65,000 | 9,000 | 1,000 | 7,000 | 14,000 |
| 1990 | 80,000 | 41,000 | 22,000 | 143,000 | 127,000 | 17,000 | 65,000 | 9,000 | 1,000 | 7,000 | 14,000 |
| 1991 | 80,000 | 41,000 | 22,000 | 143,000 | 127,000 | 17,000 | 65,000 | 9,000 | 1,000 | 7,000 | 14,000 |
| 1992 | 80,000 | 41,000 | 22,000 | 143,000 | 126,000 | 17,000 | 65,000 | 9,000 | 1,000 | 7,000 | 14,000 |
| 1993 | 80,000 | 41,000 | 22,000 | 143,000 | 126,000 | 17,000 | 65,000 | 9,000 | 1,000 | 7,000 | 14,000 |
| 1994 | 80,000 | 41,000 | 22,000 | 143,000 | 126,000 | 17,000 | 65,000 | 9,000 | 1,000 | 7,000 | 14,000 |
| 1995 | 80,000 | 41,000 | 22,000 | 143,000 | 126,000 | 17,000 | 65,000 | 9,000 | 1,000 | 7,000 | 14,000 |
| 1996 | 80,000 | 41,000 | 22,000 | 143,000 | 126,000 | 17,000 | 65,000 | 9,000 | 1,000 | 7,000 | 14,000 |
| 1997 | 80,000 | 41,000 | 22,000 | 143,000 | 126,000 | 17,000 | 65,000 | 9,000 | 1,000 | 7,000 | 14,000 |
| 1998 | 80,000 | 41,000 | 22,000 | 143,000 | 126,000 | 17,000 | 65,000 | 9,000 | 1,000 | 7,000 | 14,000 |
| 1999 | 80,000 | 41,000 | 22,000 | 143,000 | 126,000 | 17,000 | 65,000 | 9,000 | 1,000 | 7,000 | 14,000 |
| 2000* | 80,000 | 41,000 | 22,000 | 143,000 | 126,000 | 17,000 | 65,000 | 9,000 | 1,000 | 7,000 | 14,000 |

* And thereafter for the remainder of the project repayment period.

TABLE B-9 (Continued)

ACTUAL AND PROJECTED MINIMUM OPERATION, MAINTENANCE, POWER,
AND REPLACEMENT COSTS ALLOCATED TO TRANSPORTATION
FOR EACH AQUEDUCT REACH

(in dollars)



| CALENDAR YEAR | SOUTH BAY AQUEDUCT (Continued) | | CALIFORNIA AQUEDUCT | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | NORTH SAN JOAQUIN DIVISION | | | SAN LUIS DIVISION | | | | | |
| | Reach 9 | Total | Reach 1 | Reach 2 | Subtotal | Reach 3 | Reach 4 | Reach 5 | Reach 6 | Reach 7 | Subtotal |
| 1960 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1961 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1962 | 0 | 68,596 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1963 | 0 | 152,616 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1964 | 0 | 165,740 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1965 | 5,517 | 319,866 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1966 | 26,000 | 268,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1967 | 28,000 | 269,000 | 405,000 | 0 | 405,000 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1968 | 28,000 | 255,000 | 1,161,000 | 668,000 | 1,829,000 | 56,000 | 399,000 | 194,000 | 67,000 | 106,000 | 822,000 |
| 1969 | 28,000 | 283,000 | 1,428,000 | 663,000 | 2,091,000 | 65,000 | 420,000 | 224,000 | 78,000 | 122,000 | 909,000 |
| 1970 | 28,000 | 284,000 | 1,383,000 | 700,000 | 2,083,000 | 65,000 | 404,000 | 222,000 | 77,000 | 122,000 | 890,000 |
| 1971 | 28,000 | 284,000 | 1,398,000 | 688,000 | 2,086,000 | 67,000 | 424,000 | 229,000 | 79,000 | 125,000 | 924,000 |
| 1972 | 28,000 | 277,000 | 1,362,000 | 687,000 | 2,049,000 | 66,000 | 420,000 | 228,000 | 79,000 | 124,000 | 917,000 |
| 1973 | 28,000 | 274,000 | 1,323,000 | 676,000 | 1,999,000 | 65,000 | 430,000 | 224,000 | 78,000 | 122,000 | 919,000 |
| 1974 | 28,000 | 274,000 | 1,343,000 | 675,000 | 2,018,000 | 65,000 | 438,000 | 224,000 | 78,000 | 122,000 | 927,000 |
| 1975 | 27,000 | 270,000 | 1,338,000 | 674,000 | 2,012,000 | 65,000 | 432,000 | 224,000 | 77,000 | 122,000 | 920,000 |
| 1976 | 27,000 | 270,000 | 1,316,000 | 674,000 | 1,990,000 | 65,000 | 425,000 | 223,000 | 77,000 | 122,000 | 912,000 |
| 1977 | 27,000 | 270,000 | 1,327,000 | 674,000 | 2,001,000 | 65,000 | 428,000 | 223,000 | 77,000 | 122,000 | 915,000 |
| 1978 | 27,000 | 269,000 | 1,297,000 | 674,000 | 1,971,000 | 65,000 | 430,000 | 223,000 | 77,000 | 122,000 | 917,000 |
| 1979 | 27,000 | 269,000 | 1,294,000 | 674,000 | 1,968,000 | 65,000 | 434,000 | 223,000 | 77,000 | 122,000 | 921,000 |
| 1980 | 27,000 | 269,000 | 1,290,000 | 674,000 | 1,964,000 | 65,000 | 440,000 | 223,000 | 77,000 | 122,000 | 927,000 |
| 1981 | 27,000 | 269,000 | 1,291,000 | 674,000 | 1,965,000 | 65,000 | 439,000 | 223,000 | 77,000 | 122,000 | 926,000 |
| 1982 | 27,000 | 269,000 | 1,299,000 | 674,000 | 1,973,000 | 65,000 | 441,000 | 223,000 | 77,000 | 122,000 | 928,000 |
| 1983 | 27,000 | 270,000 | 1,301,000 | 674,000 | 1,975,000 | 65,000 | 445,000 | 223,000 | 77,000 | 122,000 | 932,000 |
| 1984 | 27,000 | 269,000 | 1,286,000 | 674,000 | 1,960,000 | 65,000 | 443,000 | 223,000 | 77,000 | 122,000 | 930,000 |
| 1985 | 27,000 | 268,000 | 1,264,000 | 674,000 | 1,938,000 | 65,000 | 436,000 | 223,000 | 77,000 | 122,000 | 923,000 |
| 1986 | 27,000 | 267,000 | 1,315,000 | 674,000 | 1,989,000 | 65,000 | 413,000 | 223,000 | 77,000 | 122,000 | 900,000 |
| 1987 | 27,000 | 267,000 | 1,293,000 | 674,000 | 1,967,000 | 65,000 | 412,000 | 223,000 | 77,000 | 122,000 | 899,000 |
| 1988 | 27,000 | 267,000 | 1,284,000 | 674,000 | 1,958,000 | 65,000 | 413,000 | 223,000 | 77,000 | 122,000 | 900,000 |
| 1989 | 27,000 | 267,000 | 1,284,000 | 674,000 | 1,958,000 | 65,000 | 413,000 | 223,000 | 77,000 | 122,000 | 900,000 |
| 1990 | 27,000 | 267,000 | 1,295,000 | 674,000 | 1,969,000 | 65,000 | 427,000 | 223,000 | 77,000 | 122,000 | 914,000 |
| 1991 | 27,000 | 267,000 | 1,294,000 | 674,000 | 1,968,000 | 65,000 | 428,000 | 223,000 | 77,000 | 122,000 | 915,000 |
| 1992 | 27,000 | 266,000 | 1,297,000 | 674,000 | 1,971,000 | 65,000 | 428,000 | 223,000 | 77,000 | 122,000 | 915,000 |
| 1993 | 27,000 | 266,000 | 1,297,000 | 674,000 | 1,971,000 | 65,000 | 428,000 | 223,000 | 77,000 | 122,000 | 915,000 |
| 1994 | 27,000 | 266,000 | 1,297,000 | 674,000 | 1,971,000 | 65,000 | 428,000 | 223,000 | 77,000 | 122,000 | 915,000 |
| 1995 | 27,000 | 266,000 | 1,297,000 | 674,000 | 1,971,000 | 65,000 | 428,000 | 223,000 | 77,000 | 122,000 | 915,000 |
| 1996 | 27,000 | 266,000 | 1,297,000 | 674,000 | 1,971,000 | 65,000 | 428,000 | 223,000 | 77,000 | 122,000 | 915,000 |
| 1997 | 27,000 | 266,000 | 1,297,000 | 674,000 | 1,971,000 | 65,000 | 428,000 | 223,000 | 77,000 | 122,000 | 915,000 |
| 1998 | 27,000 | 266,000 | 1,297,000 | 674,000 | 1,971,000 | 65,000 | 428,000 | 223,000 | 77,000 | 122,000 | 915,000 |
| 1999 | 27,000 | 266,000 | 1,297,000 | 674,000 | 1,971,000 | 65,000 | 428,000 | 223,000 | 77,000 | 122,000 | 915,000 |
| 2000* | 27,000 | 266,000 | 1,297,000 | 674,000 | 1,971,000 | 65,000 | 428,000 | 223,000 | 77,000 | 122,000 | 915,000 |

* And thereafter for the remainder of the project repayment period.

TABLE B-9 (Continued)

ACTUAL AND PROJECTED MINIMUM OPERATION, MAINTENANCE, POWER,
AND REPLACEMENT COSTS ALLOCATED TO TRANSPORTATION
FOR EACH AQUEDUCT REACH

(in dollars)



| CALENDAR YEAR | CALIFORNIA AQUEDUCT (Continued) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | SOUTH SAN JOAQUIN DIVISION | | | | | | | | | | |
| | Reach 8 | Reach 9 | Reach 10A | Reach 11B | Reach 12D | Reach 12E | Reach 13B | Reach 14A | Reach 14B | Reach 14C | Reach 15 |
| 1960 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1961 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1963 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1964 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1965 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1966 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1967 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1968 | 102,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1969 | 128,000 | 128,000 | 132,000 | 89,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1970 | 123,000 | 123,000 | 125,000 | 85,000 | 152,000 | 91,000 | 125,000 | 0 | 0 | 0 | 0 |
| 1971 | 150,000 | 150,000 | 154,000 | 105,000 | 185,000 | 113,000 | 155,000 | 426,000 | 120,000 | 100,000 | 291,000 |
| 1972 | 152,000 | 152,000 | 156,000 | 108,000 | 190,000 | 114,000 | 156,000 | 443,000 | 122,000 | 102,000 | 308,000 |
| 1973 | 150,000 | 150,000 | 154,000 | 106,000 | 189,000 | 113,000 | 156,000 | 437,000 | 121,000 | 101,000 | 304,000 |
| 1974 | 150,000 | 150,000 | 154,000 | 106,000 | 188,000 | 113,000 | 155,000 | 434,000 | 120,000 | 100,000 | 306,000 |
| 1975 | 150,000 | 150,000 | 154,000 | 105,000 | 188,000 | 112,000 | 155,000 | 429,000 | 120,000 | 100,000 | 301,000 |
| 1976 | 150,000 | 150,000 | 154,000 | 105,000 | 188,000 | 112,000 | 155,000 | 425,000 | 120,000 | 100,000 | 294,000 |
| 1977 | 150,000 | 150,000 | 154,000 | 105,000 | 188,000 | 112,000 | 155,000 | 426,000 | 120,000 | 100,000 | 305,000 |
| 1978 | 150,000 | 150,000 | 154,000 | 105,000 | 188,000 | 112,000 | 155,000 | 433,000 | 120,000 | 100,000 | 306,000 |
| 1979 | 150,000 | 150,000 | 154,000 | 105,000 | 188,000 | 112,000 | 155,000 | 436,000 | 120,000 | 100,000 | 308,000 |
| 1980 | 150,000 | 150,000 | 154,000 | 105,000 | 188,000 | 112,000 | 155,000 | 435,000 | 120,000 | 100,000 | 308,000 |
| 1981 | 150,000 | 150,000 | 154,000 | 105,000 | 188,000 | 112,000 | 155,000 | 436,000 | 120,000 | 100,000 | 308,000 |
| 1982 | 150,000 | 150,000 | 154,000 | 105,000 | 188,000 | 112,000 | 155,000 | 435,000 | 120,000 | 100,000 | 309,000 |
| 1983 | 150,000 | 150,000 | 154,000 | 105,000 | 188,000 | 112,000 | 155,000 | 438,000 | 120,000 | 100,000 | 311,000 |
| 1984 | 150,000 | 150,000 | 154,000 | 105,000 | 188,000 | 112,000 | 155,000 | 436,000 | 120,000 | 100,000 | 309,000 |
| 1985 | 150,000 | 150,000 | 154,000 | 105,000 | 188,000 | 112,000 | 155,000 | 432,000 | 120,000 | 100,000 | 302,000 |
| 1986 | 150,000 | 150,000 | 154,000 | 105,000 | 188,000 | 112,000 | 155,000 | 422,000 | 120,000 | 100,000 | 295,000 |
| 1987 | 150,000 | 150,000 | 154,000 | 105,000 | 188,000 | 112,000 | 155,000 | 420,000 | 120,000 | 100,000 | 293,000 |
| 1988 | 150,000 | 150,000 | 154,000 | 105,000 | 188,000 | 112,000 | 155,000 | 421,000 | 120,000 | 100,000 | 294,000 |
| 1989 | 150,000 | 150,000 | 154,000 | 105,000 | 188,000 | 112,000 | 155,000 | 422,000 | 120,000 | 100,000 | 295,000 |
| 1990 | 150,000 | 150,000 | 154,000 | 105,000 | 188,000 | 112,000 | 155,000 | 426,000 | 120,000 | 100,000 | 294,000 |
| 1991 | 150,000 | 150,000 | 154,000 | 105,000 | 188,000 | 112,000 | 155,000 | 426,000 | 120,000 | 100,000 | 297,000 |
| 1992 | 150,000 | 150,000 | 154,000 | 105,000 | 188,000 | 112,000 | 155,000 | 426,000 | 120,000 | 100,000 | 297,000 |
| 1993 | 150,000 | 150,000 | 154,000 | 105,000 | 188,000 | 112,000 | 155,000 | 426,000 | 120,000 | 100,000 | 297,000 |
| 1994 | 150,000 | 150,000 | 154,000 | 105,000 | 188,000 | 112,000 | 155,000 | 426,000 | 120,000 | 100,000 | 297,000 |
| 1995 | 150,000 | 150,000 | 154,000 | 105,000 | 188,000 | 112,000 | 155,000 | 426,000 | 120,000 | 100,000 | 297,000 |
| 1996 | 150,000 | 150,000 | 154,000 | 105,000 | 188,000 | 112,000 | 155,000 | 426,000 | 120,000 | 100,000 | 297,000 |
| 1997 | 150,000 | 150,000 | 154,000 | 105,000 | 188,000 | 112,000 | 155,000 | 426,000 | 120,000 | 100,000 | 297,000 |
| 1998 | 150,000 | 150,000 | 154,000 | 105,000 | 188,000 | 112,000 | 155,000 | 426,000 | 120,000 | 100,000 | 297,000 |
| 1999 | 150,000 | 150,000 | 154,000 | 105,000 | 188,000 | 112,000 | 155,000 | 426,000 | 120,000 | 100,000 | 297,000 |
| 2000* | 150,000 | 150,000 | 154,000 | 105,000 | 188,000 | 112,000 | 155,000 | 426,000 | 120,000 | 100,000 | 297,000 |

* And thereafter for the remainder of the project repayment period.

TABLE B-9 (Continued)

ACTUAL AND PROJECTED MINIMUM OPERATION, MAINTENANCE, POWER, AND REPLACEMENT COSTS ALLOCATED TO TRANSPORTATION FOR EACH AQUEDUCT REACH

(in dollars)



| CALENDAR YEAR | CALIFORNIA AQUEDUCT (Continued) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | SOUTH SAN JOAQUIN DIVISION | | TEHACHAPI DIVISION | | | MOJAVE DIVISION | | | | | |
| | Reach 16 | Subtotal | Reach 17C | Reach 17D | Subtotal | Reach 18A | Reach 19 | Reach 20 | Reach 21 | Reach 22A | Reach 22B |
| 1960 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1961 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1963 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1964 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1965 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1966 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1967 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1968 | 0 | 102,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1969 | 0 | 477,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1970 | 0 | 824,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1971 | 704,000 | 2,653,000 | 1,734,000 | 15,000 | 1,749,000 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1972 | 750,000 | 2,753,000 | 1,907,000 | 16,000 | 1,923,000 | 45,000 | 260,000 | 298,000 | 82,000 | 71,000 | 862,000 |
| 1973 | 738,000 | 2,719,000 | 1,870,000 | 16,000 | 1,886,000 | 38,000 | 255,000 | 294,000 | 80,000 | 70,000 | 861,000 |
| 1974 | 739,000 | 2,715,000 | 1,838,000 | 16,000 | 1,854,000 | 37,000 | 255,000 | 293,000 | 80,000 | 70,000 | 849,000 |
| 1975 | 730,000 | 2,694,000 | 1,825,000 | 16,000 | 1,841,000 | 36,000 | 255,000 | 293,000 | 80,000 | 70,000 | 834,000 |
| 1976 | 717,000 | 2,670,000 | 1,799,000 | 16,000 | 1,815,000 | 35,000 | 255,000 | 292,000 | 80,000 | 70,000 | 835,000 |
| 1977 | 724,000 | 2,689,000 | 1,835,000 | 16,000 | 1,851,000 | 34,000 | 255,000 | 292,000 | 80,000 | 70,000 | 827,000 |
| 1978 | 727,000 | 2,700,000 | 1,856,000 | 16,000 | 1,872,000 | 33,000 | 255,000 | 292,000 | 80,000 | 70,000 | 839,000 |
| 1979 | 735,000 | 2,713,000 | 1,889,000 | 16,000 | 1,905,000 | 34,000 | 255,000 | 292,000 | 80,000 | 70,000 | 844,000 |
| 1980 | 735,000 | 2,712,000 | 1,899,000 | 16,000 | 1,915,000 | 33,000 | 255,000 | 292,000 | 80,000 | 70,000 | 831,000 |
| 1981 | 737,000 | 2,715,000 | 1,911,000 | 16,000 | 1,927,000 | 33,000 | 255,000 | 292,000 | 80,000 | 70,000 | 831,000 |
| 1982 | 738,000 | 2,716,000 | 1,919,000 | 16,000 | 1,935,000 | 31,000 | 255,000 | 292,000 | 80,000 | 70,000 | 857,000 |
| 1983 | 743,000 | 2,726,000 | 1,945,000 | 16,000 | 1,961,000 | 33,000 | 255,000 | 292,000 | 80,000 | 70,000 | 853,000 |
| 1984 | 739,000 | 2,718,000 | 1,936,000 | 16,000 | 1,952,000 | 33,000 | 255,000 | 292,000 | 80,000 | 70,000 | 844,000 |
| 1985 | 725,000 | 2,693,000 | 1,890,000 | 16,000 | 1,906,000 | 33,000 | 255,000 | 292,000 | 80,000 | 70,000 | 836,000 |
| 1986 | 711,000 | 2,662,000 | 1,843,000 | 16,000 | 1,859,000 | 34,000 | 255,000 | 292,000 | 80,000 | 70,000 | 830,000 |
| 1987 | 708,000 | 2,655,000 | 1,835,000 | 16,000 | 1,851,000 | 33,000 | 255,000 | 292,000 | 80,000 | 70,000 | 824,000 |
| 1988 | 710,000 | 2,659,000 | 1,845,000 | 16,000 | 1,861,000 | 33,000 | 255,000 | 292,000 | 80,000 | 70,000 | 827,000 |
| 1989 | 713,000 | 2,664,000 | 1,859,000 | 16,000 | 1,875,000 | 33,000 | 255,000 | 292,000 | 80,000 | 70,000 | 826,000 |
| 1990 | 712,000 | 2,666,000 | 1,853,000 | 16,000 | 1,869,000 | 33,000 | 255,000 | 292,000 | 80,000 | 70,000 | 827,000 |
| 1991 | 712,000 | 2,669,000 | 1,852,000 | 16,000 | 1,868,000 | 33,000 | 255,000 | 292,000 | 80,000 | 70,000 | 829,000 |
| 1992 | 712,000 | 2,669,000 | 1,852,000 | 16,000 | 1,868,000 | 33,000 | 255,000 | 292,000 | 80,000 | 70,000 | 829,000 |
| 1993 | 712,000 | 2,669,000 | 1,852,000 | 16,000 | 1,868,000 | 33,000 | 255,000 | 292,000 | 80,000 | 70,000 | 829,000 |
| 1994 | 712,000 | 2,669,000 | 1,852,000 | 16,000 | 1,868,000 | 33,000 | 255,000 | 292,000 | 80,000 | 70,000 | 829,000 |
| 1995 | 712,000 | 2,669,000 | 1,852,000 | 16,000 | 1,868,000 | 33,000 | 255,000 | 292,000 | 80,000 | 70,000 | 829,000 |
| 1996 | 712,000 | 2,669,000 | 1,852,000 | 16,000 | 1,868,000 | 33,000 | 255,000 | 292,000 | 80,000 | 70,000 | 829,000 |
| 1997 | 712,000 | 2,669,000 | 1,852,000 | 16,000 | 1,868,000 | 33,000 | 255,000 | 292,000 | 80,000 | 70,000 | 829,000 |
| 1998 | 712,000 | 2,669,000 | 1,852,000 | 16,000 | 1,868,000 | 33,000 | 255,000 | 292,000 | 80,000 | 70,000 | 829,000 |
| 1999 | 712,000 | 2,669,000 | 1,852,000 | 16,000 | 1,868,000 | 33,000 | 255,000 | 292,000 | 80,000 | 70,000 | 829,000 |
| 2000* | 712,000 | 2,669,000 | 1,852,000 | 16,000 | 1,868,000 | 33,000 | 255,000 | 292,000 | 80,000 | 70,000 | 829,000 |

* And thereafter for the remainder of the project repayment period.

TABLE B-9 (Continued)

ACTUAL AND PROJECTED MINIMUM OPERATION, MAINTENANCE, POWER, AND REPLACEMENT COSTS ALLOCATED TO TRANSPORTATION FOR EACH AQUEDUCT REACH

(in dollars)



| CALENDAR YEAR | CALIFORNIA AQUEDUCT (Continued) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MOJAVE DIVISION (Continued) | | | SANTA ANA DIVISION | | | | | | | WEST BRANCH | |
| | Reach 23 | Reach 24 | Subtotal | Reach 25 | Reach 26 | Reach 27 | Reach 28A | Reach 28B | Reach 28C | Subtotal | Reach 29A | Reach 29B |
| 1960 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1961 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1963 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1964 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1965 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1966 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1967 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1968 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1969 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1970 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1971 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 199,000 | 60,000 |
| 1972 | 4,000 | 32,000 | 1,654,000 | 12,000 | 204,000 | 142,000 | 22,000 | 63,000 | 32,000 | 475,000 | 242,000 | 63,000 |
| 1973 | 5,000 | 32,000 | 1,635,000 | 12,000 | 190,000 | 130,000 | 21,000 | 62,000 | 32,000 | 447,000 | 225,000 | 62,000 |
| 1974 | 5,000 | 32,000 | 1,621,000 | 12,000 | 189,000 | 130,000 | 21,000 | 62,000 | 32,000 | 446,000 | 226,000 | 61,000 |
| 1975 | 5,000 | 32,000 | 1,605,000 | 12,000 | 190,000 | 132,000 | 21,000 | 62,000 | 32,000 | 449,000 | 227,000 | 61,000 |
| 1976 | 5,000 | 32,000 | 1,604,000 | 12,000 | 189,000 | 130,000 | 21,000 | 62,000 | 32,000 | 446,000 | 225,000 | 61,000 |
| 1977 | 5,000 | 32,000 | 1,595,000 | 12,000 | 177,000 | 122,000 | 21,000 | 62,000 | 32,000 | 426,000 | 225,000 | 61,000 |
| 1978 | 5,000 | 32,000 | 1,606,000 | 12,000 | 175,000 | 121,000 | 21,000 | 62,000 | 32,000 | 423,000 | 229,000 | 61,000 |
| 1979 | 5,000 | 32,000 | 1,612,000 | 12,000 | 174,000 | 121,000 | 21,000 | 62,000 | 32,000 | 422,000 | 229,000 | 61,000 |
| 1980 | 5,000 | 32,000 | 1,598,000 | 12,000 | 176,000 | 122,000 | 21,000 | 62,000 | 32,000 | 425,000 | 225,000 | 61,000 |
| 1981 | 5,000 | 32,000 | 1,598,000 | 12,000 | 176,000 | 122,000 | 21,000 | 62,000 | 32,000 | 425,000 | 225,000 | 61,000 |
| 1982 | 5,000 | 32,000 | 1,622,000 | 12,000 | 178,000 | 124,000 | 21,000 | 62,000 | 32,000 | 429,000 | 229,000 | 61,000 |
| 1983 | 5,000 | 32,000 | 1,620,000 | 12,000 | 177,000 | 122,000 | 21,000 | 62,000 | 32,000 | 426,000 | 230,000 | 61,000 |
| 1984 | 5,000 | 32,000 | 1,611,000 | 12,000 | 177,000 | 123,000 | 21,000 | 62,000 | 32,000 | 427,000 | 230,000 | 61,000 |
| 1985 | 5,000 | 32,000 | 1,603,000 | 12,000 | 177,000 | 122,000 | 21,000 | 62,000 | 32,000 | 426,000 | 227,000 | 61,000 |
| 1986 | 5,000 | 32,000 | 1,598,000 | 12,000 | 183,000 | 126,000 | 21,000 | 62,000 | 32,000 | 436,000 | 226,000 | 61,000 |
| 1987 | 5,000 | 32,000 | 1,591,000 | 12,000 | 182,000 | 126,000 | 21,000 | 62,000 | 32,000 | 435,000 | 226,000 | 61,000 |
| 1988 | 5,000 | 32,000 | 1,594,000 | 12,000 | 181,000 | 125,000 | 21,000 | 62,000 | 32,000 | 433,000 | 228,000 | 61,000 |
| 1989 | 5,000 | 32,000 | 1,593,000 | 12,000 | 181,000 | 125,000 | 21,000 | 62,000 | 32,000 | 433,000 | 228,000 | 61,000 |
| 1990 | 5,000 | 32,000 | 1,594,000 | 12,000 | 180,000 | 124,000 | 21,000 | 62,000 | 32,000 | 431,000 | 228,000 | 61,000 |
| 1991 | 5,000 | 32,000 | 1,596,000 | 12,000 | 180,000 | 124,000 | 21,000 | 62,000 | 32,000 | 431,000 | 227,000 | 61,000 |
| 1992 | 5,000 | 32,000 | 1,596,000 | 12,000 | 180,000 | 124,000 | 21,000 | 62,000 | 32,000 | 431,000 | 227,000 | 61,000 |
| 1993 | 5,000 | 32,000 | 1,596,000 | 12,000 | 180,000 | 124,000 | 21,000 | 62,000 | 32,000 | 431,000 | 227,000 | 61,000 |
| 1994 | 5,000 | 32,000 | 1,596,000 | 12,000 | 180,000 | 124,000 | 21,000 | 62,000 | 32,000 | 431,000 | 227,000 | 61,000 |
| 1995 | 5,000 | 32,000 | 1,596,000 | 12,000 | 180,000 | 124,000 | 21,000 | 62,000 | 32,000 | 431,000 | 227,000 | 61,000 |
| 1996 | 5,000 | 32,000 | 1,596,000 | 12,000 | 180,000 | 124,000 | 21,000 | 62,000 | 32,000 | 431,000 | 227,000 | 61,000 |
| 1997 | 5,000 | 32,000 | 1,596,000 | 12,000 | 180,000 | 124,000 | 21,000 | 62,000 | 32,000 | 431,000 | 227,000 | 61,000 |
| 1998 | 5,000 | 32,000 | 1,596,000 | 12,000 | 180,000 | 124,000 | 21,000 | 62,000 | 32,000 | 431,000 | 227,000 | 61,000 |
| 1999 | 5,000 | 32,000 | 1,596,000 | 12,000 | 180,000 | 124,000 | 21,000 | 62,000 | 32,000 | 431,000 | 227,000 | 61,000 |
| 2000* | 5,000 | 32,000 | 1,596,000 | 12,000 | 180,000 | 124,000 | 21,000 | 62,000 | 32,000 | 431,000 | 227,000 | 61,000 |

* And thereafter for the remainder of the project repayment period.

TABLE B-9 (Continued)

ACTUAL AND PROJECTED MINIMUM OPERATION, MAINTENANCE, POWER, AND REPLACEMENT COSTS ALLOCATED TO TRANSPORTATION FOR EACH AQUEDUCT REACH

(in dollars)



| CALENDAR YEAR | CALIFORNIA AQUEDUCT (Continued) | | | | | | | | | | | GRAND TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | WEST BRANCH (Continued) | | | | | COASTAL BRANCH | | | | | Total | |
| | Reach 29C | Reach 29D | Reach 29E | Reach 30 | Subtotal | Reach 31A | Reach 33A | Reach 34 | Reach 35 | Subtotal | | |
| 1960 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1961 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 68,596 |
| 1963 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 152,616 |
| 1964 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 165,740 |
| 1965 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 319,866 |
| 1966 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 268,000 |
| 1967 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 405,000 | 674,000 |
| 1968 | 0 | 0 | 0 | 0 | 0 | 91,000 | 0 | 0 | 0 | 91,000 | 2,844,000 | 3,127,000 |
| 1969 | 0 | 0 | 0 | 0 | 0 | 110,000 | 0 | 0 | 0 | 110,000 | 3,587,000 | 3,898,000 |
| 1970 | 0 | 0 | 0 | 0 | 0 | 110,000 | 0 | 0 | 0 | 110,000 | 3,907,000 | 4,219,000 |
| 1971 | 392,000 | 32,000 | 533,000 | 35,000 | 1,251,000 | 129,000 | 0 | 0 | 0 | 129,000 | 8,792,000 | 9,104,000 |
| 1972 | 395,000 | 31,000 | 655,000 | 34,000 | 1,420,000 | 131,000 | 0 | 0 | 0 | 131,000 | 11,322,000 | 11,627,000 |
| 1973 | 427,000 | 31,000 | 561,000 | 34,000 | 1,340,000 | 128,000 | 0 | 0 | 0 | 128,000 | 11,073,000 | 11,374,000 |
| 1974 | 414,000 | 31,000 | 529,000 | 34,000 | 1,295,000 | 128,000 | 0 | 0 | 0 | 128,000 | 11,004,000 | 11,305,000 |
| 1975 | 414,000 | 31,000 | 543,000 | 34,000 | 1,310,000 | 128,000 | 0 | 0 | 0 | 128,000 | 10,959,000 | 11,256,000 |
| 1976 | 412,000 | 31,000 | 537,000 | 34,000 | 1,300,000 | 127,000 | 0 | 0 | 0 | 127,000 | 10,864,000 | 11,161,000 |
| 1977 | 407,000 | 31,000 | 543,000 | 34,000 | 1,301,000 | 127,000 | 0 | 0 | 0 | 127,000 | 10,905,000 | 11,202,000 |
| 1978 | 409,000 | 31,000 | 539,000 | 34,000 | 1,303,000 | 127,000 | 0 | 0 | 0 | 127,000 | 10,919,000 | 11,215,000 |
| 1979 | 410,000 | 31,000 | 536,000 | 34,000 | 1,301,000 | 127,000 | 0 | 0 | 0 | 127,000 | 10,969,000 | 11,265,000 |
| 1980 | 407,000 | 31,000 | 535,000 | 34,000 | 1,293,000 | 130,000 | 258,000 | 9,000 | 27,000 | 424,000 | 11,258,000 | 11,671,000 |
| 1981 | 404,000 | 31,000 | 530,000 | 34,000 | 1,285,000 | 130,000 | 245,000 | 9,000 | 27,000 | 411,000 | 11,252,000 | 11,664,000 |
| 1982 | 402,000 | 31,000 | 533,000 | 34,000 | 1,290,000 | 130,000 | 218,000 | 9,000 | 27,000 | 384,000 | 11,277,000 | 11,689,000 |
| 1983 | 404,000 | 31,000 | 526,000 | 34,000 | 1,286,000 | 129,000 | 200,000 | 9,000 | 27,000 | 365,000 | 11,291,000 | 11,704,000 |
| 1984 | 407,000 | 31,000 | 530,000 | 34,000 | 1,293,000 | 130,000 | 212,000 | 9,000 | 27,000 | 378,000 | 11,269,000 | 11,681,000 |
| 1985 | 405,000 | 31,000 | 530,000 | 34,000 | 1,288,000 | 128,000 | 185,000 | 9,000 | 27,000 | 349,000 | 11,126,000 | 11,537,000 |
| 1986 | 411,000 | 31,000 | 545,000 | 34,000 | 1,308,000 | 126,000 | 183,000 | 9,000 | 27,000 | 345,000 | 11,097,000 | 11,507,000 |
| 1987 | 408,000 | 31,000 | 549,000 | 34,000 | 1,309,000 | 126,000 | 179,000 | 9,000 | 27,000 | 341,000 | 11,048,000 | 11,458,000 |
| 1988 | 407,000 | 31,000 | 551,000 | 34,000 | 1,312,000 | 127,000 | 178,000 | 9,000 | 27,000 | 341,000 | 11,058,000 | 11,468,000 |
| 1989 | 406,000 | 31,000 | 552,000 | 34,000 | 1,312,000 | 126,000 | 176,000 | 9,000 | 27,000 | 338,000 | 11,073,000 | 11,483,000 |
| 1990 | 407,000 | 31,000 | 550,000 | 34,000 | 1,311,000 | 127,000 | 175,000 | 9,000 | 27,000 | 338,000 | 11,092,000 | 11,502,000 |
| 1991 | 408,000 | 31,000 | 550,000 | 34,000 | 1,311,000 | 127,000 | 175,000 | 9,000 | 27,000 | 338,000 | 11,096,000 | 11,506,000 |
| 1992 | 408,000 | 31,000 | 550,000 | 34,000 | 1,311,000 | 127,000 | 175,000 | 9,000 | 27,000 | 338,000 | 11,099,000 | 11,508,000 |
| 1993 | 408,000 | 31,000 | 550,000 | 34,000 | 1,311,000 | 127,000 | 175,000 | 9,000 | 27,000 | 338,000 | 11,099,000 | 11,508,000 |
| 1994 | 408,000 | 31,000 | 550,000 | 34,000 | 1,311,000 | 127,000 | 175,000 | 9,000 | 27,000 | 338,000 | 11,099,000 | 11,508,000 |
| 1995 | 408,000 | 31,000 | 550,000 | 34,000 | 1,311,000 | 127,000 | 175,000 | 9,000 | 27,000 | 338,000 | 11,099,000 | 11,508,000 |
| 1996 | 408,000 | 31,000 | 550,000 | 34,000 | 1,311,000 | 127,000 | 175,000 | 9,000 | 27,000 | 338,000 | 11,099,000 | 11,508,000 |
| 1997 | 408,000 | 31,000 | 550,000 | 34,000 | 1,311,000 | 127,000 | 175,000 | 9,000 | 27,000 | 338,000 | 11,099,000 | 11,508,000 |
| 1998 | 408,000 | 31,000 | 550,000 | 34,000 | 1,311,000 | 127,000 | 175,000 | 9,000 | 27,000 | 338,000 | 11,099,000 | 11,508,000 |
| 1999 | 408,000 | 31,000 | 550,000 | 34,000 | 1,311,000 | 127,000 | 175,000 | 9,000 | 27,000 | 338,000 | 11,099,000 | 11,508,000 |
| 2000* | 408,000 | 31,000 | 550,000 | 34,000 | 1,311,000 | 127,000 | 175,000 | 9,000 | 27,000 | 338,000 | 11,099,000 | 11,508,000 |

* And thereafter for the remainder of the project repayment period.

TABLE B-10

ACTUAL AND PROJECTED VARIABLE OPERATION, MAINTENANCE, POWER, AND REPLACEMENT COSTS ALLOCATED TO TRANSPORTATION

(in dollars)



| CALENDAR YEAR | NORTH BAY AQUEDUCT | | | SOUTH BAY AQUEDUCT | | CALIFORNIA AQUEDUCT | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Reach 1 | Reach 3 | | Reach 1 | | Reach 1 | Reach 4 | Reach 14A | Reach 15 | Reach 16 | Reach 17C |
| | Calhoun Pumping Plant | Cordelia Pumping Plant | Total | South Bay and Del Valle Pumping Plants 1/ | Total | Delta Pumping Plant | Dos Amigos Pumping Plant | Buena Vista Pumping Plant | Wheeler Ridge Pumping Plant | Wind Gap Pumping Plant | Tehachapi Pumping Plant |
| 1960 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1961 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1962 | 0 | 0 | 0 | 38,709 | 38,709 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1963 | 0 | 0 | 0 | 60,415 | 60,415 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1964 | 0 | 0 | 0 | 78,335 | 78,335 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1965 | 0 | 0 | 0 | 149,141 | 149,141 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1966 | 0 | 0 | 0 | 224,000 | 224,000 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1967 | 0 | 0 | 0 | 288,000 | 288,000 | 184,000 | 0 | 0 | 0 | 0 | 0 |
| 1968 | 0 | 15,000 | 15,000 | 388,000 | 388,000 | 261,000 | 187,000 | 0 | 0 | 0 | 0 |
| 1969 | 0 | 17,000 | 17,000 | 370,000 | 370,000 | 563,000 | 201,000 | 0 | 0 | 0 | 0 |
| 1970 | 0 | 19,000 | 19,000 | 433,000 | 433,000 | 335,000 | 177,000 | 0 | 0 | 0 | 0 |
| 1971 | 0 | 21,000 | 21,000 | 423,000 | 423,000 | 550,000 | 346,000 | 341,000 | 404,000 | 830,000 | 2,250,000 |
| 1972 | 0 | 21,000 | 21,000 | 438,000 | 438,000 | 825,000 | 460,000 | 533,000 | 616,000 | 1,299,000 | 3,899,000 |
| 1973 | 0 | 21,000 | 21,000 | 441,000 | 441,000 | 850,000 | 636,000 | 663,000 | 771,000 | 1,644,000 | 4,836,000 |
| 1974 | 0 | 25,000 | 25,000 | 470,000 | 470,000 | 1,090,000 | 772,000 | 726,000 | 861,000 | 1,814,000 | 4,949,000 |
| 1975 | 0 | 32,000 | 32,000 | 421,000 | 421,000 | 1,203,000 | 829,000 | 790,000 | 929,000 | 1,977,000 | 5,492,000 |
| 1976 | 0 | 33,000 | 33,000 | 423,000 | 423,000 | 1,180,000 | 872,000 | 844,000 | 992,000 | 2,096,000 | 5,975,000 |
| 1977 | 0 | 34,000 | 34,000 | 429,000 | 429,000 | 1,401,000 | 1,004,000 | 979,000 | 1,279,000 | 2,466,000 | 7,284,000 |
| 1978 | 0 | 35,000 | 35,000 | 414,000 | 414,000 | 1,244,000 | 1,133,000 | 1,198,000 | 1,430,000 | 2,792,000 | 8,497,000 |
| 1979 | 0 | 40,000 | 40,000 | 426,000 | 426,000 | 1,325,000 | 1,286,000 | 1,364,000 | 1,626,000 | 3,206,000 | 9,995,000 |
| 1980 | 14,000 | 47,000 | 61,000 | 418,000 | 418,000 | 1,409,000 | 1,414,000 | 1,508,000 | 1,790,000 | 3,567,000 | 11,430,000 |
| 1981 | 6,000 | 48,000 | 54,000 | 421,000 | 421,000 | 1,535,000 | 1,520,000 | 1,627,000 | 1,944,000 | 3,917,000 | 12,696,000 |
| 1982 | 6,000 | 39,000 | 45,000 | 450,000 | 450,000 | 1,750,000 | 1,667,000 | 1,768,000 | 2,113,000 | 4,234,000 | 13,893,000 |
| 1983 | 6,000 | 44,000 | 50,000 | 468,000 | 468,000 | 1,914,000 | 1,872,000 | 1,989,000 | 2,339,000 | 4,740,000 | 15,585,000 |
| 1984 | 6,000 | 61,000 | 67,000 | 457,000 | 457,000 | 1,795,000 | 1,956,000 | 2,064,000 | 2,444,000 | 4,938,000 | 16,353,000 |
| 1985 | 6,000 | 60,000 | 66,000 | 423,000 | 423,000 | 1,551,000 | 1,925,000 | 2,087,000 | 2,475,000 | 4,808,000 | 15,976,000 |
| 1986 | 6,000 | 44,000 | 50,000 | 403,000 | 403,000 | 2,546,000 | 1,580,000 | 1,932,000 | 2,306,000 | 4,660,000 | 15,438,000 |
| 1987 | 6,000 | 44,000 | 50,000 | 399,000 | 399,000 | 2,277,000 | 1,635,000 | 1,980,000 | 2,354,000 | 4,830,000 | 16,076,000 |
| 1988 | 6,000 | 46,000 | 52,000 | 403,000 | 403,000 | 2,225,000 | 1,762,000 | 2,111,000 | 2,541,000 | 5,175,000 | 17,356,000 |
| 1989 | 6,000 | 48,000 | 54,000 | 427,000 | 427,000 | 2,291,000 | 1,839,000 | 2,252,000 | 2,662,000 | 5,468,000 | 18,434,000 |
| 1990 | 6,000 | 50,000 | 56,000 | 441,000 | 441,000 | 2,581,000 | 2,227,000 | 2,420,000 | 2,663,000 | 5,451,000 | 18,435,000 |
| 1991 | 6,000 | 50,000 | 56,000 | 445,000 | 445,000 | 2,587,000 | 2,243,000 | 2,441,000 | 2,789,000 | 5,476,000 | 18,488,000 |
| 1992 | 6,000 | 50,000 | 56,000 | 453,000 | 453,000 | 2,649,000 | 2,243,000 | 2,441,000 | 2,789,000 | 5,476,000 | 18,488,000 |
| 1993 | 6,000 | 50,000 | 56,000 | 457,000 | 457,000 | 2,651,000 | 2,243,000 | 2,441,000 | 2,789,000 | 5,476,000 | 18,488,000 |
| 1994 | 6,000 | 50,000 | 56,000 | 462,000 | 462,000 | 2,653,000 | 2,243,000 | 2,441,000 | 2,789,000 | 5,476,000 | 18,488,000 |
| 1995 | 6,000 | 50,000 | 56,000 | 464,000 | 464,000 | 2,653,000 | 2,243,000 | 2,441,000 | 2,789,000 | 5,476,000 | 18,488,000 |
| 1996 | 6,000 | 50,000 | 56,000 | 466,000 | 466,000 | 2,655,000 | 2,243,000 | 2,441,000 | 2,789,000 | 5,476,000 | 18,488,000 |
| 1997 | 6,000 | 50,000 | 56,000 | 468,000 | 468,000 | 2,655,000 | 2,243,000 | 2,441,000 | 2,789,000 | 5,476,000 | 18,488,000 |
| 1998 | 6,000 | 50,000 | 56,000 | 468,000 | 468,000 | 2,655,000 | 2,243,000 | 2,441,000 | 2,789,000 | 5,476,000 | 18,488,000 |
| 1999 | 6,000 | 50,000 | 56,000 | 468,000 | 468,000 | 2,655,000 | 2,243,000 | 2,441,000 | 2,789,000 | 5,476,000 | 18,488,000 |
| 2000* | 6,000 | 50,000 | 56,000 | 468,000 | 468,000 | 2,655,000 | 2,243,000 | 2,441,000 | 2,789,000 | 5,476,000 | 18,488,000 |

* And thereafter for the remainder of the project repayment period.

