

STATE OF CALIFORNIA

The Resources Agency

Department of Water Resources

BULLETIN No. 132-70

THE
CALIFORNIA
STATE WATER PROJECT
IN 1970

JUNE 1970

NORMAN B. LIVERMORE, JR.
Secretary for Resources
The Resources Agency

RONALD REAGAN
Governor
State of California

WILLIAM R. GIANELLI
Director
Department of Water Resources

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FOREWORD

The State Water Project rounded out the decade of the 1960s with significant achievements:

- Water has been delivered to meet man's needs in Plumas and Alameda Counties since 1962; in Santa Clara County since 1965; and in Napa, Stanislaus, Kings, Kern, and Tulare Counties since 1968.
- New recreational opportunities have been created for family fun and fishing and water sports at Frenchman Lake, Lake Davis, Antelope Lake, Lake Oroville, Thermalito Forebay, O'Neill Forebay, San Luis Reservoir, Los Banos Reservoir, and at special "fishing holes" along the California Aqueduct in the San Joaquin Valley.
- Lake Oroville has controlled Feather River floods that were threatened by storms in 1964, even while Oroville Dam was under construction, and again in 1967 and 1969. Lake Del Valle brings flood control benefits to Alameda County.
- The Project's smoke-free Edward Hyatt, Thermalito and San Luis Powerplants have added new electric energy to the supply used by Californians and have increased the State's capability of meeting peak load requirements and avoiding blackouts.
- The Project has provided construction loans and recreation grants for local water projects ranging the State from the Oregon to the Mexican border.

Our goal for the State Water Project, as we enter the 1970s, is to push construction to completion, so that all its benefits can be realized for the people of California, thus fully implementing the program enacted by the Legislature and approved by the vote of the people a decade ago.



William R. Gianelli, *Director*
Department of Water Resources
The Resources Agency
State of California
May 29, 1970

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State of California
The Resources Agency
DEPARTMENT OF WATER RESOURCES

RONALD REAGAN, Governor
NORMAN B. LIVERMORE, JR., Secretary for Resources
WILLIAM R. GIANELLI, Director
ROBERT G. EILAND, Assistant Director
ALFRED R. GOLZE', Deputy Director
JOHN R. TEERINK, Deputy Director

DIVISION OF RESOURCES DEVELOPMENT

Herbert W. Greydanus Division Engineer

This report was prepared under the direction of

John R. Eaton.Chief, Water Project Analysis Branch

by

Lawrence W. Smith. Chief, Systems Analysis Section

Donald R. Long Chief, Repayment Analysis Section

Earl G. Bingham, Jr.Reports Administration

Assisted by

Donald W. Fisher

Clinton E. Fitzgerald

Thais U. Johnson

Frances Mercer

Samuel O. Moy

Michele L. Reyes

Harley R. Woodworth

James C. Scheler

Carol G. Scott

Kenneth L. Scribner

Lloyd B. Shinn

Margaret E. Ward

Donald A. Williams

- - - -

DIVISION OF DESIGN AND CONSTRUCTION

Design and construction cost data were provided
under the direction of

Haywood G. Dewey, Jr. Division Engineer

Jeff A. WinelandChief, Design Branch

Clyde E. ShieldsChief, Construction Branch

as coordinated by

Donald H. McKillop . . . Chief, Program Liaison and Control Office

DIVISION OF RIGHT OF WAY ACQUISITION

Land and relocation cost data were provided
under the direction of

Thomas H. T. Morrow. . Chief, Division of Right of Way Acquisition

DISTRICT ENGINEERS

Planning and investigations cost data were provided
under the direction of

Gordon W. Dukleth	Northern District
John M. Haley	Central District
Carl L. Stetson	San Joaquin District
James J. Doody.	Southern District

DIVISION OF OPERATIONS AND MAINTENANCE

Operations, maintenance, and power cost data were provided
under the direction of

Robert B. Jansen.	Division Engineer
Robin R. Reynolds	Deputy Division Engineer
J. K. Cummings.	Deputy Division Engineer

as coordinated with the following Field Division Chiefs

Philip F. Johns	Oroville Field Division
William T. Kritikos	Delta Field Division
Jack E. Arnold.	San Luis Field Division
Merle S. Bashor	San Joaquin Field Division
Joseph H. Sherrard.	Southern Field Division

ADMINISTRATIVE AND TECHNICAL SERVICES

Financial statements and data on incurred costs
were compiled under the direction of

Peter D. Mysing	Comptroller
---------------------------	-------------

and

Corning D. Gilpin	Deputy Comptroller
-----------------------------	--------------------

Preparation of the financial analysis
was coordinated with

John E. Hunt.	Financial Advisor
-----------------------	-------------------

FINANCIAL CONSULTANTS

Dillon, Read & Co., Inc.

State of California
Department of Water Resources
CALIFORNIA WATER COMMISSION

IRA J. CHRISMAN, Chairman, Visalia
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Mal Coombs Garberville
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C. A. McCullough, Engineer

ABSTRACT

Bulletin 132-70, "The California State Water Project in 1970," is the eighth annual report on the Project: it documents management actions and summarizes construction and operations progress during 1969; it updates the Project's long-range financial projections as of the beginning of 1970; and it provides data and computations as contractually required to support those charges to be assessed water service contractors during 1971.

The documents referred to in the Bulletin are bound and placed in the Department's Reference Collection and are a permanent part of the Project's historical records. Where possible, these documents are referenced to that material which has been widely distributed during 1969 through a system of Water Service Contractors Council Memos.

During 1969, project management actions centered on alleviating an immediate financial problem brought about by the inability to market \$600 million in authorized general obligation bonds within the statutory interest ceiling of 5 percent.

Construction of the State Water Project continues on schedule. At the end of 1969, 90 percent of the "1973 Project facilities" (those facilities required to fulfill initial water delivery commitments) were either completed or under contract. The Carley V. Porter Tunnel—the longest and southernmost tunnel of the Tehachapi Crossing—was "holed through" on October 23, 1969. Edward Hyatt and Thermalito Powerplants were declared fully operational on July 20, 1969, thus triggering guaranteed minimum payments by three major California utilities of \$16.15 million annually.

Operations during 1969 included 284,246 acre-feet of water delivered from project facilities; 1,554,800 recreation days of use provided by project lakes; and 2,614,000,000 kilowatt-hours of electric energy generated at project powerplants. In addition, Oroville and Del Valle Dams controlled flood flows in the Feather River and Arroyo Del Valle, respectively. Flood inflow to Tulare Lake was reduced through a unique "backward flow" operation of the California Aqueduct.

As of the beginning of 1970, estimated capital costs to be incurred for the entire Project (1952 through 1985) totaled \$2,837 million, exclusive of future costs of the Pyramid Power Complex (to be financed by revenue bonds) and the San Joaquin Drainage Facilities (to be constructed once repayment of reimbursable costs is assured). Of this estimated total cost, \$1,676 million had been incurred as of the beginning of 1970. Assuming approval of Proposition No. 7 of the June 2, 1970 Ballot, which would raise the statutory interest ceiling and permit the sale of authorized general obligation bonds, sufficient funds should be available to complete the "1973 Project facilities".

On the basis of projections and computations summarized in Bulletin 132-70, water charges to be assessed during 1971 will total about \$55 million. Through 1971, payments of water charges will have totaled about \$228 million. Most of these payments will have been made by contractors south of the Tehachapi Crossing. Initial water deliveries to these contractors depend on completion of the "1973 Project facilities".

CHAPTER I. CONTINUING HISTORY OF THE PROJECT

This chapter is a record of specific actions during 1969 which concern the management of either the State Water Project as a whole or the individual facilities which comprise it.

Actions Affecting Project Management

During 1969, overall management activities by the Legislature, the State Administration, and the Department of Water Resources centered on (a) project financing and (b) the program to develop new recreation areas and to enhance fisheries and wildlife habitat. In all matters concerning project management, the Department of Water Resources consults with, and seeks the recommendations of, the California Water Commission.

Project Financing

Of the \$1.75 billion in general obligation bonds authorized by the Burns-Porter Act, \$600 million remain to be issued. High interest rates precluded the marketing of these bonds in 1969 within the statutory interest ceiling of 5 percent. During 1969:

- The Legislature acted to increase the statutory interest ceiling so that, if California voters approve, the remaining bonds can be issued.
- The State Administration took steps to make available temporary sources of financing until bonds can again be sold.
- The Department continued to monitor the capital requirements for remaining construction and the capability of authorized funds to finance these requirements.

Actions by the 1969 Legislature. Most of the legislation enacted during 1969 either directly or indirectly concerned project financing.¹

Enactment of Assembly Bill (AB) 516 raised the maximum interest rate payable on revenue bonds issued under the State Central Valley Project Act from 5½ percent to 6½ percent.² The new law, effective March 17, 1969, permitted the sale of \$94,995,000 in Central Valley Project Revenue Bonds, Oroville Division, Series B, on April 1, 1969.

Enactment of Senate Bill (SB) 695³ provides for submission of Senate Constitutional Amendment (SCA) 26⁴ to the voters at the June 2, 1970 primary election. This proposed constitutional amendment (Proposition 7 of the June 2, 1970 Ballot) would provide that if any general obligation bonds of the State

authorized before or after the effective date of the measure have been offered for sale and not sold, the Legislature may raise the maximum rate of interest payable on all general obligation bonds authorized but not sold, whether or not such bonds have been offered for sale. This proposed constitutional amendment would also ratify the provisions of SB 763.

Enactment of SB 763 raises the interest rate ceiling on state general obligation bonds from 5 percent to 7 percent—and removes the interest rate ceiling on bond anticipation notes.⁵ Provided that if SCA 26 is approved, the changes made by this Act shall also apply to all bonds and notes, regardless of when the bonds were authorized.

Enactment of SB 764 removes the ceiling on the interest rate for bond anticipation notes for bonds authorized prior to September 15, 1961, (i.e., bonds authorized by the Burns-Porter Act) or for bonds hereafter authorized.⁶ This legislation provides a necessary vehicle by which to initiate court action in the event the Department wishes to sell anticipation notes at rates higher than 5 percent prior to ratification of SCA 26 by the electorate.

Senate Concurrent Resolution (SCR) 157 requests the Director of Water Resources to inform the Legislature, through letters to the Chairmen of the Senate Committee on Water Resources and the Assembly Water Committee, of all proposed changes to the water supply contracts, or policy determinations thereunder, which the Director considers sufficiently important to affect project financing and feasibility or manner of meeting original commitments to deliver water.⁷ SCR 157 also requests the Director to take no action for 90 days unless the Committees present their comments and recommendations before 90 days have passed, or unless the Director determines an urgency exists and he so notifies the Committees.

Actions by the State Administration. During 1969, the State Administration negotiated with the banking community to sell bond anticipation notes. On August 28, 1969, the Director of Finance stated that conditions then imposed by the banking community for underwriting bond anticipation notes were not acceptable.

¹ For periodic progress reports and summaries concerning legislative actions during 1969, see Water Service Contractors Council Memos No. 454, "Checklist of Bills," March 3, 1969; No. 489, "Checklist of Bills," July 23, 1969; No. 496, "Reports Regarding 1969 Legislation of Interest to the Department of Water Resources," August 27, 1969; No. 500, "Final Checklist of Bills, 1969 Regular Session," September 19, 1969; and No. 510, "Final Legislative Report, 1969 Regular Session," October 21, 1969.

² Calif. Stats. of 1969, Chapter 14.

³ Calif. Stats. of 1969, Chapter 738.

⁴ Calif. Stats. of 1969, Resolution Chapter 299.

⁵ Calif. Stats. of 1969, Chapter 740.

⁶ Calif. Stats. of 1969, Chapter 741.

⁷ Calif. Stats. of 1969, Resolution Chapter 298.

Therefore, he proposed an alternative whereby the Project would borrow up to \$100 million from the State General Fund and would repay the loan from future sales of general obligation bonds.

On November 14, 1969, Governor Reagan presented a major policy address to 450 California water leaders.⁸ The speech touched on nearly all aspects of water resources development in California and concentrated on current problems facing the State Water Project, including project financing. The Governor reaffirmed the State Administration's intent to provide for a loan of up to \$100 million from the General Fund to assure that project construction will proceed on schedule through June 1970, when, hopefully, California voters will approve Proposition 7. Governor Reagan emphasized that the loan will be arranged on a completely businesslike basis—that it will be drawn down on an as-needed basis and will bear the same rate of interest that would be earned by the State if the borrowed amounts were invested in the open market.

Actions by the Department. The Department continues to monitor the capability of authorized funds to finance project construction. In February 1969, the Department released a report on a comprehensive financial review and described the results before a joint hearing of the Senate Committee on Water Resources and the Assembly Water Committee on March 3, 1969.⁹

The results of the review were that whereas project funds were aided measurably as a result of legislation enacted in 1968, such funds will not be sufficient to finance construction through 1975. However, if capital expenditures are carefully monitored, authorized funds will be sufficient through early 1973 to construct the facilities required to initiate water deliveries throughout the Aqueduct, including Perris Dam and Lake Perris.

The report presents an updated construction program for the Project through 1975. Identified as Case II-Modified, this program is a modification of Case II, the minimum deferral program, presented in the Department's September 1967 Report on "Alternatives for State Water Project Construction and Financing Through 1975".¹⁰

The updated program accounts for the additional funds provided for by enactment of SB 261 of the

1968 Legislature, together with subsequent construction rescheduling of certain project units which otherwise would have been deferred.¹¹ However, the increase in actual interest rates for Oroville Division revenue bonds above those rates estimated in 1967, together with the escalation of construction prices, acted to partially offset the additional financing capability provided under SB 261. Consequently, during development of the Case II-Modified program, a number of items, however small, that could be postponed were deferred to conserve available capital. Furthermore, the designs of facilities not yet constructed were reviewed to determine if additional cost savings could be achieved through design modifications.

As a result of a continuing review during and immediately following the development of the Case II-Modified program, several design modifications were adopted, the more important of which included the following:¹²

- The scheduled completion of one of the two discharge lines for the Pearblossom Pumping Plant was deferred until 1976.
- The maximum design stress of steel pipe for the Santa Ana Valley Pipeline was increased in relation to ultimate strength, which reduced the estimated amount of steel to be required.
- The design crest width of Perris Dam was reduced from 100 feet to 40 feet.

A notable exception to design criteria assumed for the Department's report on the Case II-Modified program from the design criteria subsequently adopted concerns the number of penstocks for the Devil Canyon Powerplant. The assumed criteria were based on the construction of two 600-cubic-feet-per-second penstocks—the first to be completed by 1972, and the second in 1975. After fully discussing the considerations involved with the concerned water contractors, the Department adopted a single penstock of 1,200 cubic feet per second capacity, to be completed by 1972.¹³

Recreation and Fish and Wildlife Program

In January 1969, a report was released on the Department's program for including the development of new recreation areas and the enhancement of fisheries and wildlife habitat in the State Water Project.¹⁴

¹¹ See pp. 1–2, Bulletin 132-69.

¹² Department of Water Resources memorandum from Alfred R. Golzé to Mr. William R. Gianelli, "Reconsideration of Design Requirements —State Water Project," April 14, 1969, approved April 16, 1969.

¹³ Letter from W. R. Gianelli to Mr. Henry J. Mills, General Manager, The Metropolitan Water District of Southern California, April 16, 1969.

¹⁴ Department of Water Resources Bulletin 117, "Recreation and Fish and Wildlife Program for the State Water Project," December 1968. (See Water Service Contractors Council Memo No. 442, "Bulletin No. 117," January 13, 1969.)

⁸ See Water Service Contractors Council Memo No. 517, "Governor's Water Talk," November 18, 1969.

⁹ Department of Water Resources Bulletin, "Case II Modified, An Updated Alternative for State Water Project Construction and Financing through 1975," February 1969. (See Water Service Contractors Council Memo No. 455, "Case II Modified," March 3, 1969, for copies of the report and of the Director's statement before the joint hearing.)

¹⁰ See pp. 2–8, Bulletin 132-68.

The report presents the background of the statutory and administrative basis for the program, a description of the present situation, and the Department's schedule for developing recreation and fish and wildlife plans through June 1973. Drafts of the report had been widely circulated among interested agencies and groups. The Senate Committee on Water Resources had held a hearing on the proposed program in 1968.¹⁵

Concerning the development of recreation and fish and wildlife plans, enactment of AB 1772 of the 1969 Legislature directs the Department of Fish and Game, the Department of Parks and Recreation, and other governmental agencies to submit their recommendations or comments on reconnaissance studies or feasibility reports of the Department of Water Resources relating to any project facility within 60 days following receipt of a formal request for review.¹⁶

In view of the emphasis placed on fishery preservation and enhancement in the Department's program, three internationally famed experts were appointed to a board of fishery consultants for the State Water Project.¹⁷ The board will advise the Department on important and complex questions concerning fishery preservation and enhancement connected with construction and operation of the Project.

In March 1969, the Department reported to the Legislature that through December 31, 1968, (a) \$3,894,793 had been expended to acquire lands for recreation developments associated with the State Water Project and (b) \$11,056,638 had been expended for the joint costs of multiple-purpose project facilities that are allocated to recreation and fishery and wildlife habitat enhancement. By enactment of SB 429,¹⁸ the 1969 Legislature approved the \$14,951,431 in expenditures reported by the Department.¹⁹ This enactment includes the \$13,511,294 previously reported to, and approved by, the 1968 Legislature.²⁰ As of December 31, 1969, a total of \$20,000,000 in state tideland oil and gas revenues had been deposited in the Central Valley Water Project Construction Fund to reimburse the Department for project recreation and fishery and wildlife habitat enhancement costs that have been approved by the Legislature.

The construction and operating costs of recreation developments themselves (incurred by the Department

of Parks and Recreation), and the joint operating costs of multiple-purpose project facilities that are allocated to recreation and fishery and wildlife habitat enhancement, are financed by annual appropriations of the State General Fund. Recreation developments associated with the State Water Project must compete with other State Park System projects—parks, beaches, and recreation areas—for the limited moneys available from the General Fund to programs of the Department of Parks and Recreation.

The State Administration believes that the costs of recreation developments associated with the State Water Project, which will benefit many generations of Californians to come, should be financed by some means which will spread the costs of such developments to future users. The Administration is considering such alternative sources as revenue bonds and general obligation bonds in lieu of General Fund moneys provided by the present taxpayers.²¹

Recommendations for Future Management Emphasis

In November 1969, the California Water Commission submitted to the Legislature and the Department a report on the Commission's annual inspection of the Project—required by legislation enacted in 1967.²² The Commission recommended that Management emphasize the following five items:²³

- "1. Every effort should be made to encourage provision of funds for distribution facilities for agricultural water use from the California Aqueduct on the west side of the San Joaquin Valley.
- "2. Recreation facilities adequate for initial use of reservoirs should be available when the reservoirs first fill so that the benefits computed for the reservoirs will be available immediately.
- "3. Short term financing must be provided for the Project to maintain present construction momentum and to avoid excessive additional costs.
- "4. The imperative need for passage of the June 1970 Bond Interest Act should be brought to the attention of the electorate by every water organization and by every means available.
- "5. The public and unions should be kept alerted of the damaging effects additional strikes would have on the increased costs and critical completion dates of the Project."

¹⁵ See p. 3, Bulletin 132-69.

¹⁶ Calif. Stats. of 1969, Chapter 906.

¹⁷ Milo Bell, world-renowned consultant, currently directing the College of Fisheries of the University of Washington, Seattle; Robert C. Meigs of Olympia, Washington, former Chief of the Washington State Game Department's Fishery Management Operations; and Dr. Ernest Salo, Professor of Fisheries, University of Washington. (See Water Service Contractors Council Memo No. 445, "Fishery Consultants," January 24, 1969. See also Water Service Contractors Council Memo No. 451, "Fish and Wildlife Resources Mitigation and Enhancement," February 24, 1969.)

¹⁸ Calif. Stats. of 1969, Chapter 663.

¹⁹ Department of Water Resources Bulletin 132-69, Appendix D, "Recreation and Fish and Wildlife Enhancement Costs of the State Water Project," March 1969. (See Water Service Contractors Council Memo No. 461, "Appendix D of Bulletin 132-69," March 28, 1969.)

²⁰ See p. 3, Bulletin 132-69.

²¹ See Water Service Contractors Council Memo No. 443, "Financing Recreation in State Water Project," January 21, 1969.

²² See pp. 25-28, Bulletin 132-68.

²³ See Water Service Contractors Council Memo No. 518, "Annual Inspection by California Water Commission, September 1969," November 20, 1969.

Actions Affecting Individual Facilities

The remainder of this chapter describes significant actions and events pertaining to individual facilities of the State Water Project that occurred during 1969.

Feather River Facilities

Last year's bulletin included a reference to the Joint Exercise of Power Agreement executed with the Plumas County Flood Control and Water Conservation District for construction of the Grizzly Valley Pipeline.²⁴ In May 1969, the Department authorized the District to award the construction contract for the Pipeline and related treatment facilities.²⁵ By the end of 1969, construction was substantially complete.

Oroville Dam and Edward Hyatt Powerplant were selected as the "Outstanding Civil Engineering Achievement of 1969" by the American Society of Civil Engineers. On July 12, 1969, a bronze plaque was formally dedicated atop the dam's crest to commemorate the selection.

The "full operation date" under terms of the Oroville-Thermalito Power Sale Contract was reached at 12:01, on July 20, 1969.²⁶ On July 22, the Department received a check from the California Power Pool Companies²⁷ in the amount of \$4,564,130.43 as the prorated portion of the first in the series of guaranteed minimum semiannual payments of \$8,075,000. The guaranteed payments will continue until all Oroville Division revenue bonds have been repaid.

The first annual report was submitted to the Trustee of the Oroville Division revenue bonds (Bank of America, San Francisco),²⁸ in accordance with a requirement of the Department's March 19, 1968 Resolution.²⁹

Essentially all features of the Oroville Division have now been formally transferred from a construction to

an operational status. The following features were transferred in 1969:

- Oroville-Thermalito Bus Lines.³⁰
- Oroville Operations and Maintenance Center and Thermalito Annex.³¹
- Oroville Dam and Lake Oroville.³²
- Edward Hyatt and Thermalito Powerplants.³³

South Bay Aqueduct

All features of the South Bay Aqueduct have now been formally transferred from a construction to an operational status. In 1969, the following features were transferred:

- South Bay Pumping Plant.³⁴
- Del Valle Dam and Lake Del Valle.³⁵
- Del Valle Pumping Plant and Branch Pipeline.³⁶

As of the end of 1969, the last three units installed in the South Bay Pumping Plant (Units No. 5, 6, and 7) had not been accepted by the Department from the construction contractor.

North Bay Aqueduct

Phase I of the North Bay Aqueduct was formally transferred from a construction to an operational status in September 1969.³⁷

Phase I construction includes a pipeline, Napa turnout reservoir, and an interim pumping plant to deliver a temporary water supply from the federal Solano Project to Napa County. Phase II construction will include pumping plants, canal, and pipeline to

²⁴ See p. 4, Bulletin 132-69.

²⁵ Letter from William R. Gianelli to Mr. Robin Jeskey, Chairman of the Board of Directors, Plumas County Flood Control and Water Conservation District, May 8, 1969.

²⁶ See pp. 88-89, Bulletin 132-68, for a description of the significance of the "full operation date."

²⁷ Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas and Electric Company.

²⁸ Department of Water Resources Bulletin, "Oroville Power Project, Annual Report: 1968," March 1969. (See Water Service Contractors Council Memo No. 469, "Oroville Power Project Annual Report: 1968," April 25, 1969.)

²⁹ See p. 19, Bulletin 132-68.

³⁰ Department of Water Resources memorandum from Clyde E. Shields, J. A. Wineland, and Robert B. Jansen to Messrs. John R. Teerink and Alfred R. Golzé, "Transfer of Oroville-Thermalito Bus Lines from Construction to Operational Status," August 15, 1969, approved August 25, 1969.

³¹ Department of Water Resources memorandum from Clyde E. Shields, J. A. Wineland, and Robert B. Jansen to Messrs. John R. Teerink and Alfred R. Golzé, "Transfer of Oroville Operations and Maintenance Center and Thermalito Annex from Construction to Operational Status," October 8, 1969, approved October 20, 1969.

³² Department of Water Resources memorandum from Robert B. Jansen, J. A. Wineland, and Clyde E. Shields to Messrs. John R. Teerink and Alfred R. Golzé, "Transfer of Oroville Dam and Facilities from Construction to Operational Status," December 17, 1969, approved December 19, 1969.

³³ Department of Water Resources memorandum from Clyde E. Shields, Robert B. Jansen, and J. A. Wineland to Messrs. John R. Teerink and Alfred R. Golzé, "Transfer of Edward Hyatt Powerplant and Switchyard and Penstock Intake and Thermalito Powerplant from Construction to Operational Status," December 17, 1969, approved December 19, 1969.

³⁴ Department of Water Resources memorandum from Clyde E. Shields and Robert B. Jansen to Messrs. John R. Teerink and Alfred R. Golzé, "Transfer of South Bay Pumping Plant and Appurtenant Facilities from Construction to Operational Status," April 22, 1969, approved May 2, 1969.

³⁵ Department of Water Resources memorandum from Clyde E. Shields, J. A. Wineland, and R. B. Jansen to Messrs. John R. Teerink and Alfred R. Golzé, "Transfer of Del Valle Dam and Reservoir from Construction to Operational Status," October 1, 1969, approved October 7, 1969.

³⁶ Department of Water Resources memorandum from R. B. Jansen, J. A. Wineland and Clyde E. Shields to Messrs. John R. Teerink and Alfred R. Golzé, "Transfer of Del Valle Pumping Plant and Del Valle Branch Pipeline from Construction to Operational Status," December 22, 1969, approved December 23, 1969.

³⁷ Department of Water Resources memorandum from Clyde E. Shields, J. A. Wineland, and Robert B. Jansen to Messrs. John R. Teerink and Alfred R. Golzé, "Transfer of North Bay Aqueduct Interim Facilities from Construction to Operational Status," September 19, 1969, approved September 30, 1969.

deliver a project water supply, commencing in 1980, from the Sacramento-San Joaquin Delta to Solano and Napa Counties.

Preliminary designs and cost estimates for Phase II construction were revised in April 1969.³⁸ This revision updates the following items concerning a 1966 report on the preliminary alignment of Phase II:³⁹

- Canal reaches were changed from unlined to concrete-lined sections, because: (a) unlined sections will require periodic shut-down of the Aqueduct in order to permit removal of accumulated Asiatic clam beds, tule beds, silt deposits, and algae growths; (b) the Aqueduct must be operated continuously in order to meet projected delivery requirements allowing little, if any, shut-down time for cleaning and (c) concrete-lined sections can be cleaned while the Aqueduct is in operation, if necessary.
- Pipeline was substituted for canal in the reach between Travis Air Force Base and a point west of Fairfield, for safety and to allow partial location of the Aqueduct in a "common corridor" with proposed State Route 12 freeway. A pumping plant, to be situated adjacent to the southern boundary of the Base, was added to force water through the additional pipeline.

In June 1969, a meeting was held with representatives of both Napa and Solano County Flood Control and Water Conservation Districts to review current design, alignment, and cost estimates for Phase II construction and to determine those reaches where right-of-way should be purchased now to avoid paying for excessive escalation of land prices. Conclusions concerning the immediate purchase of right-of-way were as follows:⁴⁰

- Right-of-way will be purchased now between the Cordelia Pumping Plant and the Cordelia surge tank.
- Right-of-way in the Fairfield-Suisun area will be purchased jointly with the Division of Highways for the State Highway 12 freeway and the North Bay Aqueduct.
- Right-of-way will not be purchased now in the Travis Air Force Base area, or between Fairfield and Cordelia Pumping Plant.

The Bureau of Reclamation is currently investigating a "tidal pumping" scheme for fishery and wildlife habitat preservation and enhancement which includes a 50-cubic-feet-per-second canal from Calhoun

Cut to Denverton Slough—to introduce fresh water into the eastern area of the Suisun Marsh. The preliminary alignment of this canal crosses the proposed North Bay Aqueduct alignment twice in the Calhoun Cut area. At an August meeting with representatives of the Bureau of Reclamation and the Solano County Flood Control and Water Conservation District, these additional conclusions were reached on right-of-way acquisition in the Calhoun Cut area:⁴¹

- Right-of-way will be acquired now for the North Bay Aqueduct in the vicinity of the Sacramento Northern Railroad, from Dixon-Rio Vista Road to Creed Road.
- Plans for joint use of the initial reach from the Delta to Denverton Slough will be coordinated by the Department and the Bureau. If the Bureau's canal is formulated and funded before Phase II construction of the North Bay Aqueduct begins, the two facilities may be combined. In this event, the Department would sell any portion of the right-of-way not required for the joint-use reach.

Delta Facilities

Whereas the State has authority to construct the Peripheral Canal as part of the State Water Project,⁴² the Bureau of Reclamation is not presently authorized to participate in the proposed joint-use facility. On July 3, 1969, the Secretary of the Interior approved the Bureau's feasibility report on the Peripheral Canal—the fundamental document for obtaining authorization of the Canal as part of the federal Central Valley Project.⁴³ The report was then transmitted to the State of California for official review and comment. (State comments are a required step in federal authorization procedures, prior to consideration by the Congress.) The Resources Agency sent copies of the report to all interested state agencies, and to the State Senate and Assembly for legislative review and comment, pursuant to Sections 450–453 of the California Water Code.

The Senate Committee on Water Resources and the Assembly Water Committee conducted joint fact-finding hearings concerning the report in September 1969. Appearing before the joint hearings were some 30 witnesses representing governmental agencies at the federal, state, and local levels and private groups and individuals interested in all aspects of the Peripheral Canal and the environment of the Delta area.

³⁸ Department of Water Resources memorandum from J. A. Wineland to Mr. Alfred R. Golzé, "North Bay Aqueduct Phase II—Updating of Designers' Direct Pay Estimates," April 16, 1969, approved May 14, 1969.

³⁹ See p. 17, Bulletin 132–67.

⁴⁰ Letters from Carl A. Werner to Mr. David Balmer, County Administrator, Solano County Flood Control and Water Conservation District, and to Mr. Joseph V. Reynolds, Flood Control Engineer, Napa County Flood Control and Water Conservation District, July 8, 1969.

⁴¹ Letter from Carl A. Werner to Mr. David Balmer, County Administrator, Solano County Flood Control and Water Conservation District, August 27, 1969.

⁴² See p. 21, Bulletin 132–66.

⁴³ "Peripheral Canal Unit, Central Valley Project, California, A Report on the Feasibility of Water Transfer in the Sacramento-San Joaquin Delta," United States Department of the Interior, Bureau of Reclamation.

In the Department's testimony given before the joint hearing,⁴⁴ the Director emphasized that the Peripheral Canal will be operated to serve the Delta in accordance with (a) the agreements being negotiated with local Delta interests and (b) the water quality standards to be established by the State Water Resources Control Board.

In the fall of 1969, the comments of the two legislative committees were transmitted to The Resources Agency.⁴⁵ Both committees recommended early congressional authorization of the Peripheral Canal, along with strong provisions in the enabling federal legislation to guarantee certain safeguards in the Delta area.

The review by each of the concerned state agencies has also been completed and the official state comments will be released soon. These comments will be based on a comprehensive review and analysis of the issues and on recommendations made by the legislative committees and the various state agencies.

In his November 14, 1969 address,⁴⁶ Governor Reagan stated he believed that "... when all the study and technical information is made available, it will be seen that the Peripheral Canal, operated properly, will do much toward protecting the environment of the Delta area as well as providing a means for delivery of water to our State's other areas of need."

In March 1969, a memorandum of understanding was signed by the Department of Water Resources, the Department of Fish and Game, the Bureau of Reclamation, and the Bureau of Sport Fisheries and Wildlife.⁴⁷ The agreement covers interim procedures to reduce fishery problems in the Delta until the Peripheral Canal is operational. Specific objectives under the agreement are:

- To maintain salmon stocks in the San Joaquin River tributaries until Peripheral Canal water releases can be made to rebuild this run;
- To improve fish salvage operations at the Tracy Pumping Plant of the Central Valley Project;
- To minimize effects of flow reversals in the San Joaquin River south of Stockton; and,
- To protect striped bass eggs, larvae, migration, and spawning.

⁴⁴ See Water Service Contractors Council Memos No. 497, "Peripheral Canal," September 17, 1969, and No. 499, "Peripheral Canal," September 17, 1969, concerning the Department's testimony.

⁴⁵ Letters to Honorable Norman B. Livermore, Jr., Secretary for Resources, from Senators Cologne, Rodda, Stevens, Way, Whitmore, and Harmer, November 7, 1969, and from Assemblymen Porter, Stacey, Badham, Belottie, Johnson, and Quimby, October 14, 1969.

⁴⁶ See p. 2.

⁴⁷ "Memorandum of Understanding on Interim Measures to Protect Fish in the Sacramento-San Joaquin Delta Prior to the Construction of the Peripheral Canal," March 10, 1969, DWR No. 458183. (See Water Service Contractors Council Memo No. 467, "Delta Fish Protection Agreement," April 22, 1969.)

⁴⁸ Department of Water Resources memorandum from Clyde E. Shields, J. A. Wineland, and Robert B. Jansen to Messrs. John R. Teerink and Alfred R. Golzé, "Transfer of Delta Operations and Maintenance Center from Construction to Operational Status," June 20, 1969, approved June 30, 1969.

⁴⁹ Department of Water Resources memorandum from Clyde E. Shields, J. A. Wineland, and R. B. Jansen to Messrs. John R. Teerink and Alfred R. Golzé, "Transfer of Delta Pumping Plant, Discharge Lines, and Switchyards, Clifton Court Forebay, the Intake Channel, and Fish Protective Facilities from Construction to Operational Status," December 22, 1969, approved December 23, 1969.

California Aqueduct

During 1969, the following features of the California Aqueduct were formally transferred from a construction to an operational status:

- Delta Operations and Maintenance Center.⁴⁸
- Delta Pumping Plant, Intake Channel, Fish Protective Facilities, and Clifton Court Forebay.⁴⁹
- Aqueduct, Kettleman City to Seventh Standard Road.⁵⁰
- Aqueduct, Seventh Standard Road to Buena Vista Pumping Plant.⁵¹

All of the California Aqueduct from the Sacramento-San Joaquin Delta to the Buena Vista Pumping Plant, and to the site of the Devil's Den Pumping Plant on the Coastal Branch, is now operational. However, transfer of the San Luis Division from the Bureau of Reclamation to the Department for operation is contingent upon execution of (a) the long-term agreement for overall coordinated operation of the State Water Project and the federal Central Valley Project and (b) the supplemental agreement for operation of the San Luis Division.

On April 4, 1969, the California Water Commission approved a request by the United States Board on Geographic Names and the Bureau of Reclamation that the word "detention" be deleted from the names for Los Banos Reservoir and Little Panoche Reservoir. The word "detention" is retained in regard to Los Banos Detention Dam and Little Panoche Detention Dam, however.

In December 1969, a revised construction schedule was approved for the California Aqueduct, from and including Devil Canyon Powerplant and Penstock to and including Perris Dam and Lake Perris.⁵² Under the revised schedule, Devil Canyon Powerplant will be completed in March 1972, instead of January 1972 (Unit No. 1 to be operational by December 31, 1971); the Santa Ana Valley Pipeline between Devil Canyon and Mill Street will be completed in December 1971, instead of August 1971; the Santa Ana Valley Pipeline between Mill Street and Sugarloaf Mountain will

⁵⁰ Department of Water Resources memorandum from Clyde E. Shields and Robert B. Jansen to Messrs. John R. Teerink and Alfred R. Golzé, "Transfer of California Aqueduct-Kettleman City to Seventh Standard Road and Coastal Branch, Avenal Gap to Devil's Den from Construction to Operational Status," May 22, 1969, approved June 10, 1969.

⁵¹ Department of Water Resources memorandum from R. B. Jansen, J. A. Wineland, and Clyde E. Shields to Messrs. John R. Teerink and Alfred R. Golzé, "Transfer of California Aqueduct, Seventh Standard Road to Buena Vista Pumping Plant Intake Channel from Construction to Operational Status," December 22, 1969, approved December 23, 1969.

⁵² Department of Water Resources memoranda from Alfred R. Golzé to Mr. William R. Gianelli, "Proposed Revised Construction Schedule for the Santa Ana Pipeline and Perris Dam," October 27, 1969, approved with qualifications October 27, 1969, and "Report on Meeting, Southern District, November 20, 1960," November 25, 1969, approved December 1, 1969.

be completed in December 1971, instead of October 1971; the Santa Ana Valley Pipeline between Sugarloaf Mountain and Lake Perris will be completed in April 1973, instead of October 1971; and Perris Dam, Lake Perris, and Perris Dam outlet works will be completed in May 1973, instead of January 1973.

The revised schedule will better fit financial and water delivery plans of both the State and the project water contractors. The Metropolitan Water District of Southern California, the only contractor to be served from Lake Perris, indicated that water deliveries were desired from Lake Perris commencing in July 1973, instead of January 1973 as heretofore planned.⁵³ The schedule was revised only after discussion and agreement among all the contractors to be served from the affected reaches.

West Branch. In July 1969, an amendment⁵⁴ was executed to the 1967 agreement between the Department and the City of Los Angeles for cooperative development of the Castaic power complex.⁵⁵ The amendment establishes the location of the dam that will form Castaic Pumping Forebay and the operating criteria for the Forebay.

Coastal Branch. Phase I of the Coastal Branch, including the Las Perillas and Badger Hill Pumping Plants, was formally transferred from a construction to an operational status in 1969.⁵⁶

Last year's bulletin included a description of the agreements that provide for the installation by the Berrenda Mesa Water District (a member unit of the Kern County Water Agency) of one pump (Unit No. 4) in each of the Las Perillas and Badger Hill Pumping Plants. It also included a notation that the District was interested in installing additional pumps.⁵⁷

In May 1969, two agreements were signed (a) between the Department and the Berrenda Mesa Water District covering the installation of additional pumps⁵⁸ and (b) among the Department, the Kern County Water Agency, and the Berrenda Mesa Water District covering the operation of additional pumps.⁵⁹

Under the first agreement, the Berrenda Mesa Water District is permitted to install an additional pump (Unit No. 5) in each of the Las Perillas and Badger Hill Pumping Plants and to construct a second dis-

charge line at the Badger Hill Pumping Plant. The District is to procure, install, and construct the pumps and discharge line in accordance with the Department's designs, plans, and specifications. Contract awards for such work are subject to state approval, and the performance of such work is subject to state supervision and approval. In early 1977, the Department will be required to purchase Units No. 5 and the additional discharge line at their depreciated value. (Units No. 4 were not constructed to the Department's plans and specifications and the Department is not required to purchase these units.)