TABLE B-10 (Continued)

ACTUAL AND PROJECTED VARIABLE OPERATION, MAINTENANCE, POWER, AND REPLACEMENT COSTS ALLOCATED TO TRANSPORTATION

(in dollars)



| CALENDAR YEAR | CALIFORNIA AQUEDUCT (Continued) | | | | | | | | | | GRAND TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Reach 18A | Reach 22B | Reach 26 | Reach 27 | Reach 29A | Reach 29C | Reach 29E | Reach 31 | Reach 33 | Total | |
| | Cottonwood Powerplant | Pearblossom Pumping Plant | Upper Devil Canyon Powerplant | Lower Devil Canyon Powerplant | Oso Pumping Plant | Pyramid Powerplant | Castaic Powerplant | Las Perillas and Badger Hill Pumping Plants | Devil's Den Sawtooth and Polonio PP's and San Luis Obispo Pwp | | |
| 1960 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1961 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38,709 |
| 1963 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60,415 |
| 1964 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 78,335 |
| 1965 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 149,141 |
| 1966 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 224,000 |
| 1967 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 184,000 | 472,000 |
| 1968 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 159,000 | 0 | 607,000 | 1,010,000 |
| 1969 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 149,000 | 0 | 913,000 | 1,300,000 |
| 1970 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 139,000 | 0 | 651,000 | 1,103,000 |
| 1971 | 0 | 0 | 0 | 0 | 283,000 | 474,000- | 298,000- | 138,000 | 0 | 4,370,000 | 4,814,000 |
| 1972 | 41,000- | 413,000 | 399,000- | 263,000- | 285,000 | 427,000- | 455,000- | 147,000 | 0 | 6,892,000 | 7,351,000 |
| 1973 | 56,000- | 681,000 | 295,000- | 194,000- | 328,000 | 595,000- | 1,421,000- | 172,000 | 0 | 8,020,000 | 8,482,000 |
| 1974 | 69,000- | 637,000 | 323,000- | 213,000- | 340,000 | 842,000- | 2,361,000- | 193,000 | 0 | 7,574,000 | 8,069,000 |
| 1975 | 82,000- | 569,000 | 318,000- | 209,000- | 433,000 | 976,000- | 2,225,000- | 187,000 | 0 | 8,599,000 | 9,052,000 |
| 1976 | 97,000- | 669,000 | 427,000- | 278,000- | 453,000 | 1,124,000- | 2,720,000- | 189,000 | 0 | 8,624,000 | 9,080,000 |
| 1977 | 124,000- | 658,000 | 820,000- | 542,000- | 504,000 | 1,475,000- | 2,800,000- | 194,000 | 0 | 10,008,000 | 10,471,000 |
| 1978 | 154,000- | 882,000 | 969,000- | 642,000- | 670,000 | 1,545,000- | 3,296,000- | 220,000 | 0 | 11,460,000 | 11,909,000 |
| 1979 | 153,000- | 1,049,000 | 1,086,000- | 718,000- | 755,000 | 1,686,000- | 3,802,000- | 254,000 | 0 | 13,415,000 | 13,881,000 |
| 1980 | 174,000- | 932,000 | 1,130,000- | 745,000- | 692,000 | 1,947,000- | 4,171,000- | 181,000 | 97,000 | 14,853,000 | 15,332,000 |
| 1981 | 206,000- | 1,066,000 | 1,287,000- | 851,000- | 740,000 | 2,185,000- | 4,684,000- | 176,000 | 126,000 | 16,134,000 | 16,609,000 |
| 1982 | 268,000- | 1,725,000 | 1,316,000- | 873,000- | 926,000 | 2,425,000- | 4,735,000- | 176,000 | 169,000 | 18,804,000 | 19,299,000 |
| 1983 | 262,000- | 1,838,000 | 1,586,000- | 1,050,000- | 1,058,000 | 2,432,000- | 5,548,000- | 174,000 | 177,000 | 20,808,000 | 21,326,000 |
| 1984 | 272,000- | 1,808,000 | 1,694,000- | 1,115,000- | 1,098,000 | 2,398,000- | 5,533,000- | 212,000 | 342,000 | 21,998,000 | 22,522,000 |
| 1985 | 311,000- | 1,754,000 | 1,888,000- | 1,249,000- | 980,000 | 2,603,000- | 5,790,000- | 197,000 | 271,000 | 20,083,000 | 20,572,000 |
| 1986 | 294,000- | 1,701,000 | 1,612,000- | 1,064,000- | 987,000 | 2,449,000- | 4,762,000- | 148,000 | 334,000 | 21,451,000 | 21,904,000 |
| 1987 | 319,000- | 1,593,000 | 1,656,000- | 1,091,000- | 1,056,000 | 2,777,000- | 4,826,000- | 151,000 | 338,000 | 21,621,000 | 22,070,000 |
| 1988 | 326,000- | 1,686,000 | 1,740,000- | 1,152,000- | 1,216,000 | 3,060,000- | 4,998,000- | 187,000 | 391,000 | 23,374,000 | 23,829,000 |
| 1989 | 355,000- | 1,710,000 | 1,792,000- | 1,188,000- | 1,267,000 | 3,254,000- | 5,105,000- | 185,000 | 457,000 | 24,871,000 | 25,352,000 |
| 1990 | 352,000- | 1,777,000 | 1,904,000- | 1,254,000- | 1,280,000 | 3,201,000- | 5,316,000- | 252,000 | 515,000 | 25,574,000 | 26,071,000 |
| 1991 | 345,000- | 1,837,000 | 1,922,000- | 1,270,000- | 1,253,000 | 3,132,000- | 5,323,000- | 256,000 | 523,000 | 25,901,000 | 26,402,000 |
| 1992 | 345,000- | 1,837,000 | 1,922,000- | 1,270,000- | 1,253,000 | 3,132,000- | 5,323,000- | 256,000 | 523,000 | 25,963,000 | 26,472,000 |
| 1993 | 345,000- | 1,837,000 | 1,922,000- | 1,270,000- | 1,253,000 | 3,132,000- | 5,323,000- | 256,000 | 523,000 | 25,965,000 | 26,478,000 |
| 1994 | 345,000- | 1,837,000 | 1,922,000- | 1,270,000- | 1,253,000 | 3,132,000- | 5,323,000- | 256,000 | 523,000 | 25,967,000 | 26,485,000 |
| 1995 | 345,000- | 1,837,000 | 1,922,000- | 1,270,000- | 1,253,000 | 3,132,000- | 5,323,000- | 256,000 | 523,000 | 25,967,000 | 26,487,000 |
| 1996 | 345,000- | 1,837,000 | 1,922,000- | 1,270,000- | 1,253,000 | 3,132,000- | 5,323,000- | 256,000 | 523,000 | 25,969,000 | 26,491,000 |
| 1997 | 345,000- | 1,837,000 | 1,922,000- | 1,270,000- | 1,253,000 | 3,132,000- | 5,323,000- | 256,000 | 523,000 | 25,969,000 | 26,493,000 |
| 1998 | 345,000- | 1,837,000 | 1,922,000- | 1,270,000- | 1,253,000 | 3,132,000- | 5,323,000- | 256,000 | 523,000 | 25,969,000 | 26,493,000 |
| 1999 | 345,000- | 1,837,000 | 1,922,000- | 1,270,000- | 1,253,000 | 3,132,000- | 5,323,000- | 256,000 | 523,000 | 25,969,000 | 26,493,000 |
| 2000* | 345,000- | 1,837,000 | 1,922,000- | 1,270,000- | 1,253,000 | 3,132,000- | 5,323,000- | 256,000 | 523,000 | 25,969,000 | 26,493,000 |

* And thereafter for the remainder of the project repayment period.

TABLE B-11

ALLOCATED CAPITAL COSTS TO EACH CONTRACTOR

(in dollars)



| CALENDAR YEAR | FUTURE CONTRACTORS | | | NORTH BAY AREA | | | SOUTH BAY AREA | | | | CENTRAL COASTAL AREA | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | South Bay | Cedar Springs | Nuclear Powerplant (Assumed) | Napa County FC & WCD | Solano County FC & WCD | Total | Alameda County FC & WCD, Zone 7 | Alameda County Water District | Santa Clara County FC & WD | Total | San Luis Obispo County FC & WCD | Santa Barbara County FC & WCD | Total |
| 1952 | 48 | 53 | 282 | 0 | 0 | 0 | 74 | 78 | 305 | 457 | 111 | 260 | 371 |
| 1953 | 196 | 177 | 885 | 0 | 0 | 0 | 269 | 307 | 1311 | 1887 | 290 | 677 | 967 |
| 1954 | 551 | 196 | 1117 | 0 | 0 | 0 | 692 | 834 | 3874 | 5400 | 352 | 822 | 1174 |
| 1955 | 696 | 75 | 538 | 0 | 0 | 0 | 844 | 1038 | 4991 | 6873 | 179 | 417 | 596 |
| 1956 | 8464 | 66 | 1025 | 0 | 0 | 0 | 10089 | 12554 | 68471 | 91114 | 213 | 498 | 711 |
| 1957 | 19219 | 234 | 2442 | 12834 | 8046 | 20880 | 22867 | 28485 | 648510 | 699862 | 268 | 626 | 894 |
| 1958 | 32220 | 386 | 5810 | 29076 | 11805 | 40881 | 57134 | 56576 | 696666 | 810376 | 786 | 1833 | 2619 |
| 1959 | 64419 | 911 | 10841 | 17843 | 4704 | 22547 | 129591 | 119998 | 422412 | 672001 | 14906 | 38509 | 53415 |
| 1960 | 151029 | 1962 | 11740 | 10299 | 8659 | 18958 | 303914 | 280138 | 951848 | 1535900 | 28318 | 74293 | 102611 |
| 1961 | 436139 | 4241 | 20329 | 8142 | 7727 | 15869 | 882324 | 818907 | 2008864 | 3710095 | 20963 | 52688 | 73651 |
| 1962 | 327474 | 2058 | 33390 | 3415 | 2648 | 6063 | 535986 | 578728 | 1762175 | 2876889 | 38675 | 93449 | 132124 |
| 1963 | 628841 | 8440 | 115194 | 8271 | 6660 | 14931 | 523236 | 1267171 | 3488229 | 5278636 | 110814 | 265262 | 376076 |
| 1964 | 1070921 | 6387 | 214598 | 64567 | 17093 | 81660 | 739207 | 1070398 | 7451028 | 9260633 | 186598 | 443398 | 629996 |
| 1965 | 355818 | 12877 | 372878 | 199052 | 20409 | 219461 | 373771 | 434183 | 3424464 | 4232418 | 280559 | 659830 | 940389 |
| 1966 | 742749 | 35656 | 633503 | 641538 | 82462 | 724000 | 1492866 | 1164960 | 4017170 | 6674996 | 640733 | 1498336 | 2139069 |
| 1967 | 450592 | 38513 | 736741 | 1515277 | 101723 | 1617000 | 926453 | 720423 | 2369602 | 4016478 | 1184627 | 2768512 | 3953139 |
| 1968 | 198466 | 111672 | 707037 | 130892 | 160108 | 291000 | 414835 | 316840 | 960969 | 1692644 | 205631 | 484024 | 689655 |
| 1969 | 7342 | 339157 | 683518 | 96551 | 141449 | 238000 | 15344 | 11863 | 35414 | 62621 | 38639 | 94348 | 132987 |
| 1970 | 466 | 292614 | 236644 | 14739 | 19261 | 34000 | 972 | 887 | 2120 | 3979 | 20254 | 51450 | 71704 |
| 1971 | 35862 | 14367 | 79889 | 14137 | 19863 | 34000 | 74873 | 68260 | 163207 | 306340 | 23543 | 67761 | 91304 |
| 1972 | 35866 | 21405 | 5468 | 13341 | 18659 | 32000 | 74882 | 68268 | 163226 | 306376 | 98158 | 276199 | 374357 |
| 1973 | 0 | 16234 | 0 | 268793 | 128207 | 397000 | 0 | 0 | 0 | 0 | 155706 | 506294 | 662000 |
| 1974 | 0 | 15184 | 0 | 263201 | 125799 | 389000 | 0 | 0 | 0 | 0 | 287414 | 829586 | 1117000 |
| 1975 | 0 | 0 | 0 | 11545 | 17455 | 29000 | 0 | 0 | 0 | 0 | 675306 | 1727694 | 2403000 |
| 1976 | 0 | 0 | 0 | 87150 | 78850 | 166000 | 0 | 0 | 0 | 0 | 1848818 | 4425182 | 6274000 |
| 1977 | 0 | 0 | 0 | 132723 | 87277 | 220000 | 0 | 0 | 0 | 0 | 2327100 | 5691437 | 8018537 |
| 1978 | 0 | 0 | 0 | 1144426 | 1125574 | 2270000 | 0 | 0 | 0 | 0 | 3831155 | 11010431 | 14841586 |
| 1979 | 0 | 0 | 0 | 1907066 | 1679934 | 3587000 | 0 | 0 | 0 | 0 | 1842243 | 5957977 | 7800220 |
| 1980 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1981 | 0 | 0 | 7300 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5649 | 13181 | 18830 |
| 1982 | 0 | 0 | 14585 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11285 | 26337 | 37622 |
| 1983 | 0 | 0 | 29179 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40574 | 94689 | 135263 |
| 1984 | 0 | 0 | 21880 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 246406 | 575029 | 821435 |
| 1985 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 94490 | 220510 | 315000 |
| 1986 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1987 | 1257 | 0 | 0 | 0 | 0 | 0 | 2626 | 2394 | 5723 | 10743 | 0 | 0 | 0 |
| 1988 | 10480 | 0 | 0 | 0 | 0 | 0 | 21880 | 19947 | 47693 | 89520 | 0 | 0 | 0 |
| 1989 | 16768 | 0 | 0 | 0 | 0 | 0 | 35008 | 31916 | 76308 | 143232 | 0 | 0 | 0 |
| 1990 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 4595883 | 922865 | 3946813 | 6594878 | 3874372 | 10469250 | 6639737 | 7075153 | 28774580 | 42489470 | 14260763 | 37951539 | 52212302 |

TABLE B-11 (Continued)

ALLOCATED CAPITAL COSTS TO EACH CONTRACTOR

(in dollars)



| CALENDAR YEAR | SAN JOAQUIN VALLEY | | | | | | | | | | SOUTHERN CALIFORNIA | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Devil's Den Water District | Dudley Ridge Water District | Empire West Side Irrigation District | Hacienda Water District | Kern County Water Agency | | Kings County (Assumed) | Oak Flat Water District | Tulare Lake Basin Water Storage District | Total | Antelope Valley-East Kern Water Agency | Big Bear Municipal Water District (Assumed) | Coachella Valley County Water District |
| | | | | | Agriculture | Municipal and Industrial | | | | | | | |
| 1952 | 74 | 346 | 17 | 50 | 7966 | 983 | 17 | 15 | 649 | 10117 | 2665 | 269 | 849 |
| 1953 | 201 | 901 | 45 | 132 | 22717 | 2898 | 45 | 38 | 1677 | 28654 | 8552 | 896 | 2778 |
| 1954 | 242 | 1099 | 54 | 162 | 28172 | 3647 | 54 | 47 | 2040 | 35517 | 11501 | 1062 | 3423 |
| 1955 | 123 | 557 | 27 | 83 | 13896 | 1799 | 27 | 25 | 1035 | 17572 | 5854 | 459 | 1564 |
| 1956 | 146 | 667 | 31 | 99 | 21668 | 2999 | 31 | 30 | 1206 | 26877 | 8338 | 515 | 1922 |
| 1957 | 183 | 836 | 35 | 122 | 42487 | 6414 | 35 | 35 | 1416 | 51563 | 21905 | 1555 | 5492 |
| 1958 | 543 | 2451 | 113 | 360 | 103663 | 15006 | 114 | 82 | 4375 | 126707 | 41789 | 2750 | 10019 |
| 1959 | 3222 | 8568 | 430 | 1262 | 249103 | 31228 | 435 | 508 | 15986 | 310742 | 63024 | 3839 | 14447 |
| 1960 | 4978 | 10676 | 510 | 1572 | 306511 | 36006 | 519 | 638 | 19451 | 380861 | 68968 | 5990 | 20304 |
| 1961 | 6105 | 21122 | 1023 | 3110 | 530518 | 63583 | 1041 | 699 | 38758 | 665959 | 125204 | 12417 | 44068 |
| 1962 | 14075 | 54727 | 2685 | 8063 | 1117820 | 125452 | 2726 | 1946 | 101043 | 1428537 | 184436 | 10772 | 43367 |
| 1963 | 53587 | 226468 | 11593 | 33360 | 4247688 | 464614 | 11779 | 9425 | 428033 | 5486547 | 584660 | 33624 | 133526 |
| 1964 | 103989 | 356965 | 18432 | 52588 | 7103584 | 764551 | 18722 | 14870 | 677905 | 9111606 | 1139012 | 48903 | 220398 |
| 1965 | 179987 | 569394 | 29065 | 83881 | 12336104 | 1349913 | 29539 | 31565 | 1074531 | 15683979 | 1939715 | 80754 | 372431 |
| 1966 | 425396 | 1052517 | 50500 | 155051 | 23950125 | 2557141 | 51335 | 64722 | 1920578 | 30227365 | 3650523 | 153439 | 710664 |
| 1967 | 785835 | 932369 | 41196 | 137351 | 27535954 | 2874000 | 41863 | 47940 | 1629325 | 34025833 | 5831787 | 277071 | 1208297 |
| 1968 | 125105 | 163997 | 7967 | 24157 | 9953915 | 1257719 | 8091 | 5769 | 301227 | 11847947 | 6989154 | 449705 | 1663618 |
| 1969 | 12098 | 8655 | 436 | 1277 | 4878401 | 663932 | 443 | 667 | 16211 | 5582120 | 6770044 | 585533 | 2250786 |
| 1970 | 145 | 658 | 32 | 97 | 1496343 | 237914 | 32 | 31 | 1219 | 1736471 | 2839236 | 529764 | 1475210 |
| 1971 | 63 | 286 | 15 | 43 | 483968 | 93275 | 15 | 13 | 530 | 578208 | 1240368 | 163611 | 500933 |
| 1972 | 75 | 336 | 17 | 50 | 53454 | 18278 | 18 | 17 | 627 | 72872 | 306837 | 23863 | 103145 |
| 1973 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2598 | 5985 |
| 1974 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2430 | 5598 |
| 1975 | 0 | 0 | 0 | 0 | 0 | 204 | 0 | 0 | 0 | 204 | 5265 | 181 | 900 |
| 1976 | 0 | 0 | 0 | 0 | 0 | 4697 | 0 | 0 | 0 | 4697 | 121101 | 4167 | 20689 |
| 1977 | 1914 | 0 | 0 | 0 | 13549 | 8170 | 0 | 0 | 0 | 23633 | 210610 | 7248 | 35980 |
| 1978 | 30625 | 0 | 0 | 0 | 216789 | 4902 | 0 | 0 | 0 | 252316 | 126366 | 4349 | 21588 |
| 1979 | 11484 | 0 | 0 | 0 | 81296 | 0 | 0 | 0 | 0 | 92780 | 0 | 0 | 0 |
| 1980 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1981 | 3902 | 17636 | 916 | 2597 | 310789 | 33350 | 928 | 0 | 33596 | 403714 | 31118 | 1071 | 5315 |
| 1982 | 7797 | 35237 | 1830 | 5191 | 620975 | 66635 | 1857 | 0 | 67130 | 806652 | 62176 | 2138 | 10619 |
| 1983 | 15600 | 70490 | 3660 | 10384 | 1242250 | 133302 | 3716 | 0 | 134292 | 1613694 | 124382 | 4279 | 21242 |
| 1984 | 11697 | 52856 | 2745 | 7786 | 931462 | 99951 | 2787 | 0 | 100696 | 1209980 | 93263 | 3208 | 15928 |
| 1985 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1986 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1987 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1988 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1989 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1990 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 1799191 | 3589814 | 173374 | 528828 | 97901167 | 10922563 | 176169 | 179082 | 6573536 | 121843724 | 32607853 | 2418460 | 8931085 |

TABLE B-11 (Continued)

ALLOCATED CAPITAL COSTS TO EACH CONTRACTOR

(in dollars)



| CALENDAR YEAR | SOUTHERN CALIFORNIA (Continued) | | | | | | | | | | | | GRAND TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Crestline-Lake Arrowhead Water Agency | Desert Water Agency | Littlerock Creek Irrigation District | Mojave Water Agency | Palmdale Irrigation District | San Bernardino Valley Municipal Water District | San Gabriel Valley Municipal Water District | San Gorgonio Pass Water Agency | The Metropolitan Water District of S. California | Upper Santa Clara Valley Water Agency | Ventura County Flood Control District | Total | |
| 1953 | 242 | 1398 | 71 | 1761 | 410 | 6145 | 1566 | 802 | 68858 | 727 | 344 | 86107 | 97435 |
| 1954 | 799 | 4581 | 234 | 5757 | 1328 | 20300 | 5162 | 2632 | 225141 | 2318 | 1095 | 281573 | 314339 |
| 1955 | 975 | 5647 | 294 | 7136 | 1729 | 23974 | 6155 | 3177 | 279590 | 3184 | 1513 | 349360 | 393315 |
| 1956 | 439 | 2579 | 137 | 3285 | 844 | 10293 | 2681 | 1412 | 128989 | 1657 | 788 | 160981 | 187331 |
| 1957 | 523 | 3166 | 176 | 4087 | 1146 | 11390 | 3045 | 1654 | 160894 | 2425 | 1160 | 200441 | 328698 |
| 1958 | 1518 | 9055 | 486 | 11606 | 3093 | 34693 | 9127 | 4862 | 455917 | 6281 | 2998 | 568588 | 1363682 |
| 1959 | 2748 | 16520 | 899 | 21255 | 5813 | 61298 | 16255 | 8739 | 835693 | 12084 | 5774 | 1041636 | 2060635 |
| 1960 | 4080 | 23826 | 1303 | 30476 | 8688 | 87084 | 23173 | 12774 | 1259424 | 19483 | 9271 | 1560892 | 2695768 |
| 1961 | 6018 | 33486 | 1724 | 42103 | 10361 | 138974 | 35521 | 19171 | 1741437 | 22325 | 10595 | 2156977 | 4360038 |
| 1962 | 13127 | 72684 | 3521 | 90793 | 19745 | 288152 | 77926 | 41819 | 3153970 | 39567 | 18789 | 4001782 | 8928065 |
| 1963 | 12049 | 71530 | 3626 | 91651 | 24794 | 241328 | 66042 | 36760 | 3916171 | 68446 | 32193 | 4803165 | 9609700 |
| 1964 | 37555 | 220227 | 11823 | 283135 | 79387 | 763288 | 206639 | 115147 | 12222742 | 198077 | 94516 | 14984346 | 26893011 |
| 1965 | 58550 | 363515 | 20426 | 478220 | 147874 | 1076752 | 303287 | 174329 | 19535156 | 376895 | 178967 | 24122284 | 44498085 |
| 1966 | 99635 | 614267 | 33722 | 807088 | 250534 | 1785972 | 507307 | 300967 | 35368196 | 710547 | 334490 | 43205625 | 65023445 |
| 1967 | 194089 | 1172140 | 65185 | 1532792 | 485105 | 3442644 | 979210 | 575851 | 67123505 | 1350434 | 630137 | 82065718 | 123243056 |
| 1968 | 321722 | 1992914 | 104935 | 2623523 | 773136 | 6122396 | 1754905 | 1029709 | 126745132 | 2573960 | 1198151 | 152557638 | 197395934 |
| 1969 | 464968 | 2743896 | 146990 | 3565575 | 1044697 | 10242913 | 2842574 | 1592209 | 190519501 | 3564231 | 1660718 | 227490749 | 243029170 |
| 1970 | 705031 | 3712360 | 158768 | 4631913 | 1105301 | 14170448 | 3878771 | 2207067 | 219754476 | 3895256 | 1774927 | 265600681 | 272646426 |
| 1971 | 506810 | 2433158 | 49177 | 2833906 | 366572 | 12916060 | 2745597 | 1505104 | 135990139 | 1498813 | 687952 | 166377498 | 168753376 |
| 1972 | 136526 | 826220 | 23523 | 1059026 | 172112 | 3639650 | 814566 | 409152 | 76885609 | 818810 | 357232 | 87047338 | 88187308 |
| 1973 | 34280 | 170128 | 5631 | 209415 | 41454 | 608311 | 162747 | 95603 | 15734751 | 329386 | 138137 | 17963688 | 18812032 |
| 1974 | 7647 | 9872 | 0 | 0 | 0 | 129776 | 27010 | 17612 | 2937352 | 55827 | 21819 | 3215498 | 4290732 |
| 1975 | 7153 | 9234 | 0 | 0 | 0 | 121383 | 25263 | 16473 | 1125434 | 16383 | 6403 | 1335754 | 2856938 |
| 1976 | 229 | 1484 | 88 | 1978 | 663 | 3860 | 1134 | 682 | 78362 | 1599 | 771 | 97196 | 2529400 |
| 1977 | 5254 | 34123 | 2033 | 45497 | 15258 | 88782 | 26091 | 15673 | 1802327 | 36782 | 17726 | 2235503 | 8680200 |
| 1978 | 9138 | 59344 | 3535 | 79125 | 26535 | 154403 | 45375 | 27257 | 3134482 | 63969 | 30829 | 3887830 | 12150000 |
| 1979 | 5483 | 35607 | 2121 | 47475 | 15921 | 92642 | 27225 | 16354 | 1880689 | 38381 | 18497 | 2332698 | 19696600 |
| 1980 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11480000 |
| 1981 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1982 | 1350 | 8765 | 523 | 11689 | 3921 | 22805 | 6703 | 4027 | 463059 | 9450 | 4554 | 574350 | 1004194 |
| 1983 | 2697 | 17514 | 1044 | 23353 | 7833 | 45567 | 13391 | 8045 | 925219 | 18885 | 9100 | 1147581 | 2006440 |
| 1984 | 5395 | 35037 | 2088 | 46717 | 15670 | 91157 | 26789 | 16092 | 1850886 | 37777 | 18207 | 2295718 | 4073854 |
| 1985 | 4045 | 26270 | 1565 | 35029 | 11750 | 68349 | 20086 | 12067 | 1387828 | 28326 | 13651 | 1721365 | 3774660 |
| 1986 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 315000 |
| 1987 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1988 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12000 |
| 1989 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100000 |
| 1990 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 160000 |
| TOTAL | 2650075 | 14730547 | 645648 | 18625366 | 4641674 | 56510789 | 14661323 | 8273222 | 927690929 | 15802285 | 7281304 | 1115470560 | 1351950867 |

TABLE B-12

CAPITAL COST COMPONENTS OF EACH CONTRACTOR*

(in dollars)



| CALENDAR YEAR | FUTURE CONTRACTORS | | | NORTH BAY AREA | | | SOUTH BAY AREA | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | South Bay | Cedar Springs | Nuclear Powerplant (Assumed) | Napa County FC & WCD | Solano County FC & WCD | Total | Alameda County FC & WCD, Zone 7 | Alameda County Water District | Santa Clara County FC & WD | Total |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1963 | 47187 | 477 | 0 | 0 | 0 | 0 | 87592 | 85454 | 304054 | 477100 |
| 1964 | 74351 | 842 | 0 | 0 | 0 | 0 | 90606 | 140191 | 454733 | 685530 |
| 1965 | 120611 | 1118 | 0 | 0 | 0 | 0 | 117018 | 186428 | 776591 | 1080037 |
| 1966 | 135981 | 1674 | 0 | 16261 | 0 | 16261 | 130373 | 205183 | 924516 | 1260072 |
| 1967 | 168065 | 3214 | 0 | 43973 | 0 | 43973 | 183713 | 255505 | 1098044 | 1537262 |
| 1968 | 187529 | 4878 | 0 | 109428 | 0 | 109428 | 216815 | 286625 | 1200403 | 1703843 |
| 1969 | 196102 | 9702 | 0 | 115082 | 20038 | 135120 | 231637 | 300311 | 1241913 | 1773861 |
| 1970 | 196419 | 24352 | 0 | 119253 | 26148 | 145401 | 232185 | 300823 | 1243443 | 1776451 |
| 1971 | 196439 | 36992 | 0 | 119890 | 26980 | 146870 | 232220 | 300861 | 1243535 | 1776616 |
| 1972 | 197988 | 37613 | 0 | 120501 | 27838 | 148339 | 300187 | 303810 | 1250585 | 1854582 |
| 1973 | 199537 | 38538 | 207857 | 121077 | 28644 | 149721 | 303422 | 306759 | 1257636 | 1867817 |
| 1974 | 199537 | 39239 | 207857 | 132688 | 34182 | 166870 | 303422 | 306759 | 1257636 | 1867817 |
| 1975 | 199537 | 39895 | 207857 | 144057 | 39616 | 183673 | 303422 | 306759 | 1257636 | 1867817 |
| 1976 | 199537 | 39895 | 207857 | 144556 | 40370 | 184926 | 303422 | 306759 | 1257636 | 1867817 |
| 1977 | 199537 | 39895 | 207857 | 148321 | 43776 | 192097 | 303422 | 306759 | 1257636 | 1867817 |
| 1978 | 199537 | 39895 | 207857 | 154054 | 47546 | 201600 | 303422 | 306759 | 1257636 | 1867817 |
| 1979 | 199537 | 39895 | 207857 | 203489 | 96167 | 299656 | 303422 | 306759 | 1257636 | 1867817 |
| 1980 | 199537 | 39895 | 207857 | 285868 | 168734 | 454602 | 303422 | 306759 | 1257636 | 1867817 |
| 1981 | 199537 | 39895 | 207857 | 285868 | 168734 | 454602 | 303422 | 306759 | 1257636 | 1867817 |
| 1982 | 199537 | 39895 | 208172 | 285868 | 168734 | 454602 | 303422 | 306759 | 1257636 | 1867817 |
| 1983 | 199537 | 39895 | 208802 | 285868 | 168734 | 454602 | 303422 | 306759 | 1257636 | 1867817 |
| 1984 | 199537 | 39895 | 210062 | 285868 | 168734 | 454602 | 303422 | 306759 | 1257636 | 1867817 |
| 1985 | 199537 | 39895 | 211007 | 285868 | 168734 | 454602 | 303422 | 306759 | 1257636 | 1867817 |
| 1986 | 199537 | 39895 | 211007 | 285868 | 168734 | 454602 | 303422 | 306759 | 1257636 | 1867817 |
| 1987 | 199537 | 39895 | 211007 | 285868 | 168734 | 454602 | 303422 | 306759 | 1257636 | 1867817 |
| 1988 | 199591 | 39895 | 211007 | 285868 | 168734 | 454602 | 303535 | 306862 | 1257883 | 1868280 |
| 1989 | 200044 | 39895 | 211007 | 285868 | 168734 | 454602 | 304480 | 307724 | 1259943 | 1872147 |
| 1990 | 200768 | 39895 | 211007 | 285868 | 168734 | 454602 | 305992 | 309103 | 1263239 | 1878334 |
| 1991 | 200768 | 39895 | 211007 | 285868 | 168734 | 454602 | 305992 | 309103 | 1263239 | 1878334 |
| 1992 | 200768 | 39895 | 211007 | 285868 | 168734 | 454602 | 305992 | 309103 | 1263239 | 1878334 |
| 1993 | 200768 | 39895 | 211007 | 285868 | 168734 | 454602 | 305992 | 309103 | 1263239 | 1878334 |
| 1994 | 200768 | 39895 | 211007 | 285868 | 168734 | 454602 | 305992 | 309103 | 1263239 | 1878334 |
| 1995 | 200768 | 39895 | 211007 | 285868 | 168734 | 454602 | 305992 | 309103 | 1263239 | 1878334 |
| 1996 | 200768 | 39895 | 211007 | 285868 | 168734 | 454602 | 305992 | 309103 | 1263239 | 1878334 |
| 1997 | 200768 | 39895 | 211007 | 285868 | 168734 | 454602 | 305992 | 309103 | 1263239 | 1878334 |
| 1998 | 200768 | 39895 | 211007 | 285868 | 168734 | 454602 | 305992 | 309103 | 1263239 | 1878334 |
| 1999 | 200768 | 39895 | 211007 | 285868 | 168734 | 454602 | 305992 | 309103 | 1263239 | 1878334 |
| 2000 | 200768 | 39895 | 211007 | 285868 | 168734 | 454602 | 305992 | 309103 | 1263239 | 1878334 |
| 2001 | 200768 | 39895 | 211007 | 285868 | 168734 | 454602 | 305992 | 309103 | 1263239 | 1878334 |
| 2002 | 200768 | 39895 | 211007 | 285868 | 168734 | 454602 | 305992 | 309103 | 1263239 | 1878334 |
| 2003 | 200768 | 39895 | 211007 | 285868 | 168734 | 454602 | 305992 | 309103 | 1263239 | 1878334 |
| 2004 | 200768 | 39895 | 211007 | 285868 | 168734 | 454602 | 305992 | 309103 | 1263239 | 1878334 |
| 2005 | 200768 | 39895 | 211007 | 285868 | 168734 | 454602 | 305992 | 309103 | 1263239 | 1878334 |
| 2006 | 200768 | 39895 | 211007 | 285868 | 168734 | 454602 | 305992 | 309103 | 1263239 | 1878334 |
| 2007 | 200768 | 39895 | 211007 | 285868 | 168734 | 454602 | 305992 | 309103 | 1263239 | 1878334 |
| 2008 | 200768 | 39895 | 211007 | 285868 | 168734 | 454602 | 305992 | 309103 | 1263239 | 1878334 |
| 2009 | 200768 | 39895 | 211007 | 285868 | 168734 | 454602 | 305992 | 309103 | 1263239 | 1878334 |
| 2010 | 200768 | 39895 | 211007 | 285868 | 168734 | 454602 | 305992 | 309103 | 1263239 | 1878334 |
| 2011 | 200768 | 39895 | 211007 | 285868 | 168734 | 454602 | 305992 | 309103 | 1263239 | 1878334 |
| 2012 | 200768 | 39895 | 211007 | 285868 | 168734 | 454602 | 305992 | 309103 | 1263239 | 1878334 |
| 2013 | 153581 | 39418 | 211007 | 285868 | 168734 | 454602 | 211025 | 223649 | 959185 | 1393859 |
| 2014 | 126417 | 39053 | 211007 | 285868 | 168734 | 454602 | 187482 | 168912 | 808506 | 1164900 |
| 2015 | 80157 | 38777 | 211007 | 285868 | 168734 | 454602 | 153577 | 122675 | 486648 | 762900 |
| 2016 | 64787 | 38221 | 211007 | 269607 | 168734 | 438341 | 136600 | 103920 | 338723 | 579243 |
| 2017 | 32703 | 36681 | 211007 | 241895 | 168734 | 410629 | 69420 | 53598 | 165195 | 288213 |
| 2018 | 13239 | 35017 | 211007 | 176440 | 168734 | 345174 | 28099 | 22478 | 62836 | 113413 |
| 2019 | 4666 | 30193 | 211007 | 170786 | 148696 | 319482 | 9754 | 8792 | 21326 | 39872 |
| 2020 | 4349 | 15543 | 211007 | 166615 | 142586 | 309201 | 9081 | 8280 | 19796 | 37157 |
| 2021 | 4329 | 2903 | 211007 | 165978 | 141754 | 307732 | 9039 | 8242 | 19704 | 36985 |
| 2022 | 2780 | 2282 | 211007 | 165367 | 140896 | 306263 | 5805 | 5293 | 12654 | 23752 |
| 2023 | 1231 | 1357 | 3150 | 164791 | 140090 | 304881 | 2570 | 2344 | 5603 | 10517 |
| 2024 | 1231 | 656 | 3150 | 153180 | 134552 | 287732 | 2570 | 2344 | 5603 | 10517 |
| 2025 | 1231 | 0 | 3150 | 141811 | 129118 | 270929 | 2570 | 2344 | 5603 | 10517 |
| 2026 | 1231 | 0 | 3150 | 141312 | 128364 | 269676 | 2570 | 2344 | 5603 | 10517 |
| 2027 | 1231 | 0 | 3150 | 137547 | 124958 | 262505 | 2570 | 2344 | 5603 | 10517 |
| 2028 | 1231 | 0 | 3150 | 131814 | 121188 | 253002 | 2570 | 2344 | 5603 | 10517 |
| 2029 | 1231 | 0 | 3150 | 82379 | 72567 | 154946 | 2570 | 2344 | 5603 | 10517 |
| 2030 | 1231 | 0 | 3150 | 0 | 0 | 0 | 2570 | 2344 | 5603 | 10517 |
| 2031 | 1231 | 0 | 3150 | 0 | 0 | 0 | 2570 | 2344 | 5603 | 10517 |
| 2032 | 1231 | 0 | 2835 | 0 | 0 | 0 | 2570 | 2344 | 5603 | 10517 |
| 2033 | 1231 | 0 | 2205 | 0 | 0 | 0 | 2570 | 2344 | 5603 | 10517 |
| 2034 | 1231 | 0 | 945 | 0 | 0 | 0 | 2570 | 2344 | 5603 | 10517 |
| 2035 | 1231 | 0 | 0 | 0 | 0 | 0 | 2570 | 2344 | 5603 | 10517 |
| 2036 | 1231 | 0 | 0 | 0 | 0 | 0 | 2570 | 2344 | 5603 | 10517 |
| 2037 | 1231 | 0 | 0 | 0 | 0 | 0 | 2570 | 2344 | 5603 | 10517 |
| 2038 | 1177 | 0 | 0 | 0 | 0 | 0 | 2457 | 2241 | 5356 | 10054 |
| 2039 | 724 | 0 | 0 | 0 | 0 | 0 | 1512 | 1379 | 3296 | 6187 |

* Unadjusted for prior overpayments or underpayments of charges.

TABLE B-12 (Continued)

CAPITAL COST COMPONENTS OF EACH CONTRACTOR*

(in dollars)



| CALENDAR YEAR | SAN JOAQUIN VALLEY | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Kern County Water Agency | | | | | |
| | Devil's Den Water District | Dudley Ridge Water District | Empire West Side Irrigation District | Hacienda Water District | Agriculture | Municipal and Industrial | Kings County (Assumed) | Oak Flat Water District | Tulare Lake Basin Water Storage District | Total |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1963 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1964 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1965 | 0 | 0 | 0 | 0 | 0 | 67980 | 0 | 0 | 0 | 67980 |
| 1966 | 0 | 0 | 0 | 0 | 0 | 126292 | 0 | 0 | 0 | 126292 |
| 1967 | 0 | 0 | 0 | 0 | 0 | 236752 | 5233 | 0 | 0 | 241985 |
| 1968 | 23429 | 39381 | 6928 | 4552 | 493958 | 360899 | 7041 | 3702 | 89745 | 1029635 |
| 1969 | 29761 | 46573 | 6928 | 5603 | 543354 | 415228 | 7391 | 4024 | 97752 | 1156614 |
| 1970 | 36093 | 53764 | 6928 | 7003 | 663153 | 443908 | 7410 | 4185 | 106093 | 1328537 |
| 1971 | 42426 | 61298 | 6928 | 8054 | 916945 | 454185 | 7411 | 4507 | 114100 | 1615854 |
| 1972 | 48758 | 68489 | 6928 | 9104 | 1316653 | 458214 | 7412 | 4668 | 122440 | 2042666 |
| 1973 | 55090 | 75338 | 6928 | 10155 | 1522185 | 459004 | 7413 | 4990 | 130447 | 2271550 |
| 1974 | 61422 | 82530 | 6928 | 11555 | 1720904 | 459004 | 7413 | 5151 | 143458 | 2498365 |
| 1975 | 67754 | 89721 | 6928 | 12606 | 1899751 | 459004 | 7413 | 5473 | 156470 | 2705120 |
| 1976 | 74087 | 96912 | 6928 | 13656 | 2162059 | 459013 | 7413 | 5634 | 169481 | 2995183 |
| 1977 | 80418 | 104104 | 6928 | 14707 | 2419258 | 459216 | 7413 | 5956 | 182826 | 3280826 |
| 1978 | 80418 | 111295 | 6928 | 16108 | 2681567 | 459569 | 7413 | 6278 | 195837 | 3565413 |
| 1979 | 80418 | 118487 | 6928 | 17158 | 2937062 | 459781 | 7413 | 6439 | 208849 | 3842535 |
| 1980 | 80418 | 125678 | 6928 | 18209 | 3204481 | 459781 | 7413 | 6761 | 221860 | 4131529 |
| 1981 | 80418 | 132869 | 6928 | 19609 | 3479280 | 459781 | 7413 | 6922 | 234871 | 4428091 |
| 1982 | 80418 | 140403 | 6928 | 20660 | 3730801 | 461222 | 7453 | 7244 | 247883 | 4703012 |
| 1983 | 80418 | 146910 | 6928 | 21710 | 4027744 | 464100 | 7533 | 7405 | 260894 | 5023642 |
| 1984 | 80418 | 154444 | 6928 | 22761 | 4300272 | 469858 | 7694 | 7727 | 273905 | 5324007 |
| 1985 | 80418 | 161635 | 6928 | 24161 | 4571665 | 474176 | 7814 | 7888 | 286917 | 5621602 |
| 1986 | 80418 | 168827 | 6928 | 25212 | 4831135 | 474176 | 7814 | 8210 | 300262 | 5902982 |
| 1987 | 80418 | 176017 | 6928 | 26262 | 5108206 | 474176 | 7814 | 8371 | 313274 | 6201466 |
| 1988 | 80418 | 183209 | 6928 | 27312 | 5321118 | 474176 | 7814 | 8693 | 326284 | 6435952 |
| 1989 | 80418 | 190401 | 6928 | 28713 | 5518134 | 474176 | 7814 | 9015 | 339296 | 6654895 |
| 1990 | 80418 | 197592 | 6928 | 29764 | 5742403 | 474176 | 7814 | 9176 | 366987 | 6915258 |
| 1991 | 80418 | 197592 | 6928 | 29764 | 5742403 | 474176 | 7814 | 9176 | 366987 | 6915258 |
| 1992 | 80418 | 197592 | 6928 | 29764 | 5742403 | 474176 | 7814 | 9176 | 366987 | 6915258 |
| 1993 | 80418 | 197592 | 6928 | 29764 | 5742403 | 474176 | 7814 | 9176 | 366987 | 6915258 |
| 1994 | 80418 | 197592 | 6928 | 29764 | 5742403 | 474176 | 7814 | 9176 | 366987 | 6915258 |
| 1995 | 80418 | 197592 | 6928 | 29764 | 5742403 | 474176 | 7814 | 9176 | 366987 | 6915258 |
| 1996 | 80418 | 197592 | 6928 | 29764 | 5742403 | 474176 | 7814 | 9176 | 366987 | 6915258 |
| 1997 | 80418 | 197592 | 6928 | 29764 | 5742403 | 474176 | 7814 | 9176 | 366987 | 6915258 |
| 1998 | 80418 | 197592 | 6928 | 29764 | 5742403 | 474176 | 7814 | 9176 | 366987 | 6915258 |
| 1999 | 80418 | 197592 | 6928 | 29764 | 5742403 | 474176 | 7814 | 9176 | 366987 | 6915258 |
| 2000 | 80418 | 197592 | 6928 | 29764 | 5742403 | 474176 | 7814 | 9176 | 366987 | 6915258 |
| 2001 | 80418 | 197592 | 6928 | 29764 | 5742403 | 474176 | 7814 | 9176 | 366987 | 6915258 |
| 2002 | 80418 | 197592 | 6928 | 29764 | 5742403 | 474176 | 7814 | 9176 | 366987 | 6915258 |
| 2003 | 80418 | 197592 | 6928 | 29764 | 5742403 | 474176 | 7814 | 9176 | 366987 | 6915258 |
| 2004 | 80418 | 197592 | 6928 | 29764 | 5742403 | 474176 | 7814 | 9176 | 366987 | 6915258 |
| 2005 | 80418 | 197592 | 6928 | 29764 | 5742403 | 474176 | 7814 | 9176 | 366987 | 6915258 |
| 2006 | 80418 | 197592 | 6928 | 29764 | 5742403 | 474176 | 7814 | 9176 | 366987 | 6915258 |
| 2007 | 80418 | 197592 | 6928 | 29764 | 5742403 | 474176 | 7814 | 9176 | 366987 | 6915258 |
| 2008 | 80418 | 197592 | 6928 | 29764 | 5742403 | 474176 | 7814 | 9176 | 366987 | 6915258 |
| 2009 | 80418 | 197592 | 6928 | 29764 | 5742403 | 474176 | 7814 | 9176 | 366987 | 6915258 |
| 2010 | 80418 | 197592 | 6928 | 29764 | 5742403 | 474176 | 7814 | 9176 | 366987 | 6915258 |
| 2011 | 80418 | 197592 | 6928 | 29764 | 5742403 | 474176 | 7814 | 9176 | 366987 | 6915258 |
| 2012 | 80418 | 197592 | 6928 | 29764 | 5742403 | 474176 | 7814 | 9176 | 366987 | 6915258 |
| 2013 | 80418 | 197592 | 6928 | 29764 | 5742403 | 474176 | 7814 | 9176 | 366987 | 6915258 |
| 2014 | 80418 | 197592 | 6928 | 29764 | 5742403 | 474176 | 7814 | 9176 | 366987 | 6915258 |
| 2015 | 80418 | 197592 | 6928 | 29764 | 5742403 | 406196 | 7814 | 9176 | 366987 | 6847278 |
| 2016 | 80418 | 197592 | 6928 | 29764 | 5742403 | 347884 | 7814 | 9176 | 366987 | 6788966 |
| 2017 | 80418 | 197592 | 6928 | 29764 | 5742403 | 237424 | 2581 | 9176 | 366987 | 6673273 |
| 2018 | 80418 | 197592 | 6928 | 29764 | 5742403 | 113277 | 773 | 9176 | 366987 | 6547318 |
| 2019 | 80418 | 197592 | 6928 | 29764 | 5742403 | 58948 | 423 | 9176 | 366987 | 6492639 |
| 2020 | 80418 | 197592 | 6928 | 29764 | 5742403 | 30268 | 404 | 9176 | 366987 | 6463940 |
| 2021 | 80418 | 197592 | 6928 | 29764 | 5742403 | 19991 | 403 | 9176 | 366987 | 6453662 |
| 2022 | 80418 | 197592 | 6928 | 29764 | 5742403 | 15962 | 402 | 9176 | 366987 | 6449632 |
| 2023 | 80418 | 197592 | 6928 | 29764 | 5742403 | 15172 | 401 | 9176 | 366987 | 6448841 |
| 2024 | 80418 | 197592 | 6928 | 29764 | 5742403 | 15172 | 401 | 9176 | 366987 | 6448841 |
| 2025 | 80418 | 197592 | 6928 | 29764 | 5742403 | 15172 | 401 | 9176 | 366987 | 6448841 |
| 2026 | 80418 | 197592 | 6928 | 29764 | 5742403 | 15163 | 401 | 9176 | 366987 | 6448832 |
| 2027 | 80418 | 197592 | 6928 | 29764 | 5742403 | 14960 | 401 | 9176 | 366987 | 6448629 |
| 2028 | 80418 | 197592 | 6928 | 29764 | 5742403 | 14607 | 401 | 9176 | 366987 | 6448276 |
| 2029 | 80418 | 197592 | 6928 | 29764 | 5742403 | 14395 | 401 | 9176 | 366987 | 6448064 |
| 2030 | 80418 | 197592 | 6928 | 29764 | 5742403 | 14395 | 401 | 9176 | 366987 | 6448064 |
| 2031 | 80418 | 197592 | 6928 | 29764 | 5742403 | 14395 | 401 | 9176 | 366987 | 6448064 |
| 2032 | 80418 | 197592 | 6928 | 29764 | 5742403 | 12954 | 361 | 9176 | 366987 | 6446583 |
| 2033 | 80418 | 197592 | 6928 | 29764 | 5742403 | 10076 | 281 | 9176 | 366987 | 6443625 |
| 2034 | 80418 | 197592 | 6928 | 29764 | 5742403 | 4318 | 120 | 9176 | 366987 | 6437706 |
| 2035 | 80418 | 197592 | 6928 | 29764 | 5742403 | 0 | 0 | 9176 | 366987 | 6433268 |
| 2036 | 80418 | 197592 | 6928 | 29764 | 5742403 | 0 | 0 | 9176 | 366987 | 6433268 |
| 2037 | 80418 | 197592 | 6928 | 29764 | 5742403 | 0 | 0 | 9176 | 366987 | 6433268 |
| 2038 | 80418 | 197592 | 6928 | 29764 | 5742403 | 0 | 0 | 9176 | 366987 | 6433268 |
| 2039 | 80418 | 197592 | 6928 | 29764 | 5742403 | 0 | 0 | 9176 | 366987 | 6433268 |

* Unadjusted for prior overpayments or underpayments of charges.

TABLE B-12 (Continued)

CAPITAL COST COMPONENTS OF EACH CONTRACTOR*

(in dollars)



| CALENDAR YEAR | SOUTHERN CALIFORNIA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Antelope Valley-East Kern Water Agency | Big Bear Municipal Water District (Assumed) | Coachella Valley County Water District | Crestline-Lake Arrowhead Water Agency | Desert Water Agency | Littlerock Creek Irrigation District | Mojave Water Agency | Palmdale Irrigation District | San Bernardino Valley Municipal Water District | San Gabriel Valley Municipal Water District |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1963 | 25090 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42896 | 0 |
| 1964 | 50345 | 0 | 12874 | 3660 | 32549 | 1110 | 27089 | 7168 | 75867 | 32215 |
| 1965 | 99546 | 0 | 22394 | 6189 | 36532 | 1992 | 47746 | 13556 | 122379 | 33467 |
| 1966 | 183335 | 0 | 38482 | 10493 | 63066 | 3449 | 82609 | 24378 | 199527 | 55381 |
| 1967 | 341025 | 16287 | 69180 | 18877 | 113698 | 6265 | 148820 | 45333 | 348237 | 97679 |
| 1968 | 593457 | 28273 | 121463 | 32797 | 199931 | 10807 | 262342 | 78795 | 613083 | 173597 |
| 1969 | 895364 | 47699 | 193325 | 52882 | 318458 | 17156 | 416362 | 123922 | 1055541 | 296386 |
| 1970 | 1187806 | 72992 | 290551 | 83337 | 478819 | 24014 | 616444 | 171667 | 1667655 | 463935 |
| 1971 | 1310451 | 95876 | 354275 | 105229 | 583923 | 26138 | 738859 | 187502 | 2225584 | 582535 |
| 1972 | 1364031 | 102943 | 375914 | 111126 | 619613 | 27154 | 784605 | 194937 | 2382804 | 617721 |
| 1973 | 1377285 | 103974 | 380370 | 112607 | 626962 | 27397 | 793651 | 196728 | 2409081 | 624751 |
| 1974 | 1377285 | 104086 | 380629 | 112937 | 627388 | 27397 | 793651 | 196728 | 2414687 | 625918 |
| 1975 | 1377285 | 104191 | 380871 | 113246 | 627787 | 27397 | 793651 | 196728 | 2419930 | 627009 |
| 1976 | 1377512 | 104199 | 380910 | 113256 | 627851 | 27401 | 793736 | 196757 | 2420097 | 627058 |
| 1977 | 1382743 | 104379 | 381804 | 113483 | 629325 | 27489 | 795701 | 197416 | 2423932 | 628185 |
| 1978 | 1391841 | 104692 | 383358 | 113878 | 631888 | 27642 | 799119 | 198562 | 2430602 | 630145 |
| 1979 | 1397300 | 104880 | 384291 | 114115 | 633426 | 27734 | 801170 | 199250 | 2434604 | 631321 |
| 1980 | 1397300 | 104880 | 384291 | 114115 | 633426 | 27734 | 801170 | 199250 | 2434604 | 631321 |
| 1981 | 1397300 | 104880 | 384291 | 114115 | 633426 | 27734 | 801170 | 199250 | 2434604 | 631321 |
| 1982 | 1398644 | 104926 | 384521 | 114173 | 633805 | 27757 | 801675 | 199419 | 2435589 | 631611 |
| 1983 | 1401330 | 105018 | 384980 | 114290 | 634562 | 27802 | 802684 | 199757 | 2437557 | 632189 |
| 1984 | 1406703 | 105203 | 385898 | 114523 | 636075 | 27892 | 804702 | 200434 | 2441495 | 633346 |
| 1985 | 1410732 | 105342 | 386586 | 114698 | 637210 | 27960 | 806215 | 200942 | 2444447 | 634214 |
| 1986 | 1410732 | 105342 | 386586 | 114698 | 637210 | 27960 | 806215 | 200942 | 2444447 | 634214 |
| 1987 | 1410732 | 105342 | 386586 | 114698 | 637210 | 27960 | 806215 | 200942 | 2444447 | 634214 |
| 1988 | 1410732 | 105342 | 386586 | 114698 | 637210 | 27960 | 806215 | 200942 | 2444447 | 634214 |
| 1989 | 1410732 | 105342 | 386586 | 114698 | 637210 | 27960 | 806215 | 200942 | 2444447 | 634214 |
| 1990 | 1410732 | 105342 | 386586 | 114698 | 637210 | 27960 | 806215 | 200942 | 2444447 | 634214 |
| 1991 | 1410732 | 105342 | 386586 | 114698 | 637210 | 27960 | 806215 | 200942 | 2444447 | 634214 |
| 1992 | 1410732 | 105342 | 386586 | 114698 | 637210 | 27960 | 806215 | 200942 | 2444447 | 634214 |
| 1993 | 1410732 | 105342 | 386586 | 114698 | 637210 | 27960 | 806215 | 200942 | 2444447 | 634214 |
| 1994 | 1410732 | 105342 | 386586 | 114698 | 637210 | 27960 | 806215 | 200942 | 2444447 | 634214 |
| 1995 | 1410732 | 105342 | 386586 | 114698 | 637210 | 27960 | 806215 | 200942 | 2444447 | 634214 |
| 1996 | 1410732 | 105342 | 386586 | 114698 | 637210 | 27960 | 806215 | 200942 | 2444447 | 634214 |
| 1997 | 1410732 | 105342 | 386586 | 114698 | 637210 | 27960 | 806215 | 200942 | 2444447 | 634214 |
| 1998 | 1410732 | 105342 | 386586 | 114698 | 637210 | 27960 | 806215 | 200942 | 2444447 | 634214 |
| 1999 | 1410732 | 105342 | 386586 | 114698 | 637210 | 27960 | 806215 | 200942 | 2444447 | 634214 |
| 2000 | 1410732 | 105342 | 386586 | 114698 | 637210 | 27960 | 806215 | 200942 | 2444447 | 634214 |
| 2001 | 1410732 | 105342 | 386586 | 114698 | 637210 | 27960 | 806215 | 200942 | 2444447 | 634214 |
| 2002 | 1410732 | 105342 | 386586 | 114698 | 637210 | 27960 | 806215 | 200942 | 2444447 | 634214 |
| 2003 | 1410732 | 105342 | 386586 | 114698 | 637210 | 27960 | 806215 | 200942 | 2444447 | 634214 |
| 2004 | 1410732 | 105342 | 386586 | 114698 | 637210 | 27960 | 806215 | 200942 | 2444447 | 634214 |
| 2005 | 1410732 | 105342 | 386586 | 114698 | 637210 | 27960 | 806215 | 200942 | 2444447 | 634214 |
| 2006 | 1410732 | 105342 | 386586 | 114698 | 637210 | 27960 | 806215 | 200942 | 2444447 | 634214 |
| 2007 | 1410732 | 105342 | 386586 | 114698 | 637210 | 27960 | 806215 | 200942 | 2444447 | 634214 |
| 2008 | 1410732 | 105342 | 386586 | 114698 | 637210 | 27960 | 806215 | 200942 | 2444447 | 634214 |
| 2009 | 1410732 | 105342 | 386586 | 114698 | 637210 | 27960 | 806215 | 200942 | 2444447 | 634214 |
| 2010 | 1410732 | 105342 | 386586 | 114698 | 637210 | 27960 | 806215 | 200942 | 2444447 | 634214 |
| 2011 | 1410732 | 105342 | 386586 | 114698 | 637210 | 27960 | 806215 | 200942 | 2444447 | 634214 |
| 2012 | 1410732 | 105342 | 386586 | 114698 | 637210 | 27960 | 806215 | 200942 | 2444447 | 634214 |
| 2013 | 1385642 | 105342 | 386586 | 114698 | 625894 | 27960 | 806215 | 200942 | 2401551 | 622774 |
| 2014 | 1360387 | 105342 | 373712 | 111038 | 616381 | 26850 | 779126 | 193774 | 2368580 | 613848 |
| 2015 | 1311186 | 105342 | 364192 | 108509 | 600678 | 25968 | 758469 | 187386 | 2322068 | 600747 |
| 2016 | 1227397 | 105342 | 348104 | 104205 | 574144 | 24511 | 723606 | 176564 | 2244920 | 578833 |
| 2017 | 1069707 | 89055 | 317406 | 95821 | 523512 | 21695 | 657395 | 155609 | 2096210 | 536535 |
| 2018 | 817275 | 77069 | 265123 | 81901 | 437279 | 17153 | 543873 | 122147 | 1831364 | 460617 |
| 2019 | 515368 | 57643 | 193261 | 61816 | 318752 | 10804 | 389853 | 77020 | 1388906 | 337828 |
| 2020 | 222926 | 32350 | 96035 | 31361 | 158391 | 3946 | 189771 | 29275 | 776792 | 170279 |
| 2021 | 100281 | 9466 | 32311 | 9469 | 53287 | 1822 | 67356 | 13440 | 218863 | 51679 |
| 2022 | 46701 | 2399 | 10672 | 3572 | 17597 | 806 | 21610 | 6005 | 61643 | 16493 |
| 2023 | 33447 | 1368 | 6216 | 2091 | 10248 | 563 | 12564 | 4214 | 35366 | 9463 |
| 2024 | 33447 | 1256 | 5957 | 1761 | 9822 | 563 | 12564 | 4214 | 29760 | 8296 |
| 2025 | 33447 | 1151 | 5715 | 1452 | 9423 | 563 | 12564 | 4214 | 24517 | 7205 |
| 2026 | 33220 | 1143 | 5676 | 1442 | 9359 | 559 | 12479 | 4185 | 24350 | 7156 |
| 2027 | 27989 | 963 | 4782 | 1215 | 7885 | 471 | 10514 | 3526 | 20515 | 6029 |
| 2028 | 18891 | 650 | 3228 | 820 | 5322 | 318 | 7096 | 2380 | 13845 | 4069 |
| 2029 | 13432 | 462 | 2295 | 583 | 3784 | 226 | 5045 | 1692 | 9843 | 2893 |
| 2030 | 13432 | 462 | 2295 | 583 | 3784 | 226 | 5045 | 1692 | 9843 | 2893 |
| 2031 | 13432 | 462 | 2295 | 583 | 3784 | 226 | 5045 | 1692 | 9843 | 2893 |
| 2032 | 12088 | 416 | 2065 | 525 | 3405 | 203 | 4540 | 1523 | 8858 | 2603 |
| 2033 | 9402 | 324 | 1606 | 408 | 2648 | 158 | 3531 | 1185 | 6890 | 2025 |
| 2034 | 4029 | 139 | 688 | 175 | 1135 | 68 | 1513 | 508 | 2952 | 868 |
| 2035 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2036 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2037 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2038 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2039 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

* Unadjusted for prior overpayments or underpayments of charges

TABLE B-12 (Continued)

CAPITAL COST COMPONENTS OF EACH CONTRACTOR *

(in dollars)



| CALENDAR YEAR | SOUTHERN CALIFORNIA (Continued) | | | | | CENTRAL COASTAL AREA | | | GRAND TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| | San Gorgonio Pass Water Agency | The Metropolitan Water District of Southern California | Upper Santa Clara Valley Water Agency | Ventura County Flood Control District | Total | San Luis Obispo County FC & WCD | Santa Barbara County FC & WCD | Total | |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1963 | 0 | 565690 | 0 | 0 | 633676 | 0 | 0 | 0 | 1158440 |
| 1964 | 17591 | 1093670 | 17055 | 8108 | 1379301 | 8970 | 22118 | 31088 | 2171112 |
| 1965 | 18702 | 1937520 | 33336 | 15839 | 2389198 | 15417 | 37506 | 52923 | 3711867 |
| 1966 | 31703 | 3465302 | 64029 | 30288 | 4252042 | 24051 | 57875 | 81926 | 5874248 |
| 1967 | 56578 | 6364802 | 122363 | 57508 | 7806652 | 39301 | 93599 | 132900 | 9934051 |
| 1968 | 101125 | 11847468 | 233707 | 109340 | 14406185 | 53152 | 126102 | 179254 | 17620752 |
| 1969 | 169903 | 20077244 | 387669 | 181077 | 24232988 | 56300 | 133630 | 189930 | 27694317 |
| 1970 | 265241 | 29569868 | 555930 | 257748 | 35706007 | 57312 | 136171 | 193483 | 39370650 |
| 1971 | 330256 | 35444166 | 620673 | 287465 | 42892932 | 58187 | 138393 | 196580 | 46862283 |
| 1972 | 347930 | 38765355 | 656043 | 302896 | 46653072 | 59204 | 141320 | 200524 | 51134784 |
| 1973 | 352060 | 39445041 | 670271 | 308863 | 47429041 | 63444 | 153251 | 216695 | 52380756 |
| 1974 | 352821 | 39571924 | 672683 | 309806 | 47567940 | 70170 | 175121 | 245291 | 52792916 |
| 1975 | 353533 | 39620539 | 673391 | 310083 | 47625641 | 82585 | 210956 | 293541 | 53123081 |
| 1976 | 353562 | 39623924 | 673460 | 310116 | 47629839 | 194945 | 479706 | 674651 | 53799705 |
| 197 | 354239 | 39701778 | 675049 | 310882 | 47726405 | 274807 | 670858 | 945665 | 54460099 |
| 1978 | 355416 | 39837177 | 677812 | 312214 | 47894346 | 375330 | 916708 | 1292038 | 55268503 |
| 1979 | 356122 | 39918416 | 679470 | 313013 | 47995112 | 540822 | 1392320 | 1933142 | 56385551 |
| 1980 | 356122 | 39918416 | 679470 | 313013 | 47995112 | 620400 | 1649684 | 2270084 | 57166433 |
| 1981 | 356122 | 39918416 | 679470 | 313013 | 47995112 | 620400 | 1649684 | 2270084 | 57462995 |
| 1982 | 356296 | 39938419 | 679878 | 313210 | 48019923 | 620644 | 1650253 | 2270897 | 57763855 |
| 1983 | 356644 | 39978385 | 680694 | 313603 | 48069495 | 621131 | 1651391 | 2272522 | 58136312 |
| 1984 | 357339 | 40058337 | 682326 | 314389 | 48168662 | 622884 | 1655481 | 2278365 | 58542947 |
| 1985 | 357860 | 40118286 | 683550 | 314979 | 48243021 | 633528 | 1680320 | 2313848 | 58951329 |
| 1986 | 357860 | 40118286 | 683550 | 314979 | 48243021 | 637610 | 1689845 | 2327455 | 59246316 |
| 1987 | 357860 | 40118286 | 683550 | 314979 | 48243021 | 637610 | 1689845 | 2327455 | 59544800 |
| 1988 | 357860 | 40118286 | 683550 | 314979 | 48243021 | 637610 | 1689845 | 2327455 | 59779803 |
| 1989 | 357860 | 40118286 | 683550 | 314979 | 48243021 | 637610 | 1689845 | 2327455 | 60003066 |
| 1990 | 357860 | 40118286 | 683550 | 314979 | 48243021 | 637610 | 1689845 | 2327455 | 60270340 |
| 1991 | 357860 | 40118286 | 683550 | 314979 | 48243021 | 637610 | 1689845 | 2327455 | 60270340 |
| 1992 | 357860 | 40118286 | 683550 | 314979 | 48243021 | 637610 | 1689845 | 2327455 | 60270340 |
| 1993 | 357860 | 40118286 | 683550 | 314979 | 48243021 | 637610 | 1689845 | 2327455 | 60270340 |
| 1994 | 357860 | 40118286 | 683550 | 314979 | 48243021 | 637610 | 1689845 | 2327455 | 60270340 |
| 1995 | 357860 | 40118286 | 683550 | 314979 | 48243021 | 637610 | 1689845 | 2327455 | 60270340 |
| 1996 | 357860 | 40118286 | 683550 | 314979 | 48243021 | 637610 | 1689845 | 2327455 | 60270340 |
| 1997 | 357860 | 40118286 | 683550 | 314979 | 48243021 | 637610 | 1689845 | 2327455 | 60270340 |
| 1998 | 357860 | 40118286 | 683550 | 314979 | 48243021 | 637610 | 1689845 | 2327455 | 60270340 |
| 1999 | 357860 | 40118286 | 683550 | 314979 | 48243021 | 637610 | 1689845 | 2327455 | 60270340 |
| 2000 | 357860 | 40118286 | 683550 | 314979 | 48243021 | 637610 | 1689845 | 2327455 | 60270340 |
| 2001 | 357860 | 40118286 | 683550 | 314979 | 48243021 | 637610 | 1689845 | 2327455 | 60270340 |
| 2002 | 357860 | 40118286 | 683550 | 314979 | 48243021 | 637610 | 1689845 | 2327455 | 60270340 |
| 2003 | 357860 | 40118286 | 683550 | 314979 | 48243021 | 637610 | 1689845 | 2327455 | 60270340 |
| 2004 | 357860 | 40118286 | 683550 | 314979 | 48243021 | 637610 | 1689845 | 2327455 | 60270340 |
| 2005 | 357860 | 40118286 | 683550 | 314979 | 48243021 | 637610 | 1689845 | 2327455 | 60270340 |
| 2006 | 357860 | 40118286 | 683550 | 314979 | 48243021 | 637610 | 1689845 | 2327455 | 60270340 |
| 2007 | 357860 | 40118286 | 683550 | 314979 | 48243021 | 637610 | 1689845 | 2327455 | 60270340 |
| 2008 | 357860 | 40118286 | 683550 | 314979 | 48243021 | 637610 | 1689845 | 2327455 | 60270340 |
| 2009 | 357860 | 40118286 | 683550 | 314979 | 48243021 | 637610 | 1689845 | 2327455 | 60270340 |
| 2010 | 357860 | 40118286 | 683550 | 314979 | 48243021 | 637610 | 1689845 | 2327455 | 60270340 |
| 2011 | 357860 | 40118286 | 683550 | 314979 | 48243021 | 637610 | 1689845 | 2327455 | 60270340 |
| 2012 | 357860 | 40118286 | 683550 | 314979 | 48243021 | 637610 | 1689845 | 2327455 | 60270340 |
| 2013 | 351662 | 39552596 | 683550 | 314979 | 47580391 | 637610 | 1689845 | 2327455 | 59075571 |
| 2014 | 346688 | 39024616 | 666495 | 306871 | 46893708 | 628640 | 1667727 | 2296367 | 58101312 |
| 2015 | 339158 | 38180766 | 650214 | 299140 | 45853823 | 622193 | 1652339 | 2274532 | 56523076 |
| 2016 | 326157 | 36652984 | 619521 | 284691 | 43990979 | 613559 | 1631970 | 2245529 | 54357073 |
| 2017 | 301282 | 33753484 | 561187 | 257471 | 40436369 | 598309 | 1596246 | 2194555 | 50283430 |
| 2018 | 256735 | 28270818 | 449843 | 205639 | 33836836 | 584458 | 1563743 | 2148201 | 43250205 |
| 2019 | 187957 | 20041042 | 295881 | 133902 | 24010033 | 581310 | 1556215 | 2137525 | 33245417 |
| 2020 | 92619 | 10548418 | 127620 | 57231 | 12537014 | 580298 | 1553674 | 2133972 | 21712183 |
| 2021 | 27604 | 4674120 | 62877 | 27514 | 5350089 | 579423 | 1551452 | 2130875 | 14497582 |
| 2022 | 9930 | 1352931 | 27507 | 12083 | 1589949 | 578406 | 1548525 | 2126931 | 10712596 |
| 2023 | 5800 | 673245 | 13279 | 6116 | 813980 | 574166 | 1536594 | 2110760 | 9694717 |
| 2024 | 5039 | 546362 | 10867 | 5173 | 675081 | 567440 | 1514724 | 2082164 | 9509372 |
| 2025 | 4327 | 497747 | 10159 | 4896 | 617380 | 555025 | 1478889 | 2033914 | 9385962 |
| 2026 | 4298 | 494362 | 10090 | 4863 | 613182 | 442665 | 1210139 | 1652804 | 8999392 |
| 2027 | 3621 | 416508 | 8501 | 4097 | 516616 | 362803 | 1018987 | 1381790 | 8624438 |
| 2028 | 2444 | 281109 | 5738 | 2765 | 348675 | 262280 | 773137 | 1035417 | 8100268 |
| 2029 | 1738 | 199870 | 4080 | 1966 | 247909 | 96788 | 297525 | 394313 | 7260130 |
| 2030 | 1738 | 199870 | 4080 | 1966 | 247909 | 17210 | 40161 | 57371 | 6768242 |
| 2031 | 1738 | 199870 | 4080 | 1966 | 247909 | 17210 | 40161 | 57371 | 6768242 |
| 2032 | 1564 | 179867 | 3672 | 1769 | 223098 | 16966 | 39592 | 56558 | 6740822 |
| 2033 | 1216 | 139901 | 2856 | 1376 | 173526 | 16479 | 38454 | 54933 | 6686037 |
| 2034 | 521 | 59949 | 1224 | 590 | 74359 | 14726 | 34364 | 49090 | 6573848 |
| 2035 | 0 | 0 | 0 | 0 | 0 | 4082 | 9525 | 13607 | 6458623 |
| 2036 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6445016 |
| 2037 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6445016 |
| 2038 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6444499 |
| 2039 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6440179 |

* Unadjusted for prior overpayments or underpayments of charges.

TABLE B-13

MINIMUM OPERATION, MAINTENANCE, POWER, AND REPLACEMENT COMPONENTS
OF EACH CONTRACTOR*

(in dollars)



| CALENDAR YEAR | FUTURE CONTRACTORS | | | NORTH BAY AREA | | | SOUTH BAY AREA | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | South Bay | Cedar Springs | Nuclear Powerplant (Assumed) | Napa County FC & WCD | Solano County FC & WCD | Total | Alameda County FC & WCD, Zone 7 | Alameda County Water District | Santa Clara County FC & WD | Total |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 15008 | 13684 | 0 | 28692 |
| 1963 | 15994 | 0 | 0 | 0 | 0 | 0 | 33392 | 30442 | 72788 | 136622 |
| 1964 | 17369 | 0 | 0 | 0 | 0 | 0 | 36264 | 33061 | 79046 | 148371 |
| 1965 | 33451 | 0 | 0 | 0 | 0 | 0 | 65105 | 63049 | 158261 | 286415 |
| 1966 | 27034 | 0 | 0 | 0 | 0 | 0 | 46359 | 47143 | 147464 | 240966 |
| 1967 | 28709 | 0 | 0 | 0 | 0 | 0 | 49502 | 50392 | 157230 | 257124 |
| 1968 | 30638 | 0 | 0 | 28000 | 0 | 28000 | 53061 | 53727 | 165828 | 272616 |
| 1969 | 34742 | 0 | 0 | 28000 | 0 | 28000 | 61584 | 61248 | 184777 | 307609 |
| 1970 | 34641 | 0 | 0 | 28000 | 0 | 28000 | 61464 | 61055 | 184321 | 306840 |
| 1971 | 34710 | 0 | 0 | 28000 | 0 | 28000 | 61566 | 61188 | 184640 | 307394 |
| 1972 | 33820 | 639 | 0 | 28000 | 0 | 28000 | 59707 | 59494 | 180587 | 299788 |
| 1973 | 33233 | 639 | 48876 | 27000 | 0 | 27000 | 58950 | 58674 | 178130 | 295754 |
| 1974 | 33316 | 639 | 49028 | 27000 | 0 | 27000 | 59165 | 58832 | 178505 | 296502 |
| 1975 | 32980 | 639 | 48700 | 27000 | 0 | 27000 | 58464 | 58192 | 175975 | 292631 |
| 1976 | 32884 | 639 | 48216 | 27000 | 0 | 27000 | 58263 | 58010 | 175539 | 291812 |
| 1977 | 32932 | 639 | 48530 | 27000 | 0 | 27000 | 58364 | 58101 | 175757 | 292222 |
| 1978 | 32696 | 639 | 48457 | 27000 | 0 | 27000 | 57872 | 57653 | 174685 | 290210 |
| 1979 | 32683 | 639 | 48615 | 27000 | 0 | 27000 | 57844 | 57628 | 174626 | 290098 |
| 1980 | 32666 | 639 | 48619 | 70567 | 73433 | 144000 | 57808 | 57595 | 174547 | 289950 |
| 1981 | 32670 | 639 | 48654 | 70169 | 72831 | 143000 | 57817 | 57603 | 174567 | 289987 |
| 1982 | 32705 | 639 | 48735 | 70169 | 72831 | 143000 | 57890 | 57669 | 174725 | 290284 |
| 1983 | 32819 | 639 | 48892 | 70169 | 72831 | 143000 | 58127 | 57885 | 175242 | 291254 |
| 1984 | 32648 | 639 | 48682 | 70169 | 72831 | 143000 | 57772 | 57562 | 174467 | 289801 |
| 1985 | 32448 | 639 | 48192 | 70169 | 72831 | 143000 | 57353 | 57180 | 173554 | 288087 |
| 1986 | 32565 | 639 | 48032 | 70169 | 72831 | 143000 | 57598 | 57403 | 174088 | 289089 |
| 1987 | 32469 | 639 | 47791 | 70169 | 72831 | 143000 | 57398 | 57221 | 173652 | 288271 |
| 1988 | 32430 | 639 | 47781 | 70169 | 72831 | 143000 | 57316 | 57146 | 173474 | 287936 |
| 1989 | 32430 | 639 | 47839 | 70169 | 72831 | 143000 | 57316 | 57146 | 173474 | 287936 |
| 1990 | 32478 | 639 | 48037 | 70169 | 72831 | 143000 | 57417 | 57237 | 173692 | 288346 |
| 1991 | 32473 | 639 | 48071 | 70169 | 72831 | 143000 | 57407 | 57229 | 173672 | 288308 |
| 1992 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 1993 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 1994 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 1995 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 1996 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 1997 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 1998 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 1999 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2000 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2001 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2002 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2003 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2004 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2005 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2006 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2007 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2008 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2009 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2010 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2011 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2012 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2013 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2014 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2015 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2016 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2017 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2018 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2019 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2020 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2021 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2022 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2023 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2024 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2025 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2026 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2027 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2028 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2029 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2030 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2031 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2032 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2033 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2034 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2035 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2036 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2037 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2038 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |
| 2039 | 32381 | 639 | 48092 | 70169 | 72831 | 143000 | 57216 | 57055 | 173254 | 287525 |

* Unadjusted for prior overpayments or underpayments of charges.

TABLE B-13 (Continued)

MINIMUM OPERATION, MAINTENANCE, POWER AND REPLACEMENT COMPONENTS
OF EACH CONTRACTOR*

(in dollars)



| CALENDAR YEAR | SAN JOAQUIN VALLEY | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Kern County Water Agency | | | | | |
| | Devil's Den Water District | Dudley Ridge Water District | Empire West Side Irrigation District | Hacienda Water District | Agriculture | Municipal and Industrial | Kings County (Assumed) | Oak Flat Water District | Tulare Lake Basin Water Storage District | Total |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1963 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1964 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1965 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1966 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1967 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1968 | 17461 | 47426 | 2370 | 6986 | 885129 | 89770 | 2408 | 3053 | 88454 | 1143057 |
| 1969 | 20331 | 53811 | 2676 | 7927 | 1107928 | 115051 | 2720 | 3483 | 100132 | 1414059 |
| 1970 | 20213 | 53280 | 2652 | 7849 | 1156180 | 125910 | 2696 | 3472 | 99214 | 1471466 |
| 1971 | 21913 | 54396 | 2687 | 8014 | 1334182 | 150909 | 2731 | 3476 | 100835 | 1679143 |
| 1972 | 21909 | 53687 | 2648 | 7909 | 1330947 | 151166 | 2691 | 3416 | 99446 | 1673819 |
| 1973 | 21492 | 52838 | 2605 | 7784 | 1310775 | 148971 | 2647 | 3333 | 97869 | 1648314 |
| 1974 | 21594 | 53297 | 2629 | 7852 | 1318200 | 149699 | 2672 | 3364 | 98743 | 1658050 |
| 1975 | 21544 | 53073 | 2618 | 7819 | 1312623 | 149007 | 2660 | 3353 | 98315 | 1651012 |
| 1976 | 21355 | 52564 | 2592 | 7743 | 1301732 | 147786 | 2633 | 3317 | 97343 | 1637065 |
| 1977 | 21407 | 52802 | 2603 | 7778 | 1307018 | 148469 | 2645 | 3335 | 97796 | 1643853 |
| 1978 | 21304 | 52333 | 2579 | 7709 | 1299691 | 147714 | 2620 | 3286 | 96903 | 1634139 |
| 1979 | 21308 | 52352 | 2581 | 7713 | 1300782 | 147929 | 2622 | 3281 | 96940 | 1635508 |
| 1980 | 21546 | 52391 | 2582 | 7718 | 1302973 | 148013 | 2623 | 3275 | 97013 | 1638134 |
| 1981 | 21546 | 52390 | 2582 | 7717 | 1303138 | 148060 | 2623 | 3276 | 97012 | 1638344 |
| 1982 | 21583 | 52559 | 2591 | 7743 | 1306118 | 148407 | 2632 | 3289 | 97334 | 1642256 |
| 1983 | 21530 | 52663 | 2597 | 7758 | 1308041 | 148740 | 2638 | 3293 | 97532 | 1644792 |
| 1984 | 21542 | 52376 | 2582 | 7716 | 1303033 | 148110 | 2623 | 3268 | 96985 | 1638235 |
| 1985 | 21280 | 51883 | 2556 | 7644 | 1291871 | 146876 | 2597 | 3232 | 96047 | 1623986 |
| 1986 | 21228 | 52337 | 2579 | 7710 | 1296712 | 147379 | 2620 | 3316 | 96910 | 1630791 |
| 1987 | 21142 | 51949 | 2560 | 7653 | 1289433 | 146571 | 2600 | 3279 | 96172 | 1621359 |
| 1988 | 21190 | 51816 | 2552 | 7633 | 1287867 | 146371 | 2593 | 3265 | 95918 | 1619205 |
| 1989 | 21113 | 51816 | 2552 | 7633 | 1287606 | 146444 | 2593 | 3265 | 95918 | 1618940 |
| 1990 | 21284 | 52246 | 2575 | 7697 | 1296069 | 147260 | 2616 | 3283 | 96738 | 1629768 |
| 1991 | 21285 | 52247 | 2575 | 7697 | 1296287 | 147285 | 2616 | 3281 | 96740 | 1630013 |
| 1992 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 1993 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 1994 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 1995 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 1996 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 1997 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 1998 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 1999 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2000 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2001 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2002 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2003 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2004 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2005 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2006 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2007 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2008 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2009 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2010 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2011 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2012 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2013 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2014 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2015 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2016 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2017 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2018 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2019 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2020 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2021 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2022 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2023 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2024 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2025 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2026 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2027 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2028 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2029 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2030 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2031 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2032 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2033 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2034 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2035 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2036 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2037 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2038 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |
| 2039 | 21296 | 52298 | 2577 | 7704 | 1297176 | 147380 | 2618 | 3286 | 96836 | 1631171 |

* Unadjusted for prior overpayments or underpayments of charges.