Under the second agreement, the Department will operate and maintain Units No. 5 and the additional discharge line as integral parts of the Project. However, no water supply contractor other than the Kern County Water Agency will be required to pay any additional charges prior to the Department's purchase of the facilities in 1977.

Both the State Water Project and the Berrenda Mesa Water District will benefit from these agreements. The additional pumping capacity will enable the Project to deliver increased quantities of water to the District. The State will be able to postpone until early 1977 any additional capital outlay for pump units and discharge lines at the Las Perillas and Badger Hill Pumping Plants.

Upper Eel River Development

Last year's bulletin included references to the Corps of Engineer's final report on the Dos Rios Project which the Chief of Engineers had transmitted for official state review on July 5, 1968, and to the public hearings held by the Assembly Water Committee and the Senate Committee on Water Resources for their independent review of the proposed project.⁶⁰ Reference was also made to the report being prepared by the Department which will provide a basis for determining the extent of further studies of the routing of Eel River waters to the Sacramento Valley.

In January 1969, the Assembly Water Committee and the Senate Committee on Water Resources released reports concerning their respective studies and review of the Dos Rios Project.⁶¹ Similar conclusions by both committees included the following:

⁵³ Letter from Henry J. Mills, General Manager, The Metropolitan Water District of Southern California, to Mr. James J. Doody, September 26, 1969.

⁵⁴ "Amendment No. 1 to the Contract Between the Department of Water Resources, State of California, and the Department of Water and Power, City of Los Angeles, for Cooperative Development, West Branch, California Aqueduct," July 3, 1969.

⁵⁵ See p. 12, Bulletin 132-67.

⁵⁶ Department of Water Resources memorandum from Clyde E. Shields, J. A. Wineland, and R. B. Jansen to Messrs. John R. Teerink and Alfred R. Golze, "Transfer of Las Perillas and Badger Hill Pumping Plants from Construction to Operational Status," November 10, 1969, approved November 28, 1969. (See footnote 50 concerning transfer of Coastal Branch Aqueduct.)

⁵⁷ See pp. 7-8, Bulletin 132-69.

⁵⁸ "Agreement Between Berrenda Mesa Water District and the State of California, Department of Water Resources, for Access to and Encroachment on State Water Project Aqueduct Right-of-Way and Facilities for Installation of Discharge Line, Pumping Units No. 5 and Appurtenances at Las Perillas and Badger Hill Pumping Plants," May 8, 1969.

⁵⁹ "Agreement Between the State of California, Department of Water Resources, Kern County Water Agency and Berrenda Mesa Water District for Operation of Pumping Unit No. 5 and Discharge Line Supplied by Berrenda Mesa for the Badger Hill and Las Perillas Pumping Plants," May 8, 1969.

⁶⁰ See pp. 8-9, Bulletin 132-69.

⁶¹ Assembly Interim Committee Reports, Volume 26, Number 18, "Preliminary Comments on the Dos Rios Project," January 1969. Progress Report to the Legislature, 1969 Legislature, Senate Committee on Water Resources, "The Dos Rios Project," January 28, 1969.

- The Dos Rios Project would economically meet the State Water Project's need for additional supplies required to satisfy water delivery obligations.
- Neither sea water conversion nor waste water reclamation could then be considered as practical alternatives to the Dos Rios Project.
- Other possible water developments in the Eel, Sacramento, and San Joaquin River Basins could not be considered as alternatives to the Dos Rios Project because of insufficient benefits.

The committees offered suggestions for overcoming certain deficiencies noted in the Corps of Engineers' proposal; including the provision for federal impact payments to local governments, equitable compensation for the Indian population, and added emphasis on preservation and enhancement of fisheries and wildlife habitat. Both committees also recommended that the Department immediately begin detailed studies of the desirability of adding projects to meet local needs in the Eel River Basin. Such projects would be authorized as part of the overall development and as supplements to the Dos Rios Project.

On May 13, 1969, Governor Reagan announced he was directing the Department to work with the Corps of Engineers to make further analysis of possible water development plans for the Eel River Basin.⁶² The Governor stated that he wanted additional studies to develop definite alternatives that would not involve the flooding of Round Valley in Mendocino County, as would the Dos Rios Project. The Governor said that the Dos Rios Project report did not cover other possible water developments and that he had therefore asked the Department to work with the Corps of Engineers in the development of further information and analyses. In a letter to the Chief of Engineers, the Governor stated that until this information is developed and presented to him, he could not comment, in good conscience, on the Dos Rios Project report.⁶³

The Department immediately initiated further analysis of alternative water development plans within the Eel River Basin. The Department described the alternatives under consideration to the California Water Commission on June 6, 1969.⁶⁴ Public comment on water development possibilities in the Eel River Basin as alternatives to the proposed Dos Rios Project were invited for the August 1, 1969 meeting of the California Water Commission.⁶⁵

In December 1969, the Department released its report on the study of Eel River development alternatives in response to the Governor's May 13, 1969 directive.⁶⁶

Six principal alternatives to the Corps of Engineers' proposed Dos Rios Project are identified in the report. They involve three basic plans of Eel River development, each of which could be coupled with either an easterly or southerly diversion routing. (Reexamination of the routing issues had not progressed to the point where results could be incorporated into analyses of Eel River development alternatives.) The basic plans involve (a) a small Dos Rios Reservoir which would not flood Round Valley, (b) a medium-sized Dos Rios Reservoir with auxiliary features to protect Round Valley, and (c) a large Yellow Jacket Reservoir on the lower Eel River.

The report presents a summary of the total costs and the water supply, flood control, and recreation accomplishments of the principal alternatives. In addition, the report contains discussions of some of the environmental effects of these alternatives, such as impact on fishery and wildlife habitat, lands inundated, and people displaced.

SCR 144 of the 1969 Session requests the Department to submit to the Legislature the results of its Eel River alternative studies and directs the Senate Committee on Water Resources and the Assembly Water Committee to hold joint public hearings thereon and to submit their formal comments to the Governor.⁶⁷

In his November 14, 1969 address,⁶⁸ Governor Reagan stated that he will ask the benefit of the Legislature's views when their hearings have been concluded. The Governor also stated that:

- He was asking the Department to submit to him, through The Resources Agency, a report concerning the necessity and timing for developing additional major water projects to meet the needs of all Californians.
- At the same time, the Department will continue to explore the feasibility of cooperative construction of large-scale desalination plants in conjunction with the Federal Government and with power utilities which are developing nuclear powerplants.⁶⁹ Waste water reclamation will also receive additional study.
- In the meantime, he had asked the Corps of Engineers to withhold further action on Eel River development until the State determines which projects should proceed.

⁶² See Water Service Contractors Council Memo No. 476, "Dos Rios Project," May 22, 1969.

⁶³ Letter from Ronald Reagan to Lt. General William F. Cassidy, Chief of Engineers, Department of the Army, May 22, 1969.

⁶⁴ See Water Service Contractors Council Memo No. 479, "Alternatives to Dos Rios," June 9, 1969.

⁶⁵ See Water Service Contractors Council Memo No. 490, "Correspondence — Alternatives to Dos Rios," August 6, 1969.

⁶⁶ Department of Water Resources Bulletin 172, "Eel River Development Alternatives," December 1969. (See Water Service Contractors Council Memo No. 525, "Eel River Development Alternatives," December 15, 1969.)

⁶⁷ Calif. Stats. of 1969, Resolution Chapter 273.

⁶⁸ See p. 2.

⁶⁹ See Water Service Contractors Council Memo No. 521, "Future of Desalting in California," December 1, 1969.

In an action associated with future Eel River development, Assembly Concurrent Resolution (ACR) 186 of the 1969 Legislature requests the Department to reevaluate all alternative proposals for the Eel River Basin that will result in an effective flood control system and to report to the 1970 Legislature by the fifth day of the session.⁷⁰

San Joaquin Drainage Facilities

The San Joaquin Valley Drainage Advisory Group was formed in May 1967 to develop (a) a physical plan to meet the agricultural waste water disposal needs of the Valley and (b) a means for paying the reimbursable costs of the works contemplated under such a plan.⁷¹ After one and one-half years of study, the Group released its final report in January 1969.⁷² The following summary of the report is given in its March 12, 1969 letter of transmittal from Joseph B. Summers, Chairman of the Group, to the Director:

"The final report successfully melds the widely divergent views of the Group's members, alternates and observers. The report presents a possible plan that permits a greater degree of direct local participation than did the earlier Master Drain plan. The basic plan, however, is the same as all previously proposed 'best' plans—that is, the primary facility is an open-lined canal or canals located near the trough of the Valley and discharging into western Delta receiving waters.

"The plan for repayment is less definite than we visualized it would be in 1967. The Group believes that it is not politically practical or feasible to create a taxing valley-wide district in 1969. The recommended repayment plan requests \$8 to \$11 million of State general funds in 1969 so that provisions can be made during construction of the federal San Luis Drain for its future enlargement as a single, full-sized drainage canal for the entire San Joaquin Valley. Creation of the master district could then be deferred until after 1985 and its power could be defined to reflect the economic conditions of that time. The repayment plan suggests that eventually some combination of toll charges, taxes and government funds will provide the best means of recovering reimbursable drainage costs."

The Group recommended that the Congress and the Legislature take action that would both lead to construction of the single facility between Gustine and the Delta (estimated to result in a joint savings of \$15 million) and permit the joint use of federal and state disposal facilities in the Valley where such use is technically and economically feasible.

South of Gustine, the Bureau of Reclamation has excavated and lined 15 miles of the federal San Luis Drain in northwestern Fresno County. Rights-of-way are being acquired for the Drain from its southern end (near Kettleman City) to and including the Kesterson Reservoir site (near Gustine). However, completion of the San Luis Drain is being delayed due to reduced federal appropriations.

Nearing completion by the end of 1969 were joint studies conducted by the Department, the Bureau of Reclamation and the Federal Water Quality Administration (formerly the Federal Water Pollution Control Administration) to establish the economic feasibility of treatment of agricultural waste waters. The results of these studies will be published as a series of joint federal-state reports in mid-1970 and will facilitate a decision as to the most appropriate point of discharge for drainage facilities.

The joint studies have investigated two processes of biological nitrogen removal treatment: (a) bacteriological denitrification and (b) algal biomass production and harvesting (algae stripping). Pilot scale treatment units of these two processes have been operated for the past two years at the Agricultural Waste Water Treatment Center near Firebaugh. The treatment units will be operated during 1970 to develop both design criteria and operational procedures for the processes. Reports on this second phase will be published about mid-1971.

In July 1969, the Department and the Bureau of Reclamation announced details of a cooperative program for monitoring the quality of subsurface agricultural waste waters in the San Joaquin Valley.⁷³ Monitoring of agricultural waste waters between Patterson, in Stanislaus County, and the Sacramento-San Joaquin Delta will be the general responsibility of the Bureau while the area south of Patterson will be covered by the Department. Data from the samples collected will be used by both the Bureau and the Department in their continuing studies of the problems presented by agricultural waste water and in devising engineering solutions to meet these problems.

Local Projects

As of December 31, 1969, the Department had approved a total of \$67,365,662 in grant and loan applications under the Davis-Grunsky Program—committing over one-half of the \$130,000,000 which was reserved for such financial assistance under the Burns-Porter Act.⁷⁴ A total of \$14,154,683 was approved in 1969. (A \$457,000 loan commitment to the North Shasta Lake Community Services District, approved in 1968, was canceled due to dissolution of the District.)

⁷³ Letter from W. R. Gianelli, Director, to Mr. R. G. Pafford, Jr., Regional Director, Region II, U. S. Bureau of Reclamation, June 18, 1969, approved July 1, 1969.

⁷⁴ The approved amount includes \$1,260,000 in loans that were funded from the then local Project Assistance Fund prior to ratification of the Burns-Porter Act—but excludes \$3,928,800 incurred through 1969 for program administration costs.

⁷⁰ Calif. Stats. of 1969, Resolution Chapter 345.

⁷¹ See p. 47, Bulletin 132-68.

⁷² San Joaquin Valley Drainage Advisory Group, "Final Report," February 1969.

The following \$11,929,625 in grants were approved during 1969 for financing (a) the portions of construction costs of proposed local water projects that are allocated to recreation and fish and wildlife enhancement and (b) the construction costs of initial water supply and sanitary facilities at such projects:

- \$500,000 to the County of Los Angeles for a waste water reclamation project in the Antelope Valley area.
- \$775,125 to the Sonoma County Flood Control and Water Conservation District, for Santa Rosa Reservoir.
- \$959,500 to the Poway Municipal Water District, San Diego County, for the Poway Water Storage Project.
- \$8,623,000 to the Turlock and Modesto Irrigation Districts for the New Don Pedro Project in Tuolumne County.
- \$1,072,000 to the City of Escondido, San Diego County, for the Dixon Dam and Reservoir Project.

The following \$2,225,058 in loans were approved during 1969 for financing the construction of proposed, or the improvement of existing, municipal water distribution systems:

- \$305,000 to the Downieville Public Utility District, Sierra County.
- \$102,000 to the Del Norte County Flood Control District.

- \$460,000 to the Summit City Public Utility District, Shasta County.
- \$150,000 to the Paskenta Community Services District, Tehama County.
- \$500,000 to the City of Alturas, Modoc County.
- \$38,400 to the Keswick Community Services District, Shasta County.
- \$66,658 to the City of Dorris, Siskiyou County.
- \$350,000 to the City of Trinidad, Humboldt County.
- \$253,000 to the Gasquet Community Services District, Del Norte County.

Transactions under the Davis-Grunsky Program are reported annually to the Legislature, in compliance with Section 12890.4 of the California Water Code.⁷⁵

Of the total approved applications as of December 31, 1969, \$12,134,588 (18 percent) were for loans, and the remaining \$55,231,074 (82 percent) were for grants.

At the end of 1969, only limited funds were available for new projects under the Davis-Grunsky Program because the remaining general obligation bonds authorized by the Burns-Porter Act could not be sold. Although approval of Proposition 7 in the June 1970 election would solve this problem, future contracts under the Davis-Grunsky Program will provide that the State's obligation to disburse money thereunder will be subject to the availability of funds.

⁷⁵ Department of Water Resources Bulletin, "Transactions Under the Davis-Grunsky Act, 1969 Report to the Legislature," January 1970.

CHAPTER II. PROJECT CONSTRUCTION

By the end of 1969, the State Water Project was serving water, in accordance with contract provisions, between Frenchman Dam and Lake in Plumas County and Seventh Standard Road in Kern County. About 90 percent of the "1973 Project facilities" were either completed or under construction.

The "1973 Project facilities" are those required to meet all immediate water delivery commitments and constitute the current construction program which commenced in 1957 with the start of road relocations around what is now Lake Oroville, and which will end in 1973 with completion of Pyramid and Perris Dams. When completed, these facilities will permit the fulfillment of delivery commitments to the remaining southerly portions of Kern County, and to Ventura, Los Angeles, San Bernardino, Riverside, Orange, Imperial, and San Diego Counties. The only major facilities on which construction is not yet under way are: (a) the Mojave Siphon just north of Silverwood Lake; (b) the Santa Ana Valley Pipeline between Devil Canyon Powerplant and Lake Perris (except the portion under the Riverside International Raceway); (c) Perris Dam; (d) Pyramid Dam and the related Gorman

Creek improvement; and (e) Angeles Tunnel Intake Facilities.

Future construction beyond the "1973 Project facilities" will be required to meet the more distant 1980 water delivery commitments to Santa Barbara and San Luis Obispo Counties (Phase II of the Coastal Branch) and to Solano County (Phase II of the North Bay Aqueduct). Required future construction will also include works to maintain the quality of water and to provide for the continuing buildup of annual water delivery obligations: the Peripheral Canal, Upper Eel River Development, and additional features of the California Aqueduct (additional pumping and power recovery units, Pyramid Power Development, Buttes Dam, and San Luis Canal capacity augmentation). In addition, future construction will include Abbey Bridge and Dixie Refuge Dams in the Upper Feather Division (for recreation and fishery enhancement) and the San Joaquin Drainage Facilities (contingent on guarantees of repayment by beneficiaries). Also, not included in the "1973 Project facilities" is construction by local public agencies financed by loans and grants under the Davis-Grunsky Program of the State Water Project.

Plans and Specifications

During 1969, the Department completed plans and specifications for 34 construction and procurement contracts, 24 of which were awarded by the year's end.

Some of the more significant plans and specifications completed were those for:

- California Aqueduct Control System, Buena Vista Pumping Plant to A. D. Edmonston Pumping Plant.
- A. D. Edmonston Pumping Plant, Completion Contract.
- Tehachapi Afterbay.
- Oso Pumping Plant, Completion Contract.
- Quail Canal.
- Pearblossom Pumping Plant, Motors.

- Pearblossom Pumping Plant, Discharge lines.
- Aqueduct, Pearblossom Pumping Plant to Los Angeles-San Bernardino County Line.
- Aqueduct, Los Angeles-San Bernardino County Line to Mojave Siphon.
- Mojave Siphon.
- Santa Ana Valley Pipeline, Day Street to Ellsworth Street.
- A. D. Edmonston Pumping Plant, Control System.
- Pyramid Dam, Initial Facilities.
- Devil Canyon Powerplant, Generator, and Initial Contract.

Land Acquisition and Relocation

The current land acquisition program for the State Water Project includes land and right-of-way required for the "1973 Project facilities", together with that required for Abbey Bridge Dam and Reservoir and portions of Phase II of the North Bay Aqueduct (to

avoid paying for excessive escalation of land prices)⁷⁶ and for certain reaches of the Peripheral Canal (to realize joint savings where canal excavation can be used now in constructing the nearby Westside Freeway—Interstate 5).⁷⁷

⁷⁶ See p. 2, Bulletin 132-69.

⁷⁷ See p. 6, Bulletin 132-69.

Approximately \$9.4 million was spent during 1969, bringing the total actual expenditure for project land and right-of-way to \$97.2 million—approximately 84 percent of the \$115.4 million estimated total expenditure under the current program. In addition, \$3.4 million remains on deposit for property currently in condemnation proceedings.

In 1969, title was taken to some 525 parcels (6,948 acres). The largest single acquisition was for \$1.29 million (768 acres) at Silverwood Lake.

To obtain land required for project construction, the Department presented to the California Water Commission 26 condemnation resolutions covering 115 individual ownerships. In addition, condemnation proceedings were concluded on 106 parcels (1,885 acres).

During 1969, six parcels (258 acres) were sold, bringing the total of such excess land sold to 26 parcels (934 acres) for more than \$1.3 million. Income from rentals and leases of project land and right-of-way was more than \$0.5 million in 1969, bringing the total of such income realized from property management to about \$6.5 million.

During 1969, the Department executed 59 relocation agreements covering 144 relocations. These agreements involved costs of over \$0.9 million, and raised the total of such commitments to \$40.0 million as of the end of 1969—approximately 86 percent of the \$46.5 million estimated total relocation expenditure

under the current program. In addition, 162 land exchange agreements with utility companies and others were concluded.

Facility or Division	Current Land Acquisition Program		
	Total Parcels Required	Parcels Acquired in 1969	Total Parcels Acquired
Feather River Facilities			
Upper Feather Division ^a -----	28	0	22
Oroville Division-----	924	17	879
Delta Facilities ^b -----	40	1	1
North Bay Aqueduct			
Phase I-----	14	4	8
Phase II ^c -----	10	0	0
South Bay Aqueduct-----	209	10	195
California Aqueduct			
North San Joaquin Division--	206	9	174
San Luis Division-----	22	1	21
South San Joaquin Division--	566	48	537
Coastal Branch (Phase I)----	48	1	45
Tehachapi Division-----	2	0	0
West Branch-----	255	19	163
Mojave Division-----	1,593	342	1,425
Santa Ana Division-----	706	73	431
Total-----	4,623	525	3,901

NOTE: In addition to requirements for the "1973 Project facilities," the current program includes land and right-of-way for:

^a Abbey Bridge Dam and Reservoir.

^b Certain reaches where excavation can be used for Westside Freeway construction fill (Interstate 5).

^c Certain reaches where land prices are expected to significantly escalate prior to commencement of Phase II construction in the late 1970s.



WIND GAP
PUMPING PLANT
AND
DISCHARGE LINES

Construction Contracts

Construction of the "1973 Project facilities" will require 447 contracts; the total state payments under those contracts are estimated to be \$1,611 million. By the end of 1969:

- \$828 million had been incurred under 308 contracts with final progress payments completed, whether or not settlements of contractor claims are pending.
- \$627 million had been incurred under 85 contracts in progress as of December 31, 1969.

The required contracts include those under the Bureau of Reclamation's current construction program

for the federal-state San Luis Facilities. State payments include a 55 percent share of the Bureau's contract costs.

The status of construction for each major division of the "1973 Project facilities", as of December 31, 1969, is shown in the tabulation below. A generalized construction schedule through 1976 for the State Water Project is shown in Figure 1; the remaining construction for the "1973 Project facilities" is shown thereon by solid bars, and the future construction scheduled through 1976 by the diagonal-patterned bars.

CONSTRUCTION CONTRACTS AS OF DECEMBER 31, 1969
(thousands of dollars)

"1973 Project Facilities" Construction Program ^a	Actual Cost of Contracts Completed	Estimated Cost of Contracts in Progress	Estimated Cost of Contracts Not Yet Started ^b	Estimated Total Cost of Construction Contracts ^c	Percent Completed Contracts of Estimated Total Cost
Contracts Administered by Department of Water Resources					
Feather River Facilities:					
Upper Feather Division.....	8,228	0	0	8,228	100%
Oroville Division.....	359,623	350	1,343	361,316	99%
North Bay Aqueduct.....	1,562	0	0	1,562	100%
South Bay Aqueduct.....	44,001	0	361	44,362	99%
California Aqueduct:					
North San Joaquin Division.....	106,754	211	136	107,101	99%
South San Joaquin Division.....	94,596	85,240	291	180,127	53%
Tehachapi Division.....	11,398	192,883	7,304	211,585	5%
Mojave Division.....	4,585	101,911	11,453	117,949	4%
Santa Ana Division.....	1,663	38,171	94,184	134,018	1%
West Branch.....	16,539	196,608	31,951	245,098	7%
Coastal Branch.....	8,244	0	0	8,244	100%
General Contracts ^d	3,581	12,115	4,696	20,392	18%
Subtotal.....	660,774	627,489	151,719	1,439,982	46%
Contracts Administered by Bureau of Reclamation					
San Luis Division ^e	167,726	0	3,501	171,227	98%
Total.....	828,500	627,489	155,220	1,611,209	51%

^a Does not include Upper Eel River Development, Abbey Bridge and Dixie Refuge Units of Upper Feather Division, Peripheral Canal, Phase II of the North Bay Aqueduct and Coastal Branch, future augmentation of San Luis Canal, local projects (Davis-Grunsky), Pyramid Power Complex in West Branch, Buttes Dam and Reservoir in Mojave Division, San Joaquin Drainage Facilities, or additional pumping and power recovery units scheduled to be installed after 1973.

^b Includes allowance for future construction price escalation of 6% per annum for 1970-72; 3% per annum for 1973.

^c Does not include additional capital costs for planning, design, right-of-way acquisition, or construction supervision; or initial operating costs during construction period. For complete estimates of capital costs of these facilities, and for facilities beyond the "1973 Project facilities", see Tables 8 through 10.

^d Includes costs of contracts for State Water Project—General and California Aqueduct—General.

^e Represents 55% of total cost of features jointly used by State Water Project and federal Central Valley Project.

Construction Progress

Construction during 1969 centered primarily on the main line of the California Aqueduct, from Seventh Standard Road in northern Kern County to Devil Canyon Powerplant in San Bernardino County, and on the West Branch from Oso Pumping Plant through Castaic Dam in Los Angeles County.



A strike called on July 19, 1969, by the Operating Engineers Local Union No. 12 of Southern California continued until August 27, 1969. Initially, the strike

stopped work on all field construction south of Kings County. Because of the safety factors involved, the Department's requests to continue work on Castaic Dam were honored by the Operating Engineers, the Associated General Contractors, and the individual construction contractors. Also, arrangements were made between the Union and the contractor involved for continuation of construction of the Santa Ana Valley Pipeline under the Riverside International

FIGURE 1

GENERALIZED CONSTRUCTION SCHEDULE

FACILITY, DIVISION OR FEATURE	CALENDAR YEAR						
	1970	1971	1972	1973	1974	1975	1976
UPPER FEATHER DIVISION							
FRENCHMAN DAM AND LAKE, ANTELOPE DAM AND LAKE, AND GRIZZLY VALLEY DAM AND LAKE DAMS		(COMPLETED)					
GRIZZLY VALLEY PIPELINE							
ABBEY BRIDGE AND DIXIE REFUGE DAMS AND RESERVOIRS		(NOT YET SCHEDULED)					
OROVILLE DIVISION							
OROVILLE DAM AND LAKE OROVILLE		(COMPLETED)					
EDWARD HYATT POWERPLANT		(COMPLETED)					
THERMALITO FEATURES		(COMPLETED)					
DELTA FACILITIES							
UPPER EEL RIVER DEVELOPMENT		(NOT YET SCHEDULED)					
NORTH BAY AQUEDUCT							
(PHASE I) NAPA PIPELINE AND INTERIM FACILITIES		(COMPLETED)					
(PHASE II) LINDSEY SLOUGH THRU CORDELIA PUMPING PLANT		(SCHEDULED FOR COMPLETION BY 1980)					
SOUTH BAY AQUEDUCT							
SOUTH BAY PUMPING PLANT TO SANTA CLARA TERMINUS		(COMPLETED)					
SOUTH BAY PUMPING PLANT, UNITS 5, 6, & 7 (FINAL)		(COMPLETED)					
DEL VALLE DAM, PIPELINE, AND PUMPING PLANT		(COMPLETED)					
NORTH SAN JOAQUIN DIVISION							
AQUEDUCT, DELTA PUMPING PLANT TO O'NEILL FOREBAY		(COMPLETED)					
CLIFTON COURT FOREBAY		(COMPLETED)					
DELTA PUMPING PLANT, 7 UNITS		(COMPLETED)					
UNITS 8 & 9							
UNITS 10 & 11 (FINAL)		(SCHEDULED FOR COMPLETION BY 1983)					
SAN LUIS DIVISION		(COMPLETED - POSSIBLE AUGMENTATION SCHEDULED FOR 1986)					
SOUTH SAN JOAQUIN DIVISION							
AQUEDUCT, KETTLEMAN CITY TO 7TH STANDARD ROAD		(COMPLETED)					
AQUEDUCT, 7TH STANDARD ROAD TO BUENA VISTA PUMPING PLANT		(COMPLETED)					
AQUEDUCT, BUENA VISTA TO A. D. EDMONSTON PUMPING PLANT							
BUENA VISTA PUMPING PLANT, ALL 10 UNITS							
WHEELER RIDGE PUMPING PLANT, ALL 9 UNITS							
WIND GAP PUMPING PLANT, ALL 9 UNITS							
TEHACHAPI DIVISION							
A. D. EDMONSTON PUMPING PLANT, 11 UNITS							
UNITS 10, 12, & 14 (FINAL)							
TUNNELS AND SIPHONS							
MOJAVE DIVISION							
AQUEDUCT, TEHACHAPI AFTERBAY TO SILVERWOOD LAKE							
BUTTES DAM AND RESERVOIR			(NOT YET SCHEDULED)				
PEARLBLOSSOM PUMPING PLANT, 4 UNITS							
UNITS 1 & 2 (FINAL)							
CEDAR SPRINGS DAM							
SANTA ANA DIVISION							
AQUEDUCT, SILVERWOOD LAKE TO LAKE PERRIS							
DEVIL CANYON POWERPLANT, UNIT 1							
UNIT 2							
PERRIS DAM							
WEST BRANCH							
AQUEDUCT, TEHACHAPI AFTERBAY TO CASTAIC LAKE							
OSO PUMPING PLANT, ALL UNITS							
PYRAMID DAM							
CASTAIC DAM							
COASTAL BRANCH							
AQUEDUCT, CALIFORNIA AQUEDUCT TO DEVIL'S DEN PUMPING PLANT		(COMPLETED)					
LAS PERILLAS AND BADGER HILL PUMPING PLANTS, 3 UNITS EACH		(COMPLETED)					
UNIT 4, EACH PLANT		(COMPLETED* - TO BE PURCHASED OR REPLACED BY 1982)					
UNIT 5, EACH PLANT		(TO BE PURCHASED IN 1977)					
UNIT 6, EACH PLANT		(SCHEDULED FOR COMPLETION BY 1982)					
DEVIL'S DEN PUMPING PLANT TO SANTA MARIA TERMINUS		(SCHEDULED FOR COMPLETION BY 1980)					
SAN JOAQUIN DRAINAGE FACILITIES		(NOT YET SCHEDULED)					

 REMAINING CONSTRUCTION FOR THE "1973 PROJECT FACILITIES"
 FUTURE SCHEDULED CONSTRUCTION

▽ INITIAL PROJECT WATER DELIVERY THROUGH THE PLANT
 * INITIAL INSTALLATION BY DERRENDA MESA WATER DISTRICT

Raceway. The Operating Engineers' strike delayed the completion dates of the affected contracts by approximately two months.

At the year's end, a strike at the General Electric Company had shut down their production for two months, with the effect on delivery of project equipment still to be determined.

Feather River Facilities

Construction activities for the Feather River portion of the "1973 Project facilities" were largely concluded in 1969. The only major construction remaining will be for Abbey Bridge and Dixie Refuge Dams, for which definite schedules have not yet been established.

Upper Feather Division. There was no construction activity in the Upper Feather Division by the Department during 1969. Construction of the Grizzly Valley Pipeline and related treatment facilities by the Plumas County Flood Control and Water Conservation District should be completed during the spring of 1970, weather permitting.

Oroville Division. All units of Edward Hyatt and Thermalito Powerplants became operational under terms of the Power Sale contract during 1969.⁷⁸ Performance testing of units in both plants, and the construction of the Oroville-Thermalito Control System, continued. During 1970, relatively small contracts for modification work and landscaping will be performed, and a spare transformer for Edward Hyatt Powerplant will be purchased.

South Bay Aqueduct

Installation of the last three units, Nos. 5, 6, and 7, in the South Bay Pumping Plant was completed in August, and construction of Del Valle Pumping Plant was completed in December.

California Aqueduct

Construction continued on the California Aqueduct Control System to provide remote control and monitoring of aqueduct operations from the Delta to Buena Vista Pumping Plant Intake, including Clifton Court Forebay and Phase I of the Coastal Branch. Under another contract, construction started on the portion of the Control System between Buena Vista Pumping Plant and A. D. Edmonston Pumping Plant.

North San Joaquin Division. Construction started in 1969 for modifications to the Delta Operations and Maintenance Center water treatment plant, installation of evaluation testing equipment at the Fish Protective Facility, and modifications to the North San Joaquin Division canal. All of this work will be completed by mid-1970.

The Delta Pumping Plant completion contract was completed in June, the switchyard modification contract in July, and plant control system contract in September. Clifton Court Forebay became operational in November and was completed in December.

San Luis Division. At San Luis Pumping-Generating Plant, six of the eight pump-generator units were operational during 1969.

The three fixed-flow units at Dos Amigos Pumping Plant were accepted during 1969 and are now operational. The three variable-flow units were conditionally operational at the end of 1969.

South San Joaquin Division. The 32 miles of concrete-lined canal between Seventh Standard Road and the Buena Vista Pumping Plant became operational in December; thus, 78 miles of a total of 120 miles in the Division are now completed. The remaining 42 miles, from Buena Vista Pumping Plant to A. D. Edmonston Pumping Plant, are scheduled to be operational in September 1970.

Construction under the completion contract for the Wheeler Ridge and Wind Gap Pumping Plants began in April. At least one unit is scheduled to be operational at each of the three pumping plants in the Division by the end of 1970.

Tehachapi Division. Construction continued on the A. D. Edmonston Pumping Plant and discharge lines. With the start of work under the completion contract in June and under the contract to furnish the 230-KV equipment and apparatus in July, all essential work required for operation of the Plant was under way. Major mechanical and electrical equipment is scheduled to be installed in 1970.

Concrete lining was completed in Tunnels No. 1, 2, and 3, with consolidation grouting and clean-up operations continuing into 1970. The Carley V. Porter Tunnel was "holed through" in October 1969; lining of the tunnel began shortly thereafter and was about 16 percent complete by the end of 1969. Tunnels No. 1, 2 and 3 and the Carley V. Porter Tunnel are scheduled for completion in 1970. Work on Pastoria Siphon continued with installation of steel pipe expected to start in early 1970. Construction of the Beartrap Access Structure and the Tehachapi Afterbay, the last two features of the Tehachapi Crossing, is scheduled to begin in 1970.

Mojave Division. During 1969, construction of the Aqueduct from Tehachapi Afterbay to Pearblossom Pumping Plant continued; construction of the Pearblossom Pumping Plant itself, and installation of the pumps, and construction of Cedar Springs Dam was also continued. Construction of the Aqueduct from Pearblossom Pumping Plant to West Fork Mojave River was begun, and installation of motors, discharge lines, valves, and associated equipment at Pearblossom Pumping Plant was underway.

⁷⁸ See p. 4.

During 1970, construction will begin on the Mojave Siphon, and Pearblossom Pumping Plant discharge line, control system, completion contract, and associated equipment.

Santa Ana Division. Construction continued, during 1969, on the San Bernardino Tunnel and Intake Tower. Construction was completed on a short section of the Santa Ana Pipeline under the Riverside International Raceway. Construction began on Devil Canyon Powerplant, and the turbine, valve and governor, and generator for the first unit.

During 1970, construction will begin on Devil Canyon Powerplant penstock, completion contract, and associated equipment for the first unit; Santa Ana Valley Pipeline from Devil Canyon Powerplant to Sugarloaf Mountain; and Perris Dam.

West Branch. Construction continued during 1969 on the Oso Pumping Plant Initial Contract, pumps, motors, and valves. Delivery of pumps began, and two of the five contracts for furnishing electrical equipment were completed. Fabrication of the control system and work under the completion contract were initiated.

⁷⁹ See p. 7.

The City of Los Angeles, Department of Water and Power, is responsible for the design and construction of Castaic Powerplant. Construction started on the 50 MW unit of the Powerplant. Fabrication of the penstocks began, while fabrication of mechanical and electrical equipment continued.

Design of the Southern California Operations and Maintenance Center, Phase I, was completed, and construction is scheduled to begin early in 1970.

Construction of Castaic Dam is progressing; 25,000,000 cubic yards of embankment had been placed by the end of 1969. During 1969, construction was started on Castaic Dam outlet works, Pyramid Dam initial facilities, and Quail Canal. Construction of Angeles Intake Facilities Phase I and Gorman Creek Improvement will begin in 1970.

Coastal Branch. The Berrenda Mesa Water District, a member unit of the Kern County Water Agency, completed installation of a fourth unit at both Las Perillas and Badger Hill Pumping Plants. Under the Department's designs and specifications, the District also initiated contracting for the fabrication of a fifth unit for both plants and for the second discharge line at the Badger Hill Pumping Plant.⁷⁹



CHAPTER III. PROJECT UTILITY MANAGEMENT

This chapter summarizes the Department's management of the Project's water and power "utility" during 1969. These management activities pertain to project water rights, water supply contracts, and power purchase and supply contracts.

Water Rights Management

Water rights management activities by the Department during 1969 included:

- Execution of agreements and continuing negotiation with local water right holders to define the quantities each is entitled to divert from flows in stream channels used by the Project.
- Negotiation with water users in the Sacramento-San Joaquin Delta to define the Project's obligation with respect to any potential loss in available water of satisfactory quality.
- Presentation of testimony before the State Water Resources Control Board to demonstrate that substantial quantities of water will be available to both satisfy reasonable water quality requirements in the Delta and meet project demands.

Diversions from Feather River

On May 27, 1969, two major agreements were executed defining Feather River water right entitlements of: (a) the Joint Water Districts,⁸⁰ concerning the Districts' Sutter Butte Canal and Sunset Pumping Plant, and (b) the Pacific Gas and Electric Company, concerning the Company's Western Canal. Historically, the use by these two entities has accounted for 90 percent of the irrigation diversions from the Feather River.

Execution of the agreements guarantees the delivery of the estimated annual yield of the Districts' and the Company's water rights. The agreements cover diversions up to a maximum of 900,000 acre-feet annually. The agreements confirm the Districts' right to purchase stored water from the Company that is surplus to the Company's needs. They also confirm the Districts' right to purchase water, in the future, from the State Water Project. The agreements eliminated the necessity for the Districts to proceed with a proposed Middle Fork Feather River Project, and permitted the undeveloped Middle Fork of the Feather River to be declared a "Wild River" by the Congress during 1969.

At the end of 1969, a water right entitlement agreement had been negotiated with the Oswald Water District, and negotiations were under way with the other ten appropriative water users along the Feather

River. Agreements had been executed with eight of the 46 riparian water users, and negotiations were continuing with the remainder.

Diversions from Sacramento-San Joaquin Delta

Negotiations with the Delta Water Agency were delayed during 1969 because the Agency was beset with internal problems of organization. Enactment of AB 793 by the 1969 Legislature made clarifying and technical changes in the Delta Water Agency Act.⁸¹ These problems have been resolved sufficiently so that negotiations can commence in 1970 on embodying the November 19, 1965 Delta Water Quality Criteria⁸² in a binding agreement with users throughout the Delta.

During 1969, negotiations continued with:

- Western Delta agricultural users, to define the overland water service as a substitute for supplies historically diverted directly from western Delta channels.
- Western Delta industrial water users, to define the State's monetary responsibility for the potential loss in available water of satisfactory quality in Delta channels due to project operations.

Negotiations with agricultural water users in the western Delta moved slowly during 1969, pending clarification or establishment of the authority of the Bureau of Reclamation, as operator of the Central Valley Project, to participate in the negotiations. Plans for overland water facilities to serve Sherman and Jersey Islands and Hotchkiss Tract have been developed.

Negotiations with municipal water users in the western Delta were completed with the execution of agreements with the Contra Costa County Water District in 1967 and with the City of Antioch in 1968. Due to the above-normal runoff, these two entities realized an above-average offshore water supply in 1969. Under these agreements, both a 70-day credit with the District and a 79-day credit with the City were established to offset loss of available offshore supply in 1970 or future years.