TABLE B-13 (Continued)

MINIMUM OPERATION, MAINTENANCE, POWER, AND REPLACEMENT COMPONENTS
OF EACH CONTRACTOR*

(in dollars)



| CALENDAR YEAR | SOUTHERN CALIFORNIA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Antelope Valley-East Kern Water Agency | Big Bear Municipal Water District (Assumed) | Coachella Valley County Water District | Crestline-Lake Arrowhead Water Agency | Desert Water Agency | Littlerock Creek Irrigation District | Mojave Water Agency | Palmdale Irrigation District | San Bernardino Valley Municipal Water District | San Gabriel Valley Municipal Water District |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1963 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1964 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1965 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1966 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1967 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1968 | 83768 | 2882 | 14306 | 3632 | 23597 | 1406 | 31462 | 10553 | 61391 | 18041 |
| 1969 | 107329 | 3692 | 18330 | 4656 | 30232 | 1802 | 40310 | 13522 | 78661 | 23117 |
| 1970 | 121104 | 4168 | 20682 | 5252 | 34115 | 2032 | 45488 | 15256 | 88757 | 26084 |
| 1971 | 301122 | 10316 | 51218 | 13007 | 84475 | 5035 | 112635 | 37777 | 219788 | 64590 |
| 1972 | 355313 | 22061 | 96610 | 24795 | 159340 | 6945 | 211806 | 50472 | 476552 | 137147 |
| 1973 | 348685 | 21624 | 95293 | 24462 | 157169 | 6820 | 208881 | 49572 | 466945 | 134452 |
| 1974 | 347519 | 21504 | 94734 | 24322 | 156248 | 6799 | 207658 | 49403 | 464408 | 133710 |
| 1975 | 345315 | 21365 | 93945 | 24121 | 154944 | 6761 | 205921 | 49129 | 461455 | 132834 |
| 1976 | 341735 | 21225 | 93337 | 23965 | 153940 | 6698 | 204581 | 48659 | 458409 | 131945 |
| 1977 | 344829 | 21158 | 93644 | 24044 | 154450 | 6752 | 205261 | 49049 | 456844 | 131526 |
| 1978 | 345511 | 21228 | 94088 | 24157 | 155179 | 6762 | 206232 | 49132 | 458308 | 131962 |
| 1979 | 348046 | 21335 | 94658 | 24302 | 156122 | 6803 | 207486 | 49450 | 460610 | 132640 |
| 1980 | 348430 | 21297 | 94372 | 24231 | 155646 | 6810 | 206855 | 49502 | 459812 | 132399 |
| 1981 | 349206 | 21324 | 94503 | 24265 | 155863 | 6823 | 207145 | 49600 | 460378 | 132567 |
| 1982 | 349729 | 21510 | 95301 | 24467 | 157185 | 6833 | 208905 | 49663 | 464389 | 133735 |
| 1983 | 352037 | 21549 | 95586 | 24538 | 157651 | 6871 | 209527 | 49952 | 465171 | 133973 |
| 1984 | 350671 | 21457 | 95105 | 24417 | 156860 | 6847 | 208471 | 49781 | 463253 | 133407 |
| 1985 | 346153 | 21253 | 94117 | 24165 | 155227 | 6771 | 206297 | 49214 | 458866 | 132120 |
| 1986 | 343125 | 21178 | 93435 | 23992 | 154104 | 6721 | 204799 | 48833 | 457389 | 131665 |
| 1987 | 341549 | 21084 | 93002 | 23882 | 153388 | 6695 | 203845 | 48634 | 455383 | 131078 |
| 1988 | 342043 | 21107 | 93166 | 23924 | 153661 | 6703 | 204205 | 48695 | 455800 | 131206 |
| 1989 | 343022 | 21133 | 93305 | 23961 | 153889 | 6719 | 204512 | 48818 | 456400 | 131381 |
| 1990 | 343553 | 21145 | 93423 | 23990 | 154085 | 6728 | 204774 | 48885 | 456617 | 131448 |
| 1991 | 343640 | 21159 | 93494 | 24008 | 154201 | 6729 | 204930 | 48896 | 456921 | 131538 |
| 1992 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 1993 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 1994 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 1995 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 1996 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 1997 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 1998 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 1999 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2000 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2001 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2002 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2003 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2004 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2005 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2006 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2007 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2008 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2009 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2010 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2011 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2012 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2013 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2014 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2015 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2016 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2017 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2018 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2019 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2020 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2021 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2022 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2023 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2024 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2025 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2026 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2027 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2028 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2029 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2030 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2031 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2032 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2033 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2034 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2035 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2036 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2037 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2038 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |
| 2039 | 343729 | 21162 | 93509 | 24012 | 154226 | 6731 | 204963 | 48908 | 456986 | 131557 |

* Unadjusted for prior overpayments or underpayments of charges.

TABLE B-13 (Continued)

MINIMUM OPERATION, MAINTENANCE, POWER, AND REPLACEMENT COMPONENTS
OF EACH CONTRACTOR*

(in dollars)



| CALENDAR YEAR | SOUTHERN CALIFORNIA (Continued) | | | | | CENTRAL COASTAL AREA | | | GRAND TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| | San Gorgonio Pass Water Agency | The Metropolitan Water District of Southern California | Upper Santa Clara Valley Water Agency | Ventura County Flood Control District | Total | San Luis Obispo County FC & WCD | Santa Barbara County FC & WCD | Total | |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28692 |
| 1963 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 152616 |
| 1964 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 165740 |
| 1965 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 319866 |
| 1966 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 268000 |
| 1967 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 285833 |
| 1968 | 10838 | 1248046 | 25442 | 12263 | 1547627 | 25620 | 59781 | 85401 | 3107339 |
| 1969 | 13886 | 1605087 | 32599 | 15711 | 1988934 | 29840 | 69629 | 99469 | 3872813 |
| 1970 | 15669 | 1817618 | 36783 | 17727 | 2250735 | 29671 | 69234 | 98905 | 4190587 |
| 1971 | 38802 | 5780609 | 121071 | 58180 | 6898625 | 32201 | 75143 | 107344 | 9055216 |
| 1972 | 74046 | 7628125 | 128867 | 61939 | 9434018 | 32202 | 75147 | 107349 | 11577433 |
| 1973 | 73062 | 7442129 | 125482 | 60311 | 9214887 | 31588 | 73709 | 105297 | 11374000 |
| 1974 | 72641 | 7371995 | 124097 | 59642 | 9134680 | 31734 | 74051 | 105785 | 11305000 |
| 1975 | 72043 | 7346325 | 123823 | 59510 | 9097491 | 31663 | 73884 | 105547 | 11256000 |
| 1976 | 71580 | 7281253 | 122545 | 58892 | 9018764 | 31385 | 73235 | 104620 | 11161000 |
| 1977 | 71815 | 7309651 | 123549 | 59378 | 9051950 | 31461 | 73413 | 104874 | 11202000 |
| 1978 | 72149 | 7329425 | 123837 | 59515 | 9077485 | 31311 | 73063 | 104374 | 11215000 |
| 1979 | 72581 | 7367667 | 124518 | 59844 | 9126062 | 31318 | 73077 | 104395 | 11265000 |
| 1980 | 72362 | 7361369 | 124493 | 59834 | 9117412 | 114903 | 284677 | 399580 | 11671000 |
| 1981 | 72463 | 7365357 | 124538 | 59855 | 9124127 | 111003 | 275576 | 386579 | 11664000 |
| 1982 | 73070 | 7401918 | 124890 | 60025 | 9171620 | 102959 | 256802 | 359761 | 11689000 |
| 1983 | 73284 | 7425289 | 125413 | 60274 | 9201115 | 97477 | 244012 | 341489 | 11704000 |
| 1984 | 72920 | 7405922 | 125164 | 60155 | 9174430 | 101100 | 252465 | 353565 | 11681000 |
| 1985 | 72171 | 7325699 | 123679 | 59440 | 9075372 | 92614 | 232662 | 325276 | 11537000 |
| 1986 | 71656 | 7300586 | 123196 | 59208 | 9039887 | 91930 | 231067 | 322997 | 11507000 |
| 1987 | 71326 | 7274232 | 122782 | 59008 | 9005888 | 90606 | 227977 | 318583 | 11458000 |
| 1988 | 71452 | 7285114 | 122999 | 59113 | 9019188 | 90377 | 227444 | 317821 | 11468000 |
| 1989 | 71557 | 7299527 | 123297 | 59255 | 9036776 | 89664 | 225776 | 315440 | 11483000 |
| 1990 | 71648 | 7305400 | 123433 | 59322 | 9044451 | 89616 | 225665 | 315281 | 11502000 |
| 1991 | 71700 | 7308198 | 123463 | 59336 | 9048213 | 89617 | 225666 | 315283 | 11506000 |
| 1992 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 1993 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 1994 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 1995 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 1996 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 1997 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 1998 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 1999 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2000 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2001 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2002 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2003 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2004 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2005 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2006 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2007 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2008 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2009 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2010 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2011 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2012 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2013 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2014 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2015 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2016 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2017 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2018 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2019 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2020 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2021 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2022 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2023 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2024 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2025 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2026 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2027 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2028 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2029 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2030 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2031 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2032 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2033 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2034 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2035 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2036 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2037 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2038 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |
| 2039 | 71711 | 7309522 | 123490 | 59349 | 9049855 | 89633 | 225704 | 315337 | 11508000 |

* Unadjusted for prior overpayments or underpayments of charges.

TABLE B-14

UNIT VARIABLE OPERATION, MAINTENANCE, POWER, AND REPLACEMENT CHARGES[1]

(in dollars per acre-foot)



| CALENDAR YEAR | NORTH BAY AQUEDUCT | | SOUTH BAY AQUEDUCT | CALIFORNIA AQUEDUCT | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Reach 1 | Reach 3 | Reach 1 | Reach 1 | Reach 4 | Reach 14A | Reach 15 | Reach 16 | Reach 17C |
| | Calhoun Pumping Plant | Cordelia Pumping Plant | South Bay and Del Valle Pumping Plants [2] | Delta Pumping Plant | Dos Amigos Pumping Plant | Buena Vista Pumping Plant | Wheeler Ridge Pumping Plant | Wind Gap Pumping Plant | Tehachapi Pumping Plant |
| 1962 | | | 4.3463957 | | | | | | |
| 1963 | | | 4.7777778 | | | | | | |
| 1964 | | | 3.7461145 | | | | | | |
| 1965 | | | 4.3937367 | | | | | | |
| 1966 | | | 3.6763499 | | | | | | |
| 1967 | | | 6.8505080 | 2.6705370 | | | | | |
| 1968 | | 16.6666667 | 4.5645810 | 1.0532688 | 2.4384540 | | | | |
| 1969 | | 8.9473684 | 5.4232906 | 2.1285444 | 3.4712298 | | | | |
| 1970 | | 6.7857143 | 4.8313206 | 1.0397269 | 1.9014601 | | | | |
| 1971 | | 5.5263158 | 4.5112176 | .8709422 | 1.5460642 | 2.7824674 | 4.2910559 | 7.4614150 | 16.2573493 |
| 1972 | | 4.3750000 | 4.5909708 | .8885194 | 1.4583122 | 2.5208886 | 3.7805740 | 6.4895838 | 14.8473717 |
| 1973 | | 3.6206897 | 4.4281710 | .7653803 | 1.4097187 | 2.4555277 | 3.6925736 | 6.3589851 | 14.6531715 |
| 1974 | | 3.7313433 | 4.6958952 | .8560259 | 1.5286603 | 2.4823849 | 3.6351095 | 6.0993615 | 13.1731409 |
| 1975 | | 4.1558442 | 4.2179441 | .8364180 | 1.4690608 | 2.3599284 | 3.4282652 | 5.7346760 | 12.4636168 |
| 1976 | | 3.8372093 | 4.0741972 | .7303237 | 1.3172437 | 2.1424117 | 3.1303395 | 5.2523941 | 11.6310208 |
| 1977 | | 3.5416667 | 4.1167046 | .7807793 | 1.3848486 | 2.2334514 | 3.3631494 | 5.5782634 | 12.4854030 |
| 1978 | | 3.3333333 | 3.7982310 | .6306717 | 1.2471361 | 2.1797221 | 3.3176230 | 5.5809174 | 12.8241192 |
| 1979 | | 3.4782609 | 3.8269342 | .6166855 | 1.2558877 | 2.2225211 | 3.4027636 | 5.7728681 | 13.5138312 |
| 1980 | .7272727 | 4.4872727 | 3.7056821 | .6047919 | 1.2502397 | 2.2313545 | 3.4241892 | 5.8450760 | 13.9461330 |
| 1981 | .2758621 | 3.7667712 | 3.6829848 | .6099921 | 1.2499581 | 2.2393009 | 3.4353686 | 5.8878990 | 14.1809190 |
| 1982 | .2459016 | 2.8459016 | 3.8806747 | .6479161 | 1.2997839 | 2.2839378 | 3.4894603 | 5.9509923 | 14.3737131 |
| 1983 | .2218115 | 2.9295038 | 3.9678492 | .6580897 | 1.3357569 | 2.3594748 | 3.5933081 | 6.1411226 | 14.9565767 |
| 1984 | .2027027 | 3.6884170 | 3.7622206 | .5797693 | 1.2433467 | 2.2384008 | 3.4462932 | 5.9336261 | 14.6031672 |
| 1985 | .1832061 | 3.3832061 | 3.3730202 | .4717856 | 1.0854664 | 2.0290802 | 3.1325971 | 5.4137458 | 13.3829783 |
| 1986 | .1643836 | 2.3643836 | 3.4527711 | .7316367 | 1.2065863 | 2.0287598 | 3.0376548 | 5.1201791 | 12.3794188 |
| 1987 | .1454545 | 2.2160427 | 3.2735915 | .6189009 | 1.0829146 | 1.8786057 | 2.8513318 | 4.8903363 | 12.0231691 |
| 1988 | .1212121 | 2.1656565 | 3.2165460 | .5739230 | 1.0477156 | 1.8505826 | 2.8444314 | 4.9134159 | 12.2005651 |
| 1989 | .1030043 | 2.1240569 | 3.2951720 | .5702199 | 1.0472073 | 1.8708040 | 2.8764905 | 4.9952561 | 12.4907386 |
| 1990 | .0955414 | 2.0955414 | 3.3675937 | .6267609 | 1.1903589 | 2.0632180 | 3.0571351 | 5.1462027 | 12.5590520 |
| 1991 | .0955414 | 2.0955414 | 3.2996716 | .6253928 | 1.1911640 | 2.0674564 | 3.1033352 | 5.1914987 | 12.5866987 |
| 1992 | .0955414 | 2.0955414 | 3.2747838 | .6395307 | 1.2053019 | 2.0815943 | 3.1174731 | 5.2056366 | 12.6008366 |
| 1993 | .0955414 | 2.0955414 | 3.2152640 | .6391648 | 1.2049360 | 2.0812284 | 3.1171072 | 5.2052707 | 12.6004707 |
| 1994 | .0955414 | 2.0955414 | 3.1773999 | .6389384 | 1.2047096 | 2.0810020 | 3.1168808 | 5.2050443 | 12.6002443 |
| 1995 | .0955414 | 2.0955414 | 3.1603699 | .6386308 | 1.2044020 | 2.0806944 | 3.1165732 | 5.2047367 | 12.5999367 |
| 1996 | .0955414 | 2.0955414 | 3.1441810 | .6388047 | 1.2045759 | 2.0808683 | 3.1167471 | 5.2049106 | 12.6001106 |
| 1997 | .0955414 | 2.0955414 | 3.1278591 | .6384974 | 1.2042686 | 2.0805610 | 3.1164398 | 5.2046033 | 12.5998033 |
| 1998 | .0955414 | 2.0955414 | 3.1278591 | .6384974 | 1.2042686 | 2.0805610 | 3.1164398 | 5.2046033 | 12.5998033 |
| 1999 | .0955414 | 2.0955414 | 3.1278591 | .6384974 | 1.2042686 | 2.0805610 | 3.1164398 | 5.2046033 | 12.5998033 |
| 2000[3] | .0955414 | 2.0955414 | 3.1278591 | .6384974 | 1.2042686 | 2.0805610 | 3.1164398 | 5.2046033 | 12.5998033 |

Footnotes shown on Sheet 2.

TABLE B-14 (Continued)

UNIT VARIABLE OPERATION, MAINTENANCE, POWER, AND REPLACEMENT CHARGES[1]

(in dollars per acre-foot)



| CALENDAR YEAR | CALIFORNIA AQUEDUCT (Continued) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Reach 18A | Reach 22B | Reach 26 | Reach 27 | Reach 29A | Reach 29C | Reach 29E | Reach 31 | Reach 33 |
| | Cottonwood Powerplant | Pearblossom Pumping Plant | Upper Devil Canyon Powerplant | Lower Devil Canyon Powerplant | Oso Pumping Plant | Pyramid Powerplant | Castaic Powerplant | Las Perillas and Badger Hill Pumping Plants | Devil's Den Sawtooth and Polonio PP's and San Luis Obispo Pwp |
| 1962 | | | | | | | | | |
| 1963 | | | | | | | | | |
| 1964 | | | | | | | | | |
| 1965 | | | | | | | | | |
| 1966 | | | | | | | | | |
| 1967 | | | | | | | | | |
| 1968 | | | | | | | | 7.4542269 | |
| 1969 | | | | | | | | 7.8925948 | |
| 1970 | | | | | | | | 5.9072238 | |
| 1971 | | | | | 17.3636824 | 15.5106722 | 14.3456996 | 5.4116104 | |
| 1972 | 14.6199868 | 17.2253198 | 14.2772109 | 12.3339712 | 15.8519540 | 14.3468430 | 12.7430362 | 5.2567618 | |
| 1973 | 14.3925355 | 18.0414861 | 16.1809799 | 14.9574606 | 15.5500815 | 13.9230648 | 10.0373661 | 5.5344189 | |
| 1974 | 12.8851922 | 15.9930247 | 14.1140909 | 12.8750417 | 13.9163103 | 12.0758731 | 6.9152174 | 5.8463337 | |
| 1975 | 12.1698953 | 14.5598884 | 12.9708895 | 11.9265474 | 13.2737197 | 11.4477141 | 7.2849452 | 5.3893962 | |
| 1976 | 11.3305456 | 13.7966141 | 11.9266121 | 10.7091401 | 12.3719433 | 10.5335396 | 6.0847336 | 4.9035815 | |
| 1977 | 12.1444261 | 14.3038493 | 11.1077158 | 8.9951495 | 13.2175355 | 11.0748859 | 7.0074832 | 4.8063654 | |
| 1978 | 12.4441537 | 15.0533124 | 11.6506619 | 9.3962743 | 13.6995929 | 11.6807767 | 7.3739689 | 4.7559080 | |
| 1979 | 13.1707688 | 15.9930663 | 12.5257441 | 10.2333524 | 14.4097609 | 12.4090489 | 7.8973603 | 4.5892210 | |
| 1980 | 13.5890832 | 15.8846667 | 12.5729523 | 10.3895654 | 14.6974086 | 12.5836316 | 8.0553502 | 3.5530387 | 47.6439478 |
| 1981 | 13.8092955 | 16.0951039 | 12.8340773 | 10.6777963 | 14.9405946 | 12.6974984 | 7.8889572 | 3.4582392 | 41.6400574 |
| 1982 | 13.9410133 | 17.2306940 | 14.2791015 | 12.3210922 | 15.2748419 | 12.9149742 | 8.3071501 | 3.4202658 | 29.0263264 |
| 1983 | 14.5738256 | 17.7298514 | 14.5384541 | 12.4256122 | 15.9353907 | 13.6854128 | 8.5526541 | 3.3519794 | 21.2307673 |
| 1984 | 14.2403356 | 17.0631788 | 13.9728459 | 11.9387720 | 15.5713358 | 13.4268838 | 8.5781253 | 3.4562903 | 26.4093104 |
| 1985 | 13.0015283 | 15.5108273 | 12.3634315 | 10.2812825 | 14.2086586 | 12.0155505 | 7.1372962 | 2.8747489 | 13.8021683 |
| 1986 | 12.0446694 | 14.2978614 | 11.8131940 | 10.1731902 | 13.1716172 | 11.2059699 | 7.3838333 | 2.4117980 | 12.5024324 |
| 1987 | 11.6691192 | 13.7362778 | 11.2159677 | 9.5555460 | 12.8052175 | 10.7486375 | 7.1746169 | 2.1981288 | 10.3821482 |
| 1988 | 11.8476852 | 13.9918586 | 11.3766740 | 9.6452414 | 13.0360742 | 10.9335594 | 7.4994519 | 2.2952139 | 9.9170463 |
| 1989 | 12.1156916 | 14.2478665 | 11.5868031 | 9.8226606 | 13.3296448 | 11.1751060 | 7.7949828 | 2.1523447 | 9.0661117 |
| 1990 | 12.1953773 | 14.3725451 | 11.5770590 | 9.7359143 | 13.4031008 | 11.2923194 | 7.7868792 | 2.5503157 | 8.7776434 |
| 1991 | 12.2350167 | 14.4670945 | 11.6730837 | 9.8268851 | 13.4129433 | 11.3476614 | 7.8376053 | 2.5727074 | 8.8967703 |
| 1992 | 12.2491546 | 14.4812324 | 11.6872216 | 9.8410230 | 13.4270812 | 11.3617993 | 7.8517432 | 2.5868453 | 8.9109082 |
| 1993 | 12.2487887 | 14.4808665 | 11.6868557 | 9.8406571 | 13.4267153 | 11.3614334 | 7.8513773 | 2.5864794 | 8.9105423 |
| 1994 | 12.2485623 | 14.4806401 | 11.6866293 | 9.8404307 | 13.4264889 | 11.3612070 | 7.8511509 | 2.5862530 | 8.9103159 |
| 1995 | 12.2482547 | 14.4803325 | 11.6863217 | 9.8401231 | 13.4261813 | 11.3608994 | 7.8508433 | 2.5859454 | 8.9100083 |
| 1996 | 12.2484286 | 14.4805064 | 11.6864956 | 9.8402970 | 13.4263552 | 11.3610733 | 7.8510172 | 2.5861193 | 8.9101822 |
| 1997 | 12.2481213 | 14.4801991 | 11.6861883 | 9.8399897 | 13.4260479 | 11.3607660 | 7.8507099 | 2.5858120 | 8.9098749 |
| 1998 | 12.2481213 | 14.4801991 | 11.6861883 | 9.8399897 | 13.4260479 | 11.3607660 | 7.8507099 | 2.5858120 | 8.9098749 |
| 1999 | 12.2481213 | 14.4801991 | 11.6861883 | 9.8399897 | 13.4260479 | 11.3607660 | 7.8507099 | 2.5858120 | 8.9098749 |
| 2000[3] | 12.2481213 | 14.4801991 | 11.6861883 | 9.8399897 | 13.4260479 | 11.3607660 | 7.8507099 | 2.5858120 | 8.9098749 |

1/ Rates as shown constitute the total rate, cumulative from the Sacramento-San Joaquin Delta, applicable to deliveries downstream from the indicated pumping and power recovery plants.

2/ The relatively minor estimated costs of the Del Valle Pumping Plant have been combined with those of the South Bay Pumping Plant to simplify the allocation procedure. The increase in the unit rate in 1967 reflects use of commercial power, rather than power currently supplied by the Bureau of Reclamation.

3/ And thereafter for the remainder of the project repayment period.

TABLE B-15

VARIABLE OPERATION, MAINTENANCE, POWER, AND REPLACEMENT COMPONENTS OF EACH CONTRACTOR*

(in dollars)



| CALENDAR YEAR | FUTURE CONTRACTOR | NORTH BAY AREA | | | SOUTH BAY AREA | | | |
|---|---|---|---|---|---|---|---|---|
| | Nuclear Powerplant (Assumed) | Napa County FC & WCD | Solano County FC & WCD | Total | Alameda County FC & WCD, Zone 7 | Alameda County Water District | Santa Clara County FC & WD | Total |
| 1962 | 0 | 0 | 0 | 0 | 2147 | 36562 | 0 | 38709 |
| 1963 | 0 | 0 | 0 | 0 | 8270 | 52145 | 0 | 60415 |
| 1964 | 0 | 0 | 0 | 0 | 6267 | 72068 | 0 | 78335 |
| 1965 | 0 | 0 | 0 | 0 | 11418 | 71914 | 65809 | 149141 |
| 1966 | 0 | 0 | 0 | 0 | 15441 | 70292 | 138267 | 224000 |
| 1967 | 0 | 0 | 0 | 0 | 27402 | 97962 | 346636 | 472000 |
| 1968 | 0 | 15000 | 0 | 15000 | 34234 | 68469 | 401683 | 504386 |
| 1969 | 0 | 17000 | 0 | 17000 | 47725 | 84061 | 477250 | 609036 |
| 1970 | 0 | 19000 | 0 | 19000 | 48313 | 78268 | 425156 | 551737 |
| 1971 | 0 | 21000 | 0 | 21000 | 50525 | 76691 | 396987 | 524203 |
| 1972 | 0 | 21000 | 0 | 21000 | 56928 | 82178 | 404006 | 543112 |
| 1973 | 111282 | 21000 | 0 | 21000 | 60223 | 83249 | 389679 | 533151 |
| 1974 | 106738 | 25000 | 0 | 25000 | 69499 | 92039 | 413239 | 574777 |
| 1975 | 100356 | 32000 | 0 | 32000 | 67488 | 86467 | 371179 | 525134 |
| 1976 | 91917 | 33000 | 0 | 33000 | 70077 | 86780 | 358529 | 515386 |
| 1977 | 97619 | 34000 | 0 | 34000 | 75747 | 91391 | 362269 | 529407 |
| 1978 | 97666 | 35000 | 0 | 35000 | 74445 | 87740 | 334244 | 496429 |
| 1979 | 101025 | 40000 | 0 | 40000 | 79600 | 91464 | 336770 | 507834 |
| 1980 | 102276 | 56091 | 4909 | 61000 | 81524 | 91900 | 326095 | 499519 |
| 1981 | 102829 | 51793 | 2207 | 54000 | 84709 | 95758 | 324102 | 504569 |
| 1982 | 104143 | 42689 | 2311 | 45000 | 93136 | 105554 | 341500 | 540190 |
| 1983 | 214938 | 47604 | 2396 | 50000 | 99196 | 112687 | 349171 | 561054 |
| 1984 | 207677 | 64547 | 2453 | 67000 | 97818 | 111361 | 331076 | 540255 |
| 1985 | 189481 | 63435 | 2565 | 66000 | 91071 | 103889 | 296826 | 491786 |
| 1986 | 179205 | 47288 | 2712 | 50000 | 96678 | 110834 | 303844 | 511356 |
| 1987 | 171160 | 47091 | 2909 | 50000 | 94934 | 109010 | 288076 | 492020 |
| 1988 | 171969 | 48727 | 3273 | 52000 | 96497 | 110970 | 283056 | 490523 |
| 1989 | 174835 | 50446 | 3554 | 54000 | 102150 | 117638 | 296566 | 516354 |
| 1990 | 180117 | 52389 | 3611 | 56000 | 107762 | 124264 | 309819 | 541845 |
| 1991 | 181703 | 52389 | 3611 | 56000 | 112189 | 126707 | 310169 | 549065 |
| 1992 | 182198 | 52389 | 3611 | 56000 | 117892 | 130664 | 314379 | 562935 |
| 1993 | 182185 | 52389 | 3611 | 56000 | 122180 | 133111 | 315096 | 570387 |
| 1994 | 182177 | 52389 | 3611 | 56000 | 127096 | 133450 | 317740 | 578286 |
| 1995 | 182166 | 52389 | 3611 | 56000 | 132735 | 132735 | 316037 | 581507 |
| 1996 | 182172 | 52389 | 3611 | 56000 | 138343 | 132056 | 314418 | 584817 |
| 1997 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 1998 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 1999 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2000 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2001 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2002 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2003 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2004 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2005 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2006 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2007 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2008 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2009 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2010 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2011 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2012 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2013 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2014 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2015 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2016 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2017 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2018 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2019 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2020 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2021 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2022 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2023 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2024 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2025 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2026 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2027 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2028 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2029 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2030 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2031 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2032 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2033 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2034 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2035 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2036 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2037 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2038 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |
| 2039 | 182161 | 52389 | 3611 | 56000 | 143882 | 131370 | 312786 | 588038 |

* Unadjusted for prior overpayments of underpayments of charges.

TABLE B-15 (Continued)

VARIABLE OPERATION, MAINTENANCE, POWER AND REPLACEMENT COMPONENTS
OF EACH CONTRACTOR*

(in dollars)



| CALENDAR YEAR | SAN JOAQUIN VALLEY | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Kern County Water Agency | | | | | |
| | Devil's Den Water District | Dudley Ridge Water District | Empire West Side Irrigation District | Hacienda Water District | Agriculture | Municipal and Industrial | Kings County (Assumed) | Oak Flat Water District | Tulare Lake Basin Water Storage District | Total |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1963 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1964 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1965 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1966 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1967 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1968 | 27580 | 28043 | 7316 | 3170 | 352587 | 0 | 3901 | 2423 | 65594 | 490614 |
| 1969 | 37095 | 47208 | 10414 | 5554 | 460417 | 0 | 6248 | 5321 | 101707 | 673964 |
| 1970 | 33672 | 29853 | 5704 | 3803 | 338258 | 53811 | 3993 | 2703 | 60466 | 532263 |
| 1971 | 36257 | 27675 | 4638 | 3556 | 423643 | 44527 | 3556 | 2439 | 52875 | 599166 |
| 1972 | 40478 | 29166 | 4374 | 3791 | 556791 | 90054 | 3791 | 2577 | 53520 | 784542 |
| 1973 | 48150 | 31013 | 4229 | 4089 | 619734 | 92881 | 3947 | 2373 | 55120 | 861536 |
| 1974 | 56709 | 36840 | 4586 | 5045 | 737686 | 96220 | 4586 | 2739 | 65732 | 1010143 |
| 1975 | 57667 | 38489 | 4407 | 5289 | 761528 | 117191 | 4848 | 2844 | 68899 | 1061162 |
| 1976 | 57372 | 37278 | 3952 | 5137 | 811866 | 108054 | 4610 | 2556 | 66915 | 1097740 |
| 1977 | 61041 | 42100 | 4154 | 5816 | 939681 | 136735 | 5262 | 2889 | 75890 | 1273568 |
| 1978 | 60400 | 40532 | 3741 | 5737 | 989990 | 140936 | 4989 | 2460 | 73206 | 1321991 |
| 1979 | 58283 | 43453 | 3768 | 6154 | 1105389 | 154939 | 5024 | 2467 | 78619 | 1458096 |
| 1980 | 45122 | 45880 | 3750 | 6501 | 1107889 | 165311 | 5001 | 2540 | 83133 | 1465127 |
| 1981 | 43919 | 48499 | 3750 | 7000 | 1180654 | 181431 | 5000 | 2623 | 87997 | 1560873 |
| 1982 | 43437 | 53290 | 3900 | 7669 | 1294937 | 203140 | 5199 | 2916 | 96574 | 1711062 |
| 1983 | 42570 | 57304 | 4007 | 8282 | 1417869 | 224354 | 5343 | 3027 | 104456 | 1867212 |
| 1984 | 43895 | 56075 | 3730 | 8081 | 1461729 | 227376 | 4973 | 2783 | 102079 | 1910721 |
| 1985 | 36510 | 51234 | 3256 | 7489 | 1380561 | 214852 | 4342 | 2312 | 93350 | 1793906 |
| 1986 | 30630 | 59485 | 3620 | 8688 | 1494976 | 232082 | 4826 | 3731 | 108592 | 1946630 |
| 1987 | 27916 | 55662 | 3249 | 8122 | 1449912 | 226142 | 4332 | 3218 | 101686 | 1880239 |
| 1988 | 29149 | 56053 | 3143 | 8171 | 1504153 | 241421 | 4191 | 3099 | 102467 | 1951847 |
| 1989 | 27335 | 58224 | 3142 | 8587 | 1574876 | 250649 | 4189 | 3193 | 106501 | 2036696 |
| 1990 | 32389 | 68684 | 3571 | 10117 | 1804837 | 276569 | 4761 | 3573 | 130940 | 2335441 |
| 1991 | 32673 | 68730 | 3573 | 10125 | 1814089 | 277642 | 4765 | 3565 | 131028 | 2346190 |
| 1992 | 32853 | 69546 | 3616 | 10245 | 1828388 | 279649 | 4821 | 3645 | 132583 | 2365346 |
| 1993 | 32848 | 69525 | 3614 | 10242 | 1828018 | 279598 | 4820 | 3643 | 132543 | 2364851 |
| 1994 | 32846 | 69512 | 3614 | 10240 | 1827789 | 279565 | 4819 | 3642 | 132518 | 2364545 |
| 1995 | 32842 | 69494 | 3613 | 10237 | 1827478 | 279522 | 4818 | 3640 | 132484 | 2364128 |
| 1996 | 32844 | 69504 | 3614 | 10239 | 1827654 | 279546 | 4818 | 3641 | 132504 | 2364364 |
| 1997 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 1998 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 1999 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2000 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2001 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2002 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2003 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2004 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2005 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2006 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2007 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2008 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2009 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2010 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2011 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2012 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2013 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2014 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2015 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2016 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2017 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2018 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2019 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2020 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2021 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2022 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2023 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2024 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2025 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2026 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2027 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2028 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2029 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2030 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2031 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2032 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2033 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2034 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2035 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2036 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2037 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2038 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |
| 2039 | 32840 | 69486 | 3612 | 10236 | 1827343 | 279503 | 4817 | 3639 | 132470 | 2363946 |

* Unadjusted for prior overpayments or underpayments of charges.

TABLE B-15 (Continued)

VARIABLE OPERATION, MAINTENANCE, POWER, AND REPLACEMENT COMPONENTS
OF EACH CONTRACTOR *

(in dollars)



| CALENDAR YEAR | SOUTHERN CALIFORNIA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Antelope Valley-East Kern Water Agency | Big Bear Municipal Water District (Assumed) | Coachella Valley County Water District | Crestline-Lake Arrowhead Water Agency | Desert Water Agency | Littlerock Creek Irrigation District | Mojave Water Agency | Palmdale Irrigation District | San Bernardino Valley Municipal Water District | San Gabriel Valley Municipal Water District |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1963 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1964 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1965 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1966 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1967 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1968 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1969 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1970 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1971 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1972 | 292400 | 56736 | 89570 | 9990 | 137802 | 2486 | 144693 | 23685 | 561701 | 130741 |
| 1973 | 359813 | 68804 | 104640 | 15697 | 162373 | 4174 | 193044 | 42314 | 711362 | 172011 |
| 1974 | 386556 | 59225 | 102355 | 18552 | 159929 | 5156 | 209511 | 54892 | 641255 | 158362 |
| 1975 | 425946 | 54863 | 101920 | 21111 | 160160 | 6328 | 224223 | 67907 | 618105 | 156237 |
| 1976 | 498542 | 49263 | 104854 | 24006 | 165560 | 7251 | 245581 | 78181 | 576602 | 149928 |
| 1977 | 607221 | 41379 | 120453 | 29037 | 185950 | 8865 | 288937 | 99827 | 502468 | 133128 |
| 1978 | 709316 | 43223 | 139122 | 34923 | 210747 | 11449 | 338699 | 116227 | 543838 | 147523 |
| 1979 | 829758 | 47073 | 160938 | 41743 | 239896 | 13697 | 398227 | 135131 | 614104 | 169874 |
| 1980 | 940245 | 47785 | 172868 | 46062 | 270010 | 15626 | 432016 | 151907 | 643142 | 180748 |
| 1981 | 1034804 | 49064 | 194688 | 51306 | 305580 | 17523 | 476064 | 161430 | 684337 | 195185 |
| 1982 | 1133406 | 56678 | 229616 | 59962 | 361843 | 19238 | 549661 | 171753 | 790533 | 235331 |
| 1983 | 1278124 | 57158 | 257916 | 66841 | 407786 | 21860 | 608135 | 188586 | 797240 | 247270 |
| 1984 | 1338591 | 54919 | 269052 | 69276 | 426579 | 22927 | 626218 | 193099 | 766004 | 247132 |
| 1985 | 1305352 | 47294 | 263514 | 67472 | 418792 | 22492 | 604922 | 184362 | 659657 | 224132 |
| 1986 | 1285166 | 46799 | 260365 | 66343 | 414637 | 22162 | 591931 | 178261 | 673252 | 236018 |
| 1987 | 1318611 | 43957 | 266909 | 67721 | 432693 | 22871 | 600275 | 179936 | 692413 | 235067 |
| 1988 | 1414613 | 44368 | 288960 | 73038 | 475723 | 24525 | 643625 | 190038 | 759514 | 250778 |
| 1989 | 1522943 | 45184 | 311643 | 78504 | 520047 | 26534 | 691022 | 201849 | 834092 | 269141 |
| 1990 | 1611009 | 44786 | 332007 | 83363 | 547594 | 28050 | 730125 | 210979 | 887895 | 280394 |
| 1991 | 1693326 | 45205 | 334189 | 83907 | 551197 | 28139 | 734929 | 211666 | 963037 | 283014 |
| 1992 | 1695283 | 45270 | 334515 | 83989 | 551735 | 28172 | 735647 | 211911 | 964422 | 283422 |
| 1993 | 1695233 | 45268 | 334507 | 83987 | 551721 | 28171 | 735629 | 211905 | 964386 | 283411 |
| 1994 | 1695201 | 45267 | 334501 | 83986 | 551713 | 28171 | 735617 | 211901 | 964364 | 283404 |
| 1995 | 1695158 | 45266 | 334494 | 83984 | 551701 | 28170 | 735602 | 211895 | 964334 | 283396 |
| 1996 | 1695183 | 45267 | 334498 | 83985 | 551708 | 28170 | 735610 | 211898 | 964351 | 283401 |
| 1997 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 1998 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 1999 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2000 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2001 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2002 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2003 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2004 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2005 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2006 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2007 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2008 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2009 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2010 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2011 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2012 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2013 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2014 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2015 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2016 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2017 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2018 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2019 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2020 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2021 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2022 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2023 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2024 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2025 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2026 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2027 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2028 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2029 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2030 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2031 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2032 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2033 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2034 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2035 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2036 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2037 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2038 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |
| 2039 | 1695140 | 45265 | 334491 | 83983 | 551696 | 28170 | 735595 | 211893 | 964321 | 283392 |

* Unadjusted for prior overpayments of underpayments of charges.

TABLE B-15 (Continued)

VARIABLE OPERATION, MAINTENANCE, POWER, AND REPLACEMENT COMPONENTS OF EACH CONTRACTOR*

(in dollars)



| CALENDAR YEAR | SOUTHERN CALIFORNIA (Continued) | | | | | CENTRAL COASTAL AREA | | | GRAND TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| | San Gorgonio Pass Water Agency | The Metropolitan Water District of Southern California | Upper Santa Clara Valley Water Agency | Ventura County Flood Control District | Total | San Luis Obispo County FC & WCD | Santa Barbara County FC & WCD | Total | |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38709 |
| 1963 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60415 |
| 1964 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 78335 |
| 1965 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 149141 |
| 1966 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 224000 |
| 1967 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 472000 |
| 1968 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1010000 |
| 1969 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1300000 |
| 1970 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1103000 |
| 1971 | 0 | 3646678 | 22953 | 0 | 3669631 | 0 | 0 | 0 | 4814000 |
| 1972 | 17227 | 4488165 | 47150 | 0 | 6002346 | 0 | 0 | 0 | 7351000 |
| 1973 | 30670 | 5032915 | 57214 | 0 | 6955031 | 0 | 0 | 0 | 8482000 |
| 1974 | 38383 | 4466302 | 51864 | 0 | 6352342 | 0 | 0 | 0 | 8069000 |
| 1975 | 45136 | 5382205 | 69207 | 0 | 7333348 | 0 | 0 | 0 | 9052000 |
| 1976 | 52427 | 5320396 | 69366 | 0 | 7341957 | 0 | 0 | 0 | 9080000 |
| 1977 | 64368 | 6360872 | 93901 | 0 | 8536406 | 0 | 0 | 0 | 10471000 |
| 1978 | 78278 | 7471747 | 112822 | 0 | 9957914 | 0 | 0 | 0 | 11909000 |
| 1979 | 94361 | 8889461 | 139782 | 0 | 11774045 | 0 | 0 | 0 | 13881000 |
| 1980 | 108004 | 9920922 | 161874 | 8053 | 13099262 | 47644 | 57172 | 104816 | 15332000 |
| 1981 | 125449 | 10764050 | 174083 | 15754 | 14249317 | 41640 | 95772 | 137412 | 16609000 |
| 1982 | 151630 | 12718102 | 204357 | 24922 | 16707032 | 58053 | 133520 | 191573 | 19299000 |
| 1983 | 173753 | 14053665 | 230067 | 34210 | 18422611 | 63692 | 146493 | 210185 | 21326000 |
| 1984 | 184284 | 14912252 | 249623 | 42892 | 19402848 | 118842 | 274657 | 393499 | 22522000 |
| 1985 | 183028 | 13444150 | 220543 | 42823 | 17688533 | 103517 | 238777 | 342294 | 20572000 |
| 1986 | 184443 | 14541603 | 242929 | 59071 | 18802980 | 125023 | 288806 | 413829 | 21904000 |
| 1987 | 192308 | 14670028 | 253264 | 71746 | 19047799 | 129776 | 299006 | 428782 | 22070000 |
| 1988 | 211276 | 15899486 | 280479 | 97493 | 20653916 | 153714 | 355031 | 508745 | 23829000 |
| 1989 | 230814 | 16808011 | 306343 | 124718 | 21970845 | 181322 | 417948 | 599270 | 25352000 |
| 1990 | 248645 | 16747946 | 323156 | 155736 | 22231685 | 219441 | 506471 | 725912 | 26071000 |
| 1991 | 250281 | 16872377 | 325262 | 156751 | 22533280 | 222419 | 513343 | 735762 | 26402000 |
| 1992 | 250526 | 16900815 | 325849 | 157034 | 22568590 | 222772 | 514159 | 736931 | 26472000 |
| 1993 | 250520 | 16900079 | 325833 | 157026 | 22567676 | 222763 | 514138 | 736901 | 26478000 |
| 1994 | 250516 | 16899623 | 325824 | 157022 | 22567110 | 222757 | 514125 | 736882 | 26485000 |
| 1995 | 250510 | 16899005 | 325811 | 157016 | 22566342 | 222750 | 514107 | 736857 | 26487000 |
| 1996 | 250513 | 16899355 | 325818 | 157019 | 22566776 | 222754 | 514117 | 736871 | 26491000 |
| 1997 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 1998 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 1999 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2000 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2001 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2002 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2003 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2004 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2005 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2006 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2007 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2008 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493001 |
| 2009 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2010 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2011 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2012 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2013 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2014 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2015 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2016 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2017 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2018 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2019 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2020 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2021 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2022 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2023 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2024 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2025 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2026 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2027 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2028 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2029 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2030 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2031 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493001 |
| 2032 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2033 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2034 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2035 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2036 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2037 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2038 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |
| 2039 | 250508 | 16898737 | 325806 | 157013 | 22566010 | 222746 | 514099 | 736845 | 26493000 |

* Unadjusted for prior overpayments or underpayments of charges.

TABLE B-16

TOTAL TRANSPORTATION CHARGES OF EACH CONTRACTOR*

(in dollars)



| CALENDAR YEAR | FUTURE CONTRACTORS | | | NORTH BAY AREA | | | SOUTH BAY AREA | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | South Bay | Cedar Springs | Nuclear Powerplant (Assumed) | Napa County FC & WCD | Solano County FC & WCD | Total | Alameda County FC & WCD, Zone 7 | Alameda County Water District | Santa Clara County FC & WD | Total |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 17155 | 50246 | 0 | 67401 |
| 1963 | 63181 | 477 | 0 | 0 | 0 | 0 | 129254 | 168041 | 376842 | 674137 |
| 1964 | 91720 | 842 | 0 | 0 | 0 | 0 | 133137 | 245320 | 533779 | 912236 |
| 1965 | 154062 | 1118 | 0 | 0 | 0 | 0 | 193541 | 321391 | 1000661 | 1515593 |
| 1966 | 163015 | 1674 | 0 | 16261 | 0 | 16261 | 192173 | 322618 | 1210247 | 1725038 |
| 1967 | 196774 | 3214 | 0 | 43973 | 0 | 43973 | 260617 | 403859 | 1601910 | 2266386 |
| 1968 | 218167 | 4878 | 0 | 152428 | 0 | 152428 | 304110 | 408821 | 1767914 | 2480845 |
| 1969 | 230844 | 9702 | 0 | 160082 | 20038 | 180120 | 340946 | 445620 | 1903940 | 2690506 |
| 1970 | 231060 | 24352 | 0 | 166253 | 26148 | 192401 | 341962 | 440146 | 1852920 | 2635028 |
| 1971 | 231149 | 36992 | 0 | 168890 | 26980 | 195870 | 344311 | 438740 | 1825162 | 2608213 |
| 1972 | 231808 | 38252 | 0 | 169501 | 27838 | 197339 | 416822 | 445482 | 1835178 | 2697482 |
| 1973 | 232770 | 39177 | 368015 | 169077 | 28644 | 197721 | 422595 | 448682 | 1825445 | 2696722 |
| 1974 | 232853 | 39878 | 363623 | 184688 | 34182 | 218870 | 432086 | 457630 | 1849380 | 2739096 |
| 1975 | 232517 | 40534 | 356913 | 203057 | 39616 | 242673 | 429374 | 451418 | 1804790 | 2685582 |
| 1976 | 232421 | 40534 | 347990 | 204556 | 40370 | 244926 | 431762 | 451549 | 1791704 | 2675015 |
| 1977 | 232469 | 40534 | 354006 | 209321 | 43776 | 253097 | 437533 | 456251 | 1795662 | 2689446 |
| 1978 | 232233 | 40534 | 353980 | 216054 | 47546 | 263600 | 435739 | 452152 | 1766565 | 2654456 |
| 1979 | 232220 | 40534 | 357497 | 270489 | 96167 | 366656 | 440866 | 455851 | 1769032 | 2665749 |
| 1980 | 232203 | 40534 | 358752 | 412526 | 247076 | 659602 | 442754 | 456254 | 1758278 | 2657286 |
| 1981 | 232207 | 40534 | 359340 | 407830 | 243772 | 651602 | 445948 | 460120 | 1756305 | 2662373 |
| 1982 | 232242 | 40534 | 361050 | 398726 | 243876 | 642602 | 454448 | 469982 | 1773861 | 2698291 |
| 1983 | 232356 | 40534 | 472632 | 403641 | 243961 | 647602 | 460745 | 477331 | 1782049 | 2720125 |
| 1984 | 232185 | 40534 | 466421 | 420584 | 244018 | 664602 | 459012 | 475682 | 1763179 | 2697873 |
| 1985 | 231985 | 40534 | 448680 | 419472 | 244130 | 663602 | 451846 | 467828 | 1728016 | 2647690 |
| 1986 | 232102 | 40534 | 438244 | 403325 | 244277 | 647602 | 457698 | 474996 | 1735568 | 2668262 |
| 1987 | 232006 | 40534 | 429958 | 403128 | 244474 | 647602 | 455754 | 472990 | 1719364 | 2648108 |
| 1988 | 232021 | 40534 | 430757 | 404764 | 244838 | 649602 | 457348 | 474978 | 1714413 | 2646739 |
| 1989 | 232474 | 40534 | 433681 | 406483 | 245119 | 651602 | 463946 | 482508 | 1729983 | 2676437 |
| 1990 | 233246 | 40534 | 439161 | 408426 | 245176 | 653602 | 471171 | 490604 | 1746750 | 2708525 |
| 1991 | 233241 | 40534 | 440781 | 408426 | 245176 | 653602 | 475588 | 493039 | 1747080 | 2715707 |
| 1992 | 233149 | 40534 | 441297 | 408426 | 245176 | 653602 | 481100 | 496822 | 1750872 | 2728794 |
| 1993 | 233149 | 40534 | 441284 | 408426 | 245176 | 653602 | 485388 | 499269 | 1751589 | 2736246 |
| 1994 | 233149 | 40534 | 441276 | 408426 | 245176 | 653602 | 490304 | 499608 | 1754233 | 2744145 |
| 1995 | 233149 | 40534 | 441265 | 408426 | 245176 | 653602 | 495943 | 498893 | 1752530 | 2747366 |
| 1996 | 233149 | 40534 | 441271 | 408426 | 245176 | 653602 | 501551 | 498214 | 1750911 | 2750676 |
| 1997 | 233149 | 40534 | 441260 | 408426 | 245176 | 653602 | 507090 | 497528 | 1749279 | 2753897 |
| 1998 | 233149 | 40534 | 441260 | 408426 | 245176 | 653602 | 507090 | 497528 | 1749279 | 2753897 |
| 1999 | 233149 | 40534 | 441260 | 408426 | 245176 | 653602 | 507090 | 497528 | 1749279 | 2753897 |
| 2000 | 233149 | 40534 | 441260 | 408426 | 245176 | 653602 | 507090 | 497528 | 1749279 | 2753897 |
| 2001 | 233149 | 40534 | 441260 | 408426 | 245176 | 653602 | 507090 | 497528 | 1749279 | 2753897 |
| 2002 | 233149 | 40534 | 441260 | 408426 | 245176 | 653602 | 507090 | 497528 | 1749279 | 2753897 |
| 2003 | 233149 | 40534 | 441260 | 408426 | 245176 | 653602 | 507090 | 497528 | 1749279 | 2753897 |
| 2004 | 233149 | 40534 | 441260 | 408426 | 245176 | 653602 | 507090 | 497528 | 1749279 | 2753897 |
| 2005 | 233149 | 40534 | 441260 | 408426 | 245176 | 653602 | 507090 | 497528 | 1749279 | 2753897 |
| 2006 | 233149 | 40534 | 441260 | 408426 | 245176 | 653602 | 507090 | 497528 | 1749279 | 2753897 |
| 2007 | 233149 | 40534 | 441260 | 408426 | 245176 | 653602 | 507090 | 497528 | 1749279 | 2753897 |
| 2008 | 233149 | 40534 | 441260 | 408426 | 245176 | 653602 | 507090 | 497528 | 1749279 | 2753897 |
| 2009 | 233149 | 40534 | 441260 | 408426 | 245176 | 653602 | 507090 | 497528 | 1749279 | 2753897 |
| 2010 | 233149 | 40534 | 441260 | 408426 | 245176 | 653602 | 507090 | 497528 | 1749279 | 2753897 |
| 2011 | 233149 | 40534 | 441260 | 408426 | 245176 | 653602 | 507090 | 497528 | 1749279 | 2753897 |
| 2012 | 233149 | 40534 | 441260 | 408426 | 245176 | 653602 | 507090 | 497528 | 1749279 | 2753897 |
| 2013 | 185962 | 40057 | 441260 | 408426 | 245176 | 653602 | 412123 | 412074 | 1445225 | 2269422 |
| 2014 | 158798 | 39692 | 441260 | 408426 | 245176 | 653602 | 388580 | 357337 | 1294546 | 2040463 |
| 2015 | 112538 | 39416 | 441260 | 408426 | 245176 | 653602 | 354675 | 311100 | 972688 | 1638463 |
| 2016 | 97168 | 38860 | 441260 | 392165 | 245176 | 637341 | 337698 | 292345 | 824763 | 1454806 |
| 2017 | 65084 | 37320 | 441260 | 364453 | 245176 | 609629 | 270518 | 242023 | 651235 | 1163776 |
| 2018 | 45620 | 35656 | 441260 | 298998 | 245176 | 544174 | 229197 | 210903 | 548876 | 988976 |
| 2019 | 37047 | 30832 | 441260 | 293344 | 225138 | 518482 | 210852 | 197217 | 507366 | 915435 |
| 2020 | 36730 | 16182 | 441260 | 289173 | 219028 | 508201 | 210179 | 196705 | 505836 | 912720 |
| 2021 | 36710 | 3542 | 441260 | 288536 | 218196 | 506732 | 210137 | 196667 | 505744 | 912548 |
| 2022 | 35161 | 2921 | 441260 | 287925 | 217338 | 505263 | 206903 | 193718 | 498694 | 899315 |
| 2023 | 33612 | 1996 | 233403 | 287349 | 216532 | 503881 | 203668 | 190769 | 491643 | 886080 |
| 2024 | 33612 | 1295 | 233403 | 275738 | 210994 | 486732 | 203668 | 190769 | 491643 | 886080 |
| 2025 | 33612 | 639 | 233403 | 264369 | 205560 | 469929 | 203668 | 190769 | 491643 | 886080 |
| 2026 | 33612 | 639 | 233403 | 263870 | 204806 | 468676 | 203668 | 190769 | 491643 | 886080 |
| 2027 | 33612 | 639 | 233403 | 260105 | 201400 | 461505 | 203668 | 190769 | 491643 | 886080 |
| 2028 | 33612 | 639 | 233403 | 254372 | 197630 | 452002 | 203668 | 190769 | 491643 | 886080 |
| 2029 | 33612 | 639 | 233403 | 204937 | 149009 | 353946 | 203668 | 190769 | 491643 | 886080 |
| 2030 | 33612 | 639 | 233403 | 122558 | 76442 | 199000 | 203668 | 190769 | 491643 | 886080 |
| 2031 | 33612 | 639 | 233403 | 122558 | 76442 | 199000 | 203668 | 190769 | 491643 | 886080 |
| 2032 | 33612 | 639 | 233088 | 122558 | 76442 | 199000 | 203668 | 190769 | 491643 | 886080 |
| 2033 | 33612 | 639 | 232458 | 122558 | 76442 | 199000 | 203668 | 190769 | 491643 | 886080 |
| 2034 | 33612 | 639 | 231198 | 122558 | 76442 | 199000 | 203668 | 190769 | 491643 | 886080 |
| 2035 | 33612 | 639 | 230253 | 122558 | 76442 | 199000 | 203668 | 190769 | 491643 | 886080 |
| 2036 | 33612 | 639 | 230253 | 122558 | 76442 | 199000 | 203668 | 190769 | 491643 | 886080 |
| 2037 | 33612 | 639 | 230253 | 122558 | 76442 | 199000 | 203668 | 190769 | 491643 | 886080 |
| 2038 | 33558 | 639 | 230253 | 122558 | 76442 | 199000 | 203555 | 190666 | 491396 | 885617 |
| 2039 | 33105 | 639 | 230253 | 122558 | 76442 | 199000 | 202610 | 189804 | 489336 | 881750 |

*Unadjusted for prior overpayments or underpayments of charges. In addition to the Transportation Charge, each contractor shall pay the Delta Water Charge. The latter charge may be estimated by applying $3.50 to each acre-foot of entitlement through calendar year 1969, and $6.39 to each acre-foot of entitlement thereafter.

TABLE B-16 (Continued)

TOTAL TRANSPORTATION CHARGES OF EACH CONTRACTOR*

(in dollars)



| CALENDAR YEAR | SAN JOAQUIN VALLEY | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Kern County Water Agency | | | | | |
| | Devil's Den Water District | Dudley Ridge Water District | Empire West Side Irrigation District | Hacienda Water District | Agriculture | Municipal and Industrial | Kings County (Assumed) | Oak Flat Water District | Tulare Lake Basin Water Storage District | Total |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1963 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1964 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1965 | 0 | 0 | 0 | 0 | 0 | 67980 | 0 | 0 | 0 | 67980 |
| 1966 | 0 | 0 | 0 | 0 | 0 | 126292 | 0 | 0 | 0 | 126292 |
| 1967 | 0 | 0 | 0 | 0 | 0 | 236752 | 5233 | 0 | 0 | 241985 |
| 1968 | 68470 | 114850 | 16614 | 14708 | 1731674 | 450669 | 13350 | 9178 | 243793 | 2663306 |
| 1969 | 87187 | 147592 | 20018 | 19084 | 2111699 | 530279 | 16359 | 12828 | 299591 | 3244637 |
| 1970 | 89978 | 136897 | 15284 | 18655 | 2157591 | 623629 | 14099 | 10360 | 265773 | 3332266 |
| 1971 | 100596 | 143369 | 14253 | 19624 | 2674770 | 649621 | 13698 | 10422 | 267810 | 3894163 |
| 1972 | 111145 | 151342 | 13950 | 20804 | 3204391 | 699434 | 13894 | 10661 | 275406 | 4501027 |
| 1973 | 124732 | 159189 | 13762 | 22028 | 3452694 | 700856 | 14007 | 10696 | 283436 | 4781400 |
| 1974 | 139725 | 172667 | 14143 | 24452 | 3776790 | 704923 | 14671 | 11254 | 307933 | 5166558 |
| 1975 | 146965 | 181283 | 13953 | 25714 | 3973902 | 725202 | 14921 | 11670 | 323684 | 5417294 |
| 1976 | 152814 | 186754 | 13472 | 26536 | 4275657 | 714853 | 14656 | 11507 | 333739 | 5729988 |
| 1977 | 162866 | 199006 | 13685 | 28301 | 4665957 | 744420 | 15320 | 12180 | 356512 | 6198247 |
| 1978 | 162122 | 204160 | 13248 | 29554 | 4971248 | 748219 | 15022 | 12024 | 365946 | 6521543 |
| 1979 | 160009 | 214292 | 13277 | 31025 | 5343233 | 762649 | 15059 | 12187 | 384408 | 6936139 |
| 1980 | 147086 | 223949 | 13260 | 32428 | 5615343 | 773105 | 15037 | 12576 | 402006 | 7234790 |
| 1981 | 145883 | 233758 | 13260 | 34326 | 5963072 | 789272 | 15036 | 12821 | 419880 | 7627308 |
| 1982 | 145438 | 246252 | 13419 | 36072 | 6331856 | 812769 | 15284 | 13449 | 441791 | 8056330 |
| 1983 | 144518 | 256877 | 13532 | 37750 | 6753654 | 837194 | 15514 | 13725 | 462882 | 8535646 |
| 1984 | 145855 | 262895 | 13240 | 38558 | 7065034 | 845344 | 15290 | 13778 | 472969 | 8872963 |
| 1985 | 138208 | 264752 | 12740 | 39294 | 7244097 | 835904 | 14753 | 13432 | 476314 | 9039494 |
| 1986 | 132276 | 280649 | 13127 | 41610 | 7622823 | 853637 | 15260 | 15257 | 505764 | 9480403 |
| 1987 | 129476 | 283628 | 12737 | 42037 | 7847551 | 846889 | 14746 | 14868 | 511132 | 9703064 |
| 1988 | 130757 | 291078 | 12623 | 43116 | 8113138 | 861968 | 14598 | 15057 | 524669 | 10007004 |
| 1989 | 128866 | 300441 | 12622 | 44933 | 8380616 | 871269 | 14596 | 15473 | 541715 | 10310531 |
| 1990 | 134091 | 318522 | 13074 | 47576 | 8843309 | 898005 | 15191 | 16032 | 594665 | 10880467 |
| 1991 | 134376 | 318569 | 13076 | 47586 | 8852779 | 899103 | 15195 | 16022 | 594755 | 10891461 |
| 1992 | 134567 | 319436 | 13121 | 47713 | 8867967 | 901205 | 15253 | 16107 | 596406 | 10911775 |
| 1993 | 134562 | 319415 | 13119 | 47710 | 8867597 | 901154 | 15252 | 16105 | 596366 | 10911280 |
| 1994 | 134560 | 319402 | 13119 | 47708 | 8867368 | 901121 | 15251 | 16104 | 596341 | 10910974 |
| 1995 | 134556 | 319384 | 13118 | 47705 | 8867057 | 901078 | 15250 | 16102 | 596307 | 10910557 |
| 1996 | 134558 | 319394 | 13119 | 47707 | 8867233 | 901102 | 15250 | 16103 | 596327 | 10910793 |
| 1997 | 134554 | 319376 | 13117 | 47704 | 8866922 | 901059 | 15249 | 16101 | 596293 | 10910375 |
| 1998 | 134554 | 319376 | 13117 | 47704 | 8866922 | 901059 | 15249 | 16101 | 596293 | 10910375 |
| 1999 | 134554 | 319376 | 13117 | 47704 | 8866922 | 901059 | 15249 | 16101 | 596293 | 10910375 |
| 2000 | 134554 | 319376 | 13117 | 47704 | 8866922 | 901059 | 15249 | 16101 | 596293 | 10910375 |
| 2001 | 134554 | 319376 | 13117 | 47704 | 8866922 | 901059 | 15249 | 16101 | 596293 | 10910375 |
| 2002 | 134554 | 319376 | 13117 | 47704 | 8866922 | 901059 | 15249 | 16101 | 596293 | 10910375 |
| 2003 | 134554 | 319376 | 13117 | 47704 | 8866922 | 901059 | 15249 | 16101 | 596293 | 10910375 |
| 2004 | 134554 | 319376 | 13117 | 47704 | 8866922 | 901059 | 15249 | 16101 | 596293 | 10910375 |
| 2005 | 134554 | 319376 | 13117 | 47704 | 8866922 | 901059 | 15249 | 16101 | 596293 | 10910375 |
| 2006 | 134554 | 319376 | 13117 | 47704 | 8866922 | 901059 | 15249 | 16101 | 596293 | 10910375 |
| 2007 | 134554 | 319376 | 13117 | 47704 | 8866922 | 901059 | 15249 | 16101 | 596293 | 10910375 |
| 2008 | 134554 | 319376 | 13117 | 47704 | 8866922 | 901059 | 15249 | 16101 | 596293 | 10910375 |
| 2009 | 134554 | 319376 | 13117 | 47704 | 8866922 | 901059 | 15249 | 16101 | 596293 | 10910375 |
| 2010 | 134554 | 319376 | 13117 | 47704 | 8866922 | 901059 | 15249 | 16101 | 596293 | 10910375 |
| 2011 | 134554 | 319376 | 13117 | 47704 | 8866922 | 901059 | 15249 | 16101 | 596293 | 10910375 |
| 2012 | 134554 | 319376 | 13117 | 47704 | 8866922 | 901059 | 15249 | 16101 | 596293 | 10910375 |
| 2013 | 134554 | 319376 | 13117 | 47704 | 8866922 | 901059 | 15249 | 16101 | 596293 | 10910375 |
| 2014 | 134554 | 319376 | 13117 | 47704 | 8866922 | 901059 | 15249 | 16101 | 596293 | 10910375 |
| 2015 | 134554 | 319376 | 13117 | 47704 | 8866922 | 833079 | 15249 | 16101 | 596293 | 10842395 |
| 2016 | 134554 | 319376 | 13117 | 47704 | 8866922 | 774767 | 15249 | 16101 | 596293 | 10784083 |
| 2017 | 134554 | 319376 | 13117 | 47704 | 8866922 | 664307 | 10016 | 16101 | 596293 | 10668390 |
| 2018 | 134554 | 319376 | 13117 | 47704 | 8866922 | 540160 | 8208 | 16101 | 596293 | 10542435 |
| 2019 | 134554 | 319376 | 13117 | 47704 | 8866922 | 485831 | 7858 | 16101 | 596293 | 10487756 |
| 2020 | 134554 | 319376 | 13117 | 47704 | 8866922 | 457151 | 7839 | 16101 | 596293 | 10459057 |
| 2021 | 134554 | 319376 | 13117 | 47704 | 8866922 | 446874 | 7838 | 16101 | 596293 | 10448779 |
| 2022 | 134554 | 319376 | 13117 | 47704 | 8866922 | 442845 | 7837 | 16101 | 596293 | 10444749 |
| 2023 | 134554 | 319376 | 13117 | 47704 | 8866922 | 442055 | 7836 | 16101 | 596293 | 10443958 |
| 2024 | 134554 | 319376 | 13117 | 47704 | 8866922 | 442055 | 7836 | 16101 | 596293 | 10443958 |
| 2025 | 134554 | 319376 | 13117 | 47704 | 8866922 | 442055 | 7836 | 16101 | 596293 | 10443958 |
| 2026 | 134554 | 319376 | 13117 | 47704 | 8866922 | 442046 | 7836 | 16101 | 596293 | 10443949 |
| 2027 | 134554 | 319376 | 13117 | 47704 | 8866922 | 441843 | 7836 | 16101 | 596293 | 10443746 |
| 2028 | 134554 | 319376 | 13117 | 47704 | 8866922 | 441490 | 7836 | 16101 | 596293 | 10443393 |
| 2029 | 134554 | 319376 | 13117 | 47704 | 8866922 | 441278 | 7836 | 16101 | 596293 | 10443181 |
| 2030 | 134554 | 319376 | 13117 | 47704 | 8866922 | 441278 | 7836 | 16101 | 596293 | 10443181 |
| 2031 | 134554 | 319376 | 13117 | 47704 | 8866922 | 441278 | 7836 | 16101 | 596293 | 10443181 |
| 2032 | 134554 | 319376 | 13117 | 47704 | 8866922 | 439837 | 7796 | 16101 | 596293 | 10441700 |
| 2033 | 134554 | 319376 | 13117 | 47704 | 8866922 | 436959 | 7716 | 16101 | 596293 | 10438742 |
| 2034 | 134554 | 319376 | 13117 | 47704 | 8866922 | 431201 | 7555 | 16101 | 596293 | 10432823 |
| 2035 | 134554 | 319376 | 13117 | 47704 | 8866922 | 426883 | 7435 | 16101 | 596293 | 10428385 |
| 2036 | 134554 | 319376 | 13117 | 47704 | 8866922 | 426883 | 7435 | 16101 | 596293 | 10428385 |
| 2037 | 134554 | 319376 | 13117 | 47704 | 8866922 | 426883 | 7435 | 16101 | 596293 | 10428385 |
| 2038 | 134554 | 319376 | 13117 | 47704 | 8866922 | 426883 | 7435 | 16101 | 596293 | 10428385 |
| 2039 | 134554 | 319376 | 13117 | 47704 | 8866922 | 426883 | 7435 | 16101 | 596293 | 10428385 |

*Unadjusted for prior overpayments or underpayments of charges. In addition to the Transportation Charge, each contractor shall pay the Delta Water Charge. The latter charge may be estimated by applying $3.50 to each acre-foot of entitlement through calendar year 1969, and $6.39 to each acre-foot of entitlement thereafter.

TABLE B-16 (Continued)

TOTAL TRANSPORTATION CHARGES OF EACH CONTRACTOR*

(in dollars)



| CALENDAR YEAR | SOUTHERN CALIFORNIA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Antelope Valley-East Kern Water Agency | Big Bear Municipal Water District (Assumed) | Coachella Valley County Water District | Crestline-Lake Arrowhead Water Agency | Desert Water Agency | Littlerock Creek Irrigation District | Mojave Water Agency | Palmdale Irrigation District | San Bernardino Valley Municipal Water District | San Gabriel Valley Municipal Water District |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1963 | 25090 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42896 | 0 |
| 1964 | 50345 | 0 | 12874 | 3660 | 32549 | 1110 | 27089 | 7168 | 75867 | 32215 |
| 1965 | 99546 | 0 | 22394 | 6189 | 36532 | 1992 | 47746 | 13556 | 122379 | 33467 |
| 1966 | 183335 | 0 | 38482 | 10493 | 63066 | 3449 | 82609 | 24378 | 199527 | 55381 |
| 1967 | 341025 | 16287 | 69180 | 18877 | 113698 | 6265 | 148820 | 45333 | 348237 | 97679 |
| 1968 | 677225 | 31155 | 135769 | 36429 | 223528 | 12213 | 293804 | 89348 | 674474 | 191638 |
| 1969 | 1002693 | 51391 | 211655 | 57538 | 348690 | 18958 | 456672 | 137444 | 1134202 | 319503 |
| 1970 | 1308910 | 77160 | 311233 | 88589 | 512934 | 26046 | 661932 | 186923 | 1756412 | 490019 |
| 1971 | 1611573 | 106192 | 405493 | 118236 | 668398 | 31173 | 851494 | 225279 | 2445372 | 647125 |
| 1972 | 2011744 | 181740 | 562094 | 145911 | 916755 | 36585 | 1141104 | 269094 | 3421057 | 885609 |
| 1973 | 2085783 | 194402 | 580303 | 152766 | 946504 | 38391 | 1195576 | 288614 | 3587388 | 931214 |
| 1974 | 2111360 | 184815 | 577718 | 155811 | 943565 | 39352 | 1210820 | 301023 | 3520350 | 917990 |
| 1975 | 2148546 | 180419 | 576736 | 158478 | 942891 | 40486 | 1223795 | 313764 | 3499490 | 916080 |
| 1976 | 2217789 | 174687 | 579101 | 161227 | 947351 | 41350 | 1243898 | 323597 | 3455108 | 908931 |
| 1977 | 2334793 | 166916 | 595901 | 166564 | 969725 | 43106 | 1289899 | 346292 | 3383244 | 892839 |
| 1978 | 2446668 | 169143 | 616568 | 172958 | 997814 | 45853 | 1344050 | 363921 | 3432748 | 909630 |
| 1979 | 2575104 | 173288 | 639887 | 180160 | 1029444 | 48234 | 1406883 | 383831 | 3509318 | 933835 |
| 1980 | 2685975 | 173962 | 651531 | 184408 | 1059082 | 50170 | 1440041 | 400659 | 3537558 | 944468 |
| 1981 | 2781310 | 175268 | 673482 | 189686 | 1094869 | 52080 | 1484379 | 410280 | 3579319 | 959073 |
| 1982 | 2881779 | 183114 | 709438 | 198602 | 1152833 | 53828 | 1560241 | 420835 | 3690511 | 1000677 |
| 1983 | 3031491 | 183725 | 738482 | 205669 | 1199999 | 56533 | 1620346 | 438295 | 3699968 | 1013432 |
| 1984 | 3095965 | 181579 | 750055 | 208216 | 1219514 | 57666 | 1639391 | 443314 | 3670752 | 1013885 |
| 1985 | 3062237 | 173889 | 744217 | 206335 | 1211229 | 57223 | 1617434 | 434518 | 3562970 | 990466 |
| 1986 | 3039023 | 173319 | 740386 | 205033 | 1205951 | 56843 | 1602945 | 428036 | 3575088 | 1001897 |
| 1987 | 3070892 | 170383 | 746497 | 206301 | 1223291 | 57526 | 1610335 | 429512 | 3592243 | 1000359 |
| 1988 | 3167388 | 170817 | 768712 | 211660 | 1266594 | 59188 | 1654045 | 439675 | 3659761 | 1016198 |
| 1989 | 3276697 | 171659 | 791534 | 217163 | 1311146 | 61213 | 1701749 | 451609 | 3734939 | 1034736 |
| 1990 | 3365294 | 171273 | 812016 | 222051 | 1338889 | 62738 | 1741114 | 460806 | 3788959 | 1046056 |
| 1991 | 3447698 | 171706 | 814269 | 222613 | 1342608 | 62828 | 1746074 | 461504 | 3864405 | 1048766 |
| 1992 | 3449744 | 171774 | 814610 | 222699 | 1343171 | 62863 | 1746825 | 461761 | 3865855 | 1049193 |
| 1993 | 3449694 | 171772 | 814602 | 222697 | 1343157 | 62862 | 1746807 | 461755 | 3865819 | 1049182 |
| 1994 | 3449662 | 171771 | 814596 | 222696 | 1343149 | 62862 | 1746795 | 461751 | 3865797 | 1049175 |
| 1995 | 3449619 | 171770 | 814589 | 222694 | 1343137 | 62861 | 1746780 | 461745 | 3865767 | 1049167 |
| 1996 | 3449644 | 171771 | 814593 | 222695 | 1343144 | 62861 | 1746788 | 461748 | 3865784 | 1049172 |
| 1997 | 3449601 | 171769 | 814586 | 222693 | 1343132 | 62861 | 1746773 | 461743 | 3865754 | 1049163 |
| 1998 | 3449601 | 171769 | 814586 | 222693 | 1343132 | 62861 | 1746773 | 461743 | 3865754 | 1049163 |
| 1999 | 3449601 | 171769 | 814586 | 222693 | 1343132 | 62861 | 1746773 | 461743 | 3865754 | 1049163 |
| 2000 | 3449601 | 171769 | 814586 | 222693 | 1343132 | 62861 | 1746773 | 461743 | 3865754 | 1049163 |
| 2001 | 3449601 | 171769 | 814586 | 222693 | 1343132 | 62861 | 1746773 | 461743 | 3865754 | 1049163 |
| 2002 | 3449601 | 171769 | 814586 | 222693 | 1343132 | 62861 | 1746773 | 461743 | 3865754 | 1049163 |
| 2003 | 3449601 | 171769 | 814586 | 222693 | 1343132 | 62861 | 1746773 | 461743 | 3865754 | 1049163 |
| 2004 | 3449601 | 171769 | 814586 | 222693 | 1343132 | 62861 | 1746773 | 461743 | 3865754 | 1049163 |
| 2005 | 3449601 | 171769 | 814586 | 222693 | 1343132 | 62861 | 1746773 | 461743 | 3865754 | 1049163 |
| 2006 | 3449601 | 171769 | 814586 | 222693 | 1343132 | 62861 | 1746773 | 461743 | 3865754 | 1049163 |
| 2007 | 3449601 | 171769 | 814586 | 222693 | 1343132 | 62861 | 1746773 | 461743 | 3865754 | 1049163 |
| 2008 | 3449601 | 171769 | 814586 | 222693 | 1343132 | 62861 | 1746773 | 461743 | 3865754 | 1049163 |
| 2009 | 3449601 | 171769 | 814586 | 222693 | 1343132 | 62861 | 1746773 | 461743 | 3865754 | 1049163 |
| 2010 | 3449601 | 171769 | 814586 | 222693 | 1343132 | 62861 | 1746773 | 461743 | 3865754 | 1049163 |
| 2011 | 3449601 | 171769 | 814586 | 222693 | 1343132 | 62861 | 1746773 | 461743 | 3865754 | 1049163 |
| 2012 | 3449601 | 171769 | 814586 | 222693 | 1343132 | 62861 | 1746773 | 461743 | 3865754 | 1049163 |
| 2013 | 3424511 | 171769 | 814586 | 222693 | 1331816 | 62861 | 1746773 | 461743 | 3822858 | 1037723 |
| 2014 | 3399256 | 171769 | 801712 | 219033 | 1322303 | 61751 | 1719684 | 454575 | 3789887 | 1028797 |
| 2015 | 3350055 | 171769 | 792192 | 216504 | 1306600 | 60869 | 1699027 | 448187 | 3743375 | 1015696 |
| 2016 | 3266266 | 171769 | 776104 | 212200 | 1280066 | 59412 | 1664164 | 437365 | 3666227 | 993782 |
| 2017 | 3108576 | 155482 | 745406 | 203816 | 1229434 | 56596 | 1597953 | 416410 | 3517517 | 951484 |
| 2018 | 2856144 | 143496 | 693123 | 189896 | 1143201 | 52054 | 1484431 | 382948 | 3252671 | 875566 |
| 2019 | 2554237 | 124070 | 621261 | 169811 | 1024674 | 45705 | 1330411 | 337821 | 2810213 | 752777 |
| 2020 | 2261795 | 98777 | 524035 | 139356 | 864313 | 38847 | 1130329 | 290076 | 2198099 | 585228 |
| 2021 | 2139150 | 75893 | 460311 | 117464 | 759209 | 36723 | 1007914 | 274241 | 1640170 | 466628 |
| 2022 | 2085570 | 68826 | 438672 | 111567 | 723519 | 35707 | 962168 | 266806 | 1482950 | 431442 |
| 2023 | 2072316 | 67795 | 434216 | 110086 | 716170 | 35464 | 953122 | 265015 | 1456673 | 424412 |
| 2024 | 2072316 | 67683 | 433957 | 109756 | 715744 | 35464 | 953122 | 265015 | 1451067 | 423245 |
| 2025 | 2072316 | 67578 | 433715 | 109447 | 715345 | 35464 | 953122 | 265015 | 1445824 | 422154 |
| 2026 | 2072089 | 67570 | 433676 | 109437 | 715281 | 35460 | 953037 | 264986 | 1445657 | 422105 |
| 2027 | 2066858 | 67390 | 432782 | 109210 | 713807 | 35372 | 951072 | 264327 | 1441822 | 420978 |
| 2028 | 2057760 | 67077 | 431228 | 108815 | 711244 | 35219 | 947654 | 263181 | 1435152 | 419018 |
| 2029 | 2052301 | 66889 | 430295 | 108578 | 709706 | 35127 | 945603 | 262493 | 1431150 | 417842 |
| 2030 | 2052301 | 66889 | 430295 | 108578 | 709706 | 35127 | 945603 | 262493 | 1431150 | 417842 |
| 2031 | 2052301 | 66889 | 430295 | 108578 | 709706 | 35127 | 945603 | 262493 | 1431150 | 417842 |
| 2032 | 2050957 | 66843 | 430065 | 108520 | 709327 | 35104 | 945098 | 262324 | 1430165 | 417552 |
| 2033 | 2048271 | 66751 | 429606 | 108403 | 708570 | 35059 | 944089 | 261986 | 1428197 | 416974 |
| 2034 | 2042898 | 66566 | 428688 | 108170 | 707057 | 34969 | 942071 | 261309 | 1424259 | 415817 |
| 2035 | 2038869 | 66427 | 428000 | 107995 | 705922 | 34901 | 940558 | 260801 | 1421307 | 414949 |
| 2036 | 2038869 | 66427 | 428000 | 107995 | 705922 | 34901 | 940558 | 260801 | 1421307 | 414949 |
| 2037 | 2038869 | 66427 | 428000 | 107995 | 705922 | 34901 | 940558 | 260801 | 1421307 | 414949 |
| 2038 | 2038869 | 66427 | 428000 | 107995 | 705922 | 34901 | 940558 | 260801 | 1421307 | 414949 |
| 2039 | 2038869 | 66427 | 428000 | 107995 | 705922 | 34901 | 940558 | 260801 | 1421307 | 414949 |

*Unadjusted for prior overpayments or underpayments of charges. In addition to the Transportation Charge, each contractor shall pay the Delta Water Charge. The latter charge may be estimated by applying $3.50 to each acre-foot of entitlement through calendar year 1969, and $6.39 to each acre-foot of entitlement thereafter.