⁸⁰ Representing Richvale Irrigation District, Biggs-West Gridley Water District, Butte Water District, and Sutter Extension Water District in Butte and Sutter Counties.

⁸¹ Calif. Stats. of 1969, Chapter 285.

⁸² See p. 69, Bulletin 132-66.

Negotiations with industrial users in the western Delta are continuing. The industrial users seek compensation for (a) the projected loss of offshore availability of adequate quality water due to the operation of the State Water Project and (b) the projected increase in operations and maintenance costs of their cooling systems. Failure of the operators of the federal Central Valley Project to recognize any responsibility for either the projected loss of availability or increased operations and maintenance costs due to the operation of the Central Valley Project has hampered negotiations, and progress has been slow.

In June 1969, the Contra Costa County Water District proposed the Modified Kellogg Unit of the Central Valley Project.⁸³ Under this proposal, the Central Valley Project would provide a water supply for the District in the Delta, and the State Water Project would "wheel" the supply through the Delta Pumping Plant to a proposed delivery point at the head of the California Aqueduct. The District would construct proposed conveyance facilities from the head of the California Aqueduct to the existing Contra Costa Canal and, possibly, regulatory storage facilities enroute. In addition to providing the water supply, the Bureau of Reclamation could participate in the Modified Unit by constructing the proposed Kellogg Reservoir when federal funds become available.

Negotiations of a wheeling arrangement as outlined above were in progress at the end of 1969, among the Department, the Bureau of Reclamation, and the District. Successful completion of this arrangement could permit State delivery of a substitute supply from the head of the California Aqueduct, in lieu of monetary compensation, for loss of supply historically diverted from the western Delta channels by the District, the City of Antioch, and the industrial users.

Under Decisions D 1275 and D 1291, the State Water Resources Control Board reserved jurisdiction concerning formulation and revision of terms and conditions relative to salinity control in the Delta. Prior to June 30, 1970, the Board is to hear, review, and make such further order relative to salinity control as may be required.⁸⁴

The Board's hearings commenced on July 22, 1969. Issues on which evidence is to be received were defined by the Chairman as follows:

- Terms and conditions relative to salinity control in the Sacramento-San Joaquin Delta that should be included in the aforesaid permits.
- Whether any existing terms and conditions relative to salinity control should be revised.

- Whether, and to what extent, terms and conditions and permits issued, or to be issued, to the Bureau and to the Department should be coordinated.
- Terms and conditions for the protection of fish and wildlife in the Delta that should be included in permits to be issued to the Department.

After the 25th day of hearings, on December 18, 1969, the hearings were recessed until after the Christmas holidays.

Still pending as of December 31, 1969, were the petitions for writs of mandate filed in the Superior Court of Contra Costa County on December 29, 1967, by the Contra Costa County Water Agency and Reclamation District No. 830 (Jersey Island) to have the Board amend its Decisions D 1275 and D 1291.⁸⁵ The Contra Costa County Water Agency is a protestant in the hearings being conducted by the Board.

The water contractors are taking an active part in the hearings. If the conditions sought by the Contra Costa County Water Agency were adopted by the Board, extremely large Delta outflows would be required. These would result in increasing costs of project water service and decreasing reliability of such service.⁸⁶

In April 1969, the Department transmitted its comments on the State Water Resources Control Board's "Final Report, Preliminary Edition, San Francisco Bay-Delta Water Quality Control Program".⁸⁷ The report includes the conclusions, reached after an extremely complex and difficult study, that:

- Providing stored water for added waste assimilation and dispersion in the western Delta channels and eastern San Francisco Bay would not be economically justified.
- The proposed pollution control system could function effectively on Delta outflows required to satisfy the November 19, 1965 Delta Water Quality Criteria, developed from releases by the State Water Project and the federal Central Valley Project.
- The November 19, 1965 Delta Water Quality Criteria, in concert with substitute supplies and overland facilities for the western Delta, would be a valid measure of water quality to be maintained in the Delta after implementation of the Peripheral Canal.

The report endorses the Peripheral Canal concept for conveying water around the Delta and for improving water quality within the Delta.

⁸³ Leeds, Hill and Jewett, Inc., Consulting Engineers, Report to Board of Directors, Contra Costa County Water District, "Proposal for a Modified Kellogg Unit, Federal Central Valley Project," June 1969.

⁸⁴ See pp. 62-64, Bulletin 132-68.

⁸⁵ See p. 64, Bulletin 132-68.

⁸⁶ See Water Service Contractors Council Memo No. 528, "Water Rights Hearings," December 30, 1969.

⁸⁷ See Water Service Contractors Council Memo No. 468, "Bay-Delta Study," April 22, 1969.

In response to an invitation of the Subcommittee on Conservation and Natural Resources of the House Committee on Government Operations, the Director made a statement at its hearing in San Francisco, on August 21, 1969, concerning the Department's:

“ . . . views and comments on possible effects on the Bay and the Delta of reduction of fresh-water flows from the Delta as a result of the proposed federal construction of the Peripheral Canal . . . ”

The Director emphasized the Department's position that:

“ . . . It is apparent that the solution to the water quality problems in the San Francisco Bay lies in the implementation of a regional waste collection and disposal system as recommended by studies of the State Water Resources Control Board. Within the range of Delta outflow now under consideration, such outflow will have no significant effect on the environment or ecology of the San Francisco Bay system. The ability of the bay to provide oxygen for aquatic life and for waste assimilation will not be significantly affected by the Delta outflow. This oxygen supply is largely governed by the surface area.”⁸⁸

Diversions from Aqueduct Reservoirs

A long-term (25-year) contract was executed by the Department, Alameda County Water District, and Pleasanton Township County Water District on November 13, 1969. The agreement provides for the conservation of local water to which the local agencies have certain rights. Storage space in Lake Del Valle which is not used by the State Water Project will be used to conserve and store runoff from Arroyo Del Valle. The stored runoff will be released so as to enhance the recharge of ground water basins in the Livermore Valley and in the Alameda Creek area near Niles.

Local interests on Castaic Creek in Los Angeles County are continuing in their attempt to reach agreement among themselves as to the quantities of local runoff that they believe could be covered by water rights.⁸⁹

Water Contracts Management

The Department has entered into long-term water supply contracts with 31 local governmental agencies throughout the State as shown in Figure 2. The entire “minimum project yield” of 4,230,000 acre-feet annually—the contractual limit of the total firm delivery capability of the Project—is committed under these agreements.⁹⁰ However, this maximum annual amount

is not scheduled to be served until 2016. Each of the 31 contracts provides for an annual schedule of “entitlements to project water”, which generally build up to the “maximum annual entitlement” by 1990. In that year, over 99 percent of the total delivery capability is so scheduled to be served. However, several of the contracts provide for minor increases beyond this nominal year of maximum service. Schedules of annual entitlements for each agency are shown in Table B-4. Table 1 summarizes these entitlements for each major service region and also summarizes the estimated annual amounts of water required (a) to bring water surfaces in completed aqueduct facilities to operational levels (initial fill), (b) to compensate for water evaporation and seepage losses in operational aqueduct facilities (operational losses), and (c) to replace water consumed in recreation developments associated with aqueduct facilities (recreation water). The total of these amounts represent theoretical annual project demands on Delta flows. Actual annual project demands on Delta flows will differ from these theoretical amounts due to annual carryover of aqueduct reservoir storage, additional unscheduled demands for surplus project water, and carryover of undelivered entitlements from year-to-year as allowed in certain instances.

Project Water Service in 1969

Project water service in 1969 totaled 265,417 acre-feet, including:

- 193,020 acre-feet of entitlements under long-term contracts.
- 72,397 acre-feet of surplus water under interim one-year contracts.

In addition, 10,137 acre-feet of water was provided from Frenchman Lake to the Last Chance Creek Water District under a one-year contract; 2,687 acre-feet of water was transported from the Bureau of Reclamation's Solano Project through Phase I of the North Bay Aqueduct to the Napa County Flood Control and Water Conservation District; and 6,005 acre-feet of local Arroyo Del Valle runoff was delivered from Lake Del Valle to the Alameda County Water District. Thus, a total of 284,246 acre-feet of water was delivered by State Water Project facilities in 1969. The monthly amounts of water delivered to each contracting agency in 1969 are shown in Table 2 for each type of water service.

Entitlement Water Service. Project water entitlements for 1969 were not modified by contract amendments executed in 1969. These entitlements had been increased by 2,875 acre-feet due to the net effect of amendments executed in 1968, as reported in last year's bulletin.⁹¹

⁸⁸ See Water Service Contractors Council Memo No. 495, “Bay-Delta Statement,” August 22, 1969.

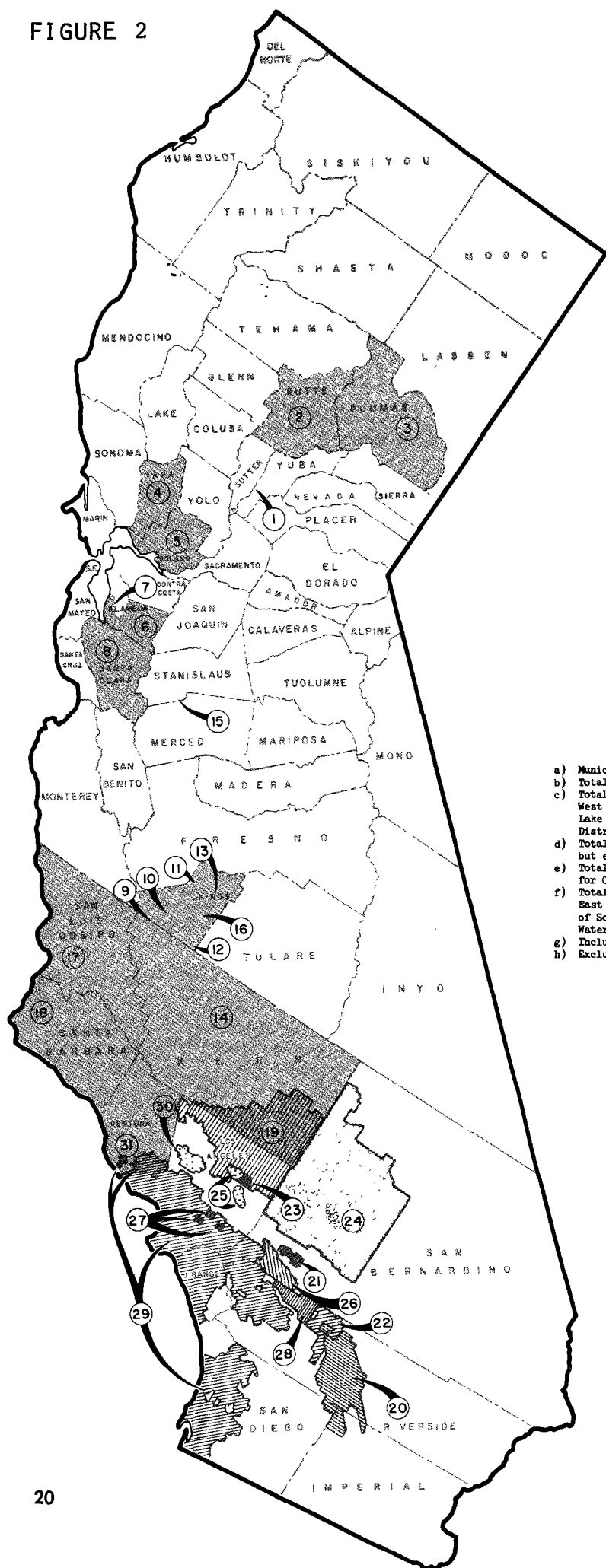
⁸⁹ See pp. 64–65, Bulletin 132–68.

⁹⁰ See p. 19, Bulletin 132–69.

⁹¹ See pp. 23 and 26, Bulletin 132–69.

FIGURE 2

LONG-TERM WATER SUPPLY



FOOTNOTES TO OPPOSITE PAGE

- a) Municipal and Industrial (MI), Agricultural (Ag), & Recreation (Rec).
- b) Total for Plumas County, including Last Chance Creek Water District.
- c) Total for Kings County, including Dudley Ridge Water District, Empire West Side Irrigation District, Hacienda Water District, most of Tulare Lake Basin Water Storage District, and about 40% of Devil's Den Water District.
- d) Total for Kern County, including about 60% of Devil's Den Water District, but excluding Kern County portion of Antelope Valley-East Kern Water Agency.
- e) Total for Antelope Valley-East Kern Water Agency includes assessed valuation for California City of \$24,311,000 but excludes City's area and population.
- f) Total for Ventura County, including about 8,400 acres in Antelope Valley-East Kern Water Agency, 214,700 acres in The Metropolitan Water District of Southern California, and about 8,400 acres in Upper Santa Clara Valley Water Agency.
- g) Includes duplicate values for overlapping agency areas.
- h) Excludes all overlapping areas.

CONTRACTING AGENCIES

Location No.	Long-Term Water Supply Contracting Agency	County	Office (City)	Type of Service (a)	Maximum Annual Entitlement (acre-feet)	Date Executed	Gross Area as of July 1, 1969 (acres)	Assessed Valuation (1969-70)	Estimated Population (July 1, 1969)
FEATHER RIVER AREA									
1	City of Yuba City	Sutter	Yuba City	M&I	8,300 1,300	Dec 30, 1963 Sep 28, 1964	2,900	26,702,900	14,000
2	County of Butte	Butte	Oroville	M&I	27,500	Dec 26, 1963	1,067,600	253,535,300	100,400
3	Plumas County Flood Control and Water Conservation District	Plumas	Quincy	M&I	2,700	Dec 26, 1963	1,621,000 (b)	92,480,400 (b)	12,500 (b)
NORTH BAY AREA									
4	Napa County Flood Control and Water Conservation District	Napa	Napa	M&I	25,000	Dec 19, 1963	508,000	160,680,300	80,800
5	Solano County Flood Control and Water Conservation District	Solano	Fairfield	M&I	42,000	Dec 26, 1963	528,400	366,687,200	174,800
SOUTH BAY AREA									
6	Alameda County Flood Control and Water Conservation District	Alameda	Hayward	M&I	40,000 6,000	Nov 20, 1961 Dec 30, 1963	272,000	177,588,400	75,400
7	Alameda County Water District	Alameda	Fremont	M&I	42,000	Nov 29, 1961	60,100	332,403,800	127,000
8	Santa Clara County Flood Control and Water District	Santa Clara	San Jose	M&I	88,000 12,000	Nov 20, 1961 Dec 30, 1963	832,300	2,618,654,300	1,032,600
SAN JOAQUIN VALLEY AREA									
9	County of Kings	Kings	Hanford	Rec	4,000	Aug 31, 1967	893,000	169,776,600 (c)	70,200
10	Devil's Den Water District	Kings and Kern	Fresno	Ag	11,000 1,700	Dec 20, 1963 Sep 28, 1964	8,700	1,257,600*	Less than 100
11	Dudley Ridge Water District	Kings	Fresno	Ag	50,000 7,700	Dec 13, 1963 Sep 28, 1964	29,900	6,032,000	Less than 50
12	Empire West Side Irrigation District	Kings	Stratford	Ag	3,000	Dec 30, 1963	7,700	757,200	Less than 100
13	Hacienda Water District	Kings	Corcoran	Ag	8,500	Dec 20, 1963	15,300	239,600	Less than 50
14	Kern County Water Agency	Kern	Bakersfield	Ag	1,000,000 153,400	Nov 15, 1963 Sep 28, 1964	4,310,200 (d)	894,314,000 (d)	331,500 (d)
15	Oak Flat Water District	Stanislaus	Westley	Ag	5,700	Mar 23, 1965	2,500	264,000	Less than 50
16	Tulare Lake Basin Water Storage District	Kings and Tulare	Corcoran	Ag	90,000 20,000	Dec 20, 1963 Dec 30, 1963	193,000	22,581,400	Less than 50
CENTRAL COASTAL AREA									
17	San Luis Obispo Flood Control and Water Conservation District	San Luis Obispo	San Luis Obispo	M&I	25,000	Feb 26, 1963	2,131,300	259,583,600	96,800
18	Santa Barbara County Flood Control and Water Conservation District	Santa Barbara	Santa Barbara	M&I	50,000 7,700	Feb 26, 1963 Jan 26, 1965	1,756,900	650,533,800	260,900
SOUTHERN CALIFORNIA AREA									
19	Antelope Valley-East Kern Water Agency	Los Angeles, Kern and Ventura	Lancaster	M&I	120,000 18,400	Sep 20, 1962 Sep 22, 1964	1,421,900	284,830,000 (e)	82,400
20	Coachella Valley County Water District	Riverside, Imperial and San Diego	Coachella	M&I	20,000 3,100	Mar 29, 1963 Sep 28, 1964	620,600	211,765,800	58,200
21	Crestline-Lake Arrowhead Water Agency	San Bernardino	Crestline	M&I	5,000 800	Jun 22, 1963 Sep 28, 1964	53,700	40,149,400	12,700
22	Desert Water Agency	Riverside	Palm Springs	M&I	33,000 5,100	Oct 17, 1962 Oct 2, 1964	172,800	129,645,700	29,400
23	Littlerock Creek Irrigation District	Los Angeles	Littlerock	M&I	2,000 300	Jun 22, 1963 Sep 28, 1964	43,300 (g)	1,789,000	1,500
24	Mojave Water Agency	San Bernardino	Victorville	M&I	44,000 6,800	Jun 22, 1963 Sep 28, 1964	3,160,400	233,761,800	100,100
25	Palmdale Irrigation District	Los Angeles	Palmdale	M&I	15,000 2,300	Feb 2, 1963 Sep 28, 1964	73,700	14,874,300	20,500
26	San Bernardino Valley Municipal Water District	San Bernardino	San Bernardino	M&I	90,000 - 5,000 13,000 4,600	Dec 30, 1960 Nov 15, 1963 Sep 28, 1964 Jun 26, 1968	150,300	508,294,100	332,000
27	San Gabriel Valley Municipal Water District	Los Angeles	Alhambra	M&I	25,000 3,800	Nov 3, 1962 Sep 28, 1964	16,200	309,814,600	155,100
28	San Geronimo Pass Water Agency	Riverside	Redlands	M&I	15,000 2,300	Nov 16, 1962 Jan 19, 1965	140,600	51,568,800	26,500
29	The Metropolitan Water District of Southern California	Los Angeles, San Diego, Riverside, San Bernardino, Orange & Ventura	Los Angeles	M&I	1,500,000 500,000 11,500	Nov 4, 1960 Sep 28, 1964 Aug 4, 1965	3,067,300	24,367,549,200	10,238,600
30	Upper Santa Clara Valley Water Agency	Los Angeles and Ventura	Newhall	M&I	23,000 3,500 15,000	Apr 30, 1963 Dec 22, 1964 Jan 29, 1966	125,000	155,581,700	43,800
31	Ventura County Flood Control District	Ventura	Ventura	M&I	20,000	Dec 2, 1963	1,179,500 (f)	994,271,600 (f)	369,100 (f)
TOTAL					4,230,000		24,466,100 (g)	33,337,968,400 (g)	13,847,200 (g)
NET AREA TOTAL					4,230,000		23,952,000 (h)	32,786,802,900 (h)	13,646,600 (h)

TABLE 1

ANNUAL PROJECT WATER REQUIREMENTS

(in acre-feet)

Cal- endar Year	Annual Entitlements Under Long-Term Water Supply Contracts (a)							Esti- mated Initial Fill (d)	Esti- mated Opera- tional Losses (e)	Esti- mated Recre- ation Water (f)	Estimated Total Water Require- ments
	Feather River Area	North Bay Area (b)	South Bay Area (c)	California Aqueduct			Total				
				San Joaquin Valley Area	Central Coastal Area	Southern California Area					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1967	0	0	11,538	0	0	0	11,538	8,328	1,558	0	21,424
1968	550	0	109,900	81,050	0	0	191,500	498,926	127,227	0	817,653
1969	620	0	98,700	168,075	0	0	267,395	451,623	70,967	0	789,985
1970	700	0	114,200	207,700	0	0	322,600	6,793	172,697	0	502,090
1971	890	0	116,200	258,500	0	0	375,590	159,007	196,925	9,500	741,022
1972	970	0	118,300	345,000	0	356,370	820,640	219,529	231,098	23,500	1,294,767
1973	1,100	0	120,400	390,800	0	472,400	984,700	205,930	246,012	29,500	1,466,142
1974	1,230	0	122,400	434,800	0	588,220	1,146,650	74,135	252,838	29,500	1,503,123
1975	1,610	0	124,500	480,900	0	704,250	1,311,260	30,591	253,902	29,500	1,625,253
1976	1,990	0	126,500	535,600	0	824,780	1,488,870	9,476	255,727	29,500	1,783,573
1977	2,420	0	128,600	594,100	0	942,201	1,667,321	0	251,595	29,500	1,948,416
1978	2,850	0	130,700	651,600	0	1,060,722	1,845,872	0	249,331	29,500	2,124,703
1979	3,280	0	132,700	707,700	0	1,177,873	2,021,553	0	249,134	29,500	2,300,187
1980	4,710	19,250	134,800	765,000	2,200	1,304,914	2,230,874	0	250,669	45,500	2,527,043
1981	10,390	21,750	137,000	828,500	3,300	1,425,865	2,426,805	0	248,875	45,500	2,721,180
1982	12,270	24,400	139,200	889,200	6,600	1,546,806	2,618,476	0	247,684	45,500	2,911,660
1983	14,200	27,050	141,400	955,500	9,900	1,668,557	2,816,607	0	247,545	45,500	3,109,652
1984	16,130	29,600	143,600	1,017,900	14,900	1,790,398	3,012,528	0	245,620	45,500	3,303,648
1985	19,060	32,750	145,800	1,079,100	24,800	1,912,549	3,214,059	0	245,686	45,500	3,505,245
1986	22,190	36,500	148,100	1,139,200	33,100	2,035,890	3,414,980	0	249,089	45,500	3,709,569
1987	25,370	41,250	150,300	1,201,200	41,300	2,160,241	3,619,661	0	249,880	45,500	3,915,041
1988	29,560	49,500	152,500	1,258,800	51,300	2,286,182	3,827,842	0	250,100	45,500	4,123,442
1989	33,850	58,250	156,700	1,303,100	66,100	2,411,933	4,029,933	0	248,758	45,500	4,324,191
1990	38,140	67,000	160,900	1,355,000	82,700	2,487,900	4,191,640	0	246,759	45,500	4,483,899
1991	38,180	67,000	166,400	1,355,000	82,700	2,497,500	4,206,780	0	247,719	45,500	4,499,999
1992	38,220	67,000	171,900	1,355,000	82,700	2,497,500	4,212,320	0	247,719	45,500	4,505,539
1993	38,260	67,000	177,400	1,355,000	82,700	2,497,500	4,217,860	0	247,719	45,500	4,511,079
1994	38,300	67,000	182,000	1,355,000	82,700	2,497,500	4,222,500	0	247,719	45,500	4,515,719
1995	38,350	67,000	184,000	1,355,000	82,700	2,497,500	4,224,550	0	247,719	45,500	4,517,769
1996	38,400	67,000	186,000	1,355,000	82,700	2,497,500	4,226,600	0	247,719	45,500	4,519,819
1997	38,450	67,000	188,000	1,355,000	82,700	2,497,500	4,228,650	0	247,719	45,500	4,521,869
1998	38,500	67,000	188,000	1,355,000	82,700	2,497,500	4,228,700	0	247,719	45,500	4,521,919
1999	38,550	67,000	188,000	1,355,000	82,700	2,497,500	4,228,750	0	247,719	45,500	4,521,969
2000	38,610	67,000	188,000	1,355,000	82,700	2,497,500	4,228,810	0	247,719	45,500	4,522,029
(g)											

a) See Table B-4 for annual entitlements of contracting agencies within each area. Note that annual deliveries may be more or less than entitlements and that surplus water amounts are not shown.

b) Until completion of Phase II construction between the Delta and Cordelia in 1980, the North Bay Aqueduct will deliver nonproject water from the federal Solano Project.

c) During 1962 thru 1967, the South Bay Aqueduct delivered 188,297 acre-feet of nonproject water from the federal Central Valley Project.

d) Water for initial filling of all aqueducts and reservoirs below the Delta, to bring water surfaces to operational levels.

e) Water to compensate for losses due to evaporation and seepage from facilities below the Delta.

f) Water consumed or otherwise lost due to contemplated operation of recreational development associated with project facilities.

g) And each year thereafter for remainder of project repayment period, except for slight annual increases in Feather River Area thru 2016, when all 4,230,000 acre-feet of annual entitlements will be delivered.

All 267,395 acre-feet of 1969 entitlements were available for delivery in accordance with long-term contracts. However, 74,375 acre-feet of such entitlements were not delivered for the following reasons:

- A total of 1,170 acre-feet was not delivered due to minor variations in actual demands as related to scheduling estimates for the Alameda County Flood Control and Water Conservation District (Zone 7), the Santa Clara County Flood Control and Water District, the Hacienda Water District, and the Oak Flat Water District.
- The Plumas County Flood Control and Water Conservation District was unable to accept delivery of its entitlement of 270 acre-feet since the Grizzly Valley Pipeline was not operational in 1969.
- The County of Butte was unable to accept delivery of its entitlement of 350 acre-feet since the County had not completed construction and installation of turnouts.
- Due to the considerably above-average runoff conditions in 1969, the following agencies requested to receive at a later date the following amounts of water pursuant to the so-called "wet weather" provisions included in their contracts:

Alameda County Flood Control and Water Conservation District (Zone 7).....	970 acre-feet
Alameda County Water District.....	14,687 acre-feet
Santa Clara County Flood Control and Water District.....	12,584 acre-feet
County of Kings.....	1,100 acre-feet
Empire West Side Irrigation District.....	2,944 acre-feet
Tulare Lake Basin Water Storage District..	40,300 acre-feet
Total.....	72,585 acre-feet

Because of flooding, the Hacienda Water District was unable to use project water within its service area in 1969. The District requested permission to take delivery of its 1969 entitlement on lands within the Lost Hills Water District, a member unit of the Kern County Water Agency. The Hacienda Water District obtained the necessary approvals from the Department and the Agency, and paid additional charges for conveying 1969 water through aqueduct reaches south of its permanent turnout.⁹² By this means, all but 158 acre-feet of the District's 2,400 acre-foot entitlement was delivered.

Surplus Water Service. Surplus water service in 1969 was provided under two extensions of interim contracts originally executed in 1968. The first extension covered service from January 1, 1969 through

April 30, 1969;⁹³ the second extension covered service from May 1, 1969 through December 31, 1969.⁹⁴

The Department executed contracts covering the service of 97,213 acre-feet of surplus water in 1969. Of this amount, 72,397 acre-feet was delivered. The Department is under no obligation to make the remaining 24,816 acre-feet available for delivery in future years. Generally, all requests for surplus water service were satisfied; however, the Department received far fewer requests than had been anticipated, because 1969 was an unusually wet year.

Project Water Service Plans for 1970

Article 12(a) of the long-term contracts provides that on or before October 1 of every year, each contractor must submit to the Department a monthly schedule of project water service desired for the following five years. On or before December 1 of every year, the Department provides each contractor with an approved schedule which sets forth the portions of annual entitlements to be delivered during each month of the following year.⁹⁵

In August 1969, the Department asked the contractors to submit schedules of requested future deliveries for the six-year period 1970 through 1975, instead of the five-year period prescribed by the contracts. Under power purchase contracts developed subsequent to the water supply contracts, the Department must have an estimate of water deliveries six years in advance in order to more accurately order the amount of electric power needed for pumping entitlement water. Notice was given to the contractors that the State intends to order power based on requests for deliveries of entitlements in 1975.⁹⁶ If the actual amounts of entitlement water eventually delivered in 1975 are greater than the amounts requested on about October 1, 1969, the Department may be required to purchase additional electric power at higher unit costs than power ordered six years in advance; if the amounts eventually delivered are less than the amounts requested, the Department may have made a commitment to purchase unneeded power capacity.

The amounts of project water service requested by the contractors on about October 1, 1969, for service in 1970, include about 248,800 acre-feet of entitlement water and 111,300 acre-feet of surplus water.

Entitlement Water Service. Requested and approved deliveries of 1970 entitlements are 73,800 acre-feet less than the amounts provided for by the contracts with the following agencies:

⁹⁴ See Water Service Contractors Council Memo No. 470, "Surplus Water Service for 1969," April 28, 1969.

⁹⁵ Department of Water Resources memorandum from John R. Eaton to Messrs. Herbert W. Greydanus and John R. Teerink, "Entitlement Water Delivery Schedules for 1970," November 21, 1969, approved November 24, 1969.

⁹⁶ See Water Service Contractors Council Memo No. 529, "Scheduling of Power for 1975," December 30, 1969.

TABLE 2

PROJECT WATER

(in acre-

Contracting Agency and Type of Service	Contract Amounts	Jan	Feb	Mar	Apr	May	Jun
FEATHER RIVER SERVICE AREA							
County of Butte:							
Entitlement Water	350	0	0	0	0	0	0
Last Chance Creek Water District:							
Regulated Releases Under Interim Contract	18,500	0	0	0	0	0	2,116
Plumas County Flood Control & Water Cons. District:							
Entitlement Water	270	0	0	0	0	0	0
AREA SUBTOTAL	19,120	0	0	0	0	0	2,116
NORTH BAY SERVICE AREA							
Napa County Flood Control & Water Conservation District:							
Transportation of Nonproject Water	4,070	585	548	629	191	130	67
SOUTH BAY SERVICE AREA							
Alameda County Flood Control & Water Cons. Dist., Zone 7:							
Entitlement Water	8,200	210	121	162	359	693	971
Alameda County Water District:							
Entitlement Water	15,500	813	0	0	0	0	0
Exchange Water	(a)	0	0	0	0	0	0
Santa Clara County Flood Control & Water District:							
Entitlement Water	75,000	3,562	1,261	1,134	2,459	5,217	7,085
AREA SUBTOTAL	98,700	4,585	1,382	1,296	2,818	5,910	8,056
SAN JOAQUIN VALLEY SERVICE AREA							
County of Kings:							
Entitlement Water	1,200	100	0	0	0	0	0
Devil's Den Water District:							
Entitlement Water	5,000	625	335	0	230	285	940
Surplus Water	5,000	412	332	0	196	197	781
Agency Subtotal	10,000	1,037	667	0	426	482	1,721
Dudley Ridge Water District:							
Entitlement Water	14,325	1,500	66	50	466	1,075	2,800
Surplus Water	18,525	916	0	139	419	2,283	4,055
Agency Subtotal	32,850	2,416	66	189	885	3,358	6,855
Empire West Side Irrigation District:							
Entitlement Water	3,000	56	0	0	0	0	0
Surplus Water	750	0	0	0	0	0	0
Agency Subtotal	3,750	56	0	0	0	0	0
Hacienda Water District:							
Entitlement Water	2,400	0	0	0	0	231	190
Surplus Water	1,700	0	0	0	0	0	579
Agency Subtotal	4,100	0	0	0	0	231	769
Kern County Water Agency:							
Entitlement Water	95,700	2,055	743	2,021	12,086	16,024	16,296
Surplus Water	60,387	0	0	607	0	200	6,898
Agency Subtotal	156,087	2,055	743	2,628	12,086	16,224	23,194
Oak Flat Water District:							
Entitlement Water	2,500	0	0	38	250	400	450
Surplus Water	2,500	0	0	0	190	87	159
Agency Subtotal	5,000	0	0	38	440	487	609
Tulare Lake Basin Water Storage District:							
Entitlement Water	43,950	3,650	0	0	0	0	0
Surplus Water	8,351	3,431	0	0	0	0	0
Agency Subtotal	52,301	7,081	0	0	0	0	0
AREA SUBTOTAL	265,288	12,745	1,476	2,855	13,837	20,782	33,148
ALL AGENCIES:							
Entitlement Water	267,395	12,571	2,526	3,405	15,850	23,925	28,732
Surplus Water	97,213	4,759	332	746	805	2,767	12,472
Subtotal--Project Water	364,608	17,330	2,858	4,151	16,655	26,692	41,204
Regulated Releases Under Interim Contract	18,500	0	0	0	0	0	2,116
Transportation of Nonproject Water	4,070	585	548	629	191	130	67
Exchange Water	(a)	0	0	0	0	0	0
TOTAL WATER	387,178	17,915	3,406	4,780	16,846	26,822	43,387

a) Delivered to Alameda County Water District in exchange for equal amount of agency's local runoff into Lake Del Valle, retained as initial fill.

TABLE 2

DELIVERIES IN 1969

feet)

Jul	Aug	Sep	Oct	Nov	Dec	Total	Carry-over	Contracting Agency and Type of Service
0	0	0	0	0	0	0	0	FEATHER RIVER SERVICE AREA
1,880	5,135	849	157	0	0	10,137	0	County of Butte:
0	0	0	0	0	0	0	0	Entitlement Water
1,880	5,135	849	157	0	0	10,137	0	Last Chance Creek Water District:
								Regulated Releases Under Interim Contract
								Plumas County Flood Control & Water Cons. Dist.:
								Entitlement Water
								AREA SUBTOTAL
0	0	0	0	81	456	2,687	0	NORTH BAY SERVICE AREA
								Napa County Flood Control & Water Cons. Dist.:
								Transportation of Nonproject Water
962	979	786	558	468	366	6,635	970	SOUTH BAY SERVICE AREA
0	0	0	0	0	0	813	14,687	Alameda County FC&WCD, Zone 7:
0	0	703	2,197	1,116	1,989	6,005	0	Entitlement Water
7,268	7,004	6,883	7,028	6,561	6,802	62,264	12,584	Alameda County Water District:
8,230	7,983	8,372	9,783	8,145	9,157	75,717	28,241	Entitlement Water
								Exchange Water
								Santa Clara County Flood Control & Water Dist.:
								Entitlement Water
								AREA SUBTOTAL
0	0	0	0	0	0	100	1,100	SAN JOAQUIN VALLEY SERVICE AREA
940	705	293	0	0	647	5,000	0	County of Kings:
948	1,314	0	0	54	736	4,970	0	Entitlement Water
1,888	2,019	293	0	54	1,383	9,970	0	Devil's Den Water District:
								Entitlement Water
								Surplus Water
								Agency Subtotal
3,250	3,500	698	606	75	239	14,325	0	Dudley Ridge Water District:
3,358	2,927	0	267	901	1,785	17,050	0	Entitlement Water
6,608	6,427	698	873	976	2,024	31,375	0	Surplus Water
								Agency Subtotal
0	0	0	0	0	0	56	2,944	Empire West Side Irrigation District
0	0	0	0	0	0	0	0	Entitlement Water
0	0	0	0	0	0	0	0	Surplus Water
								Agency Subtotal
1,068	655	0	0	98	0	2,242	0	Hacienda Water District:
21	0	0	0	0	0	600	0	Entitlement Water
1,089	655	0	0	98	0	2,842	0	Surplus Water
								Agency Subtotal
18,510	19,074	7,069	1,822	0	0	95,700	0	Kern County Water Agency:
14,311	9,223	3,212	3,310	3,355	4,449	45,565	0	Entitlement Water
32,821	28,297	10,281	5,132	3,355	4,449	141,265	0	Surplus Water
								Agency Subtotal
712	224	36	9	7	109	2,235	0	Oak Flat Water District:
345	0	0	0	0	0	781	0	Entitlement Water
1,057	224	36	9	7	109	3,016	0	Surplus Water
								Agency Subtotal
0	0	0	0	0	0	3,650	40,300	Tulare Lake Basin Water Storage District:
0	0	0	0	0	0	3,431	0	Entitlement Water
0	0	0	0	0	0	7,081	40,300	Surplus Water
								Agency Subtotal
43,463	37,622	11,308	6,014	4,490	7,965	195,705	44,344	AREA SUBTOTAL
32,710	32,141	15,765	10,023	7,209	8,163	193,020	72,585	ALL AGENCIES:
18,983	13,464	3,212	3,577	4,310	6,970	72,397	0	Entitlement Water
51,693	45,605	18,977	13,600	11,519	15,133	265,417	72,585	Surplus Water
1,880	5,135	849	157	0	0	10,137	0	Subtotal---Project Water
0	0	0	0	81	456	2,687	0	Regulated Releases Under Interim Contract
0	0	703	2,197	1,116	1,989	6,005	0	Transportation of Nonproject Water
								Exchange Water
53,573	50,740	20,529	15,954	12,716	17,578	284,246	72,585	TOTAL WATER

Alameda County Flood Control and Water Conservation District (Zone 7).....	500 acre-feet
Santa Clara County Flood Control and Water District.....	13,000 acre-feet
County of Kings.....	1,300 acre-feet
Tulare Lake Basin Water Storage District.....	30,300 acre-feet
Kern County Water Agency (municipal use portion).....	28,700 acre-feet
Total.....	73,800 acre-feet

Kings County and the Tulare Lake Basin Water Storage District requested reductions in 1970 deliveries because of the above-normal water supply available to the agencies locally. These requests were approved in accordance with the "wet weather" provisions of the agencies' contracts. The reduction for the Santa Clara County Flood Control and Water District was necessary because certain district facilities will not be completed in time to allow distribution of the full 1970 entitlement. The reductions for the other agencies reflect actual demands which are less than those originally estimated when the contracts were executed.

In 1970, the Hacienda Water District will again take delivery of its entitlement on lands within the Lost Hills Water District.

Surplus Water Service. Based on requests submitted to the Department on about October 1, 1969, seven agencies desire surplus water service during 1970 in the following amounts:

Alameda County Water District.....	9,200 acre-feet
Devil's Den Water District.....	5,700 acre-feet
Dudley Ridge Water District.....	15,700 acre-feet
Empire West Side Irrigation District.....	3,000 acre-feet
Hacienda Water District.....	7,500 acre-feet
Kern County Water Agency.....	67,700 acre-feet
Oak Flat Water District.....	2,500 acre-feet
Total.....	111,300 acre-feet

Results of the Department's studies indicate that, with the sources of pumping power to be available during 1970, power and energy costs (on a per acre-foot basis) for the delivery of combined requested entitlement and surplus water quantities will not exceed the power and energy costs (on a per acre-foot basis) for the delivery of requested entitlement water quantities only. As such, the Department proposes to provide surplus water service in 1970 under an additional one-year extension of 1968 surplus water contracts.