TABLE B-16 (Continued)

TOTAL TRANSPORTATION CHARGES OF EACH CONTRACTOR*

(in dollars)



| CALENDAR YEAR | SOUTHERN CALIFORNIA (Continued) | | | | | CENTRAL COASTAL AREA | | | GRAND TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| | San Gorgonio Pass Water Agency | The Metropolitan Water District of Southern California | Upper Santa Clara Valley Water Agency | Ventura County Flood Control District | Total | San Luis Obispo County FC & WCD | Santa Barbara County FC & WCD | Total | |
| 1962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 67401 |
| 1963 | 0 | 565690 | 0 | 0 | 633676 | 0 | 0 | 0 | 1371471 |
| 1964 | 17591 | 1093670 | 17055 | 8108 | 1379301 | 8970 | 22118 | 31088 | 2415187 |
| 1965 | 18702 | 1937520 | 33336 | 15839 | 2389198 | 15417 | 37506 | 52923 | 4180874 |
| 1966 | 31703 | 3465302 | 64029 | 30288 | 4252042 | 24051 | 57875 | 81926 | 6366248 |
| 1967 | 56578 | 6364802 | 122363 | 57508 | 7806652 | 39301 | 93599 | 132900 | 10691884 |
| 1968 | 111963 | 13095514 | 259149 | 121603 | 15953812 | 78772 | 185883 | 264655 | 21738091 |
| 1969 | 183789 | 21682331 | 420268 | 196788 | 26221922 | 86140 | 203259 | 289399 | 32867130 |
| 1970 | 280910 | 31387486 | 592713 | 275475 | 37956742 | 86983 | 205405 | 292388 | 44664237 |
| 1971 | 369058 | 44871453 | 764697 | 345645 | 53461188 | 90388 | 213536 | 303924 | 60731499 |
| 1972 | 439203 | 50881645 | 832060 | 364835 | 62089436 | 91406 | 216467 | 307873 | 70063217 |
| 1973 | 455792 | 51920085 | 852967 | 369174 | 63598959 | 95032 | 226960 | 321992 | 72236756 |
| 1974 | 463845 | 51410221 | 848644 | 369448 | 63054962 | 101904 | 249172 | 351076 | 72166916 |
| 1975 | 470712 | 52349069 | 866421 | 369593 | 64056480 | 114248 | 284840 | 399088 | 73431081 |
| 1976 | 477569 | 52225573 | 865371 | 369008 | 63990560 | 226330 | 552941 | 779271 | 74040705 |
| 1977 | 490422 | 53372301 | 892499 | 370260 | 65314761 | 306268 | 744271 | 1050539 | 76133099 |
| 1978 | 505843 | 54638349 | 914471 | 371729 | 66929745 | 406641 | 989771 | 1396412 | 78392503 |
| 1979 | 523064 | 56175544 | 943770 | 372857 | 68895219 | 572140 | 1465397 | 2037537 | 81531551 |
| 1980 | 536488 | 57200707 | 965837 | 380900 | 70211786 | 782947 | 1991533 | 2774480 | 84169433 |
| 1981 | 554034 | 58048063 | 978091 | 388622 | 71368556 | 773043 | 2021032 | 2794075 | 85735995 |
| 1982 | 580996 | 60058439 | 1009125 | 398157 | 73898575 | 781656 | 2040575 | 2822231 | 88751855 |
| 1983 | 603681 | 61457339 | 1036174 | 408087 | 75693221 | 782300 | 2041896 | 2824196 | 91166312 |
| 1984 | 614543 | 62376511 | 1057113 | 417436 | 76745940 | 842826 | 2182603 | 3025429 | 92745947 |
| 1985 | 613059 | 60888335 | 1027772 | 417242 | 75006926 | 829659 | 2151759 | 2981418 | 91060329 |
| 1986 | 613959 | 61960475 | 1049675 | 433258 | 76085888 | 854563 | 2209718 | 3064281 | 92657316 |
| 1987 | 621494 | 62062546 | 1059596 | 445733 | 76296708 | 857992 | 2216828 | 3074820 | 93072800 |
| 1988 | 640588 | 63302886 | 1087028 | 471585 | 77916125 | 881701 | 2272320 | 3154021 | 95076803 |
| 1989 | 660231 | 64225824 | 1113190 | 498952 | 79250642 | 908596 | 2333569 | 3242165 | 96838066 |
| 1990 | 678153 | 64171632 | 1130139 | 530037 | 79519157 | 946667 | 2421981 | 3368648 | 97843340 |
| 1991 | 679841 | 64298861 | 1132275 | 531066 | 79824514 | 949646 | 2428854 | 3378500 | 98178340 |
| 1992 | 680097 | 64328623 | 1132889 | 531362 | 79861466 | 950015 | 2429708 | 3379723 | 98250340 |
| 1993 | 680091 | 64327887 | 1132873 | 531354 | 79860552 | 950006 | 2429687 | 3379693 | 98256340 |
| 1994 | 680087 | 64327431 | 1132864 | 531350 | 79859986 | 950000 | 2429674 | 3379674 | 98263340 |
| 1995 | 680081 | 64326813 | 1132851 | 531344 | 79859218 | 949993 | 2429656 | 3379649 | 98265340 |
| 1996 | 680084 | 64327163 | 1132858 | 531347 | 79859652 | 949997 | 2429666 | 3379663 | 98269340 |
| 1997 | 680079 | 64326545 | 1132846 | 531341 | 79858886 | 949989 | 2429648 | 3379637 | 98271340 |
| 1998 | 680079 | 64326545 | 1132846 | 531341 | 79858886 | 949989 | 2429648 | 3379637 | 98271340 |
| 1999 | 680079 | 64326545 | 1132846 | 531341 | 79858886 | 949989 | 2429648 | 3379637 | 98271340 |
| 2000 | 680079 | 64326545 | 1132846 | 531341 | 79858886 | 949989 | 2429648 | 3379637 | 98271340 |
| 2001 | 680079 | 64326545 | 1132846 | 531341 | 79858886 | 949989 | 2429648 | 3379637 | 98271340 |
| 2002 | 680079 | 64326545 | 1132846 | 531341 | 79858886 | 949989 | 2429648 | 3379637 | 98271340 |
| 2003 | 680079 | 64326545 | 1132846 | 531341 | 79858886 | 949989 | 2429648 | 3379637 | 98271340 |
| 2004 | 680079 | 64326545 | 1132846 | 531341 | 79858886 | 949989 | 2429648 | 3379637 | 98271340 |
| 2005 | 680079 | 64326545 | 1132846 | 531341 | 79858886 | 949989 | 2429648 | 3379637 | 98271340 |
| 2006 | 680079 | 64326545 | 1132846 | 531341 | 79858886 | 949989 | 2429648 | 3379637 | 98271340 |
| 2007 | 680079 | 64326545 | 1132846 | 531341 | 79858886 | 949989 | 2429648 | 3379637 | 98271340 |
| 2008 | 680079 | 64326545 | 1132846 | 531341 | 79858886 | 949989 | 2429648 | 3379637 | 98271340 |
| 2009 | 680079 | 64326545 | 1132846 | 531341 | 79858886 | 949989 | 2429648 | 3379637 | 98271340 |
| 2010 | 680079 | 64326545 | 1132846 | 531341 | 79858886 | 949989 | 2429648 | 3379637 | 98271340 |
| 2011 | 680079 | 64326545 | 1132846 | 531341 | 79858886 | 949989 | 2429648 | 3379637 | 98271340 |
| 2012 | 680079 | 64326545 | 1132846 | 531341 | 79858886 | 949989 | 2429648 | 3379637 | 98271340 |
| 2013 | 673881 | 63760855 | 1132846 | 531341 | 79196256 | 949989 | 2429648 | 3379637 | 97076571 |
| 2014 | 668907 | 63232875 | 1115791 | 523233 | 78509573 | 941019 | 2407530 | 3348549 | 96102312 |
| 2015 | 661377 | 62389025 | 1099510 | 515502 | 77469688 | 934572 | 2392142 | 3326714 | 94524076 |
| 2016 | 648376 | 60861243 | 1068817 | 501053 | 75606844 | 925938 | 2371773 | 3297711 | 92358073 |
| 2017 | 623501 | 57961743 | 1010483 | 473833 | 72052234 | 910688 | 2336049 | 3246737 | 88284430 |
| 2018 | 578954 | 52479077 | 899139 | 422001 | 65452701 | 896837 | 2303546 | 3200383 | 81251205 |
| 2019 | 510176 | 44249301 | 745177 | 350264 | 55625898 | 893689 | 2296018 | 3189707 | 71246417 |
| 2020 | 414838 | 34756677 | 576916 | 273593 | 44152879 | 892677 | 2293477 | 3186154 | 59713183 |
| 2021 | 349823 | 28882379 | 512173 | 243876 | 36965954 | 891802 | 2291255 | 3183057 | 52498582 |
| 2022 | 332149 | 25561190 | 476803 | 228445 | 33205814 | 890785 | 2288328 | 3179113 | 48713596 |
| 2023 | 328019 | 24881504 | 462575 | 222478 | 32429845 | 886545 | 2276397 | 3162942 | 47695717 |
| 2024 | 327258 | 24754621 | 460163 | 221535 | 32290946 | 879819 | 2254527 | 3134346 | 47510372 |
| 2025 | 326546 | 24706006 | 459455 | 221258 | 32233245 | 867404 | 2218692 | 3086096 | 47386962 |
| 2026 | 326517 | 24702621 | 459386 | 221225 | 32229047 | 755044 | 1949942 | 2704986 | 47000392 |
| 2027 | 325840 | 24624767 | 457797 | 220459 | 32132481 | 675182 | 1758790 | 2433972 | 46625438 |
| 2028 | 324663 | 24489368 | 455034 | 219127 | 31964540 | 574659 | 1512940 | 2087599 | 46101268 |
| 2029 | 323957 | 24408129 | 453376 | 218328 | 31863774 | 409167 | 1037328 | 1446495 | 45261130 |
| 2030 | 323957 | 24408129 | 453376 | 218328 | 31863774 | 329589 | 779964 | 1109553 | 44769242 |
| 2031 | 323957 | 24408129 | 453376 | 218328 | 31863774 | 329589 | 779964 | 1109553 | 44769242 |
| 2032 | 323783 | 24388126 | 452968 | 218131 | 31838963 | 329345 | 779395 | 1108740 | 44741822 |
| 2033 | 323435 | 24348160 | 452152 | 217738 | 31789391 | 328858 | 778257 | 1107115 | 44687037 |
| 2034 | 322740 | 24268208 | 450520 | 216952 | 31690224 | 327105 | 774167 | 1101272 | 44574848 |
| 2035 | 322219 | 24208259 | 449296 | 216362 | 31615865 | 316461 | 749328 | 1065789 | 44459623 |
| 2036 | 322219 | 24208259 | 449296 | 216362 | 31615865 | 312379 | 739803 | 1052182 | 44446016 |
| 2037 | 322219 | 24208259 | 449296 | 216362 | 31615865 | 312379 | 739803 | 1052182 | 44446016 |
| 2038 | 322219 | 24208259 | 449296 | 216362 | 31615865 | 312379 | 739803 | 1052182 | 44445499 |
| 2039 | 322219 | 24208259 | 449296 | 216362 | 31615865 | 312379 | 739803 | 1052182 | 44441179 |

*Unadjusted for prior overpayments or underpayments of charges. In addition to the Transportation Charge, each contractor shall pay the Delta Water Charge. The latter charge may be estimated by applying $3.50 to each acre-foot of entitlement through calendar year 1969, and $6.39 to each acre-foot of entitlement thereafter.

# APPENDIX C

# FACILITY DESCRIPTIONS

# THE CALIFORNIA STATE WATER PROJECT



# THE CALIFORNIA STATE WATER PROJECT

Water problems today have become so vital a part of the national consciousness that most Americans are now aware the future development of their country is intimately related to the wise use of its water resources. This precept is particularly true in California, the nation's most populous state, where principal water-producing areas are geographically far removed from major water-using centers.

To balance this inequity of Nature, the California Water Plan of 1957 presented a blueprint for conserving and distributing water, from the stream-rich north to the arid, populous south, so that all water needs within the State could be met for all time.

In November 1960, California voters took the first major step toward bringing that engineering concept to reality by ratifying the Burns-Porter Act, the legislative provision which furnishes the major financing source for the $2,500,000,000 State Water Project through authorization of $1,750,000,000 in general obligation bonds. With a guaranteed source of financing, work began on the gigantic arrangement of dams, aqueducts, pipelines, powerplants and reservoirs that, together with works constructed by local and federal agencies, will satisfy the growing water needs of the State until the year 1990.

The northern key facility for the State Water Project is Oroville Dam, located at the base of the Feather River country and scheduled for completion in 1968 as the highest dam in the United States. Above its reaches are the sites of five smaller dams and reservoirs in the Upper Feather Area.

Alameda and Santa Clara Counties in Central California are already receiving water deliveries from the South Bay Aqueduct. The California Aqueduct, which extends from the Sacramento-San Joaquin Delta to Perris reservoir in Riverside County, is scheduled to deliver water in the San Joaquin Valley in 1968 and in Southern California in 1971. The North Bay Aqueduct, where construction is soon to begin, is slated to deliver water to Napa County in 1968.

Project construction moves into the future with plans for: the Upper Eel River Development, where waters that would otherwise flow uselessly into the Pacific Ocean can be directed from the Eel River to the Delta; the Peripheral Canal, which would convey water from the Sacramento River, across the eastern islands of the Delta, to the intake of the California Aqueduct; and, the San Joaquin Master Drain, a proposed conveyance facility for removal of poor quality drainage water from problem areas throughout the San Joaquin Valley.

The location of the project facilities is shown on the opposite page. These facilities are briefly described in the following pages, together with pertinent statistics which are current as of April 1966.

# UPPER FEATHER AREA

## Authorization

The construction of the five units constituting the Upper Feather division was authorized by the California Legislature in 1957.

## Purpose

Each of the five units will be operated to enhance downstream fisheries as well as to promote recreational activities in the reservoir areas. Three of the units, Antelope, Abbey Bridge, and Dixie Refuge, will be constructed solely for these purposes. Two of the units, Frenchman and Grizzly Valley, will also supplement local water supplies for agricultural, domestic, and municipal uses.

## Description

Each unit consists of an earthfill dam, a reservoir, and related recreational features. The Grizzly Valley unit also includes the proposed Grizzly Valley Pipeline, which may be constructed in the future to convey water from the dam to the town of Portola.

## Project Status, April 1, 1966

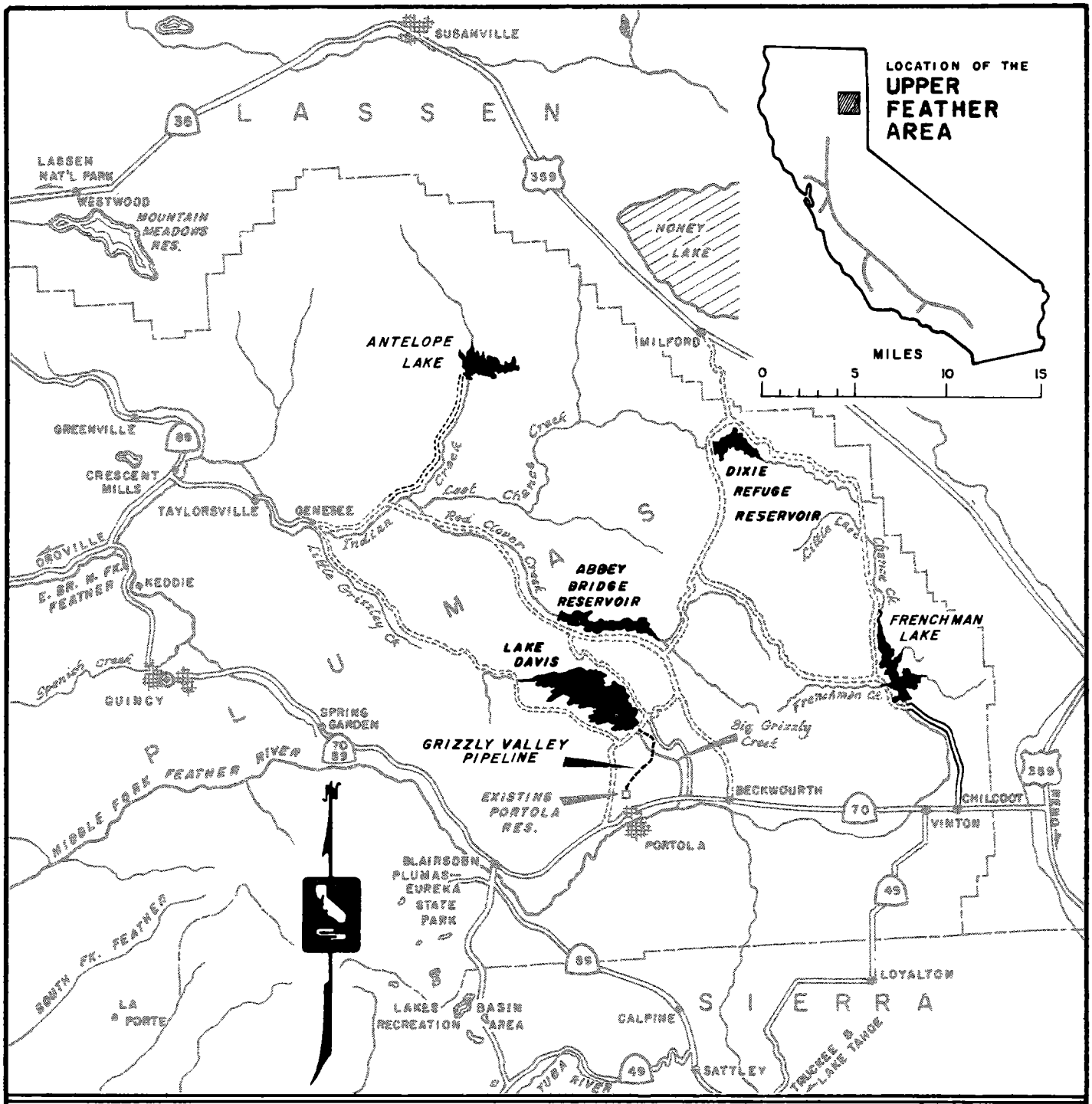
Frenchman Dam was completed in 1961, and Antelope Dam was completed in 1964. The construction of Grizzly Valley Dam is over 40 percent completed, with completion expected in November of this year. Construction of the remaining two dams has not as yet been scheduled.

## Project Statistics

| Dams (Earthfill) | Frenchman | Antelope | Grizzly Valley | Abbey Bridge | Dixie Refuge |
|---|---|---|---|---|---|
| Height, feet | 128 | 105 | 115 | 110 | 100 |
| Volume, cubic yards | 543,000 | 380,000 | 230,000 | 478,000 | 360,000 |
| Crest length, feet | 720 | 1,320 | 800 | 1,150 | 1,050 |
| Crest elevation, feet 1/ | 5,607 | 5,025 | 5,785 | 5,450 | 5,754 |
| Spillway capacity, cubic feet per second | 15,000 | 23,400 | 2,420 | 38,000 | 20,000 |

| Reservoirs | Frenchman Lake | Antelope Lake | Lake Davis | Abbey Bridge | Dixie Refuge |
|---|---|---|---|---|---|
| Capacity, acre-feet | 55,400 | 22,500 | 83,000 | 45,000 | 16,000 |
| Dead storage, acre-feet | 2,000 | 500 | 90 | 1,750 | 500 |
| Surface area, acres | 1,580 | 930 | 4,000 | 1,950 | 900 |
| Shoreline, miles | 21 | 15 | 32 | 12 | 15 |

1/ Above sea level.




## Project Costs

| | |
|---|---|
| Frenchman Dam and Lake | $ 3,174,000 |
| Antelope Dam and Lake | 4,486,000 |
| Grizzly Valley Dam and Lake Davis | 4,129,000 |
| Abbey Bridge Dam and reservoir | 5,349,000 |
| Dixie Refuge Dam and reservoir | 4,693,000 |
| Total Cost | $21,831,000 |

# OROVILLE AREA

## Authorization

The construction of the Oroville division was authorized by the California Legislature in 1951.

## Purpose

The Oroville division will be operated for the purposes of water supply, power generation, flood control, recreation, and fish and wildlife enhancement. It will provide a new water supply for areas adjacent to the Feather River and additional water for diversion from the Sacramento-San Joaquin Delta. It will generate at least 710,000 kilowatts of dependable power at 34 percent capacity factor. It will maintain a reservation of 750,000 acre-feet of storage for flood control. The reservoirs created by the Oroville division, together with proposed recreational features and controlled releases to the downstream channel, will provide a new base for recreational activities and will enhance the fish and wildlife resources of the Feather River.

## Description

Oroville Dam will be the highest dam in the United States and the third largest embankment dam in the world in terms of total volume of fill. Oroville Powerplant, the largest underground hydroelectric installation in the United States, will be located in the left abutment of the dam. During onpeak power periods, water passing through the powerplant will be diverted by Thermalito Diversion Dam and conveyed through the Thermalito Power Canal to Thermalito Forebay for use by the Thermalito Powerplant. Flow through the Thermalito Powerplant will be received by the Thermalito Afterbay for release back to the river channel or for storage and reuse during the pumpback operation. Under pumpback operation water will be returned through reversible pump-turbine units in both powerplants to Oroville reservoir during the offpeak power periods.

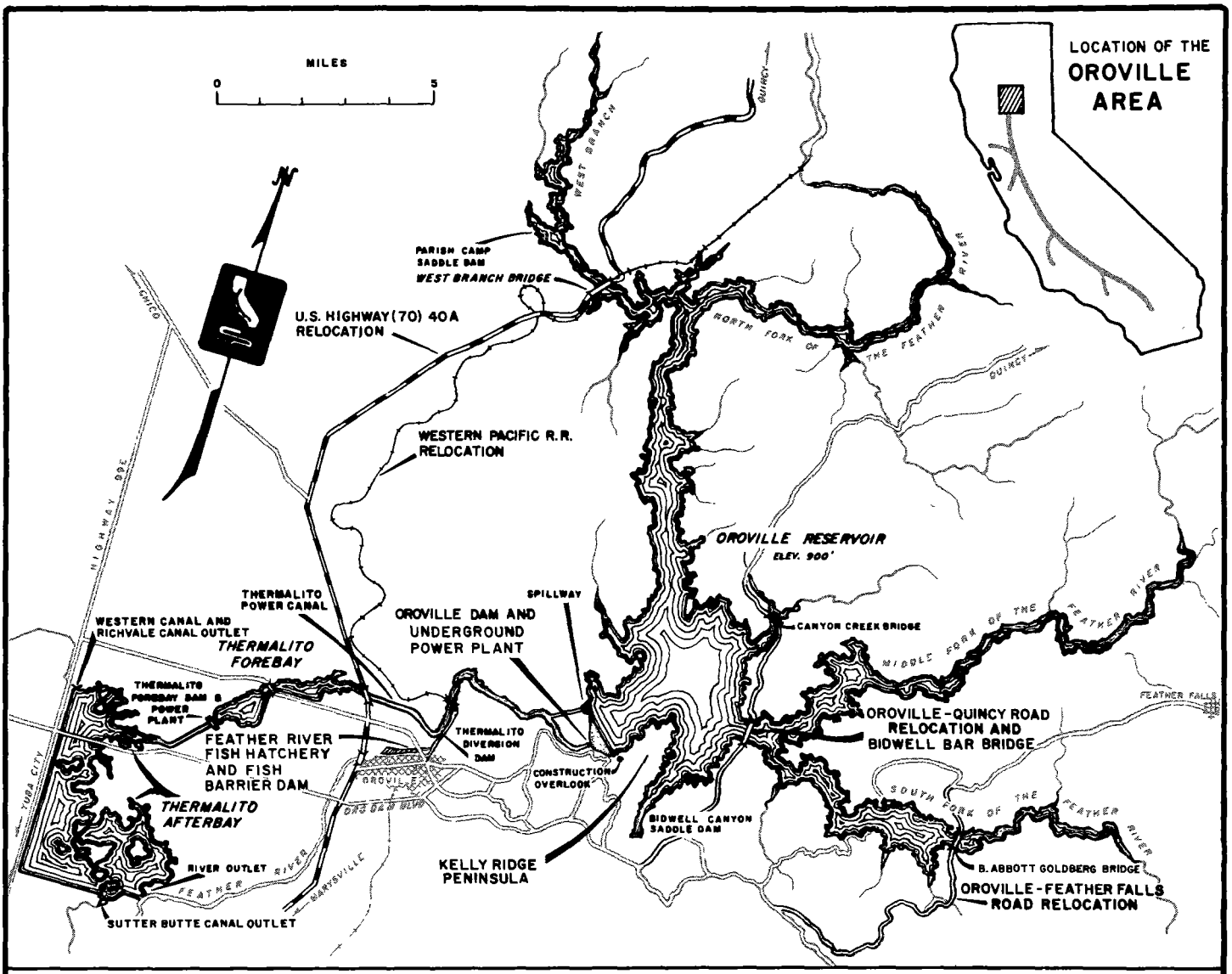
Feather River Fish Barrier Dam will divert migrating salmon and steelhead into the Feather River Fish Hatchery. The hatchery will substitute for the salmon and steelhead spawning areas inundated by Oroville reservoir.

## Project Status, April 1, 1966

The Oroville-Quincy Road and Oroville-Feather Falls Road are the last two relocation projects. Each will be completed near the end of 1967. The embankment of Oroville Dam is more than 55 percent complete, and the excavation of the Oroville Powerplant underground chamber is over 90 percent complete, with the placing of concrete under way. The remaining major projects are all in the construction phase and the entire area is scheduled for completion early in 1969.

## Project Costs

| | |
|---|---|
| Oroville Dam and reservoir | $211,354,000 |
| Feather River Fish Hatchery and Fish Barrier Dam | 6,716,000 |
| Oroville Powerplant | 82,141,000 |
| Thermalito Diversion Dam | 13,545,000 |
| Thermalito Powerplant | 34,758,000 |
| Thermalito Forebay and Afterbay | 32,492,000 |
| Thermalito Power Canal | 7,446,000 |
| Major relocations | 89,982,000 |
| Total Cost | $478,434,000 |




Project Statistics

| Pumping-Generating Plants | Oroville | Thermalito |
|---|---|---|
| Pumping capacity, cubic feet per second | 16,500 | 16,500 |
| Generating capactiy, kilowatts | 644,000 | 115,000 |
| Static head, feet | 675 | 102 |
| Annual output, kilowatt-hours 1/ | 2,467,000,000 | 379,000,000 |

| Thermalito Power Canal | |
|---|---|
| Capacity | 17,000 cubic feet per second |
| Length | 2.5 miles |

| Dams | Oroville | Thermalito Diversion | Thermalito Forebay | Thermalito Afterbay |
|---|---|---|---|---|
| Heights, feet | 770 | 246 | 71 | 37 |
| Volume, cubic yards | 80,000,000 | 155,000 | 1,580,000 | 5,038,000 |
| Crest length, feet | 6,920 | 1,280 | 15,900 | 41,600 |
| Crest elevation, feet 2/ | 922 | 205 | 231 | 142 |
| Spillway capacity, cubic feet per second | 650,000 | 650,000 | None | 17,000 |
| Reservoirs | | | | |
| Capacity, acre-feet | 3,484,000 | 13,500 | 11,400 | 57,000 |
| Surface area, acres | 15,500 | 330 | 600 | 4,550 |
| Shoreline, miles | 167 | 10 | 10 | 26 |

1/ Under full project development.
2/ Above sea level.

# NORTH BAY AQUEDUCT

## Authorization

The construction of the North Bay Aqueduct was authorized by the California Legislature in 1957.

## Purpose

The North Bay Aqueduct will provide an additional water supply for municipal and industrial uses in Napa and Solano Counties.

## Description

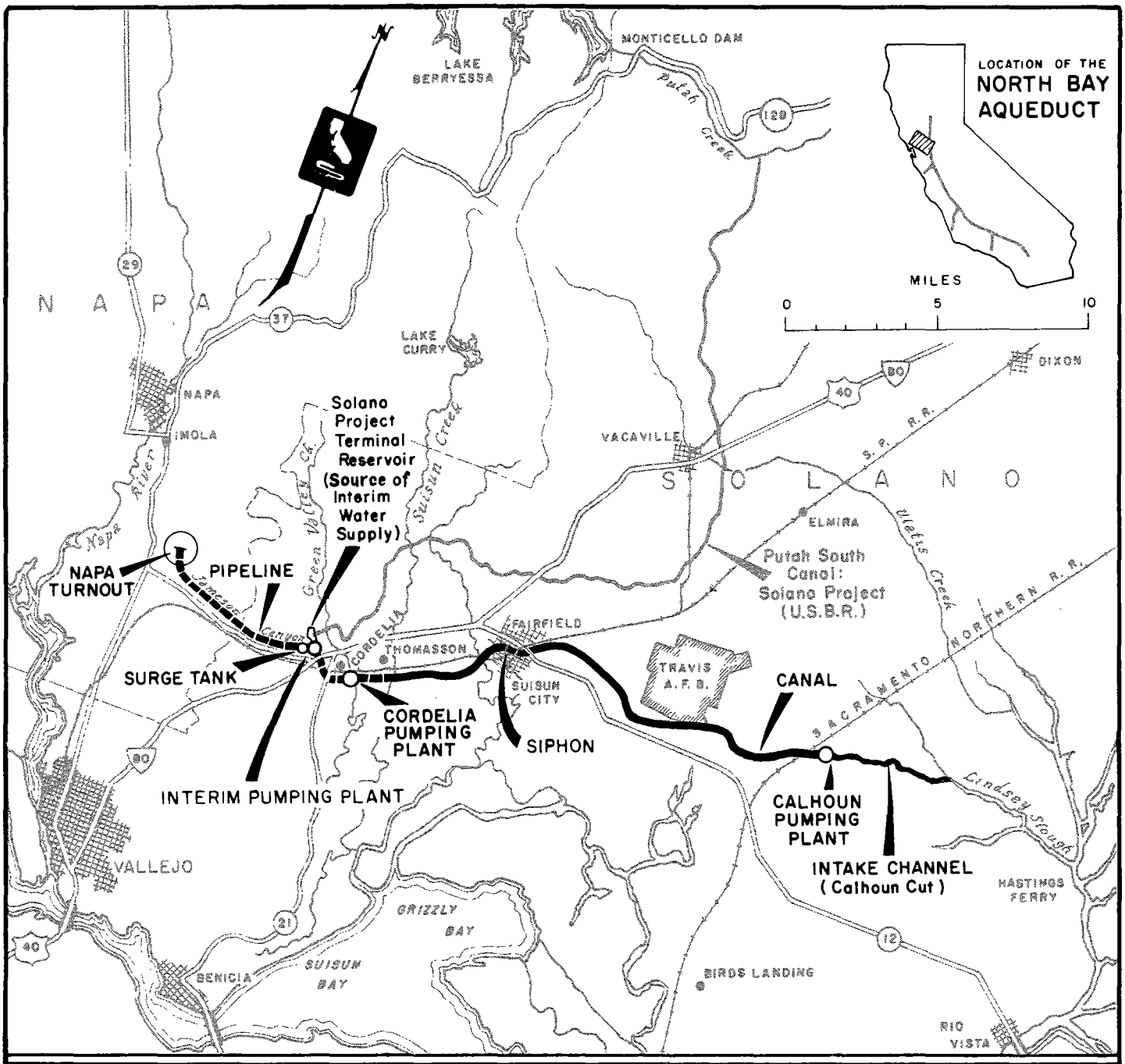
Project water will be diverted from the Sacramento-San Joaquin Delta through an enlargement of Lindsey Slough to the Calhoun Pumping Plant. The pumping plant will lift the water about 30 feet to a canal which will convey water to service areas in Solano County and to the Cordelia Pumping Plant. Cordelia Pumping Plant will lift the remaining water about 396 feet to a pipeline which will extend to the initial terminus in Napa County. Prior to about 1980, nonproject water from the Solano Project terminal reservoir will be conveyed by the Interim Pumping Plant and the 24-inch diameter Interim pipeline to the surge tank downstream from the Cordelia Pumping Plant. The Interim facilities, surge tank, 36-inch diameter pipeline downstream from the surge tank and the Napa turnout constitute Phase I of the North Bay Aqueduct. Phase II will include the remaining facilities required to deliver project water to both counties from the Delta.

## Project Status, April 1, 1966

Phase I facilities are in the final design stage, and right-of-way acquisition is proceeding for this unit. Advertising for bids will commence in 1966, to allow for water delivery early in 1968. The determination of the alignment of Phase II facilities for right-of-way purposes also is scheduled to be completed in 1966. The water supply contracts with Napa and Solano Counties provide that the construction of Phase II facilities shall not commence until 1975, unless an earlier date is mutually agreed upon by the contracting parties.

## Project Costs

| | |
|---|---|
| Channel, canal and pipeline | $ 7,906,000 |
| Interim Pumping Plant | 472,000 |
| Calhoun Pumping Plant | 571,000 |
| Cordelia Pumping Plant | 1,520,000 |
| Total Cost | $10,469,000 |




## Project Statistics

### Aqueduct

| | |
|---|---|
| Capacity | 117 to 46 cubic feet per second |
| Unlined channel | 3.8 miles |
| Unlined canal | 18.0 miles |
| Pipeline | 8.1 miles |
| Total Length | 29.9 miles |

| Pumping Plants | Interim | Calhoun | Cordelia |
|---|---|---|---|
| Capacity, cubic feet per second | 23 | 117 | 46 |
| Static head, feet | 255 | 30 | 396 |

# SOUTH BAY AQUEDUCT

## Authorization

The construction of the South Bay Aqueduct was authorized by the California Legislature in 1951. Del Valle reservoir was added to the authorized works in 1958 through administrative action by the Director of the Department of Water Resources.

## Purpose

The South Bay Aqueduct provides additional water supply for agricultural, municipal, and industrial uses in Alameda and Santa Clara Counties. Del Valle reservoir will be constructed for the purposes of flood control and recreation as well as for the purpose of water supply.

## Description

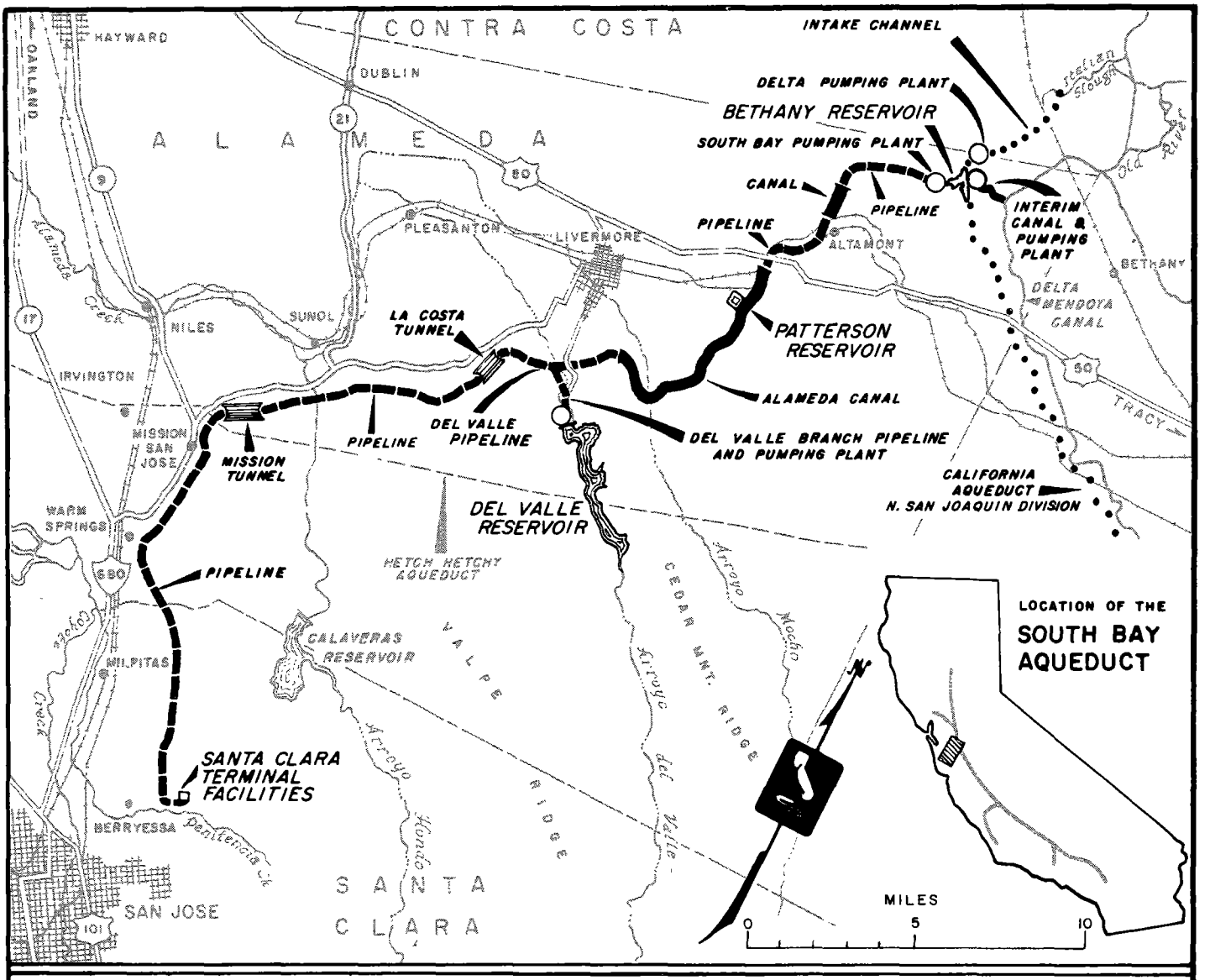
Nonproject water, purchased from the federal Central Valley Project, is being diverted from the Delta-Mendota Canal through the Interim Intake canal and the Interim Pumping Plant to Bethany reservoir of the California Aqueduct. Water is lifted 600 feet from Bethany reservoir by the South Bay Pumping Plant, and conveyed through about 42 miles of pipelines, canals, and tunnels to a terminal facility in Santa Clara County, with deliveries to water users made enroute. A portion of the conveyed water will be lifted 40 feet by the Del Valle Pumping Plant through 9,000 feet of 60-inch pipeline to Del Valle reservoir, where it will be regulated and later released during periods of peak water demand.

## Project Status, April 1, 1966

Nonproject water has been delivered to contractors in Alameda County since 1962, and the delivery of such water to Santa Clara County began in August 1965. Project water deliveries are scheduled to commence in 1967 when the Delta Pumping Plant of the California Aqueduct becomes operable. The contract for construction of Del Valle Dam and reservoir was awarded in March of this year, with completion scheduled in 1968.

## Project Costs

| | |
|---|---|
| Canal and pipelines | $28,514,000 |
| Tunnels | 3,391,000 |
| South Bay Pumping Plant | 3,129,000 |
| Del Valle Dam and reservoir | 23,350,000 |
| Del Valle Pumping Plant | 1,000,000 |
| Total Cost | $59,384,000 |




## Project Statistics

### Aqueduct

| | |
|---|---|
| Capacity | 363 to 184 cubic feet per second |
| Concrete-lined canal | 11.5 miles |
| Pipelines | 30.6 miles |
| Tunnels | 1.6 miles |
| Total length | 43.7 miles |

### Pumping Plants

| | Interim | South Bay | Del Valle |
|---|---|---|---|
| Capacity, cubic feet per second | 125 | 315 | 120 |
| Static head, feet | 60 | 600 | 40 |

### Dams (Earthfill)

| | Patterson | Del Valle |
|---|---|---|
| Height, feet | 29 | 223 |
| Volume, cubic yards | 97,450 | 4,034,000 |
| Crest length, feet | 1,831 | 880 |
| Crest elevation, feet | 709.6 | 773 |

### Reservoirs

| | | |
|---|---|---|
| Capacity, acre-feet | 100 | 78,500 |
| Surface area, acres | 4.2 | 1,075 |
| Shoreline, miles | 0.3 | 16 |

1/ Above sea level.

# PERIPHERAL CANAL

## Authorization

The Delta facilities of the State Water Project were authorized for construction upon the ratification of the Burns-Porter Act by the California electorate in November 1960.

Numerous studies of the Sacramento-San Joaquin Delta have been made by the Department of Water Resources, the Corps of Engineers and the Bureau of Reclamation. In 1961, an Interagency Delta Committee was formed by the three agencies. A mutually acceptable plan was formulated by the group and was published in January 1965, as "Plan for Development, Sacramento-San Joaquin Delta". The Committee's plan recommended a peripheral canal as the initial feature of an overall framework within which the activities of state, federal, and local governmental agencies could proceed cooperatively. Administrative action, in March 1966, by the Director of the Department of Water Resources officially adopted the Peripheral Canal and designated it as an initial feature of the State Water Facilities.

## Purpose

The main purpose of the Peripheral Canal is to divert water from the Sacramento River and transfer it to the state and federal pumping plants located in the southern Delta, without interfering with local Delta development. The Canal would also serve the purposes of local water supply, recreation, and fish and wildlife enhancement.