Activities concerning the realignment of the long-term surplus water program are continuing.⁹⁷ Essentially developed are language for a proposed amendment

to each long-term contract and the form of a surplus water contract. A draft of supplement to the contract with the "Suppliers",⁹⁸ which would provide a source of power specifically for pumping surplus water, has been prepared by the Suppliers and has been reviewed by the Department. An alternative draft has been prepared by the Department and is under consideration. A projection of the quantities to be available for future surplus water service was provided to the contractors in October 1969, together with an estimate of future charges for such service.⁹⁹ However, the proper allocation of power costs to surplus water has become involved in a much wider spectrum of power cost allocation considerations under the long-term contracts and under the proposed "deferred delivery" amendments to these contracts. (The "deferred delivery" amendment would replace the present "wet weather" provisions included in certain contracts so as to generally provide for the eventual delivery of all entitlement water paid for, but not received, by the contractors.) A special group of contractor and department representatives was developing data, as of the end of 1969, on which to base mutually agreeable solutions concerning power cost allocations.

Project Water Service Review

In view of the six-year projection of the amounts of project water required by the contractors, which indicated smaller quantities for some of the contractors than the entitlements provided for in the contracts, and the keen interest of Governor Reagan as expressed in his November 14, 1969 address,¹⁰⁰ the Department initiated a review of project water requirements anticipated by the contractors during the entire project development period. The purpose of this review is to enable an up-to-date appraisal of the timing of need for additional project conservation facilities to insure fulfillment of demands as they develop.

Concurrently, the Department is preparing Bulletin 160-70 of the Bulletin 160 series, "Implementation of the California Water Plan," a comprehensive statewide planning report on water supply and demand conditions throughout California. This report, to be released in the latter part of 1970, will incorporate the most up-to-date demands of the water contractors as part of the broader, longer-range projections for the entire State.

In December 1969, the Department requested each contractor to submit information on the quantity of project water requirements, both entitlement and surplus, anticipated for the years 1975, 1980, 1985, and 1990. The differences between these estimates and overall state projections will be reconciled by the De-

⁹⁸ Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas and Electric Company, and City of Los Angeles, Department of Water and Power. (See pp. 87-88, Bulletin 132-68, for a description of the "Suppliers Contract.")

⁹⁹ See Water Service Contractors Council Memo No. 503, "Quantity and Unit Charges of Surplus Water Available from the State Water Project," October 1, 1969.

¹⁰⁰ See p. 2.

⁹⁷ See p. 26, Bulletin 132-69.

partment, working in conjunction with the staffs of the contractors.

A periodic review of future demands for project water, and of the Project's ability to fulfill such demands, is specifically provided for in each of the 31 long-term contracts, as follows:

"Commencing within two (2) years from the year of initial project water delivery to the Agency, the State shall submit to the agency at not more than five-year intervals a report on the State's ability to meet future demands for project water and for supplemental water, and on the State's plans for constructing additional project conservation facilities and supplemental conservation facilities. Such reports shall include all estimates, projections, and other data which the State deems relevant thereto." [Article 16(c)]

A portion of forthcoming Bulletin 160-70 will constitute the initial report in compliance with the above general provision.

Negotiation of Contract Amendments

During 1969, 35 individual amendments were executed to long-term water contracts. In addition, 8 other amendments had been distributed as of December 31, 1969, for signature.

Amendments executed in 1969 were as follows:

- An amendment to seven contracts whereby a moratorium was declared concerning the surcharge and surcharge credit provisions on project water delivered during 1967, 1968, and 1969: County of Butte, Plumas County Flood Control and Water Conservation District, Alameda County Flood Control and Water Conservation District (Zone 7), Alameda County Water District, Santa Clara County Flood Control and Water District, Devil's Den Water District, and Empire West Side Irrigation District. (This amendment had been executed in late 1968 to contracts with six other agencies which were scheduled to receive project water through 1969: County of Kings, Dudley Ridge Water District, Hacienda Water District, Kern County Water Agency, Oak Flat Water District, and Tulare Lake Basin Water Storage District.)
- Amendment No. 2 to the contract with the Alameda County Water District and Amendment No. 3 to the contract with the Santa Clara County Flood Control and Water District whereby the Districts are authorized to construct delivery structures on the South Bay Aqueduct, subject to certain terms and conditions.
- Amendment No. 7 to the contract with The Metropolitan Water District of Southern California whereby the District (a) agrees to the trans-

fer to basic project capacity of 50 cubic feet per second of its former 238-cubic-feet-per-second excess capacity between Kettleman City and the West Branch and all of its former 809-cubic-feet-per-second excess capacity in the West Branch; and (b) agrees to prepay \$16,300,000 of its capital cost component in lieu of making advance payments for excess capacity in the West Branch and prepay an additional \$8,000,000 in the event construction of the Pyramid Power Development is to be completed prior to 1976 with funds provided by the Burns-Porter Act.

- Amendment No. 8 to the contract with The Metropolitan Water District of Southern California whereby the District would assume all obligations under the water supply contract between the State and the San Gabriel Valley Municipal Water District, subject to annexation by the District on or before December 15, 1969, of the corporate area of the San Gabriel Valley Municipal Water District in the manner required by law. (Since the proposed annexation was not approved by the voters in a special election, this amendment did not become effective.)
- An amendment to all 31 long-term contracts, executed in 1969 with the 24 agencies listed below, whereby (a) Article 22 was amended to provide for a Delta Water Charge of \$6.65 per acre-foot of entitlement for 1970, (b) Article 1 was amended to provide that the interest costs of all future funds used to supplement those of the Burns-Porter Act in the construction of project facilities will be accounted for in determining the "project interest rate", and (c) Article 17 was amended to clarify the adjustment of water charges due to supplemental financing: Plumas County Flood Control and Water Conservation District, Alameda County Flood Control and Water Conservation District, Santa Clara County Flood Control and Water District, County of Kings, Devil's Den Water District, Dudley Ridge Water District, Hacienda Water District, Kern County Water Agency, Oak Flat Water District, Tulare Lake Basin Water Storage District, San Luis Obispo County Flood Control and Water Conservation District, Antelope Valley-East Kern Water Agency, Coachella Valley County Water District, Desert Water Agency, Little Rock Creek Irrigation District, Mojave Water Agency, Palm-dale Irrigation District, San Bernardino Valley Municipal Water District, San Gabriel Valley Municipal Water District, San Geronio Pass Water District, The Metropolitan Water District of Southern California, Upper Santa Clara Valley Water Agency, Ventura County Flood Control District, and Santa Barbara County Flood Control and Water Conservation District.

As of the end of 1969, the amendment last described above was being considered by the remaining seven contracting agencies. Also under consideration was a proposed amendment to the contract with the San Geronio Pass Water Agency whereby water service to the Agency would be provided from the tailrace of Devil Canyon Powerplant, instead of the south portal of the San Bernardino Tunnel.

The amendments of Articles 22, 1, and 17 were the outcome of the proposal discussed in last year's report.¹⁰¹ This proposal was to defer inclusion of all estimated reimbursable costs of future project conservation facilities in the determination of the Delta Water Charge from the year of authorization of construction until such years when major construction costs are initially incurred by the State for the respective facilities.

On May 5, 1969, a special meeting was held with contractor representatives concerning this proposal.¹⁰² Since implementation of the proposal would decrease project revenues and increase the demands on limited project funds during the project development period, a modification of the "project interest rate" was suggested to provide a potential partially offsetting increase in project revenues. Originally, the project interest rate was established as the average interest cost on bonds sold under the Burns-Porter Act. In addition to such costs on general obligation bonds, the modified project interest rate would meld all interest costs paid by the State on loans from the General Fund, advances from water contractors, revenue bonds, and all other future funds which may be used in financing project facilities. Without this modification, the higher interest costs of future funds could increase the costs of the last aqueduct reaches or facilities to be constructed and would place an inequitable burden on those contractors to be served from such facilities. The consensus at the May 5 meeting was that the modification of the project interest rate should be combined with the proposed amendment to Article 22(e) and (g).¹⁰³

Subsequently, a modification of Article 17 was added to the proposed amendment which would insure that interest costs on moneys advanced by contractors would be credited to the accounts of those contractors.¹⁰⁴

When agreement had been substantially reached as to the language of the proposed amendment, the Director transmitted letters to the chairmen of the Senate Committee on Water Resources and the Assembly Water Committee advising them of the proposed

agreement, in accordance with SCR 157 of the 1969 Legislature.¹⁰⁵

In October 1969, the Chairman of the Assembly Water Committee notified the Director that the Committee concurred in the proposal provided that the operation of the amendment in respect to the Delta Water Charge be limited to a period of one year.¹⁰⁶

In November 1969, the Chairman of the Senate Committee on Water Resources stated that the Committee would have to have additional time beyond the 90-day limit provided for by SCR 157 to develop any meaningful comments. However, the Chairman recommended against adopting the proposed amendment.¹⁰⁷

The Director informed the Chairman of the Senate Committee on Water Resources of his belief that, for the good of the State Water Project as a whole, and after studying all the information available to him, the Department should execute amendments postponing inclusion of the Upper Eel River Development costs in the Delta Water Charge for one year and permanently changing the definition of the project interest rate to include other means of financing besides Burns-Porter Bonds.¹⁰⁸

By letters dated December 10, 1969, the Director distributed the proposed amendments for signature. Since only a one-year deferral was proposed, an amendment of Article 22(b), which establishes the Delta Water Charge for 1970 at \$6.65 per acre-foot, was substituted for the amendment of Articles 22(e) and 22(g).¹⁰⁹

Negotiation of Settlements Re Water Charges

During 1969, a task force of representatives of the Department, the State Water Contractors Audit Committee, and The Metropolitan Water District of Southern California continued to meet to discuss and analyze questions raised concerning the calculation of water charges under long-term contracts.

After long and difficult negotiations, contractor representatives of the task force, having been unable to reach unanimous agreement, requested the Department to determine the proper methods of allocating the costs of San Luis Reservoir and Reaches 1 through 7 of the California Aqueduct between the purposes of water transportation and water conservation. Accordingly, after consideration of all of the recom-

¹⁰¹ See pp. 26-27, Bulletin 132-69.

¹⁰² See Water Service Contractors Council Memo No. 466, "Effect of Proposed Contract Amendments," April 21, 1969.

¹⁰³ See Water Service Contractors Council Memo No. 478, "Amendment to Article 22(e) and (g) and 1(r) of the Water Supply Contracts," June 6, 1969.

¹⁰⁴ See Water Service Contractors Council Memo No. 482, "Amendment to Water Supply Contract Articles 22(e), 22(g), 1(r), and 17(f)," June 24, 1969.

¹⁰⁵ Letters from W. R. Gianelli to Honorable Gordon Cologne, Chairman, Senate Committee on Water Resources and to Honorable Carley V. Porter, Chairman of Assembly Water Committee, August 26, 1969. (See p. 1 for a description of SCR 157.)

¹⁰⁶ Letter from Carley V. Porter to Mr. William R. Gianelli, October 23, 1969.

¹⁰⁷ Letter from Gordon Cologne to Mr. William R. Gianelli, November 13, 1969.

¹⁰⁸ Letter from W. R. Gianelli to Honorable Gordon Cologne, December 2, 1969.

¹⁰⁹ See p. 238, Bulletin 132-69, for a derivation of the \$6.65 per acre-foot charge exclusive of Eel River development costs.

mendations and proposals of the water contractors, submitted at the Director's request,¹¹⁰ the Department made its determination and adopted the methods for allocating the costs of such facilities. These methods were set forth in letters sent to the contractors on March 25, 1969, for their concurrence, and were described in last year's bulletin.¹¹¹

During 1969, agreement was reached among the task force representatives on a proposed settlement covering protested planning costs for the years 1961 through 1966. The legislative water committees were advised of the proposed settlement in accordance with SCR 157.¹¹² The Assembly Water Committee approved the settlement.¹¹³ The Senate Committee on Water Resources did not comment on the proposal within the specified 90-day period. Settlement letters covering this proposal will be sent to the contracting agencies for signing in 1970.

Agreement also was reached among the task force representatives on a proposed settlement covering protested planning costs for the year 1967. The legislative water committees had not, as yet, been advised of this proposed settlement at the end of 1969.

The task force continued its studies, initiated in 1968, concerning distributions of (a) "direct operating costs" between the "minimum" and "variable" categories and (b) "general operating costs" among project facilities and aqueduct reaches.

Agreement concerning the distribution of direct operating costs between the minimum and variable categories has become contingent on agreement concerning the method of allocating pumping power costs among contractors. (Completion of negotiations regarding the realignment of the surplus water program also has become contingent on power cost allocations.)¹¹⁴ A Technical Subcommittee on Power Costs was established in November by the task force to develop data on which solutions can be based.

Certain studies regarding distributions of those "general operating costs" as heretofore classified by the Department have been completed by the Technical Accounting Subcommittee of the task force. Recommendations made by the Subcommittee through 1969 are accounted for in the data and computations used in determining water charges for 1971 and are set forth in Appendix B in the section entitled "Refinement Re Allocation of 'General Operating Costs'".¹¹⁵

¹¹⁰ See Water Service Contractors Council Memo No. 447, "Allocation of Costs of Reaches 1 through 7 of the California Aqueduct and San Luis Reservoir between the Purposes of Transportation and Conservation," January 29, 1969.

¹¹¹ Letters from W. R. Gianelli to the responsible officer of each contracting agency. (See pp. 107-108, Bulletin 132-69, for a description of the Department's determination.)

¹¹² Letters from W. R. Gianelli to Honorable Gordon Cologne and to Honorable Carley V. Porter, August 25, 1969.

¹¹³ Letter from Carley V. Porter to Mr. William R. Gianelli, October 23, 1969.

¹¹⁴ See p. 26.

¹¹⁵ See p. 111.

(The Subcommittee is continuing to audit the specific bases for distributing "direct operating costs" of miscellaneous individual programs formerly classified as "general operating costs".) Those allocation methods, guidelines, and specific bases are adopted by the Department for purposes of determining water charges. Any future extensions to be granted by the Department concerning the time for filing notices of contest concerning water charges will *not* include the manner of handling those heretofore classified "general operating costs" as set forth in the above referred-to section of Appendix B.

In November 1968, the time for filing notices of contest concerning water charges under the contracts had been extended until December 21, 1969, except those charges covered by three settlement letters, the time for protest of which terminated on March 1, 1968.¹¹⁶

There are many issues regarding the calculation of water charges which remain to be resolved. Therefore, the contractors were notified that they shall have until December 21, 1970, to file notices of contest and to pursue all remedies available to them on statements of charges submitted prior to that date—excepting charges covered by the three settlement letters and the "Reaches 1 through 7" concurrence letter sent to all contractors on March 25, 1969, covering the allocation of costs of Reaches 1 through 7 of the California Aqueduct and San Luis Reservoir between the purposes of water transportation and water conservation.¹¹⁷ The contractors were also notified that protests concerning the general methods specified in these four letters are precluded, but that notices of contest need not be filed as to any inaccuracies claimed by any contractor to exist with reference to the Reaches 1 through 7 concurrence letter in the statement of 1970 charges.¹¹⁸

The "prior capital costs" settlement letter covering certain capital costs incurred prior to December 31, 1960, included the following provision:

"The Department will contest before the State Board of Control the propriety of charges to constitutionally restrict bond proceeds for costs of the Legislature charges to the Burns-Porter Act funds as part of the State pro rata costs"

The Attorney General did not accept the Department's arguments before the State Board of Control and by an opinion, June 6, 1969, held that the pro

¹¹⁶ See p. 27, Bulletin 132-69.

¹¹⁷ See Water Service Contractors Council Memo No. 520, "Extension of Time for Contest of Statements," November 28, 1969.

¹¹⁸ See Water Service Contractors Council Memo No. 527, "Extension of Time for Contest of Statements," December 22, 1969.

rata legislative costs are proper construction costs payable from proceeds of bonds sold under the Burns-Porter Act.¹¹⁹ This decision will increase project costs by approximately \$1.5 million immediately (including allocated legislative costs for 1965-66, 1966-67, 1967-68, and 1968-69) and will result in additional future project costs of about \$0.5 million annually.

Relative to payments of charges, the contracting agencies were notified that a payment will be considered as "received by the State" when the check by which such payment is made is received in the Department's Sacramento office or when the amount of payment is deposited to the account of the State Treasurer in Sacramento, whichever occurs first.¹²⁰ In accordance with Article 32(b) of the contracts, if a payment is "received by the State" later than the 30th day after the due date (Saturdays, Sundays, or State Holidays excluded), penalty interest at the rate of one-half of one percent a month will be charged from the due date to the date of receipt.

To reduce the magnitude of costs protested by the contractors, the Department, in conjunction with the California Water Commission, has established an annual budget review as a regular procedure by which the Department's project expenditure proposals can be formally presented to the water contractors.¹²¹

As a follow-up to meetings held with contractor representatives in August and September 1968, the Department prepared and distributed an independent evaluation of comments by the State Water Contractors Audit Committee concerning the proposed 1969-70 project budget.¹²² Also, at the Director's suggestion made during the 1969-70 budget review, the Audit Committee formed an Operations and Maintenance task force. The task force, together with representatives of The Metropolitan Water District of Southern California, meets about every two months with the Department's staff to become familiar with the details of project operations and maintenance activities and to make suggestions regarding these activities.

Review of the Department's proposed 1970-71 project budget was initiated earlier in the year than for previous budgets to afford contractor representatives an opportunity to present their views before the California Water Commission well in advance of the deadline for proposals to be included in the Governor's

Budget. Preliminary program statements and other data were mailed the first week of July 1969 to the California Water Commission, State Water Contractors Audit Committee, and The Metropolitan Water District of Southern California. On July 24, 1969, the Department's top Management briefed the contractor representatives and the Budget Committee of the California Water Commission on the proposed budget.¹²³ State Water Contractors Audit Committee members met with the Department's staff and the Commission's staff on August 13, 1969, to develop details as to the Audit Committee's comments. These comments were submitted to the California Water Commission's Budget Committee for review. The Budget Committee in turn reviewed these comments with the Commission's staff and with members of the Audit Committee on September 5, 1969, and prepared a report which was presented to the Commission at its September 12, 1969 meeting. At that time, the Audit Committee presented its complete comments to the Commission.¹²⁴ The Metropolitan Water District of Southern California separately presented a letter to the Commission outlining their comments on the Department's proposed 1970-71 project budget.¹²⁵

At its October 3, 1969 meeting, the California Water Commission completed its consideration of the 1970-71 project budget and its evaluation of the contractors' comments on that budget.¹²⁶ The Commission's evaluation of the review procedure initiated in 1969 included the following points:

- The contractor representatives have expressed the view that the Department's willingness to listen with an open mind has been productive.
- The Department's staff is pleased that this year's effort resulted in fewer areas of disagreement and less criticism of the budget.
- The Commission members feel that the forum made available to the contractors played a part in this year's amiable relations; that timing restrictions precluded any real in-depth study, but that this did not appear to detract from the value of such a forum.
- The Commission's staff believes that the forum is valuable for the contractors and that the review procedure should be continued.

¹¹⁹ Opinion of Thomas C. Lynch, Attorney General, Paul M. Joseph, Deputy Attorney General, No. 69/92, June 6, 1969. (See Water Service Contractors Council Memo No. 485, "Decision on Liability of State Water Project for Pro Rata Charge of Legislative Costs," July 10, 1969.)

¹²⁰ See Water Service Contractors Council Memo No. 508, "Late Payments and Penalty Interest Under the Water Supply Contract," October 15, 1969.

¹²¹ See pp. 27-28, Bulletin 132-69.

¹²² Letters from the Director to Mr. Robert H. Born, Chairman, State Water Contractors Audit Committee and to Mr. Max Bookman, April 28, 1969, transmitting "Report on Water Service Contractors' Comments on 1969-70 Budget for State Water Project." (See Water Service Contractors Council Memos No. 457, "1969-70 Budget," March 5, 1969, and No. 460, "1969-70 Budget," March 25, 1969, for a copy of the Department of Water Resources Section of Governor's 1969-70 Budget.)

¹²³ See Water Service Contractors Council Memo No. 483, "Review of the 1970-71 Budget," June 30, 1969.

¹²⁴ "Statement on the Proposed 1970-71 State Water Project Budget Before the California Water Commission," September 12, 1969, presented by Robert H. Born, Chairman, State Water Contractors Audit Committee.

¹²⁵ Letter to Mr. Ira J. Chrisman, Chairman, California Water Commission from Mr. Henry J. Mills, General Manager, The Metropolitan Water District of Southern California, September 11, 1969.

¹²⁶ California Water Commission memorandum to Mr. W. R. Gianelli from R. Dean Thompson, "Commission Comments, State Water Project Budget Fiscal Year 1970-71," October 17, 1969.

Implementation of Additional Service

By the end of 1969, the following additional aqueduct reaches were ready to deliver project water:¹²⁷

- The Del Valle Branch of the South Bay Aqueduct, including Del Valle Dam, Branch Pipeline, and Pumping Plant and Lake Del Valle.
- The California Aqueduct between Seventh Standard Road and Buena Vista Pumping Plant.

Under Article 29(c) of the water supply contracts, all future reimbursable minimum operating costs incurred for the above reaches will be recovered annually through contractor payments of the minimum operation, maintenance, power, and replacement component, rather than recovered over an amortization period through payments of the capital cost component.

The contractors provide funds for financing the construction costs of delivery structures (turnouts) and of distribution systems required to convey water from project facilities to retail agencies or individual users within their respective boundaries. Contractors generally are experiencing financial problems similar to those of the Project with respect to prevailing high interest costs on borrowed capital.

During 1969, legislation was enacted to increase the statutory interest rate ceilings on bond sales for several of the contractors, including the Crestline-Lake Arrowhead Water Agency (Chapter 109), Santa Barbara Flood Control and Water Conservation District (Chapter 258), and Antelope Valley-East Kern Water Agency (Chapter 449).

In last year's bulletin, a 1968 Act was noted whereby the Department is authorized to enter into loan commitment contracts with specified agencies in the San Joaquin Valley to assist them in marketing general obligation bonds for financing construction of works necessary for project water use.¹²⁸ Under this authorization, a loan commitment will be considered for each agency only after the agency has proceeded to market general obligation bonds and has received no bids on the bond issue.

During 1969, the Department did not receive any applications from the designated agencies for loan commitments. Apparently, the requirement for an initial attempt to market bonds and the adverse effect such an attempt would have on the agency's credit outweighs benefits from possible loan commitments under the program. At the end of 1969, the Department was developing proposed legislation which would make the program more useful and beneficial.

¹²⁷ Department of Water Resources memorandum from Herbert W. Greydanus to Messrs. John R. Teerink, Alfred R. Golzé, Porter A. Townner, and William R. Gianelli, "Declaration of Aqueduct Reaches," December 30, 1969.

¹²⁸ See pp. 28-29, Bulletin 132-69.

Power Contracts Management

Negotiation of the following contracts and agreements was completed during 1969:

- An agreement with the California Companies whereby July 20, 1969 was established as "full operation date" for purposes of the Oroville-Thermalito Power Sale Contract.
- A letter agreement with the California Companies whereby the Companies purchased dependable Oroville power capacity prior to "full operation date".
- A letter agreement with the California Companies whereby additional flood control storage space was maintained during 1969 in Lake Oroville, thereby avoiding the release of excessive snowmelt at high flow rates.
- Contracts with Pacific Gas and Electric Company to provide for meter testing service and for setting the supplemental excitation control equipment on the Hyatt Powerplant Units.
- Approximately 40 contracts with California utilities to provide for electric service to project works, such as aqueduct checks, turnouts, drainage pumps, construction headquarters, and cathodic corrosion protection installations.

As of December 31, 1969, negotiations were in progress on the following:

- A supplement to the Suppliers Contract to provide power specifically for pumping surplus water.
- A letter agreement to modify and supplement the Oroville-Thermalito Power Sale Contract concerning the amount of banked energy and the effect of Feather River flow limitations on energy generation.
- Amendment No. 2 to the Contract for Cooperative Development of the West Branch (Castaic Power Complex) with the City of Los Angeles to provide for advancing the date of specified payments to the Department.
- An agreement with the City of Los Angeles and the Southern California Edison Company to provide for cooperative development of a Pyramid Power Complex on the West Branch.

Increasing amounts of electric energy will be required each year through 1991 by aqueduct pumping plants in order to deliver the amounts of water provided for by long-term contracts. Part of the energy will be available from recovery generation by aqueduct powerplants. Table 3 presents the estimated annual amounts of energy required by each pumping plant and generated by each powerplant. Data for the 1962 through 1969 period are actual amounts. The

TABLE 3

ANNUAL PROJECT ENERGY

(in millions f

Cal- endar Year	Energy Requirements										
	North Bay Aqueduct Pumping Plants		Periph- eral Canal Pumping Plant	South Bay Aque- duct Pumping Plants (b)	California Aqueduct Pumping Plants						
					Delta	San Luis	Dos Amigos	Buena Vista	Wheeler Ridge	Wind Gap	A. D. Edmon- ston
	Calhoun and Travis	Cor- delia (a)									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1962	0	0	0	7	0	0	0	0	0	0	0
1963	0	0	0	10	0	0	0	0	0	0	0
1964	0	0	0	19	0	0	0	0	0	0	0
1965	0	0	0	28	0	0	0	0	0	0	0
1966	0	0	0	46	0	0	0	0	0	0	0
1967	0	0	0	48	7	0	0	0	0	0	0
1968	0	1	0	83	293	148	34	0	0	0	0
1969	0	1	0	46	228	180	16	0	0	0	0
1970	0	2	0	107	166	68	51	9	5	8	0
1971	0	3	0	106	218	24	78	59	59	122	413
1972	0	3	0	108	348	31	145	149	154	320	1,150
1973	0	3	0	110	425	41	183	201	215	455	1,649
1974	0	3	0	112	390	31	169	167	176	371	1,340
1975	0	4	0	114	429	86	182	183	191	402	1,456
1976	0	6	14	109	546	107	234	265	282	624	2,311
1977	0	6	15	111	587	140	252	286	303	670	2,481
1978	0	7	14	112	661	139	285	331	353	783	2,897
1979	0	8	18	113	711	156	309	362	385	857	3,161
1980	1	10	18	116	769	184	339	397	423	943	3,470
1981	2	11	28	117	822	203	363	426	453	1,010	3,714
1982	2	11	30	119	886	209	389	460	489	1,091	4,006
1983	2	12	32	121	961	216	426	511	544	1,214	4,460
1984	2	13	36	123	981	216	439	521	553	1,233	4,517
1985	2	14	39	124	1,070	225	476	570	606	1,353	4,959
1986	2	15	49	126	1,097	189	493	586	621	1,387	5,075
1987	2	16	43	128	1,144	77	526	630	668	1,491	5,455
1988	3	17	43	130	1,216	83	563	683	725	1,620	5,928
1989	3	18	45	133	1,275	115	585	709	753	1,681	6,151
1990	3	19	46	136	1,319	151	602	725	769	1,716	6,272
1991 (c)	3	19	48	140	1,335	153	610	737	783	1,749	6,395

- a) During 1968 thru 1979, an interim pumping plant will pump from the federal Solano Project terminal reservoir.
- b) Includes South Bay and Del Valle Pumping Plants and, during 1962 thru 1967, an interim pumping plant, which pumped a supply provided by the federal Delta-Mendota Canal.
- c) And each year thereafter for remainder of project repayment period.

TABLE 3

REQUIREMENTS FOR PUMPING

kilowatt-hours)

Energy Requirements					Energy Generation					Net Energy Require- ments	Cal- endar Year
California Aqueduct Pumping Plants					California Aqueduct Powerplants						
Pear- blossom	Oso	Las Per- illas and Badger Hill	Devil's Den, Saw- tooth, and Polonio	Total	San Luis	Devil Canyon	Castaic (d	San Luis Obispo	Total	Col (16) minus Col (21)	
(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	
0	0	0	0	7	0	0	0	0	0	7	
0	0	0	0	10	0	0	0	0	0	10	
0	0	0	0	19	0	0	0	0	0	19	
0	0	0	0	28	0	0	0	0	0	28	
0	0	0	0	46	0	0	0	0	0	46	
0	0	0	0	55	0	0	0	0	0	55	
0	0	22	0	581	12	0	0	0	12	569	
0	0	17	0	488	3	0	0	0	3	485	
0	0	24	0	440	33	0	0	0	33	407	
13	43	12	0	1,150	4	0	103	0	107	1,043	
103	87	13	0	2,611	9	61	217	0	287	2,324	
173	117	15	0	3,587	17	261	255	0	533	3,054	
113	103	19	0	2,994	19	145	276	0	440	2,554	
150	101	21	0	3,319	48	220	338	0	606	2,713	
218	166	23	0	4,905	27	280	562	0	869	4,036	
232	178	25	0	5,286	50	298	605	0	953	4,333	
266	211	26	0	6,085	70	347	718	0	1,135	4,950	
298	227	27	0	6,632	116	394	774	0	1,284	5,348	
319	252	30	11	7,282	132	415	861	1	1,409	5,873	
341	270	31	14	7,805	137	444	923	2	1,506	6,299	
373	290	33	21	8,409	147	503	988	4	1,642	6,767	
444	313	35	28	9,319	161	605	1,068	5	1,839	7,480	
482	304	38	38	9,496	166	641	1,035	8	1,850	7,646	
551	327	41	60	10,417	170	738	1,114	13	2,035	8,382	
562	334	45	78	10,659	0	765	1,138	17	1,920	8,739	
566	374	48	95	11,263	42	793	1,270	21	2,126	9,137	
603	412	51	117	12,194	76	808	1,394	26	2,304	9,890	
607	434	56	149	12,714	97	810	1,464	33	2,404	10,310	
619	441	61	184	13,063	119	812	1,487	42	2,460	10,603	
681	431	61	184	13,329	153	844	1,454	42	2,493	10,836	
										(c	

- d) The City of Los Angeles Department of Water and Power will construct and operate a 1,250,000-kilowatt Castaic Powerplant and will supply the Project with electric power and energy equivalent to the generation from a 213,984-kilowatt powerplant the State originally had planned to construct.

energy quantities for the 1970–1975 period are based on the water delivery schedules submitted by the water contractors on about October 1, 1969. Beginning in 1976, the energy amounts correspond to the delivery of the annual entitlements provided for in long-term contracts. Estimated annual energy requirements for the years 1970 through 1991 are also shown graphically on Figure 3, together with the portions required during onpeak and offpeak periods, respectively.

Ultimately, about 13 billion kilowatt-hours of energy will be required annually by aqueduct pumping plants, of which slightly less than 20 percent will be supplied by recovery generation. At the present time, the lowest-cost purchased energy is available from the “Suppliers”, for use during offpeak periods.¹²⁹ Purchased energy utilized during onpeak periods, in addition to an energy cost, is also charged for in proportion to the amount of capacity or rate at which the energy is utilized. The lowest cost of onpeak capacity under present conditions is Canadian Entitlement power from the Pacific Northwest. The amount of purchased onpeak capacity may be minimized by doing as much as possible of the pumping during offpeak periods, consistent with the delivery

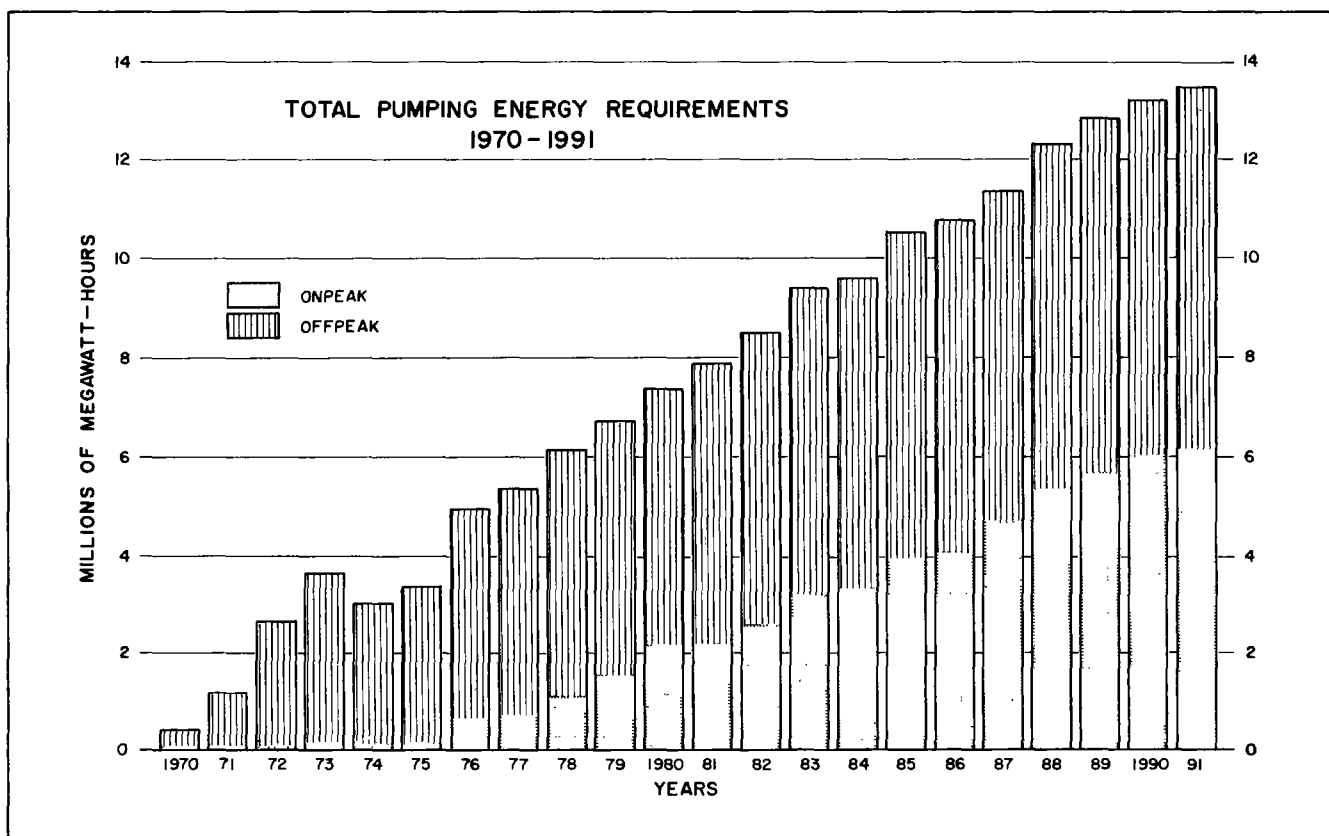
¹²⁹ See pp. 12–13, Bulletin 132–67.

requirements of the water contractors and the hydraulic limitations of pumping plants and aqueduct.

Purchase of onpeak capacity also may be minimized by accomplishing most of the recovery generation during the onpeak periods. Such onpeak operation is possible at the Devil Canyon Powerplant, in conjunction with regulatory storage capacity in Silverwood Lake, and at San Luis Pumping-Generating Plant, in conjunction with regulatory storage capacity in San Luis Reservoir. Under the terms of the Contract for Cooperative Power Development, West Branch, the State is entitled to receive from the City of Los Angeles, Department of Water and Power, power and revenue equivalent to the value of that power which would have been generated at the State’s originally planned Castaic Powerplant. Such power will be available to the State from the City on a continuous basis, rather than on an onpeak basis.

In addition to Canadian Entitlement power, onpeak capacity and energy are available from the Suppliers. Capacity and energy costs from these sources have been established through March 31, 1983. Beginning on April 1, 1983, Canadian Entitlement power will no longer be available and revised rates will be in effect for Suppliers power. Continuing studies of alternative sources of power are necessary to obtain the lowest possible costs for project power in the future.

FIGURE 3



CHAPTER IV. PROJECT OPERATIONS

The State Water Project passed its second major operational test in as many years. Whereas the 1968 water year was one of the five driest in the Central Valley during the past 30 years, the 1969 water year was one of the five wettest of record. For example, runoff from the Kern River in the southern San Joaquin Valley, fed by a record snowpack, was about 375 percent of normal.

The Project's water "bank accounts" are in excellent condition should 1970 be an unusually dry year. Storage in project reservoirs was nearly filled to capacity in 1969.

Lake Oroville and San Luis Reservoir were substantially filled in mid-1969 for the first time. Other operational highlights during 1969 included the following:

- In January, Oroville Dam again successfully handled heavy and sustained rainfall that created a peak inflow of more than 143,000 cubic feet per second. Flood control operations of Lake Oroville significantly reduced the rate of outflow and prevented an estimated \$600,000 of flood damage downstream.
- A unique "backward flow" operation of the California Aqueduct conserved 90,119 acre-feet of Kern River flood flow to Tulare Lake and conveyed it north, through the Aqueduct, for use by the Project's water contractors.¹³⁰
- All requests for water from the Project were satisfied, though these requests were significantly less than originally contemplated because of above-average water conditions: 284,246 acre-feet were delivered to water contractors in the Counties of Plumas, Napa, Santa Clara, Alameda, Stanislaus, Kings, Kern, and Tulare.
- Recreation areas at project lakes received 1,554,800 recreation days of use in 1969, and provided sightseeing for additional hundreds of thousands of Californians and their vacationing guests.
- Project powerplants; Edward Hyatt, Thermalito, and San Luis (state share); generated over 2,614,000,000 kilowatt-hours of electric energy.

Operations and Maintenance Field Divisions

Responsibility for operations and maintenance of State Water Project facilities is divided among the following established field divisions:

- Oroville Field Division—from the northern extremities of the Project south to Hood, on the Sacramento River, immediately upstream from the proposed intake to the Peripheral Canal.
- Delta Field Division—from Hood on the north, through the Delta area, to O'Neill Forebay of the California Aqueduct on the south, including the North and South Bay Aqueducts and the proposed Peripheral Canal.
- San Luis Field Division—from O'Neill Forebay to Kettleman City, including San Luis Dam and Reservoir.
- San Joaquin Field Division—from Kettleman City to the intake to Tehachapi Tunnel No. 1, including the Coastal Branch.
- Southern Field Division—from the intake to Tehachapi Tunnel No. 1 to the southern extremities of the Project.

Figure 4 shows the areal extent of and the major features in each field division. The following sections summarize the operations during 1969 of features included in each field division.¹³¹ Water operations during each month of 1969 are summarized for the three Upper Feather River lakes in Table 4; for the Oroville-Thermalito Facilities in Table 5; and for the North Bay, South Bay and California Aqueducts in Table 6. Monthly power operations for 1969 are summarized in Table 7.

Oroville Field Division

The following facilities were operational in 1969:

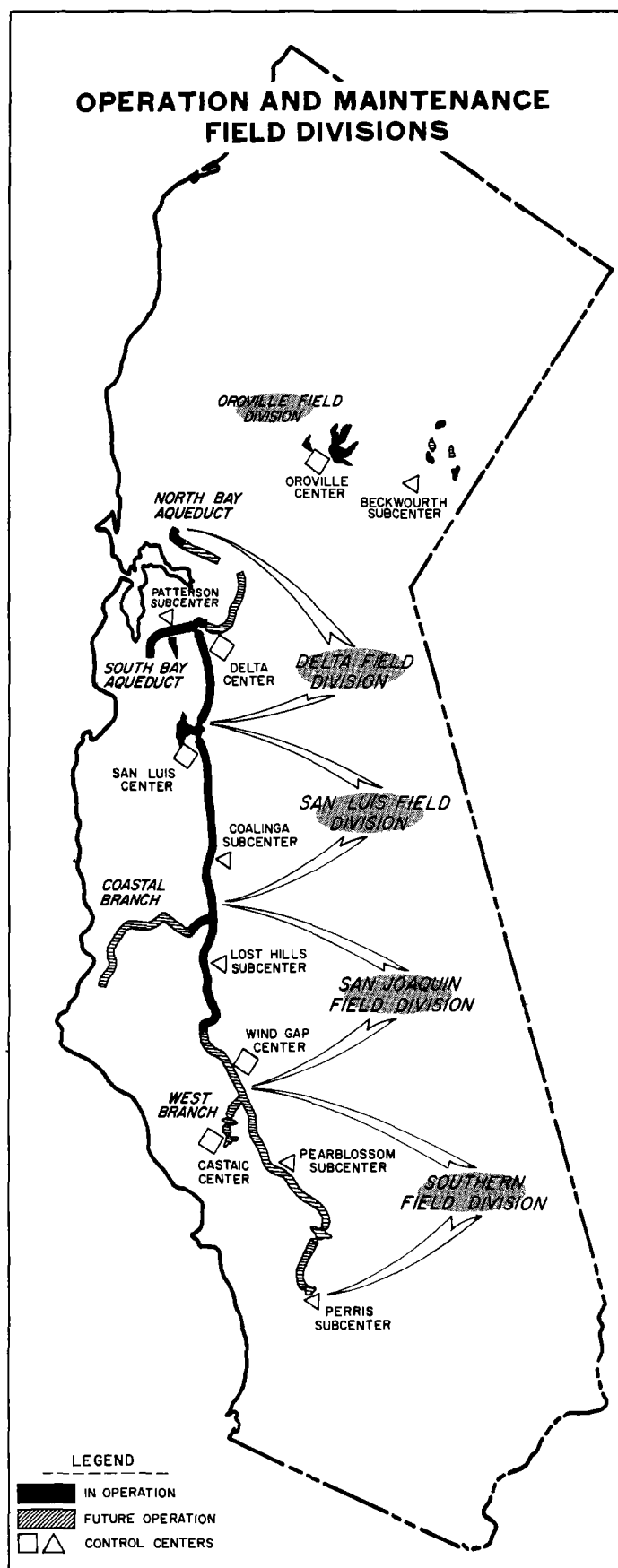
- Frenchman Dam and Lake.
- Antelope Dam and Lake.
- Grizzly Valley Dam and Lake Davis.
- Oroville Dam and Lake Oroville.
- Edward Hyatt Powerplant.
- Thermalito Facilities.
- Feather River Fish Barrier Dam and Hatchery.

All facilities of the Oroville Field Division are operated by the Department of Water Resources except the Feather River Fish Hatchery, which is operated by the Department of Fish and Game; the Upper Feather River lakes, which are operated by the United States Forest Service; and recreation developments associated with the Oroville Facilities, which are operated by the Department of Parks and Recreation.

¹³⁰ See Water Service Contractors Council Memo No. 463, "Kern River Flood Waters to Supply California Aqueduct," April 4, 1969.

¹³¹ Publication of monthly progress reports on project operations and maintenance, exclusive of revenue and expenditure data, was resumed commencing with the October 1968 issue. These reports are distributed each month by Water Service Contractors Council Memo.

FIGURE 4



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

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

Lake Davis, with a gross storage capacity of 84,371 acre-feet, is operated to enhance recreational opportunities in both the vicinity of the Lake and along the downstream channel of Big Grizzly Creek, and will supply water to the Plumas County Flood Control and Water Conservation District for municipal and industrial use.

Lake Oroville, with a gross storage capacity of 3,537,577 acre-feet, is operated for water supply, power generation, flood control, recreation, and fishery and wildlife habitat enhancement.

Edward Hyatt Powerplant, with six generators (three reversible for pumpback operation), has an installed power generation capacity (name plate rating) of 644,250 kilowatts.

The primary mission of the Thermalito Facilities is to regulate releases from Edward Hyatt Powerplant, including storage of onpeak releases for pumpback offpeak. In addition, the Facilities supplement the power generation of Edward Hyatt Powerplant and enhance recreational opportunities near the City of Oroville. Water deliveries are also made directly from the Facilities, primarily to replace diversions from the Feather River that were severed by project construction.

Thermalito Diversion Dam forms a pool of 13,328 acre-feet gross capacity on the Feather River immediately downstream from the tailrace of Edward Hyatt Powerplant. Thermalito Forebay, located offstream about four miles west of the Diversion Dam, has a gross capacity of 11,768 acre-feet. Water released from Lake Oroville is diverted by the Diversion Dam through Thermalito Power Canal into Thermalito Forebay, from which it is released through Thermalito Powerplant into Thermalito Afterbay. Releases are also made through the Diversion Dam directly into the Feather River to maintain flows for fish preservation and water right entitlements.

Thermalito Powerplant, with four generators (three reversible for pumpback operation), has an installed power generation capacity (name plate rating) of 115,100 kilowatts.

From Thermalito Afterbay, with a gross storage capacity of 57,041 acre-feet, water may be pumped back into Lake Oroville through Thermalito and Edward Hyatt Powerplants; released to the Feather River Channel; or diverted directly to the Sutter Butte Canal, P.G. & E. Lateral, Richvale Canal, and Western Canal.

UPPER FEATHER DIVISION MONTHLY WATER OPERATIONS IN 1969

(in acre-feet unless otherwise indicated)

Month	Reservoir Storage			Outflow					
	Water Surface Elevation (in feet)	End-of-Month Storage	Monthly Storage Change	Regulated Releases			Spill	Estimated Evapo-ration and Seepage	Total Gross Outflow
				Stream Flow Main-tenance (a)	Water Right Entitle-ment (b)	Total			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FRENCHMAN LAKE									
January	5,582.19	46,767	5,689	123	0	123	0	94	217
February	5,583.87	49,192	2,425	126	0	126	0	101	227
March	5,585.63	51,812	2,620	2,543	0	2,543	0	177	2,720
April	5,589.48	57,847	6,035	1,265	0	1,265	12,470	321	14,056
May	5,588.69	56,574	- 1,283	21	0	21	13,555	323	13,899
June	5,588.06(c)	55,571(c)	- 1,003	40	2,116	2,156	853	603	3,612
July	5,586.54	53,200	- 2,371	0	1,880	1,880	1(c)	1,017	2,898
August	5,582.40	47,006	- 6,134	0	5,135	5,135	0	1,037	6,172
September	5,581.40	45,652	- 1,414	0	849	849	0	692	1,541
October	5,581.30	45,512	- 140	61	157	218	0	336	554
November	5,581.31	45,526	14	119	0	119	0	224	343
December	5,582.10	46,639	1,113	123	0	123	0	155	278
Total			5,551	4,421	10,137	14,558	26,879	5,080	46,517
ANTELOPE LAKE									
January	5,002.68	23,204	3,499	615	0	615	1,525	63	2,203
February	5,002.43	22,968	- 236	555	0	555	2,676	75	3,306
March	5,003.34	23,833	865	615	0	615	3,158	113	3,886
April	5,003.69	24,170	337	427	0	427	17,960	192	18,579
May	5,002.99	23,498	- 672	0	0	0	22,538	154	22,692
June	5,002.39	22,931	- 567	387	0	387	5,823	274	6,484
July	5,001.99	22,557	- 374	523	87	610	782	430	1,822
August	5,001.23	21,855	- 702	288	327	615	0	491	1,106
September	5,000.47	21,166	- 689	341	254	595	0	348	943
October	5,000.35	21,058	- 108	290	325	615	0	179	794
November	5,000.32	21,031	- 27	595	0	595	0	144	739
December	5,001.95	22,519	1,488	615	0	615	0	100	715
Total			2,814	5,251	993	6,244	54,462	2,563	63,269
LAKE DAVIS									
January	5,770.87	68,619	10,666	246	0	246	0	236	482
February	5,772.03	72,867	4,248	222	0	222	0	257	479
March	5,772.78	75,686	2,819	613	0	613	0	449	1,062
April	5,776.39	90,056	14,370	2,358	0	2,358	1,476	797	4,631
May	5,776.38	90,015	- 41	0	0	0	12,383	837	13,220
June	5,775.52	86,477	- 3,538	0	0	0	4,941	1,563	6,504
July	5,774.32(c)	81,657	- 4,820	2,329	91	2,420	395	2,620	5,435
August	5,773.48	78,370	- 3,287	635	321	956	0	2,739	3,695
September	5,773.06	76,754	- 1,616	10	8	18	0	1,887	1,905
October	5,772.67	75,269	- 1,485	1,283	0	1,283	0	910	2,193
November	5,772.52	74,702	- 567	428	8	436	0	605	1,041
December	5,773.29	77,637	2,935	492	0	492	0	417	909
Total			19,684	8,616	428	9,044	19,195	13,317	41,556

a) Required specifically to maintain fish and wildlife habitats.

b) Includes new water delivered to the Last Chance Creek Water District under interim contract.

c) Estimated data.

TABLE 5

OROVILLE DIVISION MONTHLY

(in acre-feet unless

Operation	Month					
	January	February	March	April	May	June
LAKE OROVILLE						
Reservoir Storage						
Water Surface Elevation (feet)	848.27	846.12	859.54	864.94	886.90	897.08
End-of-Month Storage	2,785,211	2,756,643	2,938,367	3,013,816	3,334,831	3,491,642
Monthly Storage Change	719,101	- 28,568	181,724	75,449	321,015	156,811
Released						
Palermo Canal	210	49	37	195	1,210	1,408
EDWARD HYATT POWERPLANT						
Water Released Thru Plant for:						
Generation	208,729	266,771	330,837	371,491	564,371	213,358
Pumpback	573	2,451	43,391	11,694	1,384	1,106
Net	208,156	264,320	287,446	359,797	562,987	212,252
THERMALITO DIVERSION DAM POOL						
Reservoir Storage						
Water Surface Elevation (feet)	222.74	221.56	223.33	225.16	224.34	223.80
End-of-Month Storage	12,607	12,239	12,793	13,380	13,115	12,943
Monthly Storage Change	- 139	- 368	554	587	- 265	- 172
FISH BARRIER DAM AND FISH HATCHERY						
Released to River						
Fish Barrier Dam	463,200	164,700	42,260	84,280	21,090	22,490
Hatchery (a)	3,074	2,777	3,074	2,975	2,731	1,785
THERMALITO FOREBAY AND POWER CANAL						
Released From Canal						
Thermalito Irrigation District	0	0	0	0	0	0
California Water Service	0	0	0	0	0	0
Storage						
Water Surface Elevation (feet)	220.83	221.25	223	224.19	223.77	223.73
End-of-Month Storage	9,252	9,495	10,534	11,262	11,003	10,978
Monthly Storage Change	- 1,384	243	1,039	728	- 259	- 25
THERMALITO POWERPLANT						
Water Released Thru Plant for:						
Generation	286,526	563,372	435,086	768,603	644,572	206,215
Pumpback	10,280	0	19,834	59	0	0
Net	276,246	563,372	415,252	768,544	644,572	206,215
THERMALITO AFTERBAY						
Reservoir Storage						
Water Surface Elevation (feet)	123.89	123.53	124.75	131.92	134.84	132.50
End-of-Month Storage	14,899	14,071	16,962	38,829	50,088	40,963
Monthly Storage Change	- 2,336	- 828	2,891	21,867	11,259	- 9,125
Released						
Sutter Butte Canal	0	0	839	31,480	103,400	93,620
PG&E Lateral	0	0	0	1	1,057	651
Richvale Canal	0	0	0	4,255	19,050	13,090
Western Canal	0	0	0	7,309	41,600	32,970
Outlet to River	324,500	550,500	401,100	761,900	506,100	80,200
Total	324,500	550,500	401,939	804,945	671,207	220,531

a) Estimated data

TABLE 5

WATER OPERATIONS IN 1969

otherwise indicated)

Month						Total	Operation
July	August	September	October	November	December		
LAKE OROVILLE							
888.96	865.95	847.98	846.70	849.24	858.18	-	Reservoir Storage
3,366,148	3,028,078	2,781,346	2,764,329	2,798,168	2,919,580	-	Water Surface El. (ft)
- 125,494	- 338,070	- 246,732	- 17,017	33,839	121,412	853,470	End-of-Month Storage
							Monthly Storage Change
1,414	1,380	1,214	907	312	291	8,627	Released
							Palermo Canal
EDWARD HYATT POWERPLANT							
280,464	500,282	426,078	233,978	185,479	440,753	4,022,591	Released Thru Plant for:
1,727	442	0	1,432	2,066	907	67,173	Generation
278,737	499,840	426,078	232,546	183,413	439,846	3,955,418	Pumpback
							Net
THERMALITO DIVERSION DAM POOL							
223.98	222.92	222.51	222.41	215.84	223.74	-	Reservoir Storage
13,000	12,664	12,535	12,504	10,529	12,924	-	Water Surface El. (ft)
57	- 336	- 129	- 31	- 1,975	2,395	178	End-of-Month Storage
							Monthly Storage Change
FISH BARRIER DAM AND FISH HATCHERY							
23,700	22,390	20,770	20,590	19,990	49,240	954,700	Released to River
1,845	2,108	2,975	3,606	4,463	5,841	37,254	Fish Barrier Dam
							Hatchery
THERMALITO FOREBAY AND POWER CANAL							
0	0	0	0	0	0	0	Released From Canal
0	0	0	0	0	0	0	Thermalito Irr. Dist.
							Calif. Water Service
224.02	223.06	222.04	222.60	215.99	221.60	-	Storage
11,157	10,570	9,959	10,293	6,613	9,700	-	Water Surface El. (ft)
179	- 587	- 611	334	- 3,680	3,087	- 936	End-of-Month Storage
							Monthly Storage Change
THERMALITO POWERPLANT							
273,316	492,805	409,974	224,735	180,032	485,779	4,971,015	Released Thru Plant for:
0	0	0	0	0	0	30,173	Generation
273,316	492,805	409,974	224,735	180,032	485,779	4,940,842	Pumpback
							Net
THERMALITO AFTERBAY							
130.24	129.28	126.82	132.04	130.64	131.48	-	Reservoir Storage
32,953	29,799	22,413	39,266	34,311	37,246	-	Water Surface El. (ft)
- 8,010	- 3,154	- 7,386	16,853	- 4,955	2,935	20,011	End-of-Month Storage
							Monthly Storage Change
95,920	87,970	48,140	22,620	1,855	0	485,844	Released
714	750	123	0	0	0	3,296	Sutter Butte Canal
13,020	13,410	5,841(a)	230(a)	0	0	68,896	PG&E Lateral
37,150	33,270	9,588	14,810	13,240	4,504	194,441	Richvale Canal
136,400	350,300	348,400	156,500	162,200	483,600	4,261,700	Western Canal
							Outlet to River
283,204	485,700	412,092	194,160	177,295	488,104	5,014,177	Total

TABLE 6

AQUEDUCT MONTHLY WATER

(in acre-feet unless

Operation	Month					
	January	February	March	April	May	June
NORTH BAY AQUEDUCT						
Pumped at Interim (Cordelia) PP	590	553	630	181	131	57
Storage Change & Losses	5	5	1	- 10	1	- 10
Delivered to Napa County FC&WCD	585	548	629	191	130	67
CALIFORNIA AQUEDUCT---NORTH SAN JOAQUIN DIVISION						
Pumped at Delta Pumping Plant	172,496	91,543	70,267	74,540	59,932	29,220
Storage Change	- 95	404	- 1,005	213	315	- 239
Operational Losses	561	140	176	359	626	996
<u>Delivered</u>						
South Bay Aqueduct	4,632	979	1,318	1,838	702	1,471
Oak Flat Water District	0	0	38	440	487	609
San Luis Division	167,398	90,020	69,740	71,690	57,802	26,383
Total	172,030	90,999	71,096	73,968	58,991	28,463
SOUTH BAY AQUEDUCT						
Pumped at South Bay PP	4,632	979	1,318	1,838	702	1,471
Releases From Lake Del Valle	0	409	0	1,010	5,299	6,641
Total Inflow	4,632	1,388	1,318	2,848	6,001	8,112
Storage Change	0	0	0	0	0	0
Operational Losses	47	6	22	30	91	56
<u>Delivered</u>						
Alameda County FC&WCD (Zone 7)	210	121	162	359	693	971
Alameda County Water District	813	0	0	0	0	0
Santa Clara County FC&WD	3,562	1,261	1,134	2,459	5,217	7,085
Total	4,585	1,382	1,296	2,818	5,910	8,056
CALIFORNIA AQUEDUCT---SAN LUIS DIVISION						
Inflow From North San Joaquin Div	167,398	90,020	69,740	71,690	57,802	26,383
Inflow From the CVP (Federal) (a)	181,843	170,333	131,353	89,323	81,343	53,654
Flood Water Inflow	7,610	8,236	8,664	157	92	0
Total Inflow, State and Federal	356,851	268,589	209,757	161,170	139,237	80,037
<u>San Luis Reservoir Operation</u>						
Water Surface Elevation (feet)	485.56	508.03	524.58	534.54	541.56	541.10
End-of-Month Storage	1,345,139	1,600,778	1,798,509	1,921,312	2,007,035	2,003,742
Monthly Storage Change	320,039	255,639	197,731	122,803	85,723	- 3,293
Operational Losses	- 14,008	- 13,556	- 3,616	9,931	11,280	6,632
<u>Forebay and Aqueduct</u>						
Storage Change	7,975	255	- 11,744	- 1,482	- 3,235	12,487
Operational Losses	11,369	13,085	15,678	- 25	5,625	5,363
<u>Delivered</u>						
Federal (San Luis) Service Area	15,006	8,085	4,527	19,471	34,213	42,368
Released Thru O'Neill PP	0	0	0	0	0	0
South San Joaquin Division	16,470	5,081	7,181	10,472	5,631	16,480
Total	31,476	13,166	11,708	29,943	39,844	58,848
CALIFORNIA AQUEDUCT---SOUTH SAN JOAQUIN DIVISION						
Inflow From San Luis Division	16,470	5,081	7,181	10,472	5,631	16,480
Pumped From Kern River	0	0	0	3,969	15,719	17,580
Total Inflow	16,470	5,081	7,181	14,441	21,350	34,060
Storage Change	2,505	870	- 1,347	510	379	882
Operational Losses and Spills	1,110	2,729	5,722	498	516	474
<u>Delivered</u>						
County of Kings	100	0	0	0	0	0
Empire West Side Irr Dist	56	0	0	0	0	0
Tulare Lake Basin WSD	7,081	0	0	0	0	0
Hacienda Water District	0	0	0	0	231	769
Dudley Ridge Water District	2,416	66	189	885	3,358	6,855
Kern County Water Agency	516	545	2,299	6,176	11,193	14,703
Coastal Branch	2,686	871	318	6,372	5,673	10,377
Total	12,855	1,482	2,806	13,433	20,455	32,704
CALIFORNIA AQUEDUCT---COASTAL BRANCH						
Pumped at Las Perillas PP	2,686	871	318	6,372	5,673	10,377
Storage Change	2	6	- 11	- 7	6	28
Operational Losses	108	0	0	43	154	137
<u>Delivered</u>						
Devil's Den Water District	1,037	667	0	426	482	1,721
Kern County Water Agency	1,539	198	329	5,910	5,031	8,491
Total	2,576	865	329	6,336	5,513	10,212

a) Included are the following amounts of acre-feet pumped at the federal O'Neill Pumping Plant for the State:
January, 20,135; February, 23,328; March, 14,371

OPERATIONS IN 1969

(otherwise indicated)

Month						Total	Operation
July	August	September	October	November	December		
NORTH BAY AQUEDUCT							
0	0	0	0	91	456	2,689	Pumped at Cordelia PP
0	0	0	0	10	0	2	Storage Change & Losses
0	0	0	0	81	456	2,687	Del to Napa Co FC&WCD
CALIFORNIA AQUEDUCT---NORTH SAN JOAQUIN DIVISION							
32,337	34,163	10,536	16,770	37,338	44,783	673,925	Pumped at Delta PP
127	184	- 209	296	199	- 762	- 572	Storage Change
837	767	592	703	417	362	6,536	Operational Losses
							<u>Delivered</u>
5,255	8,055	8,411	9,831	8,175	9,209	59,876	South Bay Aqueduct
1,057	224	36	9	7	109	3,016	Oak Flat Water District
25,061	24,933	1,706	5,931	28,540	35,865	605,069	San Luis Division
31,373	33,212	10,153	15,771	36,722	45,183	667,961	Total
SOUTH BAY AQUEDUCT							
5,255	8,055	8,411	9,831	8,175	9,209	59,876	Pumped at South Bay PP
3,004	0	0	0	0	0	16,363	Releases Fr Lake Del Valle
8,259	8,055	8,411	9,831	8,175	9,209	76,239	Total Inflow
0	0	703	2,197	1,116	1,071	5,087	Storage Change
42	59	39	48	30	970	1,440	Operational Losses
							<u>Delivered</u>
949	992	786	558	468	366	6,635	Alameda Co FC&WCD (27)
0	0	0	0	0	0	813	Alameda Co Water Dist
7,268	7,004	6,883	7,028	6,561	6,802	62,264	Santa Clara Co FC&WD
8,217	7,996	7,669	7,586	7,029	7,168	69,712	Total
CALIFORNIA AQUEDUCT---SAN LUIS DIVISION							
25,061	24,933	1,706	5,931	28,540	35,865	605,069	Inflow From North SJ Div
53,059	49,455	7,206	23,858	0	0	841,427	Inflow From CVP (Fed) (a
0	0	0	0	0	0	24,759	Flood Water Inflow
78,120	74,388	8,912	29,789	28,540	35,865	1,471,255	Total Inflow, St & Fed
							<u>San Luis Reservoir Op</u>
540.51	539.92	539.32	538.94	537.38	537.98		Water Surface El (feet)
1,996,282	1,988,827	1,981,260	1,976,469	1,956,854	1,964,388		End-of-Month Storage
- 7,460	- 7,455	- 7,567	- 4,791	- 19,615	7,534	939,288	Monthly Storage Change
7,460	8,018	5,903	4,790	2,881	3,116	28,831	Operational Losses
							<u>Forebay and Aqueduct</u>
- 5,241	4,094	- 11,565	- 784	14,036	- 4,478	318	Storage Change
7,111	8,175	3,547	6,501	761	- 2,306	74,884	Operational Losses
							<u>Delivered</u>
50,789	41,461	17,932	16,901	18,388	23,698	292,839	Fed (San Luis) Sv Area
0	0	0	5,777	7,650	0	13,427	Rel Thru O'Neill PP
25,461	20,095	662	1,395	4,439	8,301	121,668	South San Joaquin Div
76,250	61,556	18,594	24,073	30,477	31,999	427,934	Total
CALIFORNIA AQUEDUCT---SOUTH SAN JOAQUIN DIVISION							
25,461	20,095	662	1,395	4,439	8,301	121,668	Inflow From San Luis Div
18,115	17,808	12,123	4,805	0	0	90,119	Pumped From Kern River
43,576	37,903	12,785	6,200	4,439	8,301	211,787	Total Inflow
374	- 100	- 119	- 988	- 1,127	224	2,063	Storage Change
659	578	1,506	983	1,029	189	15,993	Operational Losses & Spills
							<u>Delivered</u>
0	0	0	0	0	0	100	County of Kings
0	0	0	0	0	0	56	Empire W Side Irr Dist
0	0	0	0	0	0	7,081	Tulare Lake Basin WSD
1,089	655	0	0	98	0	2,842	Hacienda Water District
6,608	6,427	698	873	976	2,024	31,375	Dudley Ridge Water District
20,425	16,792	7,209	3,937	2,393	2,983	89,171	Kern County Water Agency
14,421	13,551	3,491	1,395	1,070	2,881	63,106	Coastal Branch
42,543	37,425	11,398	6,205	4,537	7,888	193,731	Total
CALIFORNIA AQUEDUCT---COASTAL BRANCH							
14,421	13,551	3,491	1,395	1,070	2,881	63,106	Pumped at Las Perillas PP
- 7	- 18	- 1	4	- 17	15	0	Storage Change
144	45	127	196	71	17	1,042	Operational Losses
							<u>Delivered</u>
1,888	2,019	293	0	54	1,383	9,970	Devil's Den Water Dist
12,396	11,505	3,072	1,195	962	1,466	52,094	Kern County Water Agency
14,284	13,524	3,365	1,195	1,016	2,849	62,064	Total

TABLE 7

MONTHLY POWER OPERATIONS IN 1969

(in millions of kilowatt-hours)

Operations	Month of Operations													Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
ENERGY GENERATED BY EDWARD HYATT AND THERMALITO POWERPLANTS														
Gross Generation	140.36	194.88	183.92	260.27	376.83	136.45	181.34	323.64	269.65	136.52	111.77	293.87	2,611.50	
Powerplant Use and Pumpback Requirements	1.99	0.70	3.15	0.19	0.25	1.61	2.30	0.52	0.31	1.75	2.31	1.03	16.11	
For Project Pumping(a	56.26	65.43	47.50	-	-	-	-	-	-	-	-	-	169.19	
Interim Energy Account	84.10	129.45	136.41	-	-	-	-	-	-	-	-	-	349.96	
ENERGY USED BY PROJECT PUMPING PLANTS														
Interim (Cordelia)	0.27	0.25	0.30	0.09	0.06	0.03	-	-	-	0.01	0.04	0.21	1.26	
South Bay	3.64	0.83	0.72	1.57	0.62	1.16	4.08	6.02	6.16	7.54	6.18	7.21	45.73	
Delta	51.65	27.73	21.96	23.42	18.67	9.96	10.21	10.35	3.40	5.24	12.19	14.47	209.25	
Federal Pumping Plants(b	6.37	7.38	4.54	-	-	-	-	-	-	-	-	-	18.29	
San Luis (State Share)	52.73	36.45	30.35	23.69	26.31	0.04	0.05	1.20	0.91	0.82	1.80	5.51	179.86	
Dos Amigos (State Share)	1.70	-	-	1.63	0.88	2.47	3.57	2.89	0.19	0.33	0.80	1.24	15.70	
Las Perillas	0.21	0.10	0.06	0.48	0.41	0.73	1.03	0.96	0.28	0.12	0.11	0.26	4.75	
Badger Hill	0.50	0.21	0.10	1.23	1.04	2.02	2.80	2.63	0.68	0.27	0.23	0.62	12.33	
Del Valle	-	-	-	-	-	-	-	-	-	0.01	0.02	0.03	0.06	
Transmission & Other Losses	6.48	7.29	5.50	1.24	1.19	1.21	1.33	1.06	0.97	1.22	1.07	1.12	29.68	
Total	123.55	80.24	63.53	53.35	49.18	17.62	23.07	25.11	12.59	15.56	22.44	30.67	516.91	
SOURCES OF ENERGY FOR PROJECT PUMPING PLANTS														
San Luis Pumping-Generating Plant (State's Share)	0.33	0.06	0.01	0.10	0.68	0.07	-	0.44	0.51	0.34	0.27	-	2.81	
Edward Hyatt & Thermalito Powerplants(a	56.26	65.43	47.50	-	-	-	-	-	-	-	-	-	169.19	
Central Valley Project (c	3.64	0.83	0.72	1.57	0.62	-	-	-	-	-	-	-	7.38	
Canadian Entitlement Power	11.18	10.10	11.17	10.79	11.16	10.80	11.16	11.16	10.78	11.20	10.80	11.16	131.46	
Bonneville Power Adminis- tration	5.17	5.48	4.98	6.94	7.42	6.94	5.40	0.32	-	3.09	1.08	-	46.82	
California "Suppliers"	46.97	0.15	0.10	31.18	29.45	-	6.17	13.28	1.31	1.36	9.77	19.51	159.25	
Canadian Entitlement Power- San Luis Energy Banked (d	-	(1.81)	(.95)	(3.89)	(5.89)	(2.96)	(4.18)	(2.62)	(2.44)	(4.26)	(2.42)	(2.02)	(33.44)	
Canadian Entitlement Power- San Luis Energy Withdrawn (d	-	-	-	6.66	5.74	2.77	4.52	2.53	2.43	3.83	2.94	2.02	33.44	
Total	123.55	80.24	63.53	53.35	49.18	17.62	23.07	25.11	12.59	15.56	22.44	30.67	516.91	

a) Letter agreement with Pacific Gas and Electric Company terminated. All power generation sold under Oroville-Thermalito Power sales contract starting April 1, 1969.

b) Power supplied by the State to federal Tracy and O'Neill Pumping Plants for pumping 57,834 acre-feet for the State.

c) Power contract with federal Central Valley Project terminated May 31, 1969.

d) Canadian Entitlement Power or San Luis Energy which was excess to project needs and which was temporarily banked. Such amounts were subsequently withdrawn for use during offpeak periods, in accordance with the Suppliers' Contract.

The Feather River Fish Barrier Dam diverts migrating salmon and steelhead into the Feather River Fish Hatchery.

Water Operations

Frenchman Lake contained 41,078 (adjusted)¹³² acre-feet of water in storage on January 1, 1969. Inflow to the Lake during the year totaled 52,078 acre-feet. The Lake filled on April 6, and 26,879 acre-feet flowed over the spillway before spilling ceased on July 2. The total regulated releases for the year amounted to 14,558 acre-feet for minimum streamflow requirements and for deliveries to the Last Chance Creek Water District. Total deliveries to the District in 1969 amounted to 10,137 acre-feet, which included both entitlements under existing water rights and under an annual project water supply contract. Evaporation and seepage losses were estimated at 5,080 acre-feet. Storage on December 31, 1969 was 46,639 acre-feet.

Antelope Lake contained 19,705 (adjusted) acre-feet of water in storage on January 1, 1969. Inflow to the Lake during the year totaled 66,083 acre-feet. The Lake filled on January 22, and 54,462 acre-feet flowed over the spillway before spilling ceased on July 31. The total regulated releases from the Lake to satisfy downstream water rights entitlements, and minimum streamflow requirements totaled 6,244 acre-feet. Evaporation and seepage losses were estimated to total 2,563 acre-feet. Storage on December 31, 1969 was 22,519 acre-feet.

Lake Davis contained 57,953 acre-feet of water in storage on January 1, 1969. Inflow to the Lake during the year totaled 61,239 acre-feet. The Lake filled for the first time on April 20, and 19,195 acre-feet flowed over the spillway before the spilling ceased on July 15. The total regulated releases for the year were 9,043 acre-feet for minimum streamflow requirements and water right entitlements downstream from the Dam. No releases were made to the Plumas County Flood Control and Water Conservation District. Evaporation and seepage losses were estimated at 13,317 acre-feet. Storage on December 31, 1969 was 77,637 acre-feet.

Lake Oroville contained 2,066,110 acre-feet of water in storage on January 1, 1969. Lake storage increased rapidly in January as the inflow reached a peak of 143,000 cubic feet per second. Oroville Spillway was used for the first time on January 21. A total of 2,191,489 acre-feet flowed over the spillway in 1969. Due to the heavy precipitation, the maximum flood reservation of 750,000 acre-feet was maintained until April 1. Lake Oroville storage reached a maximum on June 23; 3,504,184 acre-feet. Storage on December 31, 1969 was 2,919,580 acre-feet.

Total water deliveries from the Oroville-Thermalito Facilities during 1969 were as follows (in acre-feet):

Sutter Butte Canal (March 28–November 17)---	485,844
P.G.&E. Lateral (April 29–September 15)-----	3,296
Richvale Canal (April 17–October 10)-----	68,896
Western Canal (April 16–December 11)-----	194,441
Palermo Canal (continuous)-----	8,627
Total delivered-----	761,104

A total of 5,250,954 acre-feet was released to the Feather River; 954,700 acre-feet through Thermalito Diversion Dam and the Feather River Fish Hatchery and 4,261,700 acre-feet through Thermalito Afterbay Outlet. The flow diverted to the Feather River Fish Hatchery varied from 30 to 95 cubic feet per second throughout the year.

Monthly water quality profiles were made at three stations on Lake Oroville. Shutters were used in the Left Abutment Intake Structure to regulate irrigation and river water temperatures. Temperatures of all water releases from the Oroville-Thermalito Facilities were continuously recorded. Monthly turbidity measurements were made in the Thermalito area. Electrical conductivity and temperature of Feather River water were continuously recorded near Gridley. Monthly water samples were collected from the Feather River and from the Oroville-Thermalito Facilities. Plankton counts, nutrient determinations, and analyses of selected mineral constituents were made. A summary of mineral analyses from monthly samples collected in the Feather River near Gridley is shown below:

	Total dissolved solids (ppm)	Total hardness (ppm)	Chlorides (ppm)	Sulfates (ppm)	Sodium (%)	Boron (ppm)
Minimum-----	53	29	0.0	0.0	14	0.0
Average-----	60	33	1.2	1.4	15	0.0
Maximum-----	76	36	2.8	3.1	19	0.0

Recreation and Fish and Wildlife

Frenchman Lake received 394,500 recreation days of use during 1969. During the year, the Department of Fish and Game planted Frenchman Lake with 72,700 Rainbow trout fingerlings, 27,500 Rainbow-Whitney trout fingerlings, 10,000 Rainbow trout subcatchables, and 45,000 Kamloop trout subcatchables.

Lake Davis received 439,300 recreation days of use during 1969. Recreation developments include a two-

¹³² The parenthetic notation "(adjusted)" refers to those "end-of-year" values shown in last year's bulletin which subsequently have been adjusted for minor corrections and shown in this bulletin as "beginning-of-year" values.

lane boat-launching ramp, sanitary facilities, and two campgrounds that were constructed during 1969. Grizzly Camp has 69 campsites, and Grasshopper Camp has 56 campsites. During the year, the Department of Fish and Game planted Lake Davis with 119,900 Rainbow trout subcatchables, 891,800 Rainbow trout fingerlings, 89,600 Eastern Brook trout fingerlings, and 10,000 Kamloop trout subcatchables.

Antelope Lake received 99,300 recreation days of use during 1969. During the year, the Department of Fish and Game planted 53,300 fingerling trout of various stocks—including Rainbow, Kamloop, Steelhead-Kamloop cross, Shasta, and Virginia—to determine which is most adaptable to Antelope Lake.

A total of 516,400 recreation days of use was recorded for Lake Oroville and the Thermalito Facilities during 1969.

During 1969, the Department of Parks and Recreation completed construction at Lake Oroville of seven boat-in camps totaling 40 sites, and a group camp. The boat-in camps are accessible to the public only by boat and are primitive in nature, having pit toilets and no domestic water. Construction of a day-use area was begun at Loafer Creek, with a swimming beach, 200-car parking lot, 100-unit picnic area, utilities, and sanitary facilities. By the summer of 1970, a 136-unit campground should be completed at Loafer Creek.

The largest contract ever entered into by the Department of Parks and Recreation provides for the development of a marina, trailer sites, visitor supply facilities, and an interpretive center at Kelly Ridge. Southern California Financial Corporation, the successful bidder and concessioner, will plan and construct these facilities in conjunction with the Department of Water Resources.

During 1969, the Department of Fish and Game planted Lake Oroville with 42,700 Silver salmon yearlings, 43,700 Rainbow trout subcatchables, 643,200 Brown trout fingerlings, and 141,000 Rainbow trout fingerlings. In addition, the following fish of subcatchable size were planted with \$5.00 reward tags to see which stock has the best chance of survival and to see how many end up in the fisherman's creel: 100 Brown trout, 100 Brown trout hybrid, 100 Kamloop trout, 100 Rainbow-Whitney trout, 200 Silver salmon, and 200 Eagle Lake trout. The Thermalito Facilities were not planted with fish in 1969.

During 1969, the Feather River Fish Hatchery received 4,700 salmon and 200 steelhead from the Feather River. Also during 1969, about 2,300,000 young salmon from the 1968 brood were planted in the Feather River; no steelhead were planted.

Two very severe disease problems occurred at the Feather River Fish Hatchery during the past year: Sacramento River Chinook Disease (a cold water virus), which is injurious to the salmon, and *ceratomyxa shasta* (a protozoan parasite), which is injurious to the steelhead.

Sacramento River Chinook Disease killed approximately 12,000,000 salmon fry from the 1968 brood. The disease can be controlled by keeping the temperature of water in the rearing ponds at 58° F or higher. This temperature can be obtained by mixing warmer water from nearby wells (about 67° F) with water from the Feather River (about 44°–45° F). Beginning in January 1970, the Department will purchase well water from the Thermalito Irrigation District for mixing during the critical winter and early spring months.

Ceratomyxa shasta caused a high mortality in steelhead during 1969. Only about 500 steelhead survived out of the 378,000 hatched. The survivors were held, along with the 9,000 adult steelhead collected during 1967 and 1968, for brood stock. To control this disease, the parasite must be eliminated from the Feather River water entering the rearing ponds. Under a system which will become operational in May 1970, the river water will be sterilized by ultra-violet radiation after being passed through sand filters. Also, the steelhead being held for brood stock are expected to develop a resistance to the disease.

During 1969, operation studies were made by the Department of Fish and Game to establish criteria for preserving the fishery and wildlife habitat in the Feather River channel downstream from Oroville Dam. These studies are part of a 1967 agreement between the Department of Water Resources and the Department of Fish and Game to conduct an eight-year study.¹³³

Power Operations

During 1969, Edward Hyatt and Thermalito Powerplants generated 2,611,500,000 kilowatt-hours of electric energy—delivered to the Pacific Gas and Electric Company's Table Mountain Substation. All of the 2,092,350,000 kilowatt-hours generated since April 1, 1969 were purchased by the California Companies¹³⁴ under the terms of the Oroville-Thermalito Power Sale Contract. Of the 519,150,000 kilowatt-hours generated during January, February, and March, 169,190,000 kilowatt-hours were used by project pumping plants, and 349,960,000 kilowatt-hours were credited to an interim energy account with the California Companies.¹³⁵

¹³³ See p. 46, Bulletin 132–69.

¹³⁴ Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas and Electric Company.

¹³⁵ See pp. 87–88, Bulletin 132–68.