## Description

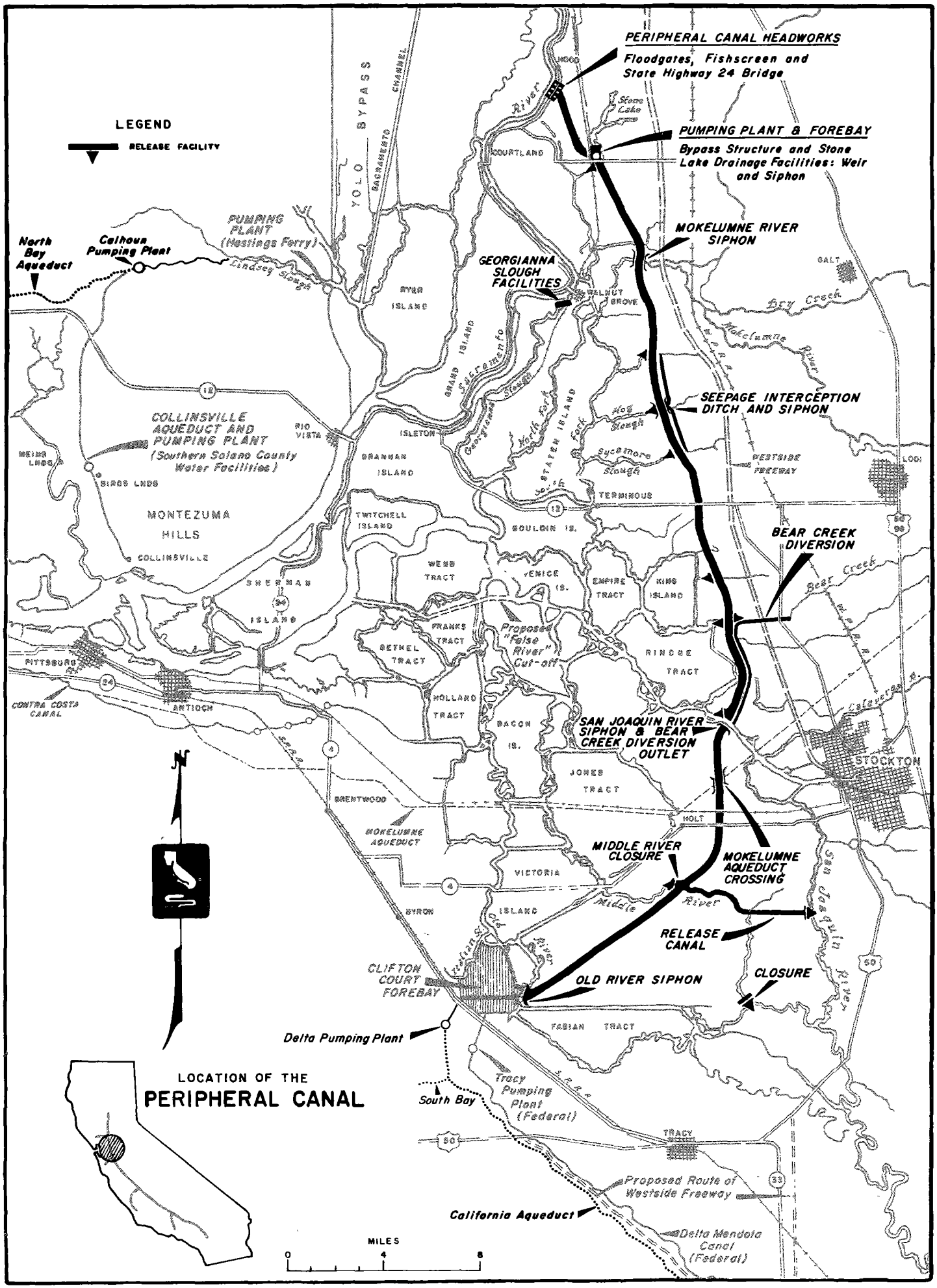
The Peripheral Canal would begin with an intake and fish screen structure located on the Sacramento River near Hood, followed by a low-lift pumping plant located near Lambert Road. The Canal would traverse the eastern edge of the northern Delta, pass beneath the Mokelumne River in a siphon, and continue toward Stockton where it would be siphoned beneath the San Joaquin River, then proceed southwesterly across the southern Delta and be siphoned beneath Old River. The Canal would divide at this point into two branches, the easterly branch terminating at the Tracy Pumping Plant of the federal Central Valley Project and the westerly branch terminating at the Clifton Court Forebay of the California Aqueduct.

## Project Status, April 1, 1966

The studies of the Peripheral Canal are just entering the advance planning stage. Completion of the facility is scheduled for the end of the year 1973.

## Project Statistics and Cost

| | |
|---|---|
| Length of canal | 43.0 miles |
| Capacity of canal (total) | 21,800 to 18,300 cubic feet per second |
| Static head of pumping plant | 11 feet |
| Cost (State share only) | $55,097,000 |


PERIPHERAL CANAL HEADWORKS
Floodgates, Fishscreen and State Highway 24 Bridge
PUMPING PLANT & FOREBAY
Bypass Structure and Stone Lake Drainage Facilities: Weir and Siphon
MOKELUMNE RIVER SIPHON
GEORGIANNA SLOUGH FACILITIES
SEEPAGE INTERCEPTION DITCH AND SIPHON
BEAR CREEK DIVERSION
SAN JOAQUIN RIVER SIPHON & BEAR CREEK DIVERSION OUTLET
MIDDLE RIVER CLOSURE
MOKELUMNE AQUEDUCT CROSSING
RELEASE CANAL
CLOSURE
OLD RIVER SIPHON
CLIFTON COURT FOREBAY
Delta Pumping Plant
South Bay
Tracy Pumping Plant (Federal)
Proposed Route of Westside Freeway
California Aqueduct
Delta Mendota Canal (Federal)
COLLINSVILLE AQUEDUCT AND PUMPING PLANT
(Southern Solano County Water Facilities)
North Bay Aqueduct
Calhoun Pumping Plant
PUMPING PLANT (Hastings Ferry)
Proposed "False River" Cut-off
MOKELUMNE AQUEDUCT
LEGEND
RELEASE FACILITY
LOCATION OF THE
PERIPHERAL CANAL
MILES
0
4
8

# CALIFORNIA AQUEDUCT

## Authorization

The construction of the California Aqueduct, including the West Branch, was originally authorized by the California Legislature in 1951. San Luis reservoir and associated features were added to the authorized works by the Legislature in 1955. The San Luis Act of 1960 gave federal authorization to the Secretary of the Interior to construct the San Luis Unit of the Central Valley Project. The State entered into an agreement with the United States on December 30, 1961, for federal construction and state operation of the features of the San Luis Unit jointly used by the federal Central Valley Project and the State Water Project. The Coastal Branch was added to the California Aqueduct in 1959 through administrative action by the Director of the Department of Water Resources.

## Purpose

The California Aqueduct will serve the purposes of water supply, recreation, and fish and wildlife enhancement. It is the principal conveyance facility of the State Water Project and extends from the Sacramento-San Joaquin Delta to termini in Southern California and Central Coastal areas. The Aqueduct north of San Luis reservoir will serve dual water conservation-water transportation functions. It will convey surplus water flowing into the Delta, to the San Luis reservoir for conservation and later delivery during times of deficient Delta flows. It will also transport flows directly from the Delta to the South Bay Aqueduct and to water supply contractors south of San Luis reservoir. Water deliveries from the Aqueduct will be made to the San Joaquin Valley, to Southern California, and in the Central Coastal area. Fishing access sites and aquatic parks will be scattered throughout the length of the Aqueduct. All major reservoirs will include recreational features.

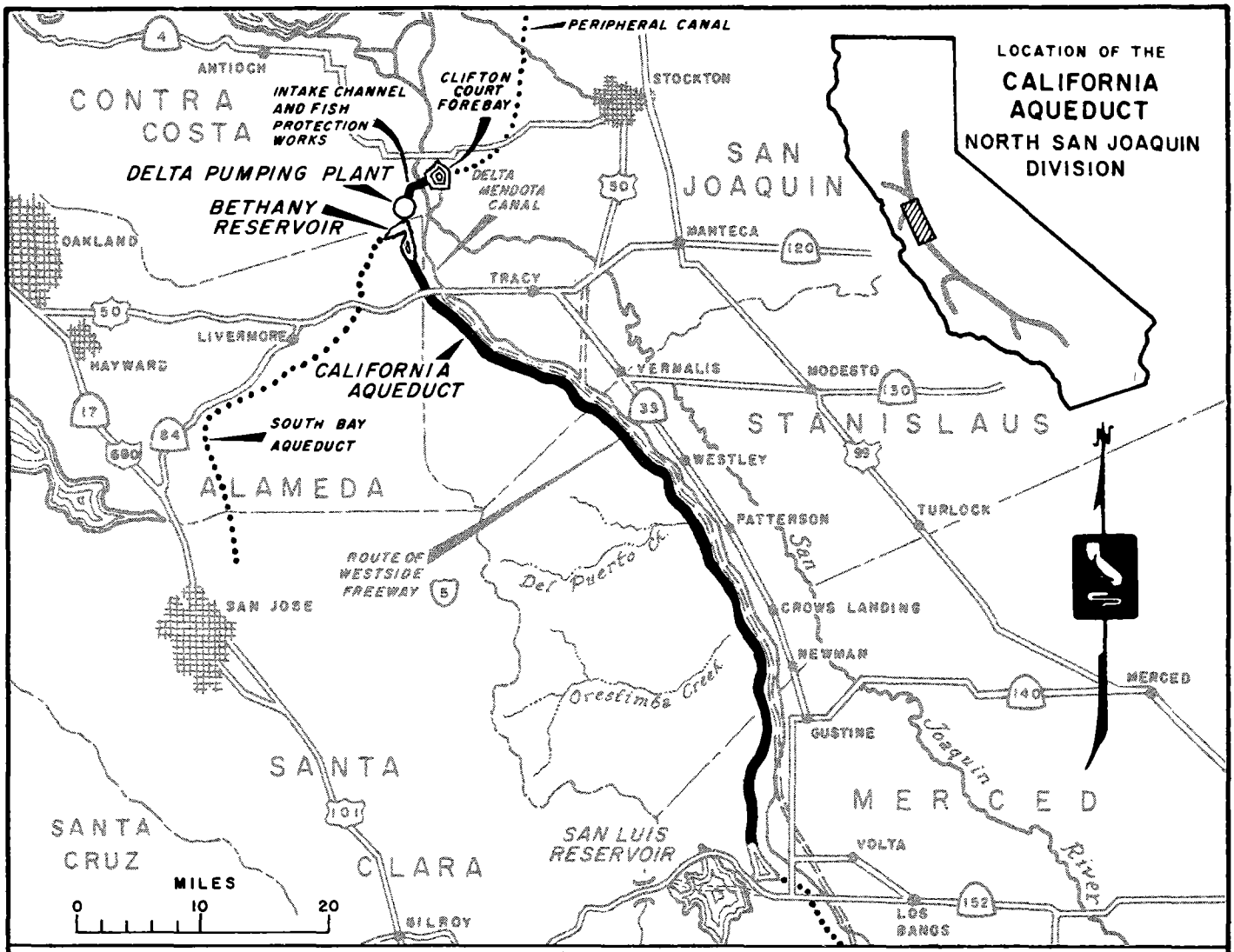
# North San Joaquin Division

## Description

The North San Joaquin division covers the portion of the California Aqueduct from Clifton Court Forebay in the Sacramento-San Joaquin Delta to San Luis Forebay. The major features will consist of a forebay, excavated intake channel, fish protection works, the Delta Pumping Plant, Bethany reservoir, and a concrete-lined canal 62 miles in length. Water will be lifted 244 feet from the Delta to the head of the canal. Project water for the South Bay Aqueduct will be diverted from Bethany reservoir.

## Project Status, April 1, 1966

The initial stage of Bethany reservoir was completed in 1961 and is being used as a part of the interim facilities now serving the South Bay Aqueduct. Construction is under way on the Intake channel, Delta Pumping Plant, and several reaches of the canal. Initial operation of the Delta Pumping Plant is planned for 1967. The entire division is scheduled for operation in 1968.




## Project Statistics

| | | |
|---|---|---|
| **Aqueduct** | | |
| Capacity | 10,000 cubic feet per second | |
| Concrete-lined canal | 62.0 miles | |
| **Delta Pumping Plant** | | |
| Capacity | 10,350 cubic feet per second | |
| Static head | 244 feet | |
| **Dams** | **Bethany** | **Clifton Court forebay** |
| Height, feet | 25 to 80 | 14 |
| Volume, cubic yards | 1,040,000 | N/A |
| Crest length, feet | 3,220 | 51,200 |
| Crest elevation, feet 1/ | 250 | N/A |
| **Reservoirs** | | |
| Capacity, acre-feet | 4,800 | 35,400 |
| Surface area, acres | 161 | 2,900 |
| Shoreline, miles | 4 | 9.7 |

## Project Costs

| | |
|---|---|
| Fish protection works | $ 4,825,000 |
| Canal | 90,022,000 |
| Clifton Court forebay | 11,659,000 |
| Delta Pumping Plant | 25,123,000 |
| Bethany Dams and reservoir | 3,154,000 |
| Total Cost | $134,783,000 |

1/ Above sea level.

# CALIFORNIA AQUEDUCT

## San Luis Division

### Description

The San Luis division of the California Aqueduct includes those facilities of the San Luis Unit of the federal Central Valley Project which will be jointly used by the State Water Project. The major features will consist of the San Luis Forebay, Pumping-Generating Plant, Dam, and reservoir; Dos Amigos Pumping Plant; and a 101-mile long canal extending from the Forebay to near Kettleman City. The canal will be protected from floods occurring in Los Banos Creek and Little Panoche Creek by two dams which will create detention reservoirs. When water entering San Luis Forebay exceeds service area demands, the excess will be pumped to San Luis reservoir by the San Luis Pumping-Generating Plant. When water entering San Luis Forebay is less than service area demands, water will be released through the San Luis Pumping-Generating Plant to produce electrical energy and to help meet water delivery requirements.

### Project Status, April 1, 1966

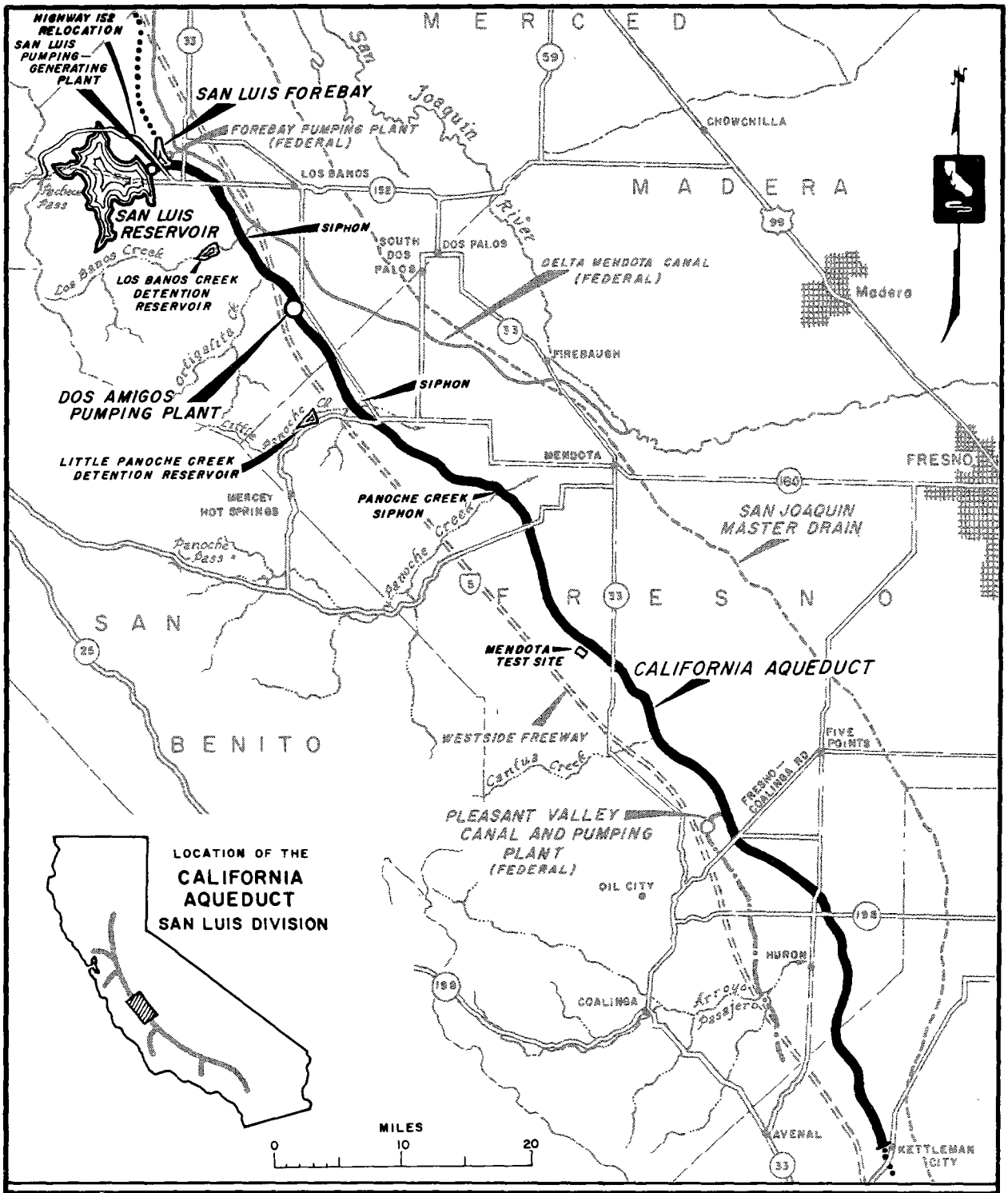
San Luis Dam, Forebay Dam and Pumping-Generating Plant are about 80 percent complete. Dos Amigos Pumping Plant is over 96 percent constructed. The Los Banos Creek Detention Dam is finished and Little Panoche Creek Detention Dam is over 50 percent completed. Deliveries of water through the division are scheduled to commence in 1967 for the federal Central Valley Project, and in 1968 for the State Water Project.

### Project Statistics

| | |
|---|---|
| **Aqueduct** | |
| Capacity | 13,100 to 8,350 cubic feet per second |
| Concrete-lined canal | 101.4 miles |
| **San Luis Pumping-Generating Plant** | |
| Pumping capacity | 11,000 cubic feet per second |
| Generating capacity | 424,000 kilowatts |
| Static head | 320 feet |
| Annual output[1/] | 118,000,000 kilowatt-hours |
| **Dos Amigos Pumping Plant** | |
| Capacity | 13,200 cubic feet per second |
| Static head | 117 feet |

| Dams | San Luis | San Luis Forebay | Los Banos Creek | Little Panoche Creek |
|---|---|---|---|---|
| Height, feet | 320 | 70 | 154 | 120 |
| Volume, cubic yards | 77,000,000 | 3,000,000 | 2,200,000 | 630,000 |
| Crest length, feet | 18,480 | 13,500 | 1,370 | 1,440 |
| Crest elevation, feet[2/] | 554 | 233 | 384 | 676 |
| **Reservoirs** | | | | |
| Capacity, acre-feet | 2,095,000 | 58,000 | 34,500 | 13,270 |
| Surface area, acres | 13,800 | 2,000 | 623 | 354 |
| Shoreline, miles | 65 | 14 | 12 | 10 |

1/ State share under full project development.
2/ Above sea level.




| Project Costs | |
|---|---|
| Canal | $111,803,000 |
| San Luis Dam and reservoir | 84,600,000 |
| San Luis Pumping-Generating Plant | 61,470,000 |
| San Luis Forebay | 8,807,000 |
| Dos Amigos Pumping Plant | 24,670,000 |
| Los Banos Creek Detention Dam | 5,625,000 |
| Little Panoche Creek Detention Dam | 3,350,000 |
| Other channels, levees, and floodworks | 4,578,000 |
| Permanent operating facilities | 3,100,000 |
| Total Costs, features jointly used | $308,003,000 |
| State share (55%) | $169,402,000 |
| Additional State-only costs | $ 20,575,000 |
| Total State Costs | $189,977,000 |

# CALIFORNIA AQUEDUCT

## South San Joaquin Division

### Description

The South San Joaquin division covers the portion of the California Aqueduct from near Kettleman City to the Tehachapi Pumping Plant. The major features will consist of three pumping plants -- Buena Vista, Wheeler Ridge, and Wind Gap -- and about 120 miles of canal. The three pumping plants will lift the conveyed water a total of 954 feet.

### Project Status, April 1, 1966

Preconsolidation of unstable soils has been completed for more than 23 miles along the Aqueduct route. A 60-mile section of the Aqueduct is well into construction and contracts have been awarded for the three intake channels of the pumping plants. Construction activities are scheduled so that initial water deliveries can be made to Seventh Standard Road in 1968, and to Tehachapi Pumping Plant in 1971.

### Project Statistics

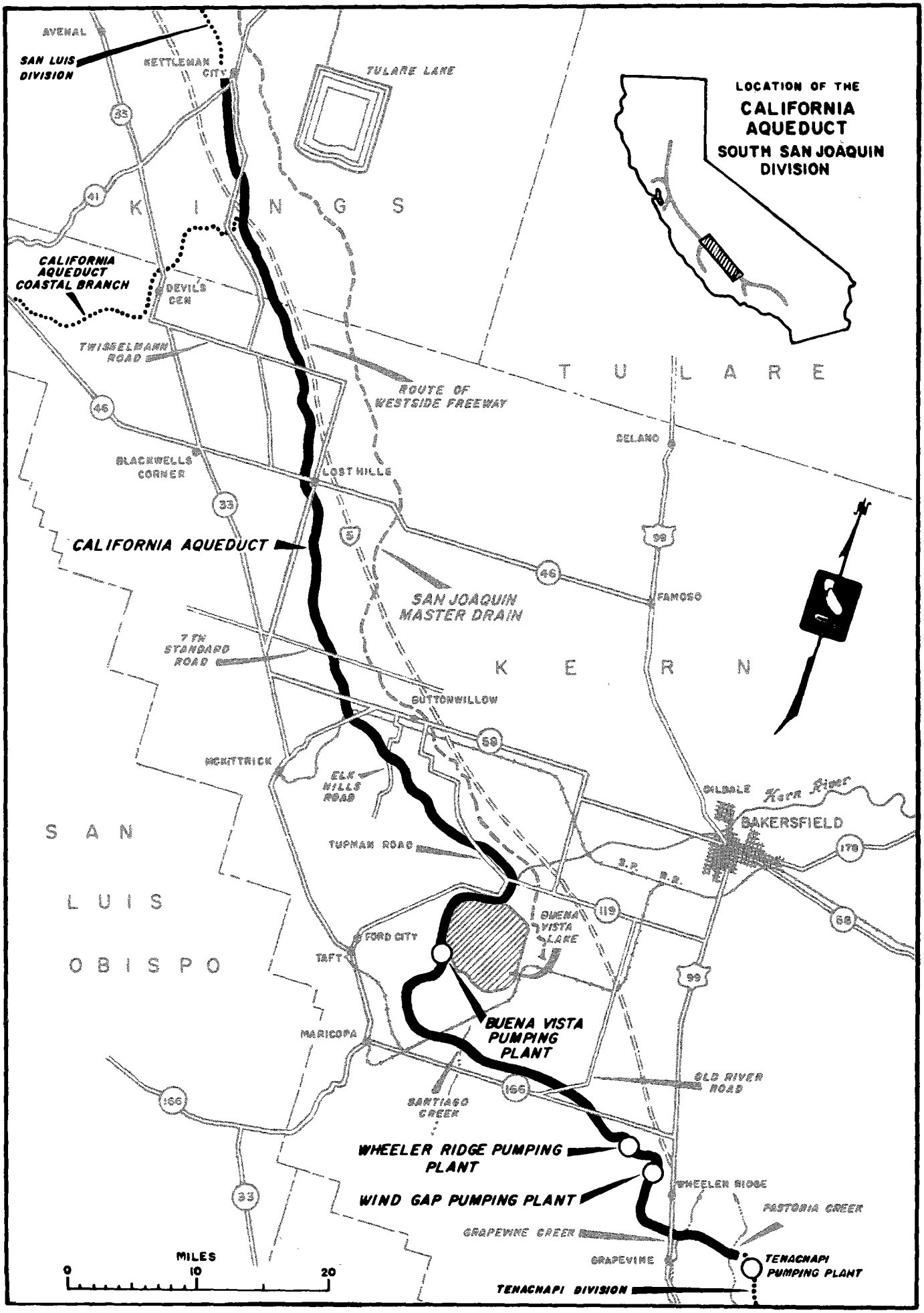
#### Aqueduct

| | |
|---|---|
| Capacity | 8,100 to 4,400 cubic feet per second |
| Concrete-lined canal | 120 miles |

| Pumping Plants | Buena Vista | Wheeler Ridge | Wind Gap |
|---|---|---|---|
| Capacity, cubic feet per second | 4,900 | 4,600 | 4,400 |
| Static head, feet | 205 | 230 | 519 |

### Project Costs

| | |
|---|---|
| Canal | $158,729,000 |
| Buena Vista Pumping Plant | 30,085,000 |
| Wheeler Ridge Pumping Plant | 27,864,000 |
| Wind Gap Pumping Plant | 35,713,000 |
| Total Cost | $252,391,000 |


LOCATION OF THE
CALIFORNIA
AQUEDUCT
SOUTH SAN JOAQUIN
DIVISION
AVENAL
SAN LUIS
DIVISION
KETTLEMAN
CITY
TULARE LAKE
K I N G S
CALIFORNIA
AQUEDUCT
COASTAL BRANCH
DEVILS
DEN
TWISSELMANN
ROAD
ROUTE OF
WESTSIDE FREEWAY
T U L A R E
SELANO
BLACKWELLS
CORNER
LOST HILLS
CALIFORNIA AQUEDUCT
SAN JOAQUIN
MASTER DRAIN
FAMOSO
7TH
STANDARD
ROAD
K E R N
BUTTONWILLOW
MCKITTRICK
ELK
HILLS
ROAD
OILDALE
Kern River
BAKERSFIELD
S A N
L U I S
O B I S P O
TUPMAN ROAD
S.P.
R.R.
BUENA
VISTA
LAKE
FORD CITY
TAFT
BUENA VISTA
PUMPING
PLANT
MARICOPA
OLD RIVER
ROAD
SANTIAGO
CREEK
WHEELER RIDGE PUMPING
PLANT
WIND GAP PUMPING PLANT
WHEELER RIDGE
PASTORIA CREEK
GRAPEVINE CREEK
GRAPEVINE
TEHACHAPI
PUMPING PLANT
TEHACHAPI DIVISION
MILES
0
10
20

# CALIFORNIA AQUEDUCT

## Tehachapi Division

### Description

The Tehachapi division consists of the portion of the California Aqueduct from the intake to the Tehachapi Pumping Plant to, and including, the Tehachapi Afterbay. The major features of the division will be the Tehachapi Pumping Plant, which will lift the water 1,926 feet through twin 150-inch discharge lines, and four tunnels: Tehachapi Tunnels Nos. 1, 2, and 3 and the Carley V. Porter Tunnel.

### Project Status, April 1, 1966

The Tehachapi Pumping Plant, Beartrap, and Cottonwood access roads have been completed. Excavation of the north and south portals of Carley V. Porter Tunnel is completed, and tunnel excavation is proceeding from both portals. Delivery of water through the division is scheduled to commence in 1971.

### Project Statistics

#### Aqueduct

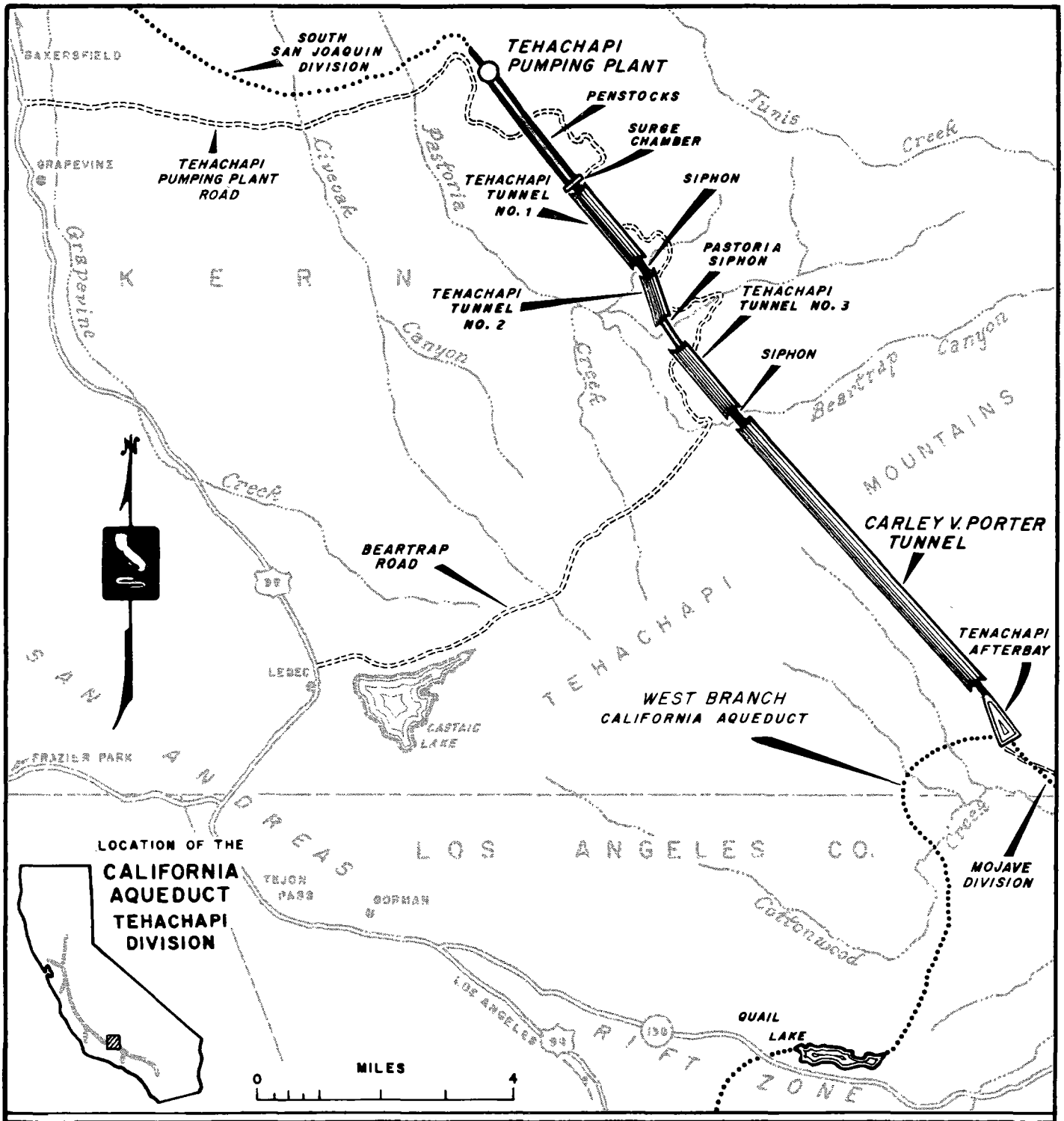
| | |
|---|---|
| Capacity | 4,100 cubic feet per second |
| Canal and Tehachapi Afterbay | 1.6 miles |
| Pipelines and siphons | 2.2 miles |
| Tunnels | 7.9 miles |
| Total length | 11.7 miles |

#### Tehachapi Pumping Plant

| | |
|---|---|
| Capacity | 4,100 cubic feet per second |
| Static head | 1,926 feet |

#### Tunnel and Pipeline Data

| | Capacity (cubic feet per second) | Length (feet) | Diameter (feet) |
|---|---|---|---|
| Tehachapi Tunnels Nos. 1, 2, & 3 | 4,112 | 16,152 | 23.5 |
| Carley V. Porter Tunnel | 4,112 | 25,080 | 20.0 |
| Pumping plant penstocks | 4,112 | 7,950 | 12.5 |
| Siphons Nos. 1 & 3 | 4,112 | 552 | 23.5 |
| Siphon No. 4 | 4,112 | 800 | 20.0 |
| Pastoria Siphons | 4,112 | 2,980 | 16.0 |




## Project Costs

| | |
|---|---|
| Tehachapi crossing | $ 99,590,000 |
| Tehachapi Pumping Plant | 135,292,000 |
| Total Costs | $234,882,000 |

# CALIFORNIA AQUEDUCT

## Mojave and Santa Ana Divisions

### Description

The Mojave and Santa Ana divisions now comprise that section of the California Aqueduct previously known as the East Branch division. The Mojave division extends from the Tehachapi Afterbay to, and including, Cedar Springs reservoir. The major features include Cottonwood Powerplant, Pearblossom Pumping Plant, Cedar Springs Dam and reservoir, and about 106 miles of canal. Santa Ana division extends from the intake of the San Bernardino Tunnel to, and including, Perris reservoir, the terminus of the California Aqueduct. Major features of the division are the San Bernardino Tunnel, Upper and Lower Devil Canyon Powerplants, over 27 miles of pipeline and Perris Dam and reservoir. The reservoirs will regulate inflow from the Aqueduct to meet downstream delivery schedules and will provide emergency storage in case of Aqueduct outages.

### Project Status, April 1, 1966

The construction of fill in areas which the Aqueduct will cross is under way. Final design has been started on Cedar Springs Dam and Pearblossom Pumping Plant. The remaining features are generally in the preliminary design stages. Water deliveries through the division are scheduled to commence in 1972.

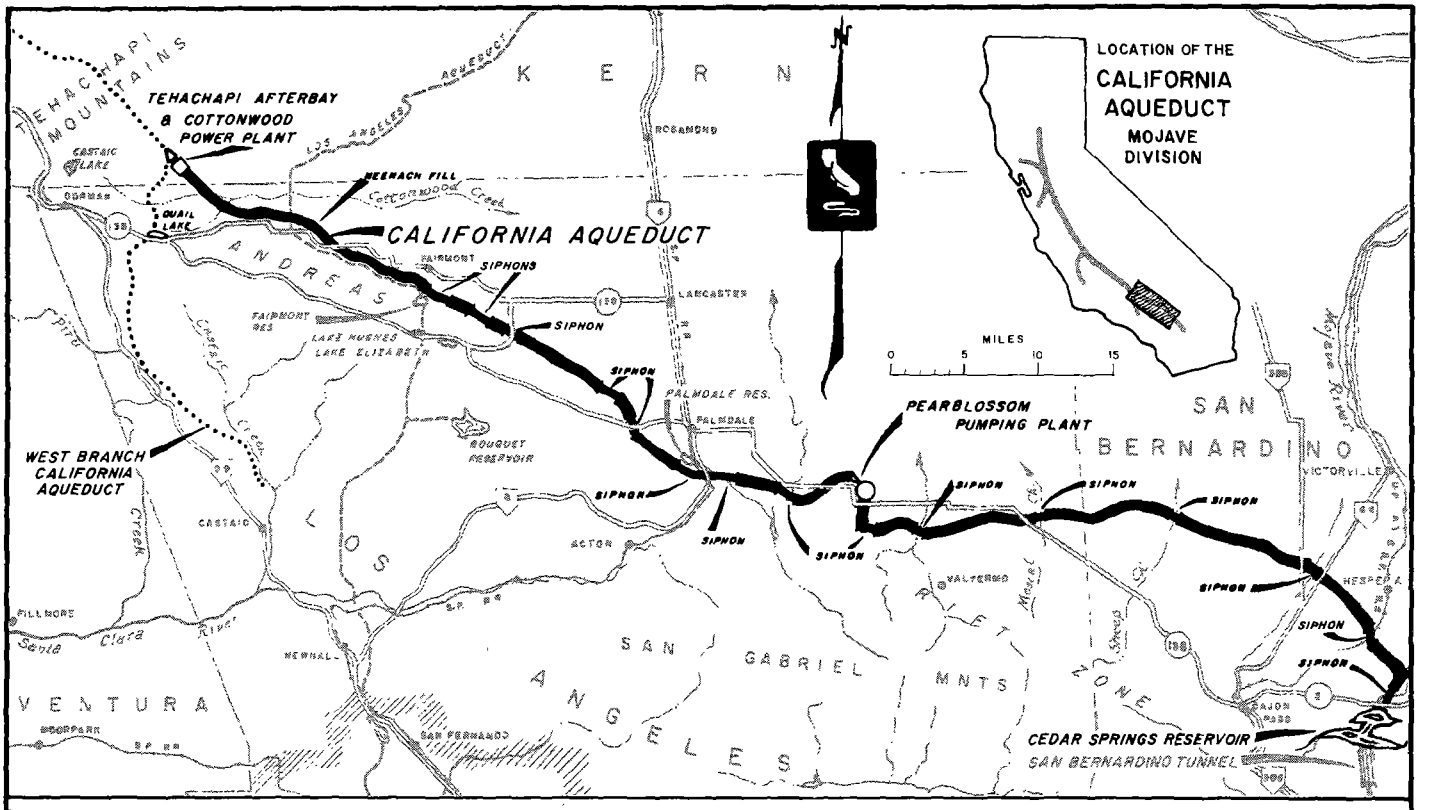
### Project Statistics

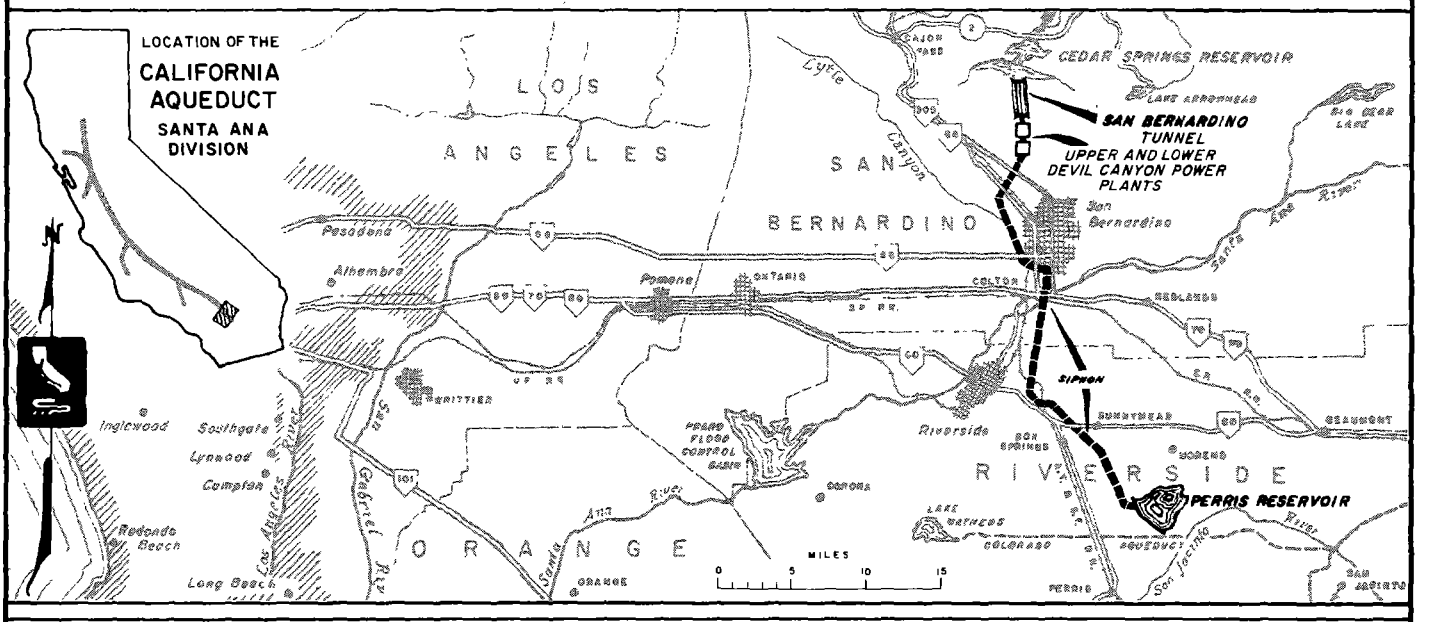
| | | |
|---|---|---|
| **Aqueduct - Mojave division** | | |
| Capacity | 1,560 to 1,220 | cubic feet per second |
| Concrete-lined canal | 106.0 | miles |
| **Cottonwood Powerplant** | | |
| Capacity | 14,000 | kilowatts |
| Static head | 140 | feet |
| Annual output[1/] | 113,000,000 | kilowatt-hours |
| **Pearblossom Pumping Plant** | | |
| Capacity | 1,295 | cubic feet per second |
| Static head | 545 | feet |
| **Aqueduct - Santa Ana division** | | |
| Capacity | 1,220 to 440 | cubic feet per second |
| Pipeline | 27.3 | miles |
| Tunnel | 3.8 | miles |
| Total Length | 31.1 | miles |

| Devil Canyon Powerplants | Upper | Lower |
|---|---|---|
| Capacity, kilowatts | 74,000 | 48,850 |
| Annual output, kilowatt-hours[1/] | 531,000,000 | 350,000,000 |

| Dams | Cedar Springs | Perris |
|---|---|---|
| Height, feet | 305 | 115 |
| Volume, cubic yards | 17,648,000 | 13,020,000 |
| Crest length, feet | 2,475 | 11,450 |
| Crest elevation, feet[2/] | 3,463 | 1,583 |
| **Reservoirs** | | |
| Capacity, acre-feet | 200,000 | 97,000 |
| Surface area, acres | 1,630 | 1,970 |
| Shoreline, miles | 22.2 | 8 |

1/ Under full project development
2/ Above sea level.




## Project Costs

| | |
|---|---|
| Canal, pipeline and tunnel | $187,332,000 |
| Cottonwood Powerplant | 12,091,000 |
| Pearblossom Pumping Plant | 29,142,000 |
| Cedar Springs Dam and reservoir | 47,470,000 |
| Upper Devil Canyon Powerplant | 12,737,000 |
| Lower Devil Canyon Powerplant | 14,505,000 |
| Perris Dam and reservoir | 35,714,000 |
| Total Costs | $338,991,000 |

# CALIFORNIA AQUEDUCT

## West Branch

### Description

The West Branch of the California Aqueduct will extend from the Tehachapi Afterbay to, and including, Castaic reservoir. It will include the Oso Pumping Plant, Pyramid and Castaic Powerplants, Pyramid and Castaic Dams and reservoirs, and about 21 miles of canal, pipeline, and tunnel. The reservoirs will regulate inflow from the aqueduct to meet downstream delivery schedules and will provide emergency storage in case of aqueduct outages.