RECREATION:
LAKE OROVILLE

Delta Field Division

The following facilities were operational in 1969:

- North Bay Aqueduct, Phase I.
- California Aqueduct from the Sacramento-San Joaquin Delta to O'Neill Forebay, including Clifton Court Forebay, Delta Fish Protective Facilities, Delta Pumping Plant, and Bethany Reservoir.
- South Bay Aqueduct, including South Bay Pumping Plant and Del Valle features.

The North Bay Aqueduct, Phase I, delivers water from the federal Solano Project terminal reservoir, near Cordelia, to Napa County for municipal and industrial use. Phase II, scheduled to be operational by 1980, will convey water from the Delta for municipal and industrial use in Solano and Napa Counties.

The California Aqueduct from the Delta to O'Neill Forebay supplies water to the South Bay Aqueduct, the Oak Flat Water District, and the O'Neill Forebay.

The South Bay Aqueduct receives water from the California Aqueduct, through the South Bay Pumping Plant, for delivery to Alameda and Santa Clara Counties, mainly for municipal and industrial use. The Del Valle features include Del Valle Dam, Lake Del Valle, Del Valle Branch Pipeline, and Del Valle Pumping Plant. Lake Del Valle regulates water conveyed through the South Bay Aqueduct, provides flood control, enhances local recreational opportunities, and conserves local runoff.

Water Operations

During 1969, the North Bay Aqueduct delivered 2,687 acre-feet of water to the Napa County Flood Control and Water Conservation District.

The California Aqueduct, from the Delta to O'Neill Forebay, supplied 59,876 acre-feet to the South Bay Aqueduct, 3,016 acre-feet to the Oak Flat Water District, and 605,069 acre-feet to the O'Neill Forebay.

Water deliveries from the South Bay Aqueduct included 6,635 acre-feet to the Alameda County Flood Control and Water Conservation District (Zone 7), 813 acre-feet to the Alameda County Water District, and 62,264 acre-feet to the Santa Clara County Flood Control and Water District.

Water storage in Lake Del Valle began November 15, 1968. Flood control releases commenced February 25, 1969, when water levels began to rise into the top 35,000 acre-feet of storage space. After the flood season, the level of the Lake was drawn down to permit construction of a boat ramp for future recreation use. During 1969, 6,005 acre-feet of local inflow to Lake Del Valle storage were delivered to the Alameda County Water District, and 10,358 acre-feet were delivered through the South Bay Aqueduct to contractors in lieu of project water pumped from the Delta, as allowed under a special contract.¹³⁶

Tests to validate the "controlled-volume" concept of aqueduct operation¹³⁷ were conducted on October 11 and December 13, in the portion of the California Aqueduct between the Delta Pumping Plant and O'Neill Forebay. Results from these tests demonstrate that, up to a maximum test flow of 6,200 cubic feet per second, simultaneous flow changes can be made without developing detrimental water surface fluctuations.

The quality of water delivered from Delta Field Division facilities generally was excellent and within the objectives established for project water. A summary of mineral analyses taken at four of the Project's monitoring stations is shown below:

	Total dissolved solids (ppm)	Total hardness (ppm)	Chlorides (ppm)	Sulfates (ppm)	Sodium (%)	Boron (ppm)
Interim Pumping Plant (Cordelia)						
Minimum.....	158	120	5	14	10	0.0
Average.....	170	147	8	18	14	0.2
Maximum.....	176	160	10	25	19	0.2
Santa Clara Terminal Facility						
Minimum.....	122	54	2	18	14	0.1
Average.....	175	84	29	28	39	0.2
Maximum.....	251	121	50	52	54	0.3
Delta Pumping Plant						
Minimum.....	50	33	10	6	32	0.1
Average.....	143	64	32	20	43	0.1
Maximum.....	228	92	55	35	48	0.2
California Aqueduct, near O'Neill Forebay						
Minimum.....	68	39	14	8	36	0.1
Average.....	143	63	30	21	43	0.2
Maximum.....	253	107	51	53	47	0.3

¹³⁶ See p. 19.

¹³⁷ See pp. 92-93, Bulletin 132-65.

A temporary monitoring station was established at Blind Point on the San Joaquin River from April 1 to June 30, 1969. The highest daily maximum chloride concentration for the period, 37 ppm, was reached on April 10 and April 13.

Recreation and Fish and Wildlife

A comprehensive testing and evaluation program for the Delta Fish Protective Facility was initiated in 1969 to determine the efficiency and the optimum mode of operation. Floating platforms, hoists, net frames, and appurtenances were installed under a \$90,000 contract. The Department of Fish and Game is participating in the program.

During 1969, the Delta Fish Protective Facility prevented about 4.2 million fish from entering the Delta Pumping Plant. The numbers of fish removed monthly from the Intake Channel and released elsewhere in the Delta were as follows:

January--	381,600	May-----	131,000	September--	72,300
February	18,700	June-----	268,500	October----	298,100
March----	11,900	July-----	1,672,200	November--	173,000
April-----	38,200	August----	1,060,300	December--	81,000

Lake Del Valle was not open to the public for recreation use in 1969 because the water level was drawn down to permit construction of a boat-launching ramp. Construction of the ramp was completed December 12, 1969. During 1969, the Department of Fish and Game planted the Lake with 5,000 Rainbow trout catchables and 200 Largemouth bass adults.

The first in a series of especially arranged sports fishing sites along the California Aqueduct was opened August 28, 1969, six miles southwest of Gustine, where Cottonwood Road crosses the Aqueduct. This and other sites were chosen after net samplings by the Department of Fish and Game showed sizable populations of Striped bass, catfish, and other species in the Aqueduct. The Wildlife Conservation Board provided funds for constructing the site, the Department of Water Resources provided lands for the site and for parking, and the Recreation and Parks Department, County of Merced, will maintain the site open and free to the public.

Power Operations

During 1969, the four pumping plants in the Delta Field Division used 256,300,000 kilowatt-hours of electric energy: 1,260,000 kilowatt-hours at the Interim Pumping Plant (Cordelia); 45,730,000 kilowatt-hours at the South Bay Pumping Plant; 60,000 kilowatt-hours at the Del Valle Pumping Plant and 209,250,000 kilowatt-hours at the Delta Pumping Plant.

San Luis Field Division

The following state-federal joint-use facilities were operational in 1969:

- O'Neill Forebay and the California Aqueduct from the Forebay to Dos Amigos Pumping Plant.
- San Luis Reservoir and San Luis Pumping-Generating Plant.
- California Aqueduct from, and including, Dos Amigos Pumping Plant to Kettleman City.
- Los Banos and Little Panoche Reservoirs.

O'Neill Forebay and the Aqueduct between the Forebay and Dos Amigos Pumping Plant regulate flows (a) pumped from the federal Delta-Mendota Canal through the federal O'Neill Pumping Plant, (b) delivered from the Delta Field Division through the California Aqueduct, and (c) released from San Luis Reservoir through the San Luis Pumping-Generating Plant. Flows so regulated are (a) pumped either into the California Aqueduct through the Dos Amigos Pumping Plant or into San Luis Reservoir through the San Luis Pumping-Generating Plant, and (b) released to the Delta-Mendota Canal.

San Luis Reservoir, with a gross storage capacity of 2,038,008 acre-feet, regulates aqueduct flow from year to year and from month to month within a particular year. During the winter and spring, when the water supply from the north is greater than water demands to the south, the excess water is pumped into San Luis Reservoir. In the summer and fall, when water demands to the south exceed the water supply from the north, water is released from the Reservoir.

Los Banos Reservoir, with a storage capacity of 34,562 acre-feet, is operated for flood control and recreation use. Little Panoche Reservoir, with a storage capacity of 13,236 acre-feet, is operated for flood control only. The primary purpose of both of these reservoirs is to protect the California Aqueduct from damage by flood flows.

Deliveries are made directly from the facilities within the San Luis Field Division to water customers of the federal Central Valley Project only.

During 1969, the San Luis Field Division was operated by the Department under an extended interim agreement.¹³⁸ The proposed formal agreement for overall coordinated operation of the State Water Project and the federal Central Valley Project and the supplemental agreement for operation of the joint-use San Luis facilities were transmitted to Washington, D.C. on July 3, 1969, and were being studied by the Commissioner for Reclamation as of December 31, 1969.

¹³⁸ See p. 48, Bulletin 132-69.

Water Operations

Inflow to the O'Neill Forebay, including the Aqueduct between the Forebay and Dos Amigos Pumping Plant, totaled 1,471,697 acre-feet during 1969: 605,069 acre-feet from the California Aqueduct; 841,427 acre-feet through O'Neill Pumping Plant from the Delta-Mendota Canal; and 31,595 acre-feet through releases from San Luis Reservoir storage. During 1969, outflow from the Forebay totaled 1,471,434 acre-feet: 386,666 acre-feet pumped through Dos Amigos Pumping Plant; 13,427 acre-feet released to the Delta-Mendota Canal through O'Neill Pumping Plant; 3,195 acre-feet delivered through turnouts to customers of the federal Central Valley Project; and 999,714 acre-feet pumped into San Luis Reservoir through San Luis Pumping-Generating Plant.

San Luis Reservoir completed its second full year of operation in 1969. Storage in the Reservoir on January 1, 1969 was 1,025,100 (adjusted) acre-feet. Water pumped into the Reservoir totaled 999,714 acre-feet; water released to the Forebay amounted to 31,595 acre-feet. Evaporation, seepage, and other losses totaled 28,831 acre-feet. Storage in the Reservoir on December 31, 1969 was 1,964,388 acre-feet, of which 1,039,443 acre-feet was project water and the re-

mainder, "Bureau" water of the federal Central Valley Project.

On January 1, 1969, storage in Los Banos and Little Panoche Reservoirs was 14,066 and 195 acre-feet, respectively. On December 31, 1969, the storage was 19,622 and 281 acre-feet, respectively.

The California Aqueduct from Dos Amigos Pumping Plant to Kettleman City received 386,666 acre-feet of water in 1969 through Dos Amigos Pumping Plant (in addition to 24,759 acre-feet of cross-drainage). By the end of 1969, 120 turnouts on this reach for customers of the Central Valley Project were active; 20 of these are permanent and 100 are temporary. Deliveries through these turnouts totaled 289,664 acre-feet. Water released from the San Luis Field Division, at Kettleman City, totaled 121,668 acre-feet in 1969.

Monthly water samples are obtained from both O'Neill Forebay and San Luis Reservoir and examined for phytoplankton and zooplankton content. The specific conductance of water is continuously measured immediately south of O'Neill Forebay and near Kettleman City, and monthly samples from these two locations are analyzed for 20 constituents. Summarized below are certain analyses of monthly samples taken immediately south of O'Neill Forebay and near Kettleman City:

	Total dissolved solids (ppm)	Total hardness (ppm)	Chlorides (ppm)	Sulfates (ppm)	Sodium (%)	Boron (ppm)
Immediately south of O'Neill Forebay						
Minimum.....	113	43	19	12	40	0.1
Average.....	174	70	36	28	47	0.2
Maximum.....	243	102	52	52	53	0.3
Near Kettleman City						
Minimum.....	109	47	19	17	41	0.0
Average.....	343	147	42	126	45	0.3
Maximum.....	1,020	435	66	537	49	0.7

The relatively high concentrations of total dissolved solids at the station near Kettleman City resulted from large quantities of cross-drainage flows which spilled into the Aqueduct due to unusually intense storms during January and February. (At the time of this flood inflow, deliveries were not being made from the affected reaches of the Aqueduct.)

Recreation and Fish and Wildlife

Recreation use of facilities within the San Luis Field Division totaled 105,300 recreation days during 1969: 60,800 recreation days at O'Neill Forebay; 33,000 recreation days at San Luis Reservoir (Basalt area); and 11,500 recreation days at Los Banos Reservoir.

In 1969, the Department of Fish and Game planted San Luis Reservoir with 211,000 White catfish fingerlings and 12,800 Channel catfish fingerlings. No fish were planted in O'Neill Forebay or Los Banos Reservoir.

Under an agreement executed in 1969,¹³⁹ the Department of Parks and Recreation will pay 55 percent, and the Bureau of Reclamation 45 percent (not to exceed \$3,015,000) of the construction costs of the initial recreation developments for the San Luis Division. After construction by the Bureau, Parks will take possession and control; administer these developments as part of the State Parks System; and, at Parks' expense, operate and maintain these facilities. The

¹³⁹ "Agreement between the United States of America and the Department of Parks and Recreation of the State of California for the Construction and Operation of the Initial Recreation Facilities of the San Luis Unit," June 3, 1969.

costs of constructing and operating future developments for the San Luis Division, necessary to satisfy the continuing growth in recreation demands, presumably will be borne solely by Parks.

Two fishing access sites were opened in the San Luis Field Division during 1969, consisting of fishing platforms cantilevered out from county road crossings of the California Aqueduct at Canyon Road and at Mervel Road. Responsible governmental agencies are the same as those previously described in connection with the site at Cottonwood Road.¹⁴⁰

Power Operations

During 1969, a total of 195,560,000 kilowatt-hours of electric energy were used for pumping State Water Project water in the San Luis Field Division: 179,860,000 kilowatt-hours at San Luis Pumping-Generating Plant and 15,700,000 kilowatt-hours at Dos Amigos Pumping Plant. The Project's share of electric energy generated by water released from San Luis Reservoir through the Pumping-Generating Plant was 2,810,000 kilowatt-hours.

San Joaquin Field Division

The following facilities were operational in 1969:

- California Aqueduct from Kettleman City to Buena Vista Pumping Plant.
- Coastal Branch of the California Aqueduct to the site of the Devil's Den Pumping Plant, including the Las Perillas and Badger Hill Pumping Plants.

¹⁴⁰ See p. 47.

The California Aqueduct from Kettleman City to the Buena Vista Pumping Plant delivers project water to the Coastal Branch and to agricultural users in the Tulare Lake Basin Water Storage District, County of Kings, Empire West Side Irrigation District, Dudley Ridge Water District, Hacienda Water District, and the Kern County Water Agency.

The operational portion of the Coastal Branch (the first 15 miles) includes the Las Perillas and Badger Hill Pumping Plants and delivers project water to agricultural users in the Devil's Den Water District and Berrenda Mesa Water District of the Kern County Water Agency.

Water Operations

The 1969 snowpack of the Kern River basin had a water content far in excess of any previously recorded. Before the 1969 snowmelt runoff season began, federal, state, and local agencies—and individuals—made preparations for the flood to come. Under one of these arrangements, executed between the Department and the El Rico Reclamation District,¹⁴¹ some 90,119 acre-feet of Kern River water were diverted from draining into the heavily taxed storage capacity of Tulare Lake, then pumped into the California Aqueduct and conveyed 25 to 50 miles north, and delivered to water contractors of the State Water Project. In addition to reducing the flood threat to Tulare Lake, the water diversion operation made possible a reduction in the State Water Project energy costs.

¹⁴¹ "Agreement between the State of California and El Rico Reclamation District No. 1618 for a Water Supply," April 4, 1969. (See also Department of Water Resources memorandum from Carl L. Stetson to Messrs. John R. Teerink and William R. Gianelli, "Assignment of Responsibilities in Connection with and Information on El Rico Reclamation District Agreement re Kern River Flood Water," June 27, 1969, approved July 28, 1969.)



CALIFORNIA AQUEDUCT AND DOS AMIGOS
PUMPING PLANT AND OUTLET STRUCTURE

This operation required a 22-foot pumplift as compared with a 350-foot lift through the Delta and Dos Amigos Pumping Plants.

The El Rico Reclamation District agreed to furnish, install, and maintain entirely at its own expense, temporary pumping plants between the Kern River Flood Channel and the California Aqueduct at Buena Vista Turnout No. 2 and at two check structures in the Aqueduct. The Department agreed to provide electrical energy to pump the water, operate the pumping plants, and pay the District 75 percent of the net savings to the Project resulting from the agreement. This payment is not to exceed the costs incurred by the District.

During 1969, the following amounts of project water were delivered from the 90,119 acre-feet of conserved Kern River flood flows (April 12, 1969 through October 18, 1969) and from the 121,668 acre-feet conveyed from the Delta past Kettleman City: 89,171

acre-feet to the Kern County Water Agency; 31,375 acre-feet to the Dudley Ridge Water District; 56 acre-feet to the Empire West Side Irrigation District; 2,842 acre-feet to the Hacienda Water District; 7,081 acre-feet to the Tulare Lake Basin Water Storage District; 100 acre-feet to the County of Kings; and 63,106 acre-feet to the Coastal Branch—for a total of 193,731 acre-feet. The Coastal Branch delivered 62,064 acre-feet of project water: 9,970 acre-feet to the Devil's Den Water District and 52,094 acre-feet to the Kern County Water Agency.

During 1969, water delivered within the San Joaquin Field Division was generally within the Project's water quality objectives. Water quality was adversely affected by the drainage water entering from the San Luis Field Division and improved by Kern River flood water entering through Buena Vista Turnout No. 2. Summarized below are water quality data for stations at the entrance to the Coastal Branch and at Buena Vista Turnout No. 2:

	Total dissolved solids (ppm)	Total hardness (ppm)	Chlorides (ppm)	Sulfates (ppm)	Sodium (%)	Boron (ppm)
California Aqueduct at Entrance to Coastal Branch						
Minimum.....	80	50	8	7	30	0.0
Average.....	292	130	37	95	40	0.2
Maximum.....	798	338	66	407	48	0.8
Kern River (California Aqueduct) at Buena Vista Turnout No. 2						
Minimum.....	51	23	1	1	29	0.0
Average.....	78	34	2	4	31	Trace
Maximum.....	110	50	4	8	33	0.2

Power Operations

A total of 17,080,000 kilowatt-hours of electric energy was used in project pumping plants of the San Joaquin Field Division during 1969: 4,750,000 kilowatt-hours in Las Perillas Pumping Plant and 12,330,000 kilowatt-hours in Badger Hill Pumping Plant.

Southern Field Division

No project facilities were operational in this field division during 1969. The Cedar Springs Interim Water Supply Facility was operated and maintained. Stream gaging and climatological stations in areas tributary to project facilities, and the completed portion of the Santa Ana Valley Pipeline under the Riverside International Raceway, were maintained.

CHAPTER V. PROJECT FINANCING

This chapter presents a financial analysis of the State Water Project, including (a) the definite construction program for the "1973 Project facilities", which will permit the fulfillment of immediate water delivery commitments, and (b) the less-definite program continuing beyond the "1973 Project facilities" under a particular set of assumptions regarding:

- What is to be built.
- When it is to be built.
- How it is to be financed.

The year ending December 31, 1969 was the 13th year of a 17-year construction program which commenced in 1957 with the start of highway and railroad relocations around the site of Lake Oroville in Butte County, and which will end in 1973 with the completion of Pyramid Dam in Los Angeles County and Perris Dam in Riverside County. Overall, about 90 percent of the "1973 Project facilities" were either completed or under construction by the end of 1969:

- Three dams and reservoirs of the five planned for the Upper Feather Division—Frenchman and Antelope Dam and Lakes, Grizzly Valley Dam and Lake Davis (completed)—and Grizzly Valley Pipeline (under construction).
- The Oroville Division, including Oroville Dam and Lake Oroville, Edward Hyatt Powerplant, and the Thermalito Facilities (completed).
- Phase I of the North Bay Aqueduct (completed).
- The South Bay Aqueduct, including the Del Valle features (completed).
- The California Aqueduct (essentially completed for the first 253 miles of its 444-mile length, with the remainder in various stages of construction), including San Luis Dam and Reservoir (completed), Cedar Springs Dam and Lake Silverwood (under construction), and Perris Dam and Lake Perris (not yet under construction).
- The West Branch of the California Aqueduct, including Castaic and Pyramid Dams and Lakes (under construction).
- Phase I of the Coastal Branch of the California Aqueduct (completed).

In addition, financial assistance continued to be provided from those project funds which are reserved for the construction of water developments by local governmental agencies under the Davis-Grunsky Program.

Present estimates are that adequate funds will be available to complete these "1973 Project facilities" and to initiate project water deliveries throughout Southern California in accordance with contract obligations. However, under the particular assumptions used herein, additional funds must be secured, com-

mencing in 1973, to complete construction of the remaining project facilities:

- Abbey Bridge and Dixie Refuge Dams and Reservoirs, planned for the Upper Feather Division, to satisfy the growth in future demands for water-oriented recreation.
- The Peripheral Canal, to protect the environment of the Sacramento-San Joaquin Delta (particularly the striped bass and salmon fishery) and to facilitate transfer of surplus water across the Delta to Clifton Court Forebay.
- The Upper Eel River Development or an equivalent alternative(s), to maintain the Project's water yield as water use increases within the Sacramento Valley and decreases surplus water in the Delta.
- Phase II of the North Bay Aqueduct, to permit delivery of a project water supply from the Delta to Solano and Napa Counties, commencing in 1980.
- Supplemental developments on the main line of the California Aqueduct, to provide for the continuing buildup in water delivery obligations, including additional pump and power recovery units, San Luis Canal modifications, and Buttes Dam and Reservoir.
- Pyramid Power Complex, to control and conserve the energy from large flows dropping through the West Branch of the California Aqueduct.
- Phase II of the Coastal Branch of the California Aqueduct, together with additional pump units in Phase I plants, to provide a project water supply to San Luis Obispo and Santa Barbara Counties, commencing in 1980.
- The San Joaquin Drainage Facilities, to dispose of, and/or reclaim, agricultural waste water of the San Joaquin Valley.

In view of possible alternative assumptions concerning the above remaining facilities, when and how much additional funds will be required to complete the Project cannot now be defined with a high degree of assurance. Furthermore, it is now premature to specify just how additional funds may be secured. Possible courses of action include:

- Issuance of general obligation bonds in addition to those authorized by the Burns-Porter Act.
- Appropriation of additional amounts of the State's tideland oil and gas revenues for use by the Project.
- Appropriation of General Fund moneys.
- Arrangement for project completion by agencies other than the Department of Water Resources.
- Issuance of revenue bonds to finance construction of powerplants.
- Advance of moneys by the Project's water contractors.

Present Sources of Funds

General obligation bonds provide the major source of funds for project construction costs. The Burns-Porter Act (California Water Code Sections 12930–12944) authorizes the issuance of \$1.75 billion in such bonds for construction of the “State Water Facilities”, a specific group of works defined in the Act which, together with certain “Additional Facilities” (the Upper Eel River Development), constitute the State Water Project. This authorization includes a reservation of \$130 million in bonds specifically for financial assistance to local agencies under the Davis-Grunsky Program (California Water Code Sections 12880–12898). As of December 31, 1969, \$1.15 billion in general obligation bonds had been sold—none were sold during 1969 because high interest rates precluded the marketing of such bonds within the statutory interest ceiling rate of 5 percent.¹⁴²

Arrangements have been made for a loan from the State's General Fund of up to \$100 million to assure that project construction will proceed on schedule through June 1970. To the extent that the loan is called upon, the amount borrowed will be repaid, with interest, from future sales of general obligation bonds.¹⁴³

California Water Fund moneys, derived from payments to the State for oil and gas royalties and bonuses under tideland leases, are also pledged to purposes of the Burns-Porter Act. As of December 31, 1969, accruals to the Fund totaled about \$176 million. By enactment of Senate Bill 261 on June 28, 1968 (Calif. Stats. of 1968, Chapter 411), the balance of moneys in the Fund, and moneys which would have accrued to the Fund through fiscal year 1971–72, were appropriated to other project funds. Under this Act, \$25 million will accrue to the California Water Fund commencing in fiscal year 1972–73.¹⁴⁴

¹⁴² The California Water Resources Development Finance Committee, composed of the Governor, the State Treasurer, the State Controller, Director of Finance, and Director of Water Resources, authorizes the sale of respective series of bonds and reports annually to the Legislature on the expenditure of funds. See Department of Water Resources “Report of the California Water Resources Development Finance Committee on Department of Water Resources to the Legislature on the State Water Resources Development System”, January 1969. (See also Water Service Contractors Council Memo No. 446, “Report Pursuant to Water Code Section 12939”, January 24, 1969).

¹⁴³ See pp. 1–2.

¹⁴⁴ See pp. 1–2, Bulletin 132-69.

The Burns-Porter Act also provides that, to the extent California Water Fund moneys are used in lieu of bond funds, for construction of the “State Water Facilities,” an equal amount of bonds is reserved (“offset”) for construction of the “Additional Facilities”. The amount of bonds to be “offset” was effectively limited to about \$176 million by enactment of Senate Bill 261. By the time moneys will again accrue to the California Water Fund (fiscal year 1972–73), all authorized general obligation bonds are expected to have been either expended or reserved.

Revenue bonds, issued by the Department under the State's Central Valley Project Act (California Water Code Sections 11100–11125), are also used to finance certain construction costs allocated to power generation. As of December 31, 1969, the Department had sold almost \$245 million in Central Valley Project Revenue Bonds, Oroville Division, which will finance about \$213 million of project construction costs.

Miscellaneous receipts are also available to the Project as a result of the following cost-sharing agreements and legislative actions:

- Specific appropriations made available by the Legislature for project construction prior to the effective date of the Burns-Porter Act. (These appropriations financed about \$100 million of construction costs.)
- Those moneys diverted from the California Water Fund during the period June 28, 1968 through June 30, 1972 by enactment of Senate Bill 261 of the 1968 Legislature. (About \$33 million have been so diverted as of December 31, 1969, and an additional \$50 million are expected before June 30, 1972.)
- A continuing annual appropriation of \$5 million from tideland gas and oil revenues to reimburse project capital expenditures for recreation and fish and wildlife enhancement, provided for by enactment of Assembly Bill 12 of the 1966 Legislature (Calif. Stats. of 1966, Chapter 27). (\$20 million have been so appropriated as of December 31, 1969. Annual appropriations are expected to continue beyond 2000 to fully reimburse the Project for eventual expenditures for recreation and fish and wildlife enhancement.)
- Federal contributions for the costs of project facilities which are allocable to flood control. (Almost \$70 million of such contributions have been received as of December 31, 1969, and additional contributions of \$4 million are expected under present agreements.)

- Federal contributions for the costs of project and recreation development lands reserved for “open space”. (Less than \$2 million of such contributions have been received as of December 31, 1969; about the total expected.)
- Payments by the City of Los Angeles, Department of Water and Power, for cooperative development of the Castaic Power Complex on the West Branch. (Such payments are expected to commence in 1971 and will total about \$41 million.)
- Advance payments by water contractors for project construction of turnout structures and of excess delivery capability in certain aqueduct reaches. (Such payments amounted to about \$38 million as of December 31, 1969, and additional payments of about \$39 million are expected.)
- Other income, including certain right-of-way proceeds and interest earnings. (Such income totaled about \$16 million as of December 31, 1969.)

Miscellaneous receipts may be applied both to capital costs and to general obligation bond service. The first call on miscellaneous receipts is coverage of any bond service which exceeds available operating revenues—to avoid withdrawals from the State General Fund for this purpose, because of the detrimental effect such withdrawals would have on the State’s overall credit rating. Because of this first call, the ability of available funds to finance capital costs depends on the total miscellaneous receipts which must be reserved now for future bond service coverage. Thus, a financial analysis of the State Water Project requires a comprehensive projection of annual bond service requirements and annual operating revenues for all future years until the bonds have been repaid.

Assumptions Basic to the Financial Analysis

Though construction is well under way and water and power sales contracts guarantee eventual repayment of reimbursable costs, future capital requirements, bond service, and operating revenues depend on several undefined aspects of the Project. These uncertainties concern primarily those facilities other than the “1973 Project facilities”. This section describes these aspects and the Department’s current assumptions regarding them.

Assumptions re Future Capital Requirements

Listed below are the major assumptions regarding future expenditures to be incurred to complete the State Water Project.

- Costs and salaries prevailing on December 31, 1969, will escalate during future years as follows:¹⁴⁵

Years	Percent increase per year		
	State salaries	Construction costs	Right-of-way costs
1970 through 1972----	5	6	7.25
1973 through 1975----	2	3	7.25
After 1975-----	0	0	7.25

- Abbey Bridge and Dixie Refuge Dams and Reservoirs will be constructed so as to be operational in 1979 and 1981, respectively—assuming the determination by the Department of Parks and Recreation that these facilities will be needed by those dates to satisfy growing demands for water-oriented recreation. The total capital costs for these facilities are estimated to be \$14 million.
- The Peripheral Canal will require the expenditure of about \$150 million in project funds—the State’s share of capital costs for a joint federal-state facility as presented in the Bureau of Reclamation’s final feasibility report, with allowances for rising construction prices and salaries, state planning costs, and operations costs to be incurred prior to completion. Final design of the Peripheral Canal will be initiated in 1972; the facility will be operational in 1977. This schedule and/or estimated expenditure may have to be modified (a) to conform to the timing of federal authorization and funding or (b) to permit the State to proceed without federal participation.¹⁴⁶
- The Upper Eel River Development, or an equivalent alternative(s), will be constructed by 1986 to provide an additional 900,000 acre-feet of annual yield in the Sacramento-San Joaquin Delta—sufficient to maintain the project water yield until the end of the project repayment period (approximately 2035). Those estimated costs reported for the “Middle Fork Eel River Development” in last year’s bulletin (\$162 million), together with state payments under an assumed Water Supply Act of 1958 contract for future conservation storage on the Eel River, will approximate the eventual costs of the particular Development to be constructed.¹⁴⁷

¹⁴⁵ Department of Water Resources memorandum from Alfred R. Golzé to Mr. William R. Gianelli, “Escalation Rates”, December 8, 1969, approved December 8, 1969. These escalation rates are essentially the same as those basic to last year’s bulletin, except that an additional 1 percent per year is provided for construction costs through 1975.

¹⁴⁶ See pp. 5–6.

¹⁴⁷ See pp. 7–9. See also p. 53, Bulletin 132-69.

- Phase II construction of the North Bay Aqueduct, estimated to require \$15 million, is scheduled to commence in 1976 so that deliveries of project water to Napa and Solano Counties from the Sacramento-San Joaquin Delta can begin in 1980. However, these dates may be accelerated if mutually agreed to by the Counties and the Department. Purchase of right-of-way in critical areas subject to early municipal and industrial development will commence in 1970.¹⁴⁸
- Buttes Dam and Reservoir, in the Mojave Division of the California Aqueduct, will be constructed during the period 1976 through 1980. The capital costs of the Dam and Reservoir are estimated to be \$13 million, based on construction of an assumed 27,800-acre-foot facility. Construction is conditioned on financial feasibility. Therefore, these estimated expenditures may be modified, depending on the final size of the facility to be constructed as well as on the availability of project funds.
- The San Luis Canal of the California Aqueduct will be modified to maintain, and eventually augment, the design conveyance capacity between Dos Amigos Pumping Plant and Kettleman City. Modifications to compensate for subsidence along the Canal will cost the State about \$4 million during the period 1970 through 1973 to maintain the present design capacity. In addition, about \$10 million will be expended during the period 1983 through 1985 for raising the canal lining to increase the design capacity of the canal by about 1,000 cubic feet per second.
- Phase II construction of the Coastal Branch of the California Aqueduct will commence in 1975 and will be completed so as to permit initial delivery of project water to San Luis Obispo and Santa Barbara Counties in 1980. Under the Counties' water contracts, the year of initial water delivery (and the schedule for expending approximately \$67 million in capital costs for Phase II construction) may be accelerated or deferred, or such services and expenditures may be eliminated entirely—depending on the exercise of options available to the Counties.
- The Pyramid Power Complex on the West Branch of the California Aqueduct will be needed by about 1978 to control the energy from falling project water between Quail Canal and Pyramid Lake. (Before about 1978, an improved natural channel of Gorman Creek will safely convey the then relatively small flow of project water between these two points.) Negotiations are under way among the Department, Southern California Edison Company, and the City of Los

Angeles, Department of Water and Power regarding the optimum development of the electric power potential between these two points. This development would be financed by revenue bonds. Since the physical and financial plan is currently under negotiation, neither the future costs of the Complex nor the additional funds which offset such costs are included in the financial analysis.

- The San Joaquin Drainage Facilities will be constructed at some indefinite time after 1980 when annual accruals to project funds exceed remaining construction expenditures for project facilities (assuming that beneficiaries guarantee repayment of the reimbursable costs of the Drainage Facilities). The only costs for the Drainage Facilities included in the current financial analysis are those incurred to date and the State's share of those to be incurred in the future to complete federal-state feasibility studies concerning the treatment of agricultural waste waters.

Assumptions re Future Available Funds

Listed below are the major assumptions regarding future project funds to be made available to the Department for financing (a) capital costs and (b) any future general obligation bond service which exceeds project operating revenues.

- Proposition 7 of the June 2, 1970 Ballot will be approved by the electorate, and the remaining \$600 million in general obligation bonds authorized under the Burns-Porter Act will be sold.
- General Fund moneys will be made available to carry project construction forward until proceeds from the future sale of general obligation bonds are available.
- Additional funds will be derived from the future sale of revenue bonds supported by generation from a Pyramid Power Complex on the West Branch of the California Aqueduct. Such future sale will provide additional funds at least equal to the capital costs of the Complex and appurtenances.
- Annual appropriations from the State's tideland gas and oil revenues to the Department will continue indefinitely in the full amounts presently provided for by law (Calif. Stats. of 1966, Chapter 27, and Calif. Stats. of 1968, Chapter 411)—\$16 million annually through fiscal year 1969-70 and \$30 million annually thereafter. (In the past, the Legislature has acted to both decrease and increase such annual appropriations and may exercise its prerogative to do either again at any time in the future.)

¹⁴⁸ See pp. 4-5.

- Those repayments to the California Water Fund, which will be derived from project revenues under the “third priority” of use specified by the Burns-Porter Act, will be available to the Department for expenditure.
- Payments by the City of Los Angeles, Department of Water and Power, will be made in the amounts set forth in proposed Amendment No. 2 to the Contract for Cooperative Development, West Branch (Castaic). Under the proposed amendment, the City will agree to accelerate their payments to the State. In exchange, the State will guarantee that (a) initial filling of Pyramid Lake above elevation 2,290 feet will begin by April 15, 1973; (b) the reservoir outlet works will be operational by April 15, 1973; and (c) construction of Pyramid Dam will be completed by December 1973.
- Of the possible courses of action previously described, the additional funds required to complete the State Water Project will be provided from a supplemental authorization of general obligation bonds.
- Project funds will realize short-term interest income on the unexpended balance of all moneys, including moneys in the California Water Fund, at a rate equivalent to 7 percent per annum through 1972, and 6 percent per annum thereafter.

Assumptions re Future General Obligation Bond Service

Listed below are the major assumptions as to the Project’s future annual principal and interest payments on general obligation bonds, which affect the projected amounts of certain funds to be applied to bond service instead of to capital costs.

- All future issues of general obligation bonds will be sold at a net interest cost of 6.5 percent.
- The service pattern for all future issues of general obligation bonds will provide for no maturities during the first nine years after issuance, with maturities scheduled so as to produce approximately level annual service for the years thereafter, and with a final maturity not later than 50 years after issuance—the maximum term permitted by the Burns-Porter Act.
- The principal amount of loans from the General Fund will be repaid by proceeds from sale of general obligation bonds within two years. Interest on such loans will be paid at the rate of 7 percent per annum from project revenues or miscellaneous receipts.

Assumptions re Future Project Revenues

Listed below are the major assumptions regarding the flow to the Project of “net operating revenues” (the portion of total operating revenues which exceeds the costs of project operations, maintenance, pumping power, and replacements and which can be applied to general obligation bond service).

- The Pyramid Power Complex will constitute a separate set of power facilities not included under the classification of “project facilities” as defined in the water supply contracts.
- Operation of the amendment of Water Supply Contract Article 22, under which the estimated reimbursable costs of the Upper Eel River Development will be temporarily excluded from rate calculations, will be limited to those charges assessed the water contractors in 1970 only.¹⁴⁹
- The project repayment period will extend through the year 2035.
- Future legislatures will declare that revenues will be available to the State Water Project from the sale or other disposal of Oroville power after 2018, the maturity of Central Valley Project Revenue Bonds, Oroville Division.
- Future legislatures will make available appropriations from the State’s General Fund in annual amounts equal to those multiple-purpose operating costs of the Project that are allocable to recreation and fish and wildlife enhancement. (Continuing appropriations from the State’s tideland gas and oil revenues for the multiple-purpose capital costs of the Project allocable to these purposes has been provided for by Calif. Stats. of 1966, Chapter 27.)
- Approximately 18 percent of the \$130 million in total expenditures under the Davis-Grunsky Program will be for loans and 82 percent for grants. (This is the relationship between loans and grants for the \$67 million in applications which have been approved through December 31, 1969.)

Estimated Project Costs

This section summarizes the estimated total costs of the State Water Project under the assumptions previously described.

Estimated Capital Expenditures

About \$1,676 million in capital expenditures have been incurred through December 31, 1969. Capital expenditures which will have been incurred by the end of the Project’s construction period (1985) are now estimated to total \$2,837 million. By the end of the project repayment period (2035), an estimated

¹⁴⁹ See pp. 27–28.

TABLE 8

SUMMARY OF CAPITAL EXPENDITURES FOR MAJOR FACILITIES

(in thousands of dollars)

Calendar Year	Local Projects (Davis-Grunsky Program)	San Joaquin Drainage Facilities	Feather River Facilities		Delta Facilities (Peripheral Canal) (a)	Upper Eel River Development (b)	California Aqueduct (a)	North Bay Aqueduct	South Bay Aqueduct	Unassigned Costs (c)	Total
			Upper Feather Division	Oroville Division							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Financed from legislative appropriations provided prior to Burns-Porter Act (d)											
18 years, 1952-1969	0	321	2,896	63,496	681	0	21,252	136	11,054	255	100,091
Financed from project funds provided subsequent to Burns-Porter Act (e)											
10 years, 1960-1969	50,787	5,484	11,294	429,899	12,229	5,700	994,153	3,684	55,779	6,681	1,575,690
Subtotal, Actual for 18 years, 1952-1969	50,787	5,805	14,190	493,395	12,910	5,700	1,015,405	3,820	66,833	6,936	1,675,761
To be financed from project funds (f)											
1970	10,600	141	753	7,282	2,029	650	247,708	344	569	514	270,590
1971	10,600	25	41	1,653	1,835	1,000	206,073	196	321	862	222,606
1972	10,600	0	9	1,146	5,195	1,350	90,688	106	328	908	110,330
1973	10,600	0	8	105	37,322	3,995	41,531	100	375	1	94,037
1974	10,600	0	5	40	31,691	3,487	18,070	172	74	2	64,141
1975	10,600	0	202	40	31,269	3,087	18,006	116	292	0	63,612
6 years, 1970-1975	63,600	166	1,018	10,266	109,341	13,569	622,076	1,034	1,959	2,287	825,316
1976	10,600	0	323	20	28,069	11,291	10,457	514	29	5	61,308
1977	5,013	0	2,170	0	159	14,758	10,275	1,065	238	0	33,678
1978	0	0	4,249	0	0	14,864	26,721	3,369	32	0	49,235
1979	0	0	595	0	0	15,003	35,598	8,027	0	0	59,223
1980	0	0	3,169	0	0	15,150	15,497	1,373	0	0	35,189
1981	0	0	1,668	0	0	15,368	9,458	39	0	0	26,533
1982	0	0	0	0	0	15,540	3,331	2	0	0	18,873
1983	0	0	0	0	0	16,983	1,425	0	0	0	18,408
1984	0	0	0	0	0	14,699	5,793	1	0	0	20,493
1985	0	0	0	0	0	9,208	3,770	1	0	0	12,979
10 years, 1976-1985	15,613	0	12,174	20	28,228	142,864	122,325	14,391	299	5	335,919
Subtotal, Projected for 16 years, 1970-1985	79,213	166	13,192	10,286	137,569	156,433	744,401	15,425	2,258	2,292	1,161,235
Total, Actual and projected for project construction period, 1952-1985											
	130,000	5,971	27,382	503,681	150,479	162,133	1,759,806	19,245	69,091	9,228	2,837,016
To be financed from repayments of project funds provided by project net operating revenues (g)											
10 years, 1986-1995	0	0	0	0	0	99,838	0	0	0	0	99,838
10 years, 1996-2005	0	0	0	0	0	145,110	0	0	0	0	145,110
10 years, 2006-2015	0	0	0	0	0	145,110	0	0	0	0	145,110
10 years, 2016-2025	0	0	0	0	0	145,110	0	0	0	0	145,110
10 years, 2026-2035	0	0	0	0	0	145,110	0	0	0	0	145,110
Total, Projected subsequent to project construction period, 1986-2035	0	0	0	0	0	680,278	0	0	0	0	680,278

a) Excludes the United States' costs of the San Luis Division (California Aqueduct) and the Delta Facilities.

b) Estimated capital expenditures thru 1985 are for facilities required to convey Eel River water to the Sacramento Valley. Expenditures after 1985 represent the State's payments for the capital costs of conservation storage on the Eel River under federal Water Supply Act of 1958 contract.

c) Includes the temporarily unassigned initial costs of mobile equipment for project operations and maintenance and interest accruals on condemnation deposits reserved for land purchases that must be paid when litigation is completed.

d) Includes actual expenditures financed by special legislative appropriations from the General Fund and California Water Fund. The funds so made available by these prior appropriations are included in the classification of "Miscellaneous Receipts" (Table 15, Column 2).

e) Includes actual expenditures from general obligation and revenue bond proceeds, California Water Fund, and "Miscellaneous Receipts".

f) An estimate of the projected sources of financing for these capital expenditures are presented in Table 14.

g) These costs would be financed thru repayments to the California Water Fund under the "third priority" use of project revenues as defined in the Burns-Porter Act, in the manner indicated in Table 14.

additional \$680 million in state principal and interest payments will have been incurred under an assumed federal Water Supply Act of 1958 contract for federal-constructed conservation storage capacity in an Upper Eel River Development. (These payments will be funded solely by moneys derived from operating revenues and will not add to the capital funding requirements of the Project.)

Estimated annual expenditures for each major facility are shown in Table 8 and are summarized graphically for the project construction period on Figure 5.

Composition of Estimated Capital Expenditures. Total capital expenditures for each facility include all costs incurred for the facility between the dates when authorized for construction and December 31 of the year when declared capable of delivering water

in accordance with contract provisions. Capital expenditures also include the costs of constructing additional works or betterments within the operational period, such as for installing those pump units that are staged in accordance with the build-up in water deliveries.

Capital costs of facilities constructed by the United States and used by the State Water Project require special treatment. For assumed federal-constructed conservation storage capacity in an Upper Eel River Development, project capital expenditures include only those state principal and interest payments under a Water Supply Act of 1958 future contract. For joint-use facilities constructed by the Bureau of Reclamation and financed, in part, with funds advanced by the State (the San Luis Division of the California Aqueduct and, as assumed herein, the Delta Facilities),

FIGURE 5

CAPITAL EXPENDITURES 1952-1985

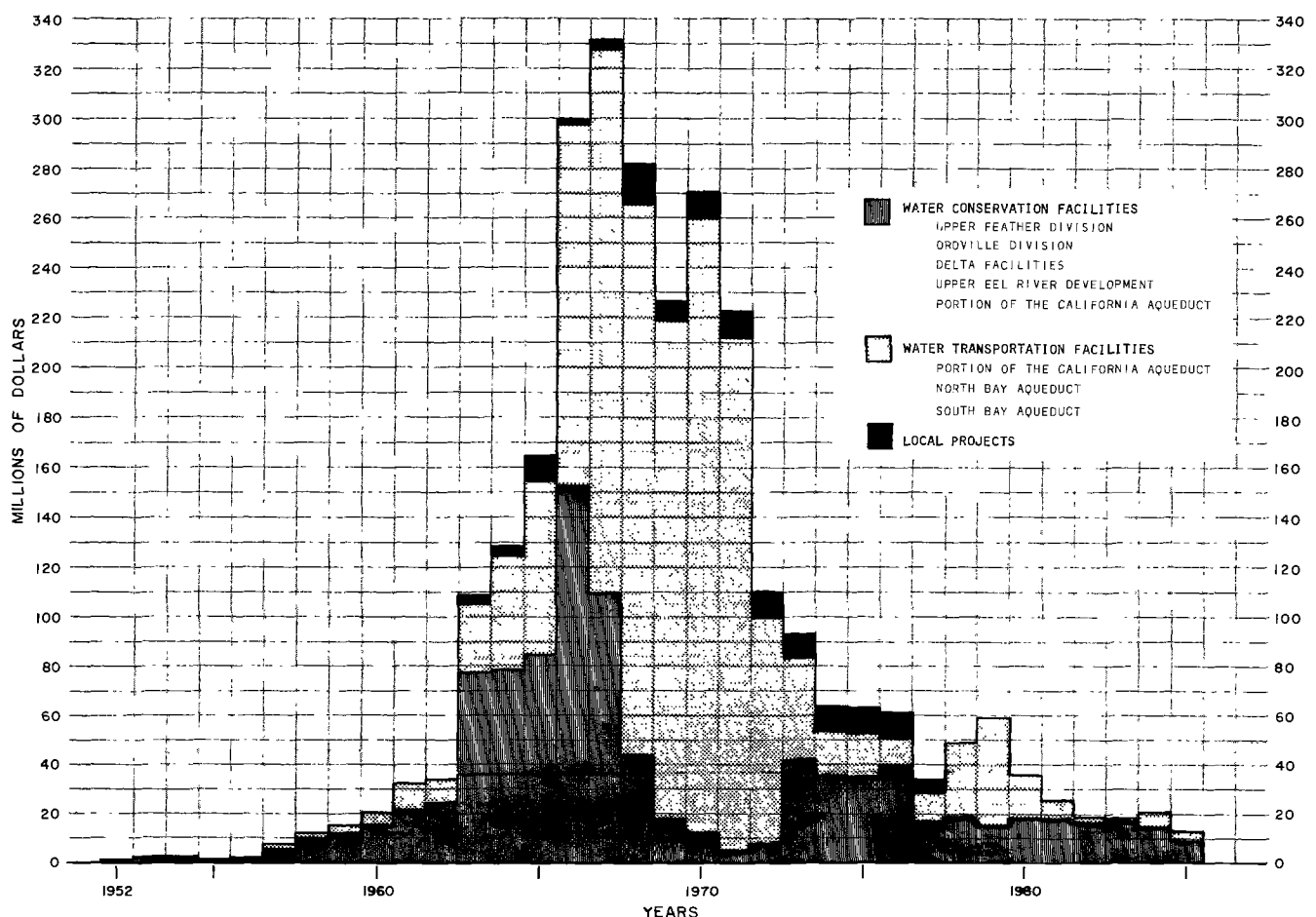


TABLE 9

COMPOSITION OF CAPITAL EXPENDITURES (a)

(in thousands of dollars)

Calendar Year	Surveys and Engineering Studies	Preliminary and Final Design	Rights-of-Way and Relocations	Construction Contracts and Supervision	Operating Costs Incurred During Construction (b)	Loans and Grants (Davis-Grunsky Program)	Project Payments to the United States (c)	Total Capital Expenditures
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Subtotal, Actual for 18 years, 1952-1969	31,378	103,278	154,292	1,147,498	42,437	50,787	146,111	1,675,781
1970	1,733	5,436	24,552	219,158	7,670	10,600	1,441	270,590
1971	1,864	2,226	6,942	189,107	9,466	10,600	2,401	222,606
1972	2,075	1,972	3,280	81,433	5,339	10,600	5,631	110,330
1973	1,768	4,843	7,985	26,081	3,610	10,600	39,150	94,037
1974	1,160	3,727	1,953	14,717	1,659	10,600	30,325	64,141
1975	705	4,670	826	16,174	984	10,600	29,653	63,612
6 Years, 1970-1975	9,305	22,874	45,538	546,670	28,728	63,600	108,601	825,316
1976	450	2,655	780	18,787	922	10,600	27,114	61,308
1977	150	2,481	2,339	23,115	580	5,013	0	33,678
1978	0	1,146	1,532	45,856	701	0	0	49,235
1979	0	741	688	57,138	656	0	0	59,223
1980	0	544	350	33,916	379	0	0	35,189
1981	0	87	0	26,148	298	0	0	26,533
1982	0	51	0	18,538	284	0	0	18,873
1983	0	683	0	17,426	299	0	0	18,408
1984	0	120	0	20,099	274	0	0	20,493
1985	0	0	0	12,769	210	0	0	12,979
10 Years, 1976-1985	600	8,508	5,689	273,792	4,603	15,613	27,114	335,919
Subtotal, Projected for 16 years, 1970-1985	9,905	31,382	51,227	820,462	33,331	79,213	135,715	1,161,235
Total, Actual and projected for project construction period, 1952-1985	41,283	134,660	205,519	1,967,960	75,768	130,000	281,826	2,837,016
10 Years, 1986-1995	0	0	0	0	0	0	99,838	99,838
10 Years, 1996-2005	0	0	0	0	0	0	145,110	145,110
10 Years, 2006-2015	0	0	0	0	0	0	145,110	145,110
10 Years, 2016-2025	0	0	0	0	0	0	145,110	145,110
10 Years, 2026-2035	0	0	0	0	0	0	145,110	145,110
Total, Projected subsequent to project construction period, 1986-2035	0	0	0	0	0	0	680,278	680,278

- a) Projected expenditures based on prices prevailing on December 31, 1969, with allowances for future price escalation.
- b) Operating costs incurred prior to transfer of respective facilities from construction to operation and for initial filling of aqueduct facilities including allowances for future price escalation.
- c) State's share of construction expenditures incurred by the United States for San Luis Division and Delta Facilities, and principal and interest payments for conservation storage on the Eel River, assumed to commence in 1986 under a federal Water Supply Act of 1958 contract.

only the amount of the State's advances is included as project capital expenditures for the respective facilities.

The estimated composition of annual capital expenditures for the Project as a whole is shown in Table 9.

The current estimate of \$2,837 million for the total capital expenditures during the Project's construction period is about \$41 million more than the estimate of \$2,796 million shown in Bulletin 132-69. This \$41 million increase is primarily attributable to an upward revision of escalation rates applied to future expenditures, increased capitalized operations and maintenance costs resulting from deferral of the operational dates of the Santa Ana Division, and an improved system of estimating capital costs.

Allocation of Capital Expenditures Among Project Purposes. The Department must allocate estimated capital costs among project purposes before projections can be made of the future operating revenues and miscellaneous receipts to be available to the Project. The estimated distribution of actual and projected annual capital costs among project purposes is shown in Table 10.

Operating Costs

While operating costs must be projected in order to estimate future operating revenues, changes in operating costs cause concomitant changes in operating revenues and thus have no material effect on the financial analysis. For this reason, the projected salaries of operations and maintenance personnel are not increased herein to allow for future price escalation during the operational period. Generally, the portion of operating revenues received for reimbursement of operating costs is directly applied to such costs during the year in which they are incurred.

Actual and estimated operating costs for the State Water Project, together with the estimated composition of such costs, are summarized in Table 11. These costs include the total operating costs for all project facilities, except that only the State's share is included for the Delta Facilities and for conservation storage on the Eel River, and no operating costs are included for the Pyramid Power Complex or for the San Joaquin Drainage Facilities.

Pumping Costs. As shown in Table 11 the costs of power constitute the largest single item of annual operating costs for the Project. Under full project water deliveries, power costs, including costs for transmission service, are estimated to be over \$42 million annually.

The combined capacity and energy requirements of all project pumping plants are met by the most economical combination of power sources available to the Department. These sources now include Canadian Entitlement power, Bonneville Power Administration, the California Suppliers, and power recovery plants

on the California Aqueduct (San Luis Pumping-Generating Plant and, eventually, Devil Canyon, Castaic, and San Luis Obispo Powerplants). The estimated power costs and the power recovery values shown in Table 11 reflect anticipated economies to be realized from cooperative development of nuclear power. Specifically, it is assumed that the State will share about half the capacity of two 1,200-megawatt units; the first to be completed in 1979, and the second in 1984.¹⁵⁰

Under full project water deliveries, the value of recovery plant generation is estimated to be about \$8 million annually. This value is equal to the cost of capacity and energy which would have been purchased from alternative sources if recovery generation were not available. In addition to the alternative cost, the value of Castaic Powerplant generation also includes the payment from the City of Los Angeles, Department of Water and Power, for peaking capacity foregone under the Contract for Cooperative Development, West Branch. Estimated sales of Oroville power (after April 1, 1969) and Pyramid power are not included in the values shown in Table 11 for recovery plant generation, since these sales will support actual and assumed revenue bond sales and will not be applied directly to reduce project operating costs.

Allocation of Operating Costs Among Project Purposes. Allocation of actual and projected operating costs (i.e., the costs of operations, maintenance, pumping power, and replacements) among project purposes and separation of such costs into "minimum and variable" categories are summarized in Table 12. The water supply contracts define variable operating costs as those "incurred in an amount which is dependent upon and varies with the amount of project water delivered"—minimum operating costs as those which do not so vary. The items of operating costs included in the minimum and variable components are defined in Appendix B.

Estimated Net Operating Revenues Available for General Obligation Bond Service

Net operating revenues represent the portion of total operating revenues remaining after deducting payments of project operating costs. Those estimated net operating revenues which will be available for application to general obligation bond service are summarized in Table 13.

Excluded from the values shown in Table 13 are the revenues from the sale of Oroville power through 2018 (the maturity of Central Valley Project Revenue Bonds, Oroville Division) and the specific operating costs of Oroville power facilities through 2018. These operating costs will be funded exclusively by revenues from Oroville power sales and are estimated to be

¹⁵⁰ This is essentially the same assumption which was basic to last year's analysis (see pp. 58 and 65, Bulletin 132-69). (See also Water Service Contractors Council Memo No. 504, "Atomic Energy Development", October 1, 1969, for a discussion of the impact of atomic energy development on water and power in California.)

TABLE 10

DISTRIBUTION OF CAPITAL EXPENDITURES BY PROJECT PURPOSE (a)

(in thousands of dollars)

Calendar Year	Unspecified (b)	Agricultural Waste Water Disposal (c)	Recreation and Fish and Wildlife Enhancement (d)	Flood Control (e)	Water Supply and Power Generation (f)		Total Capital Expenditures
					Conservation Facilities	Transportation Facilities	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Subtotal, Actual for 18 years, 1952-1969	58,271	5,805	74,725	72,104	560,875	904,001	1,675,781
1970	11,114	141	8,747	2,707	8,194	239,687	270,590
1971	11,462	25	6,743	0	4,226	200,150	222,606
1972	11,508	0	4,443	0	6,246	88,133	110,330
1973	10,601	0	13,536	0	29,543	40,357	94,037
1974	10,602	0	10,943	0	25,605	16,991	64,141
1975	10,600	0	10,987	0	25,111	16,914	63,612
6 Years, 1970-1975	65,887	166	55,399	2,707	98,925	602,232	825,316
1976	10,605	0	9,799	0	30,355	10,549	61,308
1977	5,013	0	2,316	0	14,868	11,481	33,678
1978	0	0	4,276	0	14,864	30,095	49,235
1979	0	0	708	0	15,068	43,447	59,223
1980	0	0	3,365	0	15,453	16,371	35,189
1981	0	0	1,767	0	16,168	8,598	26,533
1982	0	0	96	0	16,358	2,419	18,873
1983	0	0	44	0	17,173	1,191	18,408
1984	0	0	170	0	14,699	5,624	20,493
1985	0	0	113	0	9,208	3,658	12,979
10 Years, 1976-1985	15,618	0	22,654	0	164,214	133,433	335,919
Subtotal, Projected for 16 years, 1970-1985	81,505	166	78,053	2,707	263,139	735,665	1,161,235
Total, Actual and projected for project construction period, 1952-1985	139,776	5,971	152,778	74,811	824,014	1,639,666	2,837,016
10 Years, 1986-1995	0	0	0	0	99,838	0	99,838
10 Years, 1996-2005	0	0	0	0	145,110	0	145,110
10 Years, 2006-2015	0	0	0	0	145,110	0	145,110
10 Years, 2016-2025	0	0	0	0	145,110	0	145,110
10 Years, 2026-2035	0	0	0	0	145,110	0	145,110
Total, Projected subsequent to project construction period, 1986-2035	0	0	0	0	680,278	0	680,278

- a) Based on cost allocations of respective project facilities (preliminary, subject to revision).
- b) Consists of temporarily "Unassigned Costs" (\$9,228,000), planning costs incurred for facility features subsequently deleted from the Project (\$548,000), and loans and grants under the Davis-Grunsky Program (\$130,000,000).
- c) Planning costs which will be reimbursed by future beneficiaries of the San Joaquin Drainage Facilities.
- d) Includes joint capital costs of project facilities which are allocated to these purposes, and costs of acquiring recreation land. (These costs will be reimbursed by a continuing appropriation of tideland gas and oil revenues of \$5 million annually.) Excludes the costs of recreation developments themselves, which are financed by the General Fund.
- e) Costs will be reimbursed by federal appropriations under executed agreements.
- f) These costs, as reduced by revenues from the sale of project power, will be reimbursed by project water supply contractors.

COMPOSITION OF OPERATING COSTS (a)

(in thousands of dollars)

Calendar Year	Salaries and Expenses of Sacramento Headquarters Personnel (b) (c)	Salaries and Expenses of Field Personnel (b)			Pumping Power (d)		Deposits to Replacement Sinking Fund Account (e)	Total Operating Costs	Operating Costs Incurred During Construction (f)	Total Operating Costs Incurred Following Construction
		Operations	Plant Maintenance	Civil Maintenance	Used by Pumping Plants	Generated by Recovery Plants				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Subtotal, 1962-1969	Actual for 8 Years 36,572	18,206	(g)	(g)	5,595	- 58	336	60,651	42,437	18,214
1970	7,514	4,901	2,974	4,648	2,174	- 32	287	22,466	7,601	14,865
1971	7,533	5,435	3,460	5,187	4,660	- 293	533	26,515	9,282	17,233
1972	7,415	5,919	3,898	6,260	9,958	- 1,676	723	32,497	5,200	27,297
1973	7,204	6,202	4,183	6,610	12,739	- 3,020	723	34,641	3,466	31,175
1974	7,103	6,291	4,251	6,645	11,000	- 3,003	723	33,010	1,487	31,523
1975	7,083	6,285	4,251	6,645	11,798	- 3,590	723	33,195	791	32,404
6 Years, 1970-1975	43,852	35,033	23,017	35,995	52,329	- 11,614	3,712	182,324	27,827	154,497
1976	7,060	6,112	4,425	6,645	16,278	- 5,630	773	35,663	677	34,986
1977	7,040	6,461	4,425	6,819	19,005	- 6,525	817	38,042	397	37,645
1978	7,040	6,462	4,425	6,819	23,275	- 8,329	817	40,509	456	40,053
1979	7,040	6,503	4,425	6,819	23,201	- 6,418	817	42,387	415	41,972
1980	7,040	6,599	4,552	6,819	25,737	- 7,589	852	44,010	220	43,790
1981	7,040	6,528	4,552	6,819	26,674	- 7,280	852	45,185	157	45,028
1982	7,040	6,554	4,552	6,819	28,273	- 7,308	852	46,782	145	46,637
1983	7,040	6,553	4,552	6,819	31,412	- 7,625	865	49,616	147	49,469
1984	7,040	6,528	4,552	6,819	30,612	- 6,690	889	49,750	148	49,602
1985	7,040	6,528	4,552	6,819	33,529	- 7,644	889	51,713	117	51,596
10 Years, 1976-1985	70,420	64,828	45,012	68,016	257,996	- 71,038	8,423	443,657	2,879	440,778
10 Years, 1986-1995	70,400	67,337	45,520	70,236	402,597	- 82,033	8,890	582,947	0	582,947
10 Years, 1996-2005	70,400	67,839	45,520	70,740	422,760	- 82,200	8,890	603,949	0	603,949
10 Years, 2006-2015	70,400	67,840	45,520	70,740	422,760	- 82,160	8,890	603,990	0	603,990
10 Years, 2016-2025	70,400	67,840	45,520	70,740	422,760	- 82,160	8,890	603,990	0	603,990
10 Years, 2026-2035	70,400	67,840	45,520	70,740	422,760	- 82,160	8,890	603,990	0	603,990
Subtotal, 1970-2035	Projected for 66 Years, 466,272	438,557	295,629	457,207	2,403,962	- 493,365	56,585	3,624,847	30,706	3,594,141
TOTAL ACTUAL AND PROJECTED, 1962-2035	502,844	456,763	295,629	457,207	2,409,557	- 493,423	56,921	3,685,498	73,143	3,612,355

a) Projected costs based on state salary levels prevailing on December 31, 1969.

b) Costs of direct labor (including a prorated share of departmental indirect charges) and of related supplies and equipment.

c) For 1977 and thereafter, these costs include \$1,474,000 for general project administration, \$2,230,000 for general project operations, and \$3,336,000 for operations of specific project facilities.

d) Does not include the value of Oroville power or the

federal share of power used by pumping plants of the San Luis Division or of the Delta Facilities.

e) Funds, presently earning about 7% per annum, for financing the future costs of replacing major components expected to wear out during the project repayment period.

f) These costs are included in Column 5 of Table 9, together with a \$2,625,000 allowance for future escalation of salary levels.

g) These costs are included in the \$18,206,000 shown in Column 2.

TABLE 12

DISTRIBUTION OF OPERATING COSTS BY PROJECT PURPOSE (a)

(in thousands of dollars)

Calendar Year	Miscellaneous Purposes		Recreation and Fish and Wildlife Enhancement(c)			Water Supply and Power Generation					Total, Operating Costs Incurred Following Construction
	Federal (San Luis)	Other (b)	Minimum	Variable	Total	Conser- vation Facil- ities Minimum	Transportation Facilities			Total	
							Minimum	Variable	Total		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Subtotal, 1962-1969	Actual for 8 Years, 2,510 29 868 0 868					3,651	8,704	2,452	11,156	14,807	18,214
1970	1,472	84	596	0	596	6,167	5,407	1,139	6,546	12,713	14,865
1971	1,543	104	750	14	764	6,262	7,488	1,072	8,560	14,822	17,233
1972	1,620	75	1,233	200	1,433	6,530	13,642	3,997	17,639	24,169	27,297
1973	1,709	83	1,389	242	1,631	6,686	15,721	5,345	21,066	27,752	31,175
1974	1,763	84	1,418	225	1,643	6,674	16,159	5,200	21,359	28,033	31,523
1975	1,762	75	1,430	233	1,663	6,882	16,178	5,844	22,022	28,904	32,404
6 Years, 1970-1975	9,869	505	6,816	914	7,730	39,201	74,595	22,597	97,192	136,393	154,497
1976	1,762	81	1,349	256	1,605	6,669	15,312	9,557	24,869	31,538	34,986
1977	1,761	80	1,996	260	2,256	6,621	15,843	11,084	26,927	33,548	37,645
1978	1,759	85	1,974	285	2,259	5,901	16,150	13,899	30,049	35,950	40,053
1979	1,759	83	2,124	256	2,380	7,116	16,191	14,443	30,634	37,750	41,972
1980	1,763	84	1,951	314	2,265	6,366	16,360	16,952	33,312	39,678	43,790
1981	1,766	85	2,036	292	2,328	6,055	17,019	17,775	34,794	40,849	45,028
1982	1,768	79	2,048	305	2,353	5,628	16,966	19,843	36,809	42,437	46,637
1983	1,774	91	1,930	313	2,243	6,024	17,009	22,328	39,337	45,361	49,469
1984	1,776	81	1,933	292	2,225	6,550	16,853	22,117	38,970	45,520	49,602
1985	1,775	95	2,010	292	2,302	6,055	17,554	23,815	41,369	47,424	51,596
10 Years, 1976-1985	17,663	844	19,351	2,865	22,216	62,985	165,257	171,813	337,070	400,055	440,778
10 Years, 1986-1995	17,700	842	20,297	2,812	23,109	72,441	175,758	293,097	468,855	541,296	582,947
10 Years, 1996-2005	17,700	827	20,800	2,860	23,660	72,020	176,212	313,530	489,742	561,762	603,949
10 Years, 2006-2015	17,700	828	20,800	2,860	23,660	72,020	176,212	313,570	489,782	561,802	603,990
10 Years, 2016-2025	17,700	828	20,800	2,860	23,660	72,020	176,212	313,570	489,782	561,802	603,990
10 Years, 2026-2035	17,700	828	20,800	2,860	23,660	72,020	176,212	313,570	489,782	561,802	603,990
Subtotal, 1970-2035	Projected for 66 Years, 116,032 5,502 129,664 18,031 147,695					462,707	1,120,458	1,741,747	2,862,205	3,324,912	3,594,141
TOTAL, ACTUAL AND PROJECTED, 1962-2035	118,542	5,531	130,532	18,031	148,563	466,358	1,129,162	1,744,199	2,873,361	3,339,719	3,612,355

a) Based on cost allocations of respective project facilities (preliminary, subject to revision).

b) Includes costs for waste water monitoring in the San Joaquin Valley, a share of Lake Del Valle costs allocated to flood control, and a share of Angeles Tunnel maintenance costs allocated to City of Los Angeles.

c) Includes joint operating costs of project facilities which are allocated to these purposes. (These costs are being financed by the General Fund.) Excludes the operating costs of recreation developments themselves.

NET OPERATING REVENUES AVAILABLE FOR COVERAGE OF GENERAL OBLIGATION BOND SERVICE

(in thousands of dollars)

Calendar Year	Project Operating Revenues										Less Operating Costs (i)	Available Net Operating Revenues
	Water Supply Revenues (a)					Davis-Grunsky Loan Repayments (d)	Payments for Operating Costs Allocated to:		Miscellaneous Income (g) and Oroville Power Revenues (h)	Total Project Operating Revenues		
	Delta Water Charges (b)		Transportation Charges (c)		Total Water Supply Revenues		Recreation and Fish & Wildlife Enhancement (e)	United States (San Luis) (f)				
	Capital Costs	Operating Costs	Capital Costs	Operating Costs								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Subtotal, Actual for 8 years, 1962-1969	1,655	98	72,032	12,478	86,263	402	868	2,510	26,795	116,838	17,636	99,202
1970	1,626	533	41,184	5,974	49,317	130	596	1,472	1,766	53,281	13,365	39,916
1971	2,146	715	40,281	6,371	49,513	185	764	1,543	5,137	57,142	15,733	41,409
1972	9,159	1,613	71,346	17,507	99,625	249	1,433	1,620	4,340	107,267	25,797	81,470
1973	11,215	1,944	52,035	20,640	85,834	305	1,631	1,709	2,279	91,758	29,675	62,083
1974	13,594	2,283	75,140	21,323	112,340	358	1,643	1,763	2,452	118,556	30,023	88,533
1975	15,859	2,622	76,235	21,765	116,481	411	1,663	1,762	2,669	122,986	30,904	92,082
6 Years, 1970-1975	53,599	9,710	356,221	93,580	513,110	1,638	7,730	9,869	18,643	550,990	145,497	405,493
1976	18,346	2,989	74,774	23,885	119,994	467	1,605	1,762	3,876	127,704	33,486	94,218
1977	20,545	3,347	72,783	26,483	123,158	533	2,256	1,761	2,494	130,202	36,145	94,057
1978	22,746	3,706	73,801	29,361	129,614	717	2,259	1,759	1,455	135,804	38,553	97,251
1979	24,910	4,058	75,816	30,331	135,115	725	2,380	1,759	560	140,539	40,472	100,067
1980	27,490	4,478	78,438	32,717	143,123	850	2,265	1,763	15	148,016	42,290	105,726
1981	29,904	4,872	79,782	34,455	149,013	884	2,328	1,766	15	154,006	43,528	110,478
1982	32,266	5,256	80,638	36,310	154,470	915	2,353	1,768	15	159,521	45,137	114,384
1983	34,707	5,654	81,242	38,594	160,197	945	2,243	1,774	15	165,174	47,969	117,205
1984	37,122	6,048	81,757	38,976	163,903	976	2,225	1,776	15	168,895	48,102	120,793
1985	39,605	6,452	82,397	40,855	169,309	1,007	2,302	1,775	15	174,408	50,096	124,312
10 Years, 1976-1985	287,641	46,860	781,428	331,967	1,447,896	8,019	22,216	17,663	8,475	1,504,269	425,778	1,078,491
10 Years, 1986-1995	494,968	80,635	841,804	466,087	1,883,494	10,084	23,109	17,700	150	1,934,537	567,947	1,366,590
10 Years, 1996-2005	521,071	84,889	845,550	488,749	1,940,259	9,595	23,660	17,700	150	1,991,364	588,949	1,402,415
10 Years, 2006-2015	521,178	84,905	837,146	488,800	1,932,029	8,170	23,660	17,700	150	1,981,709	588,990	1,392,719
10 Years, 2016-2025	521,240	84,920	422,998	488,800	1,517,958	5,619	23,660	17,700	102,700	1,667,637	588,990	1,078,647
10 Years, 2026-2035	521,240	84,920	125,729	488,800	1,220,689	345	23,660	17,700	146,650	1,409,044	588,990	820,054
Subtotal, 1970-2035	Projected for 66 years, 2,920,937	476,839	4,210,876	2,846,783	10,455,435	43,470	147,695	116,032	276,918	11,039,550	3,495,141	7,544,409
Total, Actual and projected, 1962-2035	2,922,592	476,937	4,282,908	2,859,261	10,541,698	43,872	148,563	118,542	303,713	11,156,388	3,512,777	7,643,611

a) These projected revenues have been adjusted to project interest rates which match the projected sale of general obligation bonds noted in Table 14. Payments of water charges are shown on a cash basis to be consistent with the payments of general obligation bond service shown in Table 17.

b) These charges, together with power revenues, repay the reimbursable capital costs (Table 10, Column 5) and operating costs (Table 12, Column 6) of project conservation facilities allocable to water supply and power generation.

c) These charges repay the reimbursable capital costs (Table 10, Column 6) and reimbursable operating costs (Table 12, Column 9) of project transportation facilities allocable to water supply.

d) Based on the assumption that about 18 percent of all future expenditures under the Program will be for loans, to be repaid during the last 40 years of a 50-year loan repayment period with interest at 2-1/2 percent.

e) These costs (from Table 12, Column 5) are being financed by annual appropriations from the General Fund.

f) From Table 12, Column 1. (Operating costs allocable to flood control are repaid on a capitalized basis by the United States; and these advances, together with payments for capital costs allocable to flood control, are treated in the financial analysis as "miscellaneous receipts".)

g) Includes annual payments of \$15,000 by the City of Los Angeles for a share of the operating costs of the Angeles Tunnel plus income projected through 1979 from premiums and accrued interest associated with the sale of general obligation bonds, interest earnings on short term investments, and other miscellaneous income sources.

h) Oroville power revenues are pledged to the payment of certain operating costs of the Oroville Division and to the service on revenue bonds. These revenues are assumed to be available to the Project commencing in 2019.

i) From Table 12, Column 11, less those costs financed by the sale of Oroville power of \$578,000 in 1969 and \$1,500,000 thereafter.

\$1,500,000 annually, including \$560,000 annually for deposits to reserves for replacements, future increases in cost levels, and other contingencies.

Projected operating revenues are shown graphically on Figure 6.

Operating revenues are primarily derived from water sales. For the financial analysis, no revenues are assumed under future drainage contracts (since future costs of the San Joaquin Drainage Facilities are excluded from the analysis). Operating revenues in addition to those derived from water sales include:

- Repayments of loans under the Davis-Grunsky Program.
- Continuing appropriations from the State's General Fund in amounts equal to the operating costs allocable to recreation and fish and wildlife enhancement.
- Federal payments for a share of the annual operating costs of the joint-use San Luis Division of the California Aqueduct.

Operating revenues from water sales will be derived from contractor payments of two separate charges:

- The Delta Water Charge, which, together with projected power revenues and credits, will return to the State, with interest, the costs of project conservation facilities allocated to water supply and power generation.
- The Transportation Charge, which will return to the State, with interest, the costs of project transportation facilities allocated to water supply.

Both of these charges include three components: a capital cost component, which will return to the State reimbursable capital costs; and a minimum and a variable operation, maintenance, power, and replacement component, which will return to the State reimbursable fixed and variable operating costs, respectively.

Table 13 summarizes estimated annual payments under the Delta Water Charge and the Transportation Charge by all water supply contractors. A detailed development of water charges for each contractor is presented in Appendix B, which supports the Department's determination of 1971 water charges. However, there are significant differences between the bases for the financial analysis and the determination of water charges, as follows:

- The capital costs shown in Appendix B are based on state salaries and construction prices prevailing on about December 31, 1969. The capital costs for the financial analyses include allowances for future price escalation. (The Department deter-

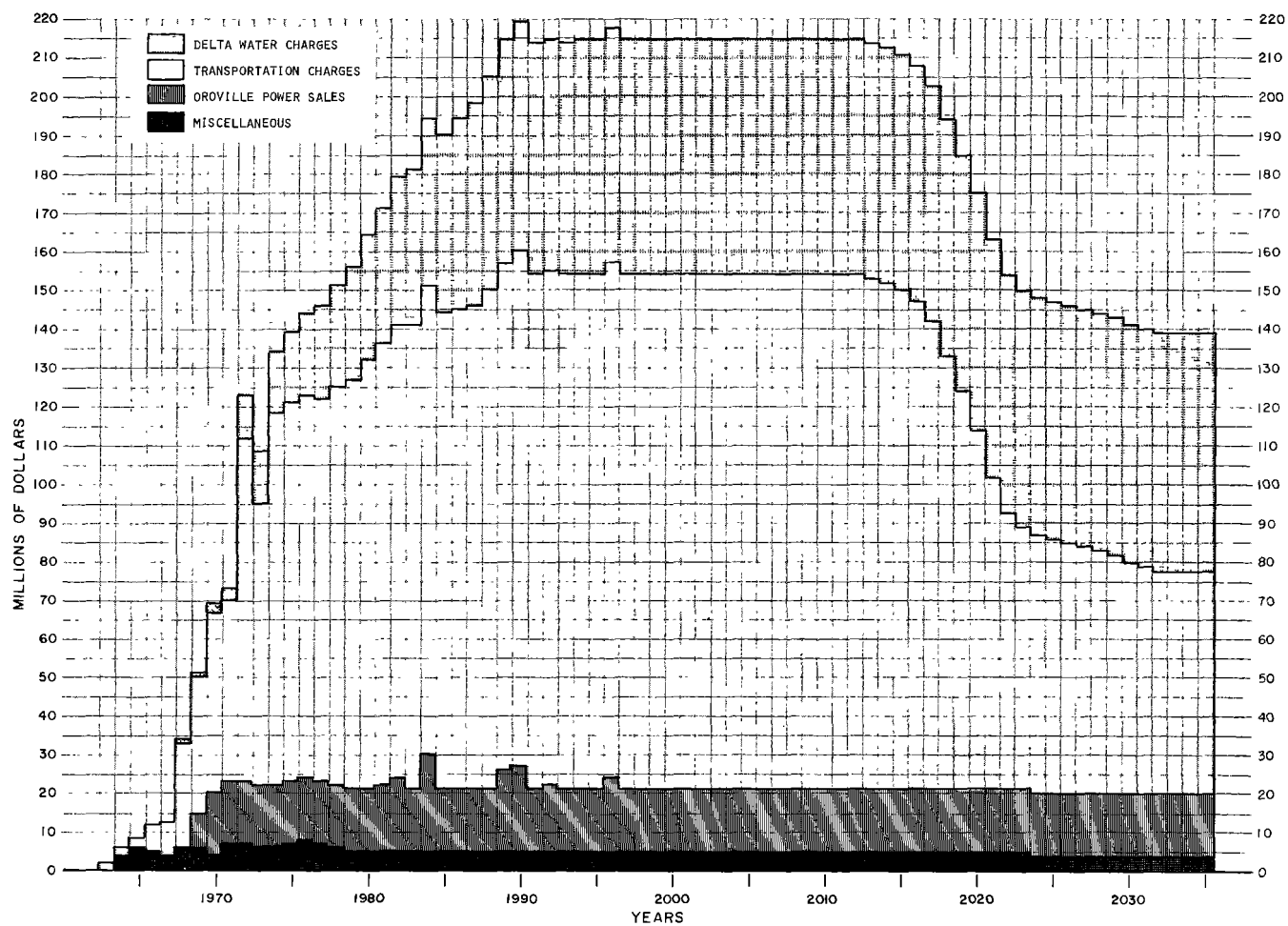
mines water charges on estimates reflecting then-prevailing price levels. To do otherwise would be to charge inflated prices—under certain of the rate calculations—before contractor payment capacities have had the opportunity to similarly inflate.)