### Project Status, April 1, 1966

Work on the foundation trench of the Castaic Dam is completed. Construction of the diversion tunnel started in 1966 and is scheduled for completion in 1967. The relocation of Lake Hughes Road is in progress, with over 70 percent of Phase I complete. Delivery of water through the West Branch of the Aqueduct is scheduled to commence in 1971.

### Project Statistics

| Aqueduct | |
|---|---|
| Capacity | 3,160 to 3,100 cubic feet per second |
| Canals | 7.5 miles |
| Pipelines | 6.5 miles |
| Tunnels | 7.4 miles |
| Total Length[1] | 21.4 miles |

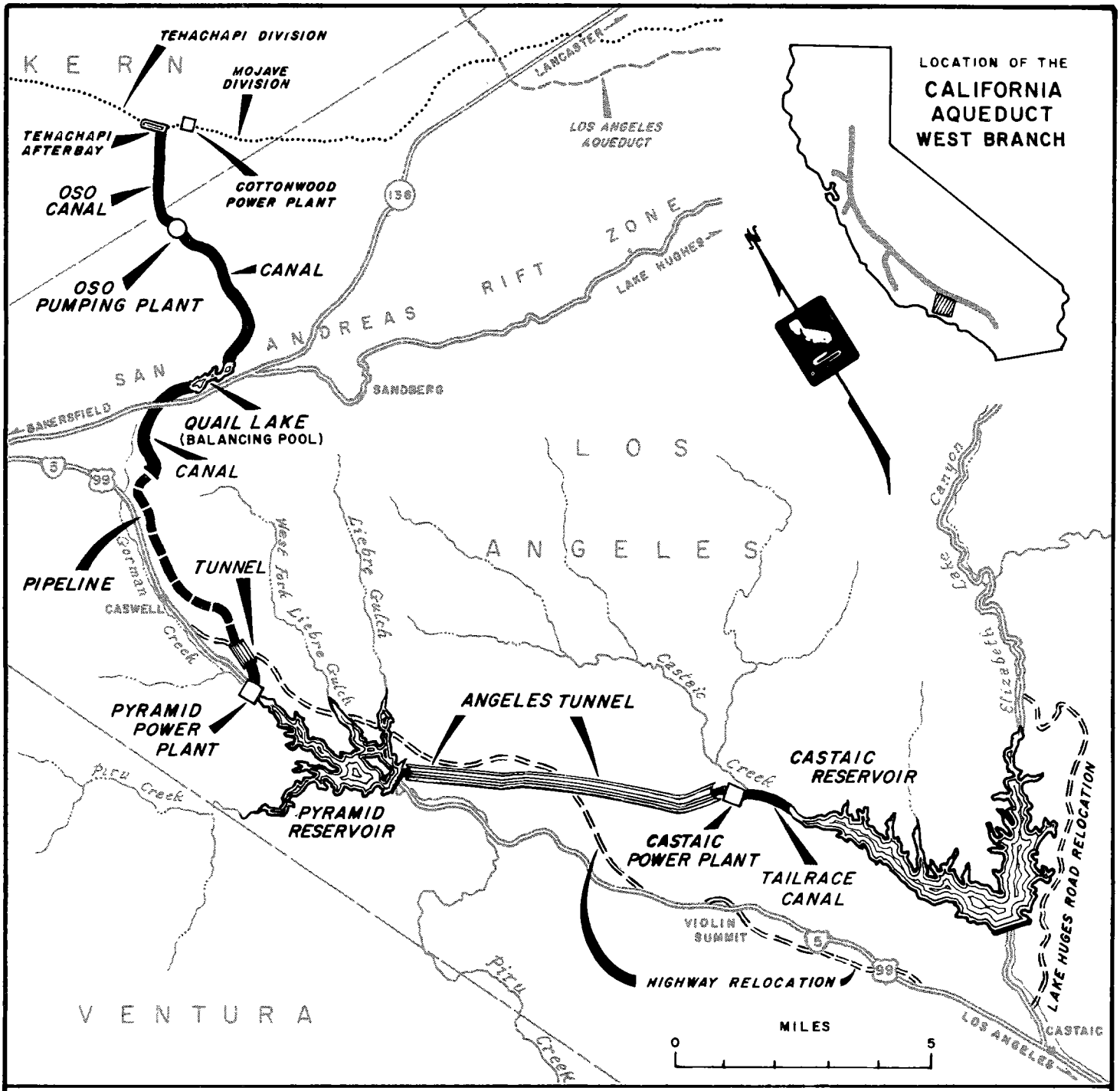
| Powerplants | Capacity (kilowatts) | Static Head (feet) | Annual Output[2] (kilowatt-hours) |
|---|---|---|---|
| Pyramid | 158,000 | 755 | 943,000,000 |
| Castaic | 214,000 | 1,060 | 1,284,000,000 |

| Pumping Plant | Capacity | Static Head |
|---|---|---|
| Oso | 3,126 cubic feet per second | 207 feet |

| Dams | Pyramid | Castaic |
|---|---|---|
| Heights, feet | 342 | 335 |
| Volume, cubic yards | 6,071,000 | 40,000,000 |
| Crest length, feet | 1,000 | 5,400 |
| Crest elevation, feet[3] | 2,570 | 1,530 |
| **Reservoirs** | | |
| Capacity, acre-feet | 146,700 | 350,000 |
| Surface area, acres | 1,225 | 2,630 |
| Shoreline, miles | 21.2 | 33.6 |

| Tunnels | Pyramid | Angeles |
|---|---|---|
| Capacity, cubic feet per second | 3,105 | 3,092 |
| Length, feet | 920 | 37,735 |
| Diameter, feet | 15.0 | 17.0 |

1/ The reservoirs extend the length an additional 9.4 miles.
2/ Under full project development
3/ Above sea level.




Project Costs

| | |
|---|---|
| Canal, pipeline and tunnels | $ 82,087,000 |
| Oso Pumping Plant | 15,236,000 |
| Pyramid Powerplant | 27,303,000 |
| Pyramid Dam and reservoir | 32,268,000 |
| Castaic Powerplant | 24,163,000 |
| Castaic Dam and reservoir | 103,442,000 |
| Total Costs | $284,499,000 |

# CALIFORNIA AQUEDUCT

## Coastal Branch

### Description

The Coastal Branch will extend about 100 miles from a point on the main line of the California Aqueduct near the boundary between Kings and Kern Counties, to a terminus on the Santa Maria River which forms a portion of the boundary between San Luis Obispo and Santa Barbara Counties. Water diverted from the main line will be initially lifted about 206 feet by the Las Perillas and Badger Hill Pumping Plants to supply agricultural service areas in the San Joaquin Valley. Water destined for the Central Coastal counties will continue through a succession of three pumping plants -- Devil's Den, Sawtooth, and Polonio -- which will lift it an additional 1,550 feet across the summit of the Temblor Range. The water will then flow through a pipeline to near the City of San Luis Obispo, where it will be dropped about 730 feet through the San Luis Obispo Powerplant, and will continue through a 60-inch pipeline to Santa Maria terminus near Santa Barbara County.

### Project Status, April 1, 1966

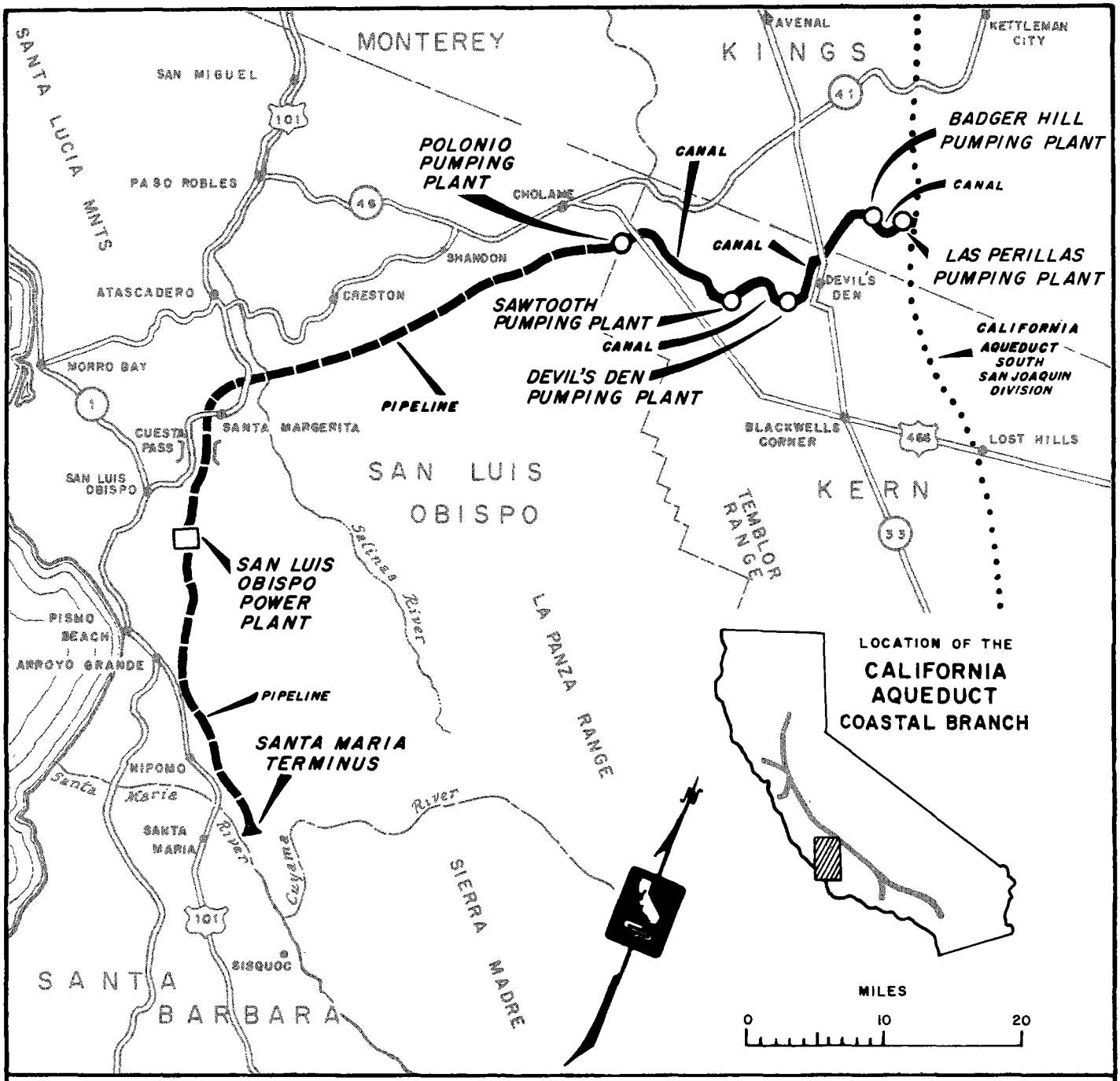
Construction has started on the first 15 miles of Aqueduct from the main line of the California Aqueduct to the Devil's Den Pumping Plant, with preconsolidation of unstable soils well under way. This portion of the branch is scheduled to be operable in 1968. Water deliveries through Devil's Den Pumping Plant to San Luis Obispo and Santa Barbara Counties are not scheduled to commence until about 1980. The latter date may be modified if mutually agreed upon by the contracting parties.

### Project Statistics

| | |
|---|---|
| **Aqueduct** | |
| Capacity | 450 to 102 cubic feet per second |
| Concrete-lined canal | 20 miles |
| Pipelines | 80 miles |
| Total length | 100 miles |
| **San Luis Obispo Powerplant** | |
| Capacity | 5,900 kilowatts |
| Static head | 730 feet |
| Annual output 1/ | 48,200,000 kilowatt-hours |

| Pumping Plants | Capacity (cubic feet per second) | Static Head (feet) |
|---|---|---|
| Las Perillas | 450 | 55 |
| Badger Hill | 450 | 151 |
| Devil's Den | 127 | 409 |
| Sawtooth | 127 | 331 |
| Polonio | 127 | 810 |

1/ Under full project development




## Project Costs

| | |
|---|---|
| Canal and pipeline | $42,195,000 |
| Las Perillas and Budger Hill Pumping Plants | 5,695,000 |
| Devil's Den Pumping Plant | 2,418,000 |
| Sawtooth Pumping Plant | 2,130,000 |
| Polonio Pumping Plant | 2,672,000 |
| San Luis Obispo Powerplant | 1,384,000 |
| Total Cost | $56,494,000 |

# UPPER EEL RIVER DEVELOPMENT

## Authorization

The Upper Eel River Development was authorized in 1964 as an additional facility of the State Water Project through administrative action by the Director of the Department of Water Resources.

## Purpose

Oroville reservoir, San Luis reservoir, and the Peripheral Canal will have the capability to conserve the required project yield under present water supply conditions. Increased water uses in the areas tributary to the Sacramento-San Joaquin Delta will continue to decrease the surplus flows available to the State Water Project, however. The Upper Eel River Development, which will import water from the North Coastal area, has been identified as the first of the additional project conservation facilities which will maintain the required project yield. This development will also serve the purposes of flood control, recreation, and fish and wildlife enhancement, and may include power generation facilities.

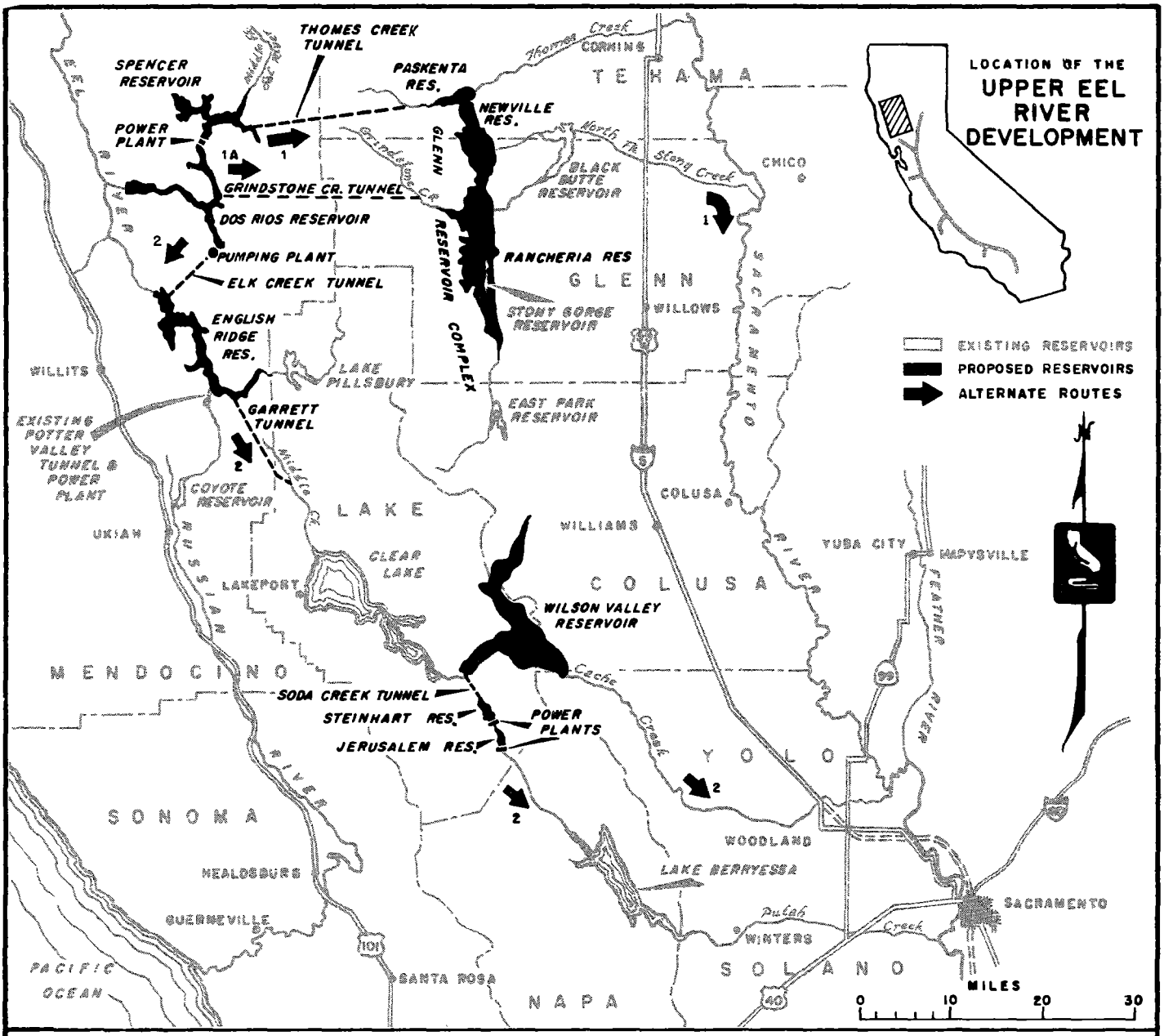
## Description and Status

The Upper Eel Development, as authorized, consists of Spencer and Franciscan Dams, Spencer reservoir, and Dos Rios Dam and reservoir, or alternatives thereto on the Middle Fork Eel River in Mendocino County; and associated conveyance features to deliver the conserved water supplies to local areas and to the Sacramento River Basin, either (1) via gravity diversion to Thomes or Stoney Creeks with inclusion of elements of the Glenn reservoir complex, or (2) via pumped diversion to the upper main stream of the Eel River with subsequent gravity diversion via Clear Lake and Putah or Cache Creeks to the Sacramento River. Selection of the diversion route and determination of the specific project units will be made during the advance planning studies now in progress.

## Project Costs

An alternative route (1A) via gravity diversion to Grindstone Creek has been selected for the purpose of illustrating the costs and capacities of component features of the Upper Eel River Development. The Development, as summarized herein, would make about 900,000 acre-feet of additional water supplies annually available in the Delta. The annual yield of the State Water Project could be maintained thereby until about 2030.

| | |
|---|---|
| Dos Rios Dam and reservoir | $ 29,496,000 |
| Paskenta Dam and reservoir | 8,427,000 |
| Newville Dam and reservoir | 21,070,000 |
| Rancheria Dam and reservoir | 62,161,000 |
| Grindstone Creek Tunnel | 105,352,000 |
| Total Cost | $226,506,000 |




## Project Statistics

| Tunnels | Grindstone Creek |
|---|---|
| Capacity, cubic feet per second | 790 |
| Length, miles | 23.3 |
| Diameter, feet | 12.0 |

| Dams | Dos Rios | Paskenta | Newville | Rancheria |
|---|---|---|---|---|
| Height, feet | 430 | 185 | 260 | 345 |
| Volume, cubic yards | 6,000,000 | 2,000,000 | 16,000,000 | 30,000,000 |
| Crest length, feet | 1,250 | 1,350 | 5,300 | 6,200 |
| Crest elevation, feet 1/ | 1,345 | 975 | 860 | 925 |
| **Reservoirs** | | | | |
| Capacity, acre-feet | 560,000 | 70,000 | 1,130,000 | 2,600,000 |
| Surface area, acres | 6,400 | 1,300 | 11,300 | 24,000 |
| Shoreline, miles | 65 | 12 | 31 | 102 |

1/ Above sea level.

# SAN JOAQUIN MASTER DRAIN

## Authorization

The construction of the San Joaquin Master Drain was authorized with the ratification of the Burns-Porter Act by the California electorate in November 1960.

## Purpose

The San Joaquin Master Drain will provide the first step toward full protection of the quality of surface and underground water supplies of the San Joaquin Valley. It will serve as a conveyance facility for removal of poor quality drainage waters from problem areas. It may also serve the purposes of recreation and fish and wildlife enhancement.

## Description and Status

The San Joaquin Master Drain will be a concrete-lined canal beginning at a point about 16 miles southwest of Bakersfield in Kern County and discharging approximately 276 miles to the north into the Sacramento-San Joaquin Delta near the Antioch Bridge in Contra Costa County. A dilution facility will be located near the Delta Pumping Plant. In addition, a surveillance system will be initiated to monitor the quality of the receiving waters and to detect any detrimental changes that may occur in those waters due to operation of the drain. If surveillance indicates that the discharge from the drain is adversely affecting the quality of the receiving waters, the drain will be extended. The drain will also include a regulatory reservoir in Kings County just north of the Kern County line, a discharge control reservoir on the Merced-Fresno County line near South Dos Palos, and two pumping plants.

The Master Drain will be constructed in three stages. The first stage will extend from Antioch Bridge to Kettleman City, a distance of 188 miles, and will be ready to accept waters from Tranquillity northward in 1969 and from Kettleman City northward in 1970. The remaining two stages are still in the planning phase. The second stage will extend from Kettleman City to Buena Vista Lake, and the third stage will comprise an enlargement of the first stage.

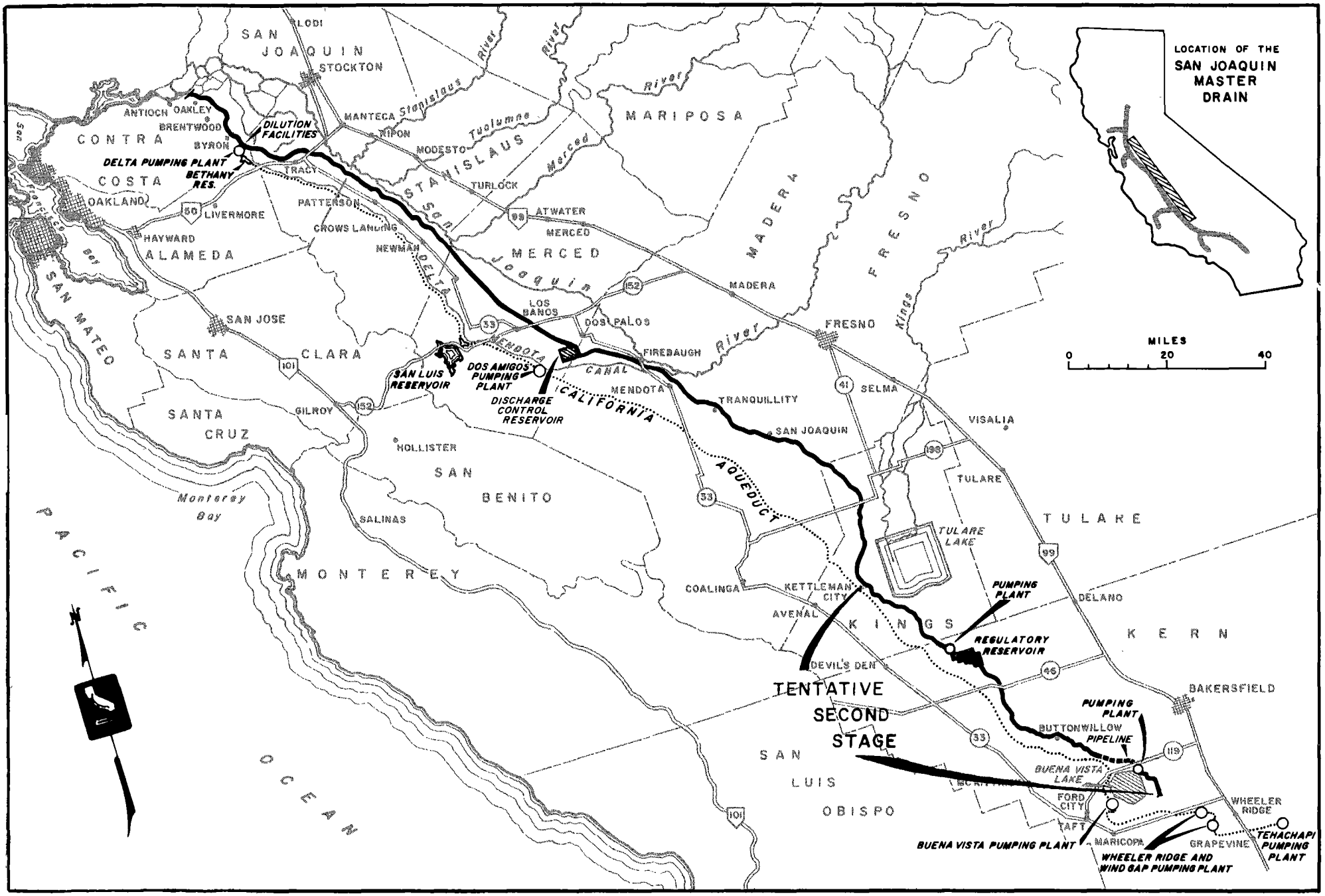
## Project Statistics, (First stage)

| Canal | |
|---|---|
| Capacity (First stage) | 400 to 110 cubic feet per second |
| Concrete-lined canal | 188.0 miles |

| Pumping Plant | Capacity (cubic feet per second) | Static Head (feet) |
|---|---|---|
| Dilution facilities | 200 | 9 |

## Project Costs, (First stage)

| | |
|---|---|
| Canal and pumping plant | $53,934,000 |


LOCATION OF THE SAN JOAQUIN MASTER DRAIN
MILES
0
20
40
TENTATIVE SECOND STAGE
DILUTION FACILITIES
DELTA PUMPING PLANT
BETHANY RES.
SAN LUIS RESERVOIR
DOS AMIGOS PUMPING PLANT
DISCHARGE CONTROL RESERVOIR
CALIFORNIA AQUEDUCT
PUMPING PLANT
REGULATORY RESERVOIR
PUMPING PLANT
PIPELINE
BUENA VISTA PUMPING PLANT
WHEELER RIDGE AND WIND GAP PUMPING PLANT
TEHACHAPI PUMPING PLANT
SAN JOAQUIN
STANISLAUS
MARIPOSA
MERCED
MADERA
FRESNO
TULARE
KINGS
KERN
SAN LUIS OBISPO
SANTA CLARA
SAN MATEO
ALAMEDA
CONTRA COSTA
SANTA CRUZ
SAN BENITO
MONTEREY
PACIFIC OCEAN
Monterey Bay
LODI
STOCKTON
MANTECA
RIPON
MODESTO
TURLOCK
ATWATER
MERCED
MADERA
FRESNO
VISALIA
TULARE
DELANO
BAKERSFIELD
TRACY
PATTERSON
CROWS LANDING
NEWMAN
LOS BANOS
DOS PALOS
FIREBAUGH
MENDOTA
TRANQUILLITY
SELMA
SAN JOSE
GILROY
HOLLISTER
SALINAS
COALINGA
KETTLEMAN CITY
AVENAL
DEVIL'S DEN
TULARE LAKE
BUTTONWILLOW
BUENA VISTA LAKE
FORD CITY
TAFT
MARICOPA
GRAPEVINE
WHEELER RIDGE
ANTIOCH
OAKLEY
BRENTWOOD
BYRON
LIVERMORE
HAYWARD
OAKLAND
Stanislaus River
Tuolumne River
Merced River
San Joaquin River
Kings River
DELTA
CANAL
50
580
680
205
101
152
33
99
41
46
119

## GENERAL PROJECT STATISTICS 1/

### GENERAL PROJECT

**Dams (19)**

| | |
|---|---|
| Crest length | 25 miles |
| Volume | 254 million cubic yards |

**Pumping Plants (24)**

| | |
|---|---|
| Annual requirements | 13.1 billion kilowatt-hours |

**Powerplants (9)**

| | |
|---|---|
| Capacity | 1.7 million kilowatts |
| Annual Output | 6.2 billion kilowatt-hours |

**Reservoirs (19)**

| | |
|---|---|
| Storage | 6,865,570 acre-feet |
| Shoreline | 514 miles |
| Surface area | 87 square miles |

**Aqueduct Lengths**

| | |
|---|---|
| Canals | 482.3 miles |
| Pipelines | 161.4 miles |
| Tunnels | 20.7 miles |
| Channel and reservoirs | 25.0 miles |
| Total length | 689.4 miles |

**Total Project Cost** $2,530,386,000

### MAJOR DAMS AND RESERVOIRS

| Name of dam | Dams: Height (feet) | Dams: Crest length (feet) | Dams: Volume (cubic yards) | Reservoirs: Gross capacity (acre-feet) | Reservoirs: Surface area (acres) | Reservoirs: Shoreline (miles) |
|---|---|---|---|---|---|---|
| Frenchman | 128 | 720 | 543,000 | 55,400 | 1,580 | 21 |
| Antelope | 105 | 1,320 | 380,000 | 22,500 | 930 | 15 |
| Grizzly Valley | 115 | 800 | 230,000 | 83,000 | 4,000 | 32 |
| Abbey Bridge | 110 | 1,150 | 478,000 | 45,000 | 1,950 | 12 |
| Dixie Refuge | 100 | 1,050 | 360,000 | 16,000 | 900 | 15 |
| Oroville | 770 | 6,920 | 80,000,000 | 3,484,000 | 15,500 | 167 |
| Thermalito Diversion | 246 | 1,280 | 155,000 | 13,500 | 330 | 10 |
| Thermalito Forebay | 71 | 15,900 | 1,580,000 | 11,400 | 600 | 10 |
| Thermalito Afterbay | 37 | 41,600 | 5,038,000 | 57,000 | 4,550 | 26 |
| Clifton Court Forebay | 14 | 51,200 | N/A | 35,400 | 2,900 | 10 |
| Bethany | 80 | 3,220 | 1,040,000 | 4,800 | 161 | 4 |
| Del Valle | 223 | 880 | 4,034,000 | 78,500 | 1,075 | 16 |
| San Luis | 320 | 18,480 | 77,000,000 | 2,095,000 | 13,800 | 65 |
| San Luis Forebay | 70 | 13,500 | 3,000,000 | 58,000 | 2,000 | 14 |
| Los Banos Creek | 154 | 1,370 | 2,200,000 | 34,500 | 623 | 12 |
| Little Panoche Creek | 120 | 1,440 | 630,000 | 13,270 | 354 | 10 |
| Cedar Springs | 305 | 2,475 | 17,648,000 | 200,000 | 1,630 | 22 |
| Perris | 115 | 11,450 | 13,020,000 | 97,000 | 1,970 | 8 |
| Pyramid | 342 | 1,000 | 6,071,000 | 146,700 | 1,225 | 21 |
| Castaic | 335 | 5,400 | 40,000,000 | 350,000 | 2,630 | 34 |
| TOTALS | | 181,155 | 253,407,000 | 6,900,970 | 58,708 | 524 |

### PUMPING PLANTS

| Name | Static head (feet) | Capacity (cubic feet per second) | Annual energy requirements (kilowatt-hours) |
|---|---|---|---|
| Oroville-Thermalito (pumped storage) | 675 | 16,500 | 469,000,000 |
| *North Bay Aqueduct:* | | | |
| Calhoun | 30 | 117 | 3,000,000 |
| Cordelia | 396 | 46 | 12,000,000 |
| Subtotal | | | 15,000,000 |
| South Bay Aqueduct: | | | |
| South Bay | 600 | 315 | 138,000,000 |
| Del Valle | 40 | 120 | 2,000,000 |
| Subtotal | | | 140,000,000 |
| California Aqueduct (main line): | | | |
| Delta | 244 | 10,300 | 1,258,000,000 |
| San Luis | 320 | 11,000 | 159,000,000 |
| Dos Amigos | 117 | 13,200 | 608,000,000 |
| Buena Vista | 205 | 4,900 | 707,000,000 |
| Wheeler Ridge | 230 | 4,600 | 779,000,000 |
| Wind Gap | 519 | 4,400 | 1,685,000,000 |
| Tehachapi | 1,926 | 4,100 | 5,990,000,000 |
| Pearblossom | 545 | 1,295 | 585,000,000 |
| Subtotal | | | 11,771,000,000 |
| California Aqueduct (branches): | | | |
| Oso | 207 | 3,126 | 391,000,000 |
| Las Perillas | 55 | 450 | 15,000,000 |
| Badger Hill | 151 | 450 | 41,000,000 |
| Devil's Den | 409 | 127 | 50,000,000 |
| Sawtooth | 331 | 127 | 40,000,000 |
| Polonio | 810 | 127 | 93,000,000 |
| Subtotal | | | 630,000,000 |
| Peripheral Canal | 11 | 21,800 | 48,000,000 |
| San Joaquin Master Drain | 41 | 380 | 1,000,000 |
| TOTAL | | | 13,074,000,000 |

### POWERPLANTS

| Name | Installed capacity (kilowatts) | Annual output (kilowatt-hours) |
|---|---|---|
| Oroville | 644,000 | 2,467,000,000 |
| Thermalito | 115,000 | 379,000,000 |
| San Luis | 424,000 | 118,000,000 |
| Cottonwood | 14,000 | 113,000,000 |
| Upper Devil Canyon | 74,000 | 531,000,000 |
| Lower Devil Canyon | 49,000 | 350,000,000 |
| Pyramid | 158,000 | 943,000,000 |
| Castaic | 214,000 | 1,284,000,000 |
| San Luis Obispo | 5,900 | 48,200,000 |
| TOTALS | 1,697,900 | 6,233,200,000 |

### AQUEDUCT LENGTHS (MILES)

| Name | Total | Canal | Pipeline | Tunnel | Channel & reservoir |
|---|---|---|---|---|---|
| North Bay Aqueduct | 29.9 | 18.0 | 8.1 | 0 | 3.8 |
| South Bay Aqueduct | 43.7 | 11.5 | 30.6 | 1.6 | 0 |
| Peripheral Canal | 43.0 | 43.0 | 0 | 0 | 0 |
| Subtotal | 116.6 | 72.5 | 38.7 | 1.6 | 3.8 |
| California Aqueduct (main line): | | | | | |
| North San Joaquin division | 66.5 | 62.0 | 0 | 0 | 4.5 |
| San Luis division | 104.3 | 101.4 | 0 | 0 | 2.9 |
| South San Joaquin division | 120.0 | 120.0 | 0 | 0 | 0 |
| Tehachapi division | 11.7 | 1.6 | 2.2 | 7.9 | 0 |
| Mojave division | 108.1 | 97.3 | 8.7 | 0 | 2.1 |
| Santa Ana division | 33.3 | 0 | 27.3 | 3.8 | 2.2 |
| Subtotal | 443.9 | 382.3 | 38.2 | 11.7 | 11.7 |
| California Aqueduct (branches): | | | | | |
| West Branch | 30.9 | 7.5 | 6.5 | 7.4 | 9.5 |
| Coastal Branch | 100.0 | 20.0 | 80.0 | 0 | 0 |
| Subtotal | 130.9 | 27.5 | 86.5 | 7.4 | 9.5 |
| TOTALS | 691.4 | 482.3 | 163.4 | 20.7 | 25.0 |

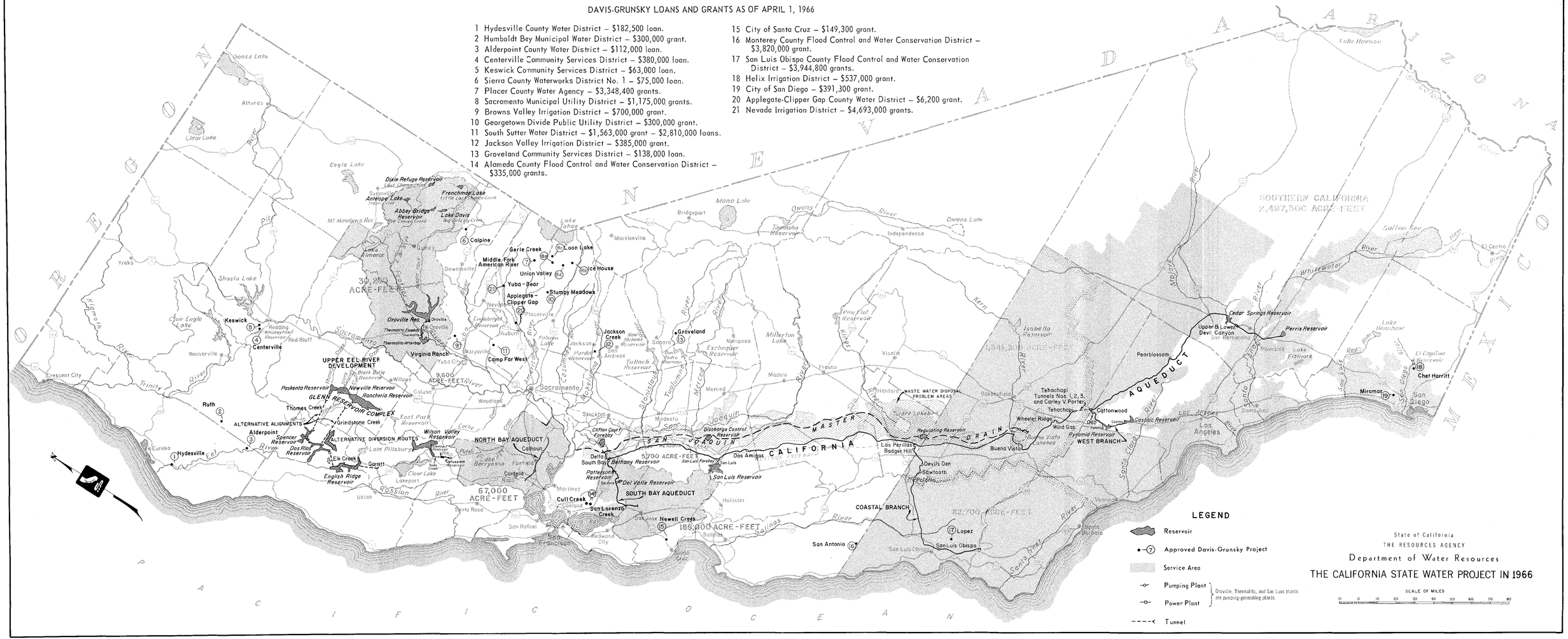
### COSTS

| | |
|---|---|
| Feather River facilities | |
| Upper Feather Area | 21,831,000 |
| Oroville Area | 478,434,000 |
| North Bay Aqueduct | 10,469,000 |
| South Bay Aqueduct | 59,384,000 |
| Peripheral Canal, (State share) | 55,097,000 |
| California Aqueduct: | |
| North San Joaquin division | 134,783,000 |
| San Luis division, (State share) | 189,977,000 |
| South San Joaquin division | 252,391,000 |
| Tehachapi division | 234,882,000 |
| Mojave and Santa Ana divisions | 338,991,000 |
| West Branch | 284,499,000 |
| Coastal Branch | 56,494,000 |
| Upper Eel River Development | 226,506,000 |
| San Joaquin Master Drain | 53,934,000 |
| Subtotal, facilities described herein | $2,397,672,000 |
| Local Projects (Davis-Grunsky Program) | 131,419,000 |
| Costs incurred for deleted features | 1,295,000 |
| Subtotal, facilities not described herein | $ 132,714,000 |
| TOTAL, STATE WATER PROJECT | $2,530,386,000 |

1/ The descriptive data in this summary excludes the facilities of the Upper Eel River Development and the conduit of the San Joaquin Master Drain. The estimated costs for these works are included, however.

DAVIS-GRUNSKY LOANS AND GRANTS AS OF APRIL 1, 1966

1 Hydesville County Water District – $182,500 loan.
2 Humboldt Bay Municipal Water District – $300,000 grant.
3 Alderpoint County Water District – $112,000 loan.
4 Centerville Community Services District – $380,000 loan.
5 Keswick Community Services District – $63,000 loan.
6 Sierra County Waterworks District No. 1 – $75,000 loan.
7 Placer County Water Agency – $3,348,400 grants.
8 Sacramento Municipal Utility District – $1,175,000 grants.
9 Browns Valley Irrigation District – $700,000 grant.
10 Georgetown Divide Public Utility District – $300,000 grant.
11 South Sutter Water District – $1,563,000 grant – $2,810,000 loans.
12 Jackson Valley Irrigation District – $385,000 grant.
13 Groveland Community Services District – $138,000 loan.
14 Alameda County Flood Control and Water Conservation District – $335,000 grants.
15 City of Santa Cruz – $149,300 grant.
16 Monterey County Flood Control and Water Conservation District – $3,820,000 grant.
17 San Luis Obispo County Flood Control and Water Conservation District – $3,944,800 grants.
18 Helix Irrigation District – $537,000 grant.
19 City of San Diego – $391,300 grant.
20 Applegate-Clipper Gap County Water District – $6,200 grant.
21 Nevada Irrigation District – $4,693,000 grants.




LEGEND

- Reservoir
- Approved Davis-Grunsky Project
- Service Area
- Pumping Plant
- Power Plant
- Tunnel

Oroville, Thermalito, and San Luis plants are pumping-generating plants.

State of California
THE RESOURCES AGENCY
Department of Water Resources

# THE CALIFORNIA STATE WATER PROJECT IN 1966

SCALE OF MILES
10 0 10 20 30 40 50 60 70 80