- The calculations basic to Appendix B use the current project interest rate (4.021 percent through the sale of Series M general obligation bonds).¹⁵¹ The calculations basic to the financial analysis use projected changes in the rate which will result from future general obligation bond sales. (As previously noted, the financial analysis is based on the assumption that all future general obligation bond sales, including bond sales under an assumed authorization supplemental to the Burns-Porter Act, will be at a net interest cost of 6.5 percent.)
- The calculations summarized in Appendix B develop what past payments should have been under the annual redetermination and adjustment process specified in the water supply contracts for the Transportation Charge. The financial analysis shows actual Transportation Charges paid through 1969 and those to be paid in 1970 under outstanding statements, with adjustments for any apparent overpayments or underpayments added to those charges to be paid in 1971.
- The calculations summarized in Appendix B develop the annual amounts of water charges. The financial analysis accounts for the projected flow of payments of such charges to the State. (For instance, certain payments for operating costs incurred during a particular year will actually accrue to the State during the early months of the following year.)

Both the estimated charges shown in Appendix B and operating revenues projected for the financial analysis are based on the assumption that the project repayment period will extend through 2035—50 years after the last year of construction. This assumption recognizes the difficulty of accurately predicting the last year of repayment of general obligation bonds authorized under the Burns-Porter Act. (As specified in the water contracts, the project repayment period shall extend until all such bonds have been repaid.) If future financial analyses indicate that the last bond repayment will occur before the fiftieth year after the end of construction, the amortization period for charges on reimbursable capital costs to be incurred during the latter portion of the construction period will be adjusted accordingly.

¹⁵¹ See Appendix A for a summary of interest rates on general obligation bond sales through December 31, 1969 (p. 84.)

SOURCE OF PROJECT OPERATING REVENUES



Financial Analysis

The current financial analysis of the State Water Project is shown in Table 14. The table shows the actual and projected annual application of funds for financing all estimated capital expenditures of the Project. The actual and projected sources of funds for financing capital expenditures during the project construction period are shown graphically on Figure 7.

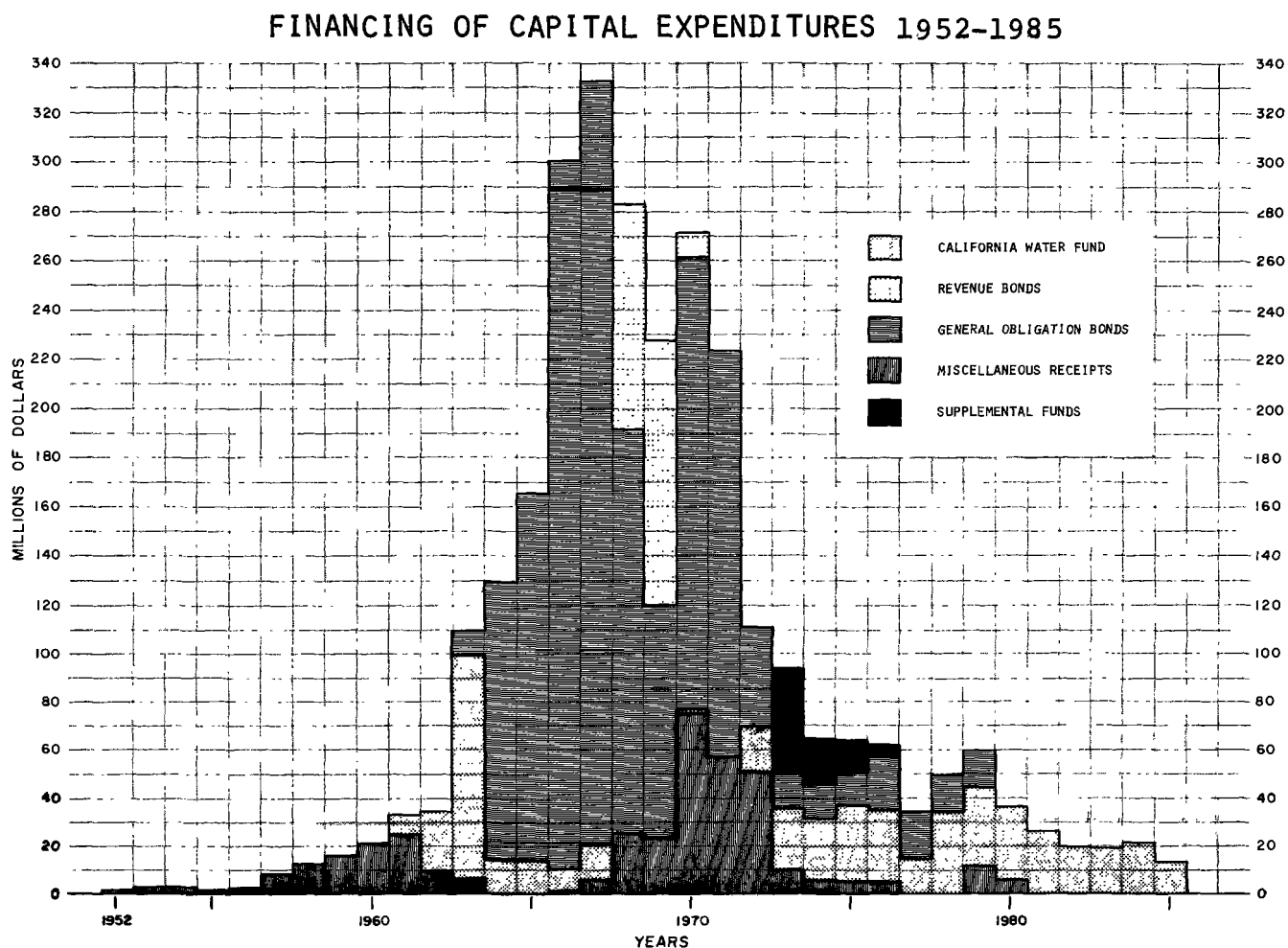
The financial analysis indicates that, on the basis of the assumptions which were previously described, available funds will be sufficient to finance the present construction program for the "1973 Project facilities"—permitting first delivery of project water across the Tehachapis to Castaic Lake in 1971, to contractors served from the Mojave and Santa Ana Divisions in 1972, and to Lake Perris in 1973. Additional financing will be required to provide about \$79 million during the period 1973 through 1976—to complete construction remaining after the "1973 Project facilities". However, should major changes from present assumptions occur, such as construction of the Peripheral Canal

entirely by the State instead of jointly with the United States, additional financing might well be required prior to 1973. Similarly, more rapid escalation of construction prices than assumed herein would further reduce the construction capability of available funds.

The financial analysis indicates that about \$30 million in future miscellaneous receipts, which could otherwise be applied to capital expenditures, must be applied to general obligation bond service to prevent withdrawals from the General Fund for this purpose. Table 15 summarizes the annual amounts of miscellaneous receipts accruing to the Project, the amount of such receipts which must be applied to bond service, and the remaining amounts available for application to capital expenditures.

Commencing in 1978, sizable amounts of available funds will remain unused after financing the capital expenditures assumed for this analysis. In addition, more than sufficient project operating revenues will accrue to the Project to finance principal and interest payments under an assumed Water Supply Act of 1958 contract for the capital costs of conservation storage on the Eel River.

FIGURE 7



FINANCIAL ANALYSIS FOR THE STATE WATER PROJECT, DECEMBER 31, 1969

(in thousands of dollars)

Calendar Year	Total Capital Expenditures (a)	Financing of Capital Expenditures								General Obligation Bond Service (g)	Available Net Operating Revenues (h)(m)	General Obligation Bond Service in Excess of Net Operating Revenues (i)	Disposition of Net Operating Revenues in Excess of General Obligation Bond Service	
		General Obligation Bonds (b)					California Water Fund (b)	Oroville Division Revenue Bond Proceeds (b)(e)	Miscellaneous Receipts (f)				Paid to California Water Fund (j)	Available for Construction (k)
		Burns-Porter Authorization			Assumed Supplemental Authorization									
		From Portion Reserved for:		From Remaining Portion										
		Davis-Grunsky Program (c)	Add'l. Facil. (Offset Bonds)(d)											
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
Prior Appropriations (1)	100,091								100,091					
10 Years, 1960-1969	1,575,690	50,787	5,700	1,093,513	1,150,000	0	176,070	212,773	55,263	145,343	99,202	53,094	0	0
1970	270,590	10,600	650	166,267	177,517	0	0	0	74,657	51,049	39,916	4,180	0	0
1971	222,606	10,600	1,000	154,161	165,761	0	0	0	56,845	63,710	41,409	22,301	0	0
1972	110,330	10,600	1,350	29,989	41,939	0	17,700	0	50,691	70,211	81,470	0	0	0
1973	94,037	10,600	3,995	0	14,595	44,175	25,750	0	9,517	76,611	62,083	3,269	0	0
1974	64,141	10,600	3,487	0	14,087	18,013	25,750	0	6,291	82,236	88,533	0	6,297	0
1975	63,612	10,600	3,087	0	13,687	12,728	32,047	0	5,150	87,969	92,082	0	4,113	0
6 Years, 1970-1975	825,316	63,600	13,569	350,417	427,586	74,916	101,247	0	203,151	431,786	405,493	29,750	10,410	0
1976	61,308	10,600	11,291	0	21,891	4,404	29,863	0	5,150	91,660	94,218	0	2,558	0
1977	33,678	5,013	14,758	0	19,771	0	13,907	0	0	94,501	94,057	444	0	0
1978	49,235	0	14,864	0	14,864	0	34,371	0	0	96,511	97,251	0	740	0
1979	59,223	0	15,003	0	15,003	0	32,270	0	11,950	96,840	100,067	0	3,227	0
1980	35,189	0	0	0	0	0	28,977	0	6,212	98,547	105,726	0	7,179	0
1981	26,533	0	0	0	0	0	26,533	0	0	99,703	110,478	0	10,775	0
1982	18,873	0	0	0	0	0	18,873	0	0	100,066	114,384	0	14,318	0
1983	18,408	0	0	0	0	0	18,408	0	0	100,486	117,205	0	16,719	0
1984	20,493	0	0	0	0	0	20,493	0	0	101,220	120,793	0	19,573	0
1985	12,979	0	0	0	0	0	12,979	0	0	101,411	124,312	0	22,901	0
10 Years, 1976-1985	335,919	15,613	55,916	0	71,529	4,404	236,674	0	23,312	980,945	1,078,491	444	97,990	0
Subtotal, Projected for 16 years, 1970-1985	1,161,235	79,213	69,485	350,417	499,115	79,320	337,921	0	226,463	1,412,731	1,483,984	30,194	108,400	0
Total, Actual and projected for construction period, 1952-1985	2,837,016	130,000	75,185	1,443,930	1,649,115	79,320	513,991	212,773	381,817	1,558,074	1,583,186	83,288	108,400	0
10 Years, 1986-1995	99,838	0	0	0	0	0	99,838	0	0	998,619	1,366,590	0	367,971	0
10 Years, 1996-2005	145,110	0	0	0	0	0	145,110	0	0	999,192	1,402,415	0	282,568	160,655
10 Years, 2006-2015	145,110	0	0	0	0	0	145,110	0	0	879,852	1,392,719	0	145,110	367,757
10 Years, 2016-2025	145,110	0	0	0	0	0	145,110	0	0	265,175	1,078,647	0	145,110	668,362
10 Years, 2026-2035	145,110	0	0	0	0	0	145,110	0	0	0	820,054	0	145,110	674,944
Total, Projected subsequent to project construction period, 1986-2035	680,278	0	0	0	0	0	680,278	0	0	3,102,838	6,060,425	0	1,085,869	1,871,718

a) From Table 8, Column 11.

b) These capital funds through 1969 produce a temporary excess (\$18,416,000) which will be used in 1970. Expenditures of proceeds from the future sale of bonds are shown in Columns 2 thru 6. Future general obligation bond sales are assumed under the following schedule, with bond service (Column 10) and project revenues (Column 11) determined thereon:

Year	Amount of Sale
1970	\$200,000,000
1971	\$150,000,000
1972	\$ 50,000,000
1973	\$ 60,000,000
1974	\$ 60,000,000
1975	\$ 58,435,000
Total	\$578,435,000

c) Under the Burns-Porter Act, \$130,000,000 in bonds are reserved for Davis-Grunsky Loans and Grants.

d) See Table 16, Column 10.

e) From revenue bonds supported by sale of Oroville power.

f) See Table 15, Column 9.

g) See Table 17, Column 7.

h) From Table 13, Column 12.

i) These amounts are funded by miscellaneous receipts, and include estimated interest on General Fund borrowing in 1970 of \$338,000. (See Table 15, Column 10.)

j) Projected reimbursement of expenditures from California Water Fund under the "third priority" of use of revenues as specified by the Burns-Porter Act. Total of repayments shown in Column 13 equal the total of expenditures shown in Column 7.

k) Amounts available for future construction under the "fourth priority" of use of revenues as specified by the Burns-Porter Act.

l) Expenditures during the period 1952 through 1969 from specific appropriations made prior to the effective date of Burns-Porter Act. (See Table 8, Column 11.)

m) Available revenues through 1969 produce a temporary excess (\$6,953,000) which will be used to cover bond service in 1970.

n) Unexpended net operating revenues (\$11,259,000) applied to general obligation bond debt service in 1973.

TABLE 15

ANALYSIS OF MISCELLANEOUS RECEIPTS

(in thousands of dollars)

Calendar Year	Cumulative Balance at Beginning of Year (a)	Miscellaneous Receipts						Cumulative Balance Plus Receipts (h)	Expenditures		Balance at End of Year (j)
		Legislative Appropriations (b)	Federal Reimbursements (c)	Cooperative Power Development (d)	Total Advances by Water Contractors (e)	Interest Earnings on Short Term Investments of Receipts (f)	Total (g)		Financing of Capital Expenditures (i)	Coverage of Bond Service (10)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Prior Appropriations	-	100,091	0	0	0	0	100,091	-	100,091	0	-
10 Years, 1960-1969	-	52,586	69,083	0	37,832	15,723	175,224	175,224	55,263	53,094	66,867(k)
1970	66,867	17,700	3,786	0	7,177	5,608	34,271	101,138	74,657	4,180	22,301
1971	22,301	30,000	288	16,837	7,769	1,951	56,845	79,146	56,845	22,301	0
1972	0	12,300	64	20,198	20,327	251	53,140	53,140	50,691	0	2,449
1973	2,449	5,000	10	4,320	801	206	10,337	12,786	9,517	3,269	0
1974	0	5,000	0	0	1,108	183	6,291	6,291	6,291	0	0
1975	0	5,000	0	0	0	150	5,150	5,150	5,150	0	0
6 Years, 1970-1975	-	75,000	4,148	41,355	37,182	8,349	166,034	-	203,151	29,750	-
1976	0	5,000	0	0	0	150	5,150	5,150	5,150	0	0
1977	0	5,000	0	0	0	150	5,150	5,150	0	444	4,706
1978	4,706	5,000	0	0	37	433	5,470	10,176	0	0	10,176
1979	10,176	5,000	0	0	1,773	439	7,212	17,388	11,950	0	5,438
1980	5,438	5,000	0	0	0	258	5,258	10,696	6,212	0	4,484
1981	4,484	5,000	0	0	116	385	5,501	9,985	0	0	9,985
1982	9,985	5,000	0	0	1	697	5,698	15,683	0	0	15,683
1983	15,683	5,000	0	0	0	1,006	6,006	21,689	0	0	21,689
1984	21,689	5,000	0	0	0	1,315	6,315	28,004	0	0	28,004
1985	28,004	5,000	0	0	0	1,624	6,624	34,628	0	0	34,628
10 Years, 1976-1985	-	50,000	0	0	1,927	6,457	58,384	-	23,312	444	-
TOTALS, 1952-1985	-	277,677	73,231	41,355	76,941	30,529	499,733	-	381,817	83,288	-

a) Each value corresponds with that shown in Column 11 for the preceding year.

b) Includes:

- o Specific appropriations which financed project construction and which were made available by the Legislature prior to the effective date of the Burns-Porter Act (\$100,091,000).
- o Moneys diverted from the California Water Fund to other project funds during the period June 28, 1968, through June 30, 1972 (\$82,586,000).
- o A continuing annual appropriation of \$5,000,000 from tideland gas and oil revenues to reimburse project expenditures for recreation and fish and wildlife enhancement totaling \$95,000,000 through 1985. (Note that these annual appropriations will continue beyond 2000 until all such expenditures are reimbursed, but appropriations accruing after 1980 cannot be applied to the project construction expenditures assumed herein. Accordingly, accruals to the California Water Fund after 1985 (\$25,000,000 per year) cannot be applied to project construction and are not shown in these tables.)

c) Includes flood control contributions for Oroville (\$66,824,000 of which \$2,400,000 are held for revenue bond reserves and are deducted herein) and Del Valle (\$4,856,000) plus federal grants for open-space grants (\$1,551,000).

d) Receipts from payments by the City of Los Angeles under proposed Amendment No. 2 to the Contract for Cooperative Development of the West Branch (Castaic).

e) Values from Tables B-8 and B-9, plus an advance payment of capital cost component in 1972 (\$16,300,000) by The Metropolitan Water District of Southern California for West Branch capacity, in accordance with Amendment No. 7 to the District's contract. Also includes income from the sale of right-of-way originally purchased for Airpoint Reservoir (\$1,275,000) and miscellaneous additional income (\$230,000).

f) At an assumed rate of 7.0 percent per annum through 1972, and 6.0 percent per annum thereafter.

g) Total of the values shown in Columns 2 through 6 for each year.

h) Total of the values shown in Columns 1 and 7 for each year.

i) Miscellaneous receipts remaining after covering general obligation bond service (Column 10).

j) The values shown in Column 8, less those shown in Columns 9 and 10 for each year. A balance of receipts is maintained at the end of 1970 (Column 11) to cover the estimated portion of bond service in excess of net operating revenues through 1972.

k) Balance of miscellaneous receipts available on December 31, 1969.

Principal and interest payments for conservation storage capacity will be made from the California Water Fund with moneys derived from the portion of project operating revenues which eventually exceed operating costs and general obligation bond service. Such net revenues will accrue to the California Water Fund, under the "third priority" of use provided by the Burns-Porter Act, until all expenditures therefrom have been repaid. All net revenue remaining after repayment of the California Water Fund will be available for financing the construction of "Additional Facilities" under the "fourth priority" of use.

The application of project operating revenues is shown graphically on Figure 8 and compares directly with those revenues shown, by respective sources, on Figure 6.

Included in those funds which the financial analysis indicates will be unused are about \$101 million in "offset bonds". Summarized in Table 16 is the use of "offset bonds" for the State's construction of the inter-basin diversion features of an assumed Upper Eel River Development. This residual amount of "offset bonds"

could be reduced by about \$87 million if those miscellaneous receipts and California Water Fund moneys accruing after 1979—used, in the financial analysis, to assist in financing the Development—were used instead for future costs of the San Joaquin Drainage Facilities or for other costs which eventually may be incurred in addition to those assumed for the financial analysis.

Annual service on actual and projected issues of general obligation bonds is summarized in Table 17. Similar data was shown in Bulletin 132-69 for Central Valley Project Revenue Bonds, Oroville Division. Also shown in last year's bulletin, and not repeated in this bulletin since those data are still current, are schedules showing the maturities and coupon rates of outstanding general obligation bond issues and their redemption provisions and additional data for Central Valley Project Revenue Bonds, Oroville Division.¹⁵²

¹⁵² See in Bulletin 132-69: Table 19, "Service on Central Valley Project Revenue Bonds, Oroville Division" (p. 80); Table 20, "Redemption Premiums for General Obligation Bonds" (p. 81); Table 21, "General Obligation Bonds Schedule of Maturities, Amount, and Coupon" (pp. 82-83); and Table 22, "Summary of Central Valley Project Revenue Bonds, Oroville Division" (pp. 84-85).

FIGURE 8

APPLICATION OF PROJECT OPERATING REVENUES

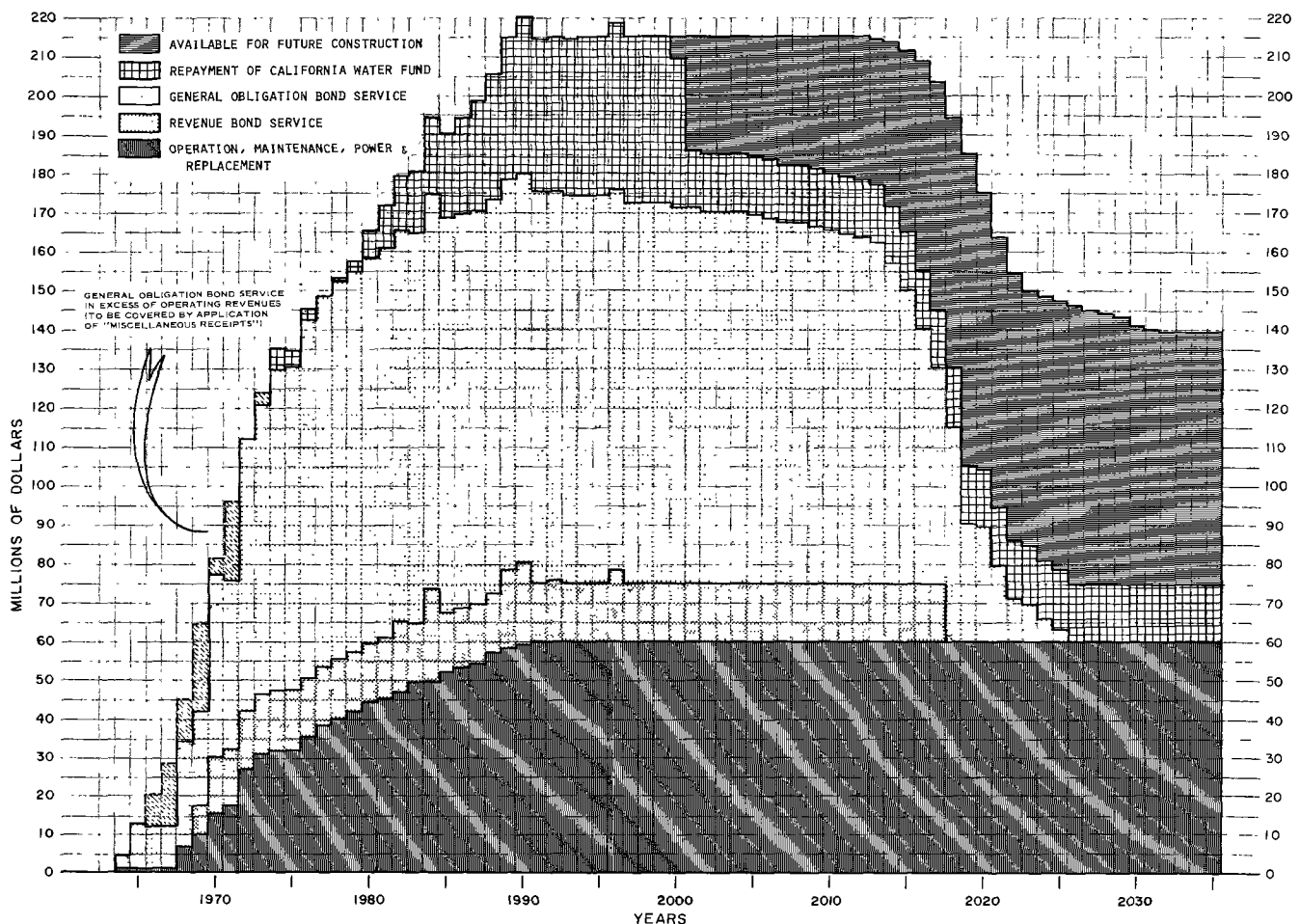


TABLE 16

ANALYSIS OF OFFSET BONDS

(in thousands of dollars)

Calendar Year	Financing of Capital Expenditures												Balance at End of Year of Unissued Offset Bonds (f)	
	Total State Water Project				State Water Facilities				Additional Facilities					
	California Water Fund (a)	General Obligation Bonds (b)	All Other (c)	Total (d)	California Water Fund	General Obligation Bonds	All Other	Total	California Water Fund	General Obligation Bonds	All Other	Total (e)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
Prior Appropriations	0		0	100,091	100,091	0		0	100,091	100,091	0	0	0	0
10 Years, 1960-1969	173,990	1,143,929	257,771	1,575,690	173,990	1,138,229	257,771	1,569,990	0	5,700	0	5,700	168,290(g)	
1970	2,080	183,588	84,922	270,590	2,080	182,938	84,922	269,940	0	650	0	650	169,720	
1971	0	165,761	56,845	222,606	0	164,761	56,845	221,606	0	1,000	0	1,000	168,720	
1972	17,700	41,939	50,691	110,330	17,700	40,589	50,691	108,980	0	1,350	0	1,350	167,370	
1973	25,750	58,770	9,517	94,037	25,750	54,775	9,517	90,042	0	3,995	0	3,995	163,375	
1974	25,750	32,100	6,291	64,141	25,750	28,613	6,291	60,654	0	3,487	0	3,487	159,888	
1975	32,047	26,415	5,150	63,612	32,047	23,328	5,150	60,525	0	3,087	0	3,087	156,801	
6 Years, 1970-1975	103,327	508,573	213,416	825,316	103,327	495,004	213,416	811,747	0	13,569	0	13,569	-	
1976	29,863	26,295	5,150	61,308	29,863	15,004	5,150	50,017	0	11,291	0	11,291	145,510	
1977	13,907	19,771	0	33,678	13,907	5,013	0	18,920	0	14,758	0	14,758	130,752	
1978	34,371	14,864	0	49,235	34,371	0	0	34,371	0	14,864	0	14,864	115,888	
1979	32,270	15,003	11,950	59,223	32,270	0	11,950	44,220	0	15,003	0	15,003	100,885	
1980	28,977	0	6,212	35,189	20,039	0	0	20,039	8,938	0	6,212	15,150	100,885	
1981	26,533	0	0	26,533	11,165	0	0	11,165	15,368	0	0	15,368	100,885	
1982	18,873	0	0	18,873	3,333	0	0	3,333	15,540	0	0	15,540	100,885	
1983	18,408	0	0	18,408	1,425	0	0	1,425	16,983	0	0	16,983	100,885	
1984	20,493	0	0	20,493	5,794	0	0	5,794	14,699	0	0	14,699	100,885	
1985	12,979	0	0	12,979	3,771	0	0	3,771	9,208	0	0	9,208	100,885	
10 Years, 1976-1985	236,674	75,933	23,312	335,919	155,938	20,017	17,100	193,055	80,736	55,916	6,212	142,864	-	
TOTALS, 1952-1985	513,991	1,728,435	594,590	2,837,016	433,255	1,653,250	588,378	2,674,883	80,736	75,185	6,212	162,133	-	

a) From Column 7, Table 14.

b) Total of Columns 5 and 6, Table 14.

c) Total of Columns 8 and 9, Table 14.

d) From Column 1, Table 14.

e) From Column 6, Table 8, thru 1985.

f) California Water Fund expenditures thru 1970 (totaling \$176,070,000) reserve bonds (Offset Bonds) to be used solely for financing the construction of Additional Facilities.

g) Balance of unissued "offset" bonds on December 31, 1969.

SERVICE ON ACTUAL AND PROJECTED GENERAL OBLIGATION BONDS

(in thousands of dollars)

Calendar Year	Bond Service on Actual Issues Through Series "M"			Bond Service on Projected Issues (a)			Total Bond Service (b Actual and Projected)
	Principal	Interest	Total	Principal	Interest	Total	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
10 Years, 1960-1969	0	145,343	145,343	0	0	0	145,343
1970	0	47,461	47,461	0	3,588(c)	3,588	51,049
1971	0	47,460	47,460	0	16,250	16,250	63,710
1972	0	47,461	47,461	0	22,750	22,750	70,211
1973	1,200	47,461	48,661	0	27,950	27,950	76,611
1974	3,000	47,386	50,386	0	31,850	31,850	82,236
1975	5,000	47,219	52,219	0	35,750	35,750	87,969
6 Years, 1970-1975	9,200	284,448	293,648	0	134,550	138,138	431,786
1976	7,000	46,960	53,960	0	37,700	37,700	91,660
1977	10,200	46,601	56,801	0	37,700	37,700	94,501
1978	12,700	46,111	58,811	0	37,700	37,700	96,511
1979	13,650	45,490	59,140	0	37,700	37,700	96,840
1980	14,050	44,830	58,880	2,000	37,667	39,667	98,547
1981	14,550	44,148	58,698	3,500	37,505	41,005	99,703
1982	15,150	43,442	58,592	4,200	37,274	41,474	100,066
1983	15,850	42,707	58,557	4,950	36,979	41,929	100,486
1984	16,850	41,936	58,786	5,800	36,634	42,434	101,220
1985	17,450	41,119	58,569	6,610	36,232	42,842	101,411
10 Years, 1976-1985	137,450	443,344	580,794	27,060	373,091	400,151	980,945
10 Years, 1986-1995	215,250	362,580	577,830	86,420	334,369	420,789	998,619
10 Years, 1996-2005	307,750	258,955	566,705	126,580	265,907	392,487	959,192
10 Years, 2006-2015	418,250	113,307	531,557	180,410	167,885	348,295	879,852
10 Years, 2016-2025	62,100	3,889	65,989	157,965	41,221	199,186	265,175
10 Years, 2026-2035	0	0	0	0	0	0	0
TOTAL 1960-2035	1,150,000	1,611,866	2,761,866	578,435	1,320,611	1,899,046	4,660,912

a) All projected issues are assumed at 6.5 percent net interest cost, with amortization commencing in the 10th year of such issues, to produce level annual bond service for the 41-year period beginning with the 10th and ending with the 50th year.

b) Actual and projected expenditures for bond service are on a cash basis. (See Table 14, Column 10.)

c) Includes estimated interest on General Fund borrowing in 1970 of \$338,000.

APPENDIX A

FINANCIAL STATEMENTS

APPENDIX A - FINANCIAL STATEMENTS

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**STATE WATER RESOURCES
DEVELOPMENT SYSTEM**

State Water Resources
December,

ASSETS

PROPERTY, PLANT, AND EQUIPMENT (Note 2)

(Schedules A & B)

1969

1968

\$1,655,703,531

\$1,438,086,264

Less Allowance for Replacements

420,176

189,982

1,655,283,355

1,437,896,282

LONG-TERM ASSETS

Funds Held by Revenue Bond Trustee (Note 3)

10,410,118

4,443,933

Loans for Local Water Projects

7,995,973

6,113,258

Investments in Mobile Equipment

4,512,059

4,321,084

22,918,150

14,878,275

CURRENT ASSETS (Note 4)

Cash

1,268,130

5,440,691

Investments

98,618,500

206,720,000

Funds Held by Revenue Bond Trustee (Note 3)

8,207,704

7,751,550

Accrued Interest Receivable

5,444,346

5,143,625

Accounts Receivable

13,498,940

15,172,029

Loans Receivable

211,925

-

Prepaid Insurance

475,509

-

127,725,054

240,227,895

OTHER ASSETS

11,636,259

7,129,238

\$1,817,562,818

\$1,700,131,690

The accompanying notes are an integral part of these statements.

Development System
1969 and 1968

LIABILITIES

CAPITALIZATION

Funded Debt

	1969	1968
General Obligation Bonds (Note 5)	\$1,150,000,000	\$1,150,000,000
Oroville Power Revenue Bonds (Note 6)	244,995,000	150,000,000
State Advances (Note 7)	173,990,369	174,313,466
Net Grants in Aid of Construction (Note 8)	86,556,002	82,085,593
Accumulated Net Revenues (Exhibit II)	72,998,583	61,186,820
	<u>1,728,539,954</u>	<u>1,617,585,879</u>

COMMITMENTS & CONTINGENT LIABILITIES (Note 9)

CURRENT LIABILITIES

Accounts Payable	19,172,147	19,750,256
Contract Retentions	27,236,207	24,948,529
Due to Other State Funds	469,563	4,442,739
Accrued Interest:		
General Obligation Bonds	10,765,636	10,765,528
Revenue Bonds	3,286,285	1,937,888
	<u>60,929,838</u>	<u>61,844,940</u>
ADVANCES FOR CONSTRUCTION (Exhibit III)	28,085,709	19,992,118
DEFERRED CREDITS AND RESERVES	7,317	708,753
	<u><u>1,817,562,818</u></u>	<u><u>1,700,131,690</u></u>

STATEMENT OF OPERATIONS

State Water Resources Development System
Years Ended December, 1969 and 1968

	1969	1968	Cumulative Total 1962-1969
OPERATING REVENUES (Note 10)			
Water Sales			
Water Supply Contractors	\$ 8,365,451	\$ 5,894,355	\$ 17,444,489
Federal Government (San Luis Facilities)	1,292,813	614,407	1,907,220
State Government (Recreation)	249,405	215,931	465,336
	9,907,669	6,724,693	19,817,045
Power Sales	11,941,470	2,115,919	14,057,389
	21,849,139	8,840,612	33,874,434
OPERATING EXPENSES			
Water Plant	9,779,813	6,555,185	19,503,882
Power Plant	529,912	-	529,912
Provisions for Replacements	209,492	169,508	384,357
	10,519,217	6,724,693	20,418,151
NET OPERATING REVENUES	11,329,922	2,115,919	13,456,283
OTHER INCOME			
Capital Cost Repayments			
Water Supply Contractors	40,096,781	27,213,246	96,514,754
Federal Government (Flood Control)	4,297,347	6,586,731	75,353,623
State Government (Recreation)	5,000,000	10,000,000	20,000,000
Investment Earnings	11,100,957	7,598,774	40,862,692
Other Receipts	306,897	149,193	1,013,259
	72,131,904	53,663,863	247,200,611
INCOME DEDUCTIONS			
Interest on Bonds			
General Obligation Bonds	47,460,669	40,337,517	154,554,581
Oroville Power Revenue Bonds	12,859,472	6,787,975	19,647,447
	60,320,141	47,125,492	174,202,028
NET REVENUES	\$ 11,811,763	\$ 6,538,371	\$ 72,998,583
RESULTS OF OPERATIONS			
Project Water Deliveries (Acre-feet)	268,104	294,457	750,725
Power Generation (Kilowatt-Hours)	2,614,000,000	628,000,000	3,242,000,000

The accompanying notes are an integral part of these statements.

SOURCES AND APPLICATIONS OF FUNDS

State Water Resources Development System
Years Ended December, 1969 and 1968

	1969	1968	Cumulative Total 1952-1969
SOURCES OF FUNDS			
Net Revenues (Exhibit II)	\$ 11,811,763	\$ 6,538,371	\$ 72,998,583
Bond Proceeds			
General Obligation Bonds (Note 5)	-	200,000,000	1,150,000,000
Oroville Power Revenue Bonds (Note 6)	94,995,000	150,000,000	244,995,000
State Advances			
California Water Fund (Note 7)	-	-	174,912,524
State Appropriations (Note 8)			
Tidelands Oil & Gas Appropriations	11,075,544	21,585,658	32,661,202
Special Appropriations Made Prior to Burns-Porter Act	-	-	100,091,400
Advances for Construction			
Water Supply Contractors	2,451,424	- 1,222,803	16,449,450
City of Los Angeles, Department of Water and Power	5,642,167	255,984	11,636,259
Loan Repayments from Local Agencies	70,360	18,970	89,330
Real Property Income	644,439	714,991	7,418,269
	<u>\$126,690,697</u>	<u>\$377,891,171</u>	<u>\$1,811,252,017</u>
APPLICATIONS OF FUNDS			
Construction Expenditures			
State Water Resources Development System.	218,031,512	272,584,595	1,662,701,624
Castaic Power Plant Surge Chamber	4,507,021	1,320,622	11,636,259
State Financial Aid to Local Water Agencies			
Loans for Local Water Projects	1,953,075	3,288,751	8,085,303
Grants for Local Water Projects	6,368,699	12,249,849	42,790,022
Investments in Mobile Equipment	190,975	1,336,026	4,512,059
Funds Returned to State Treasury			
California Water Fund Advances (Note 7)	323,097	599,058	922,155
Special Appropriations (Note 8)	236,436	1,947,634	3,406,578
Reserves for Operations and Debt Repayments - Oroville Power	6,422,339	12,195,483	18,617,822
Working Capital	- 111,342,457	72,369,153	58,580,195
	<u>\$126,690,697</u>	<u>\$377,891,171</u>	<u>\$1,811,252,017</u>

The accompanying notes are an integral part of these statements.

SCHEDULE A

CHANGES IN PROPERTY, PLANT, AND EQUIPMENT

State Water Resources Development System
Year Ended December, 1969

Project Facility	Balance, December 1968	Additions: Net of Income Credited to Construction	Deductions for Retirements and Sales	Balance, December 1969
Middle Fork Eel River Development	\$ 5,182,336	\$ 515,115	\$ 0	\$ 5,697,451
Upper Feather Division	13,306,614	835,696	0	14,142,310
Oroville Division	481,468,909	9,993,374	20,016	491,442,267
Delta Facilities	12,797,128	112,691	0	12,909,819
North Bay Aqueduct	3,585,105	217,175	0	3,402,280
South Bay Aqueduct	63,206,369	2,264,228	6,617	65,463,980
California Aqueduct				
North San Joaquin Division	143,359,672	5,766,827	134,740	148,991,759
San Luis Division	170,364,004	2,222,343	0	172,586,347
South San Joaquin Division	143,315,976	53,795,001	51,758	197,059,219
Tehachapi Division	124,597,795	52,236,372	0	176,834,167
Mojave Division	51,541,561	46,779,255	8,410	98,312,406
Santa Ana Division	36,031,103	14,926,647	167	50,957,583
West Branch	153,559,444	39,439,034	28,697	192,969,781
Coastal Branch	12,675,107	680,770	0	13,355,877
San Joaquin Drainage Facilities	5,885,644	- 80,950	0	5,804,694
Other (Principally Unallocated Accruals)	17,209,497	-11,835,906	0	5,373,591
Subtotal	\$1,438,086,264	\$217,867,672	\$250,405	\$1,655,703,531
Less: Allowance for Replacements	189,982	230,194	0	420,176
Total	\$1,437,896,282	\$217,637,478	\$250,405	\$1,655,283,355

SCHEDULE B COMPOSITION OF PROPERTY, PLANT, AND EQUIPMENT

State Water Resources Development System
Year Ended December, 1969

Project Facility	Water Conservation (Including Oroville Power)	Water Transpor- tation	Recreation	Flood Control	Other Purposes	Total
Middle Fork Eel River Development	\$ 5,624,678	\$ 0	\$ 72,773	\$ 0	\$ 0	\$ 5,697,451
Upper Feather Division	983,931	300,401	12,857,978	0	0	14,142,310
Oroville Division	412,622,707	0	10,104,003	68,715,557	0	491,442,267
Delta Facilities	8,738,405	0	4,171,414	0	0	12,909,819
North Bay Aqueduct	0	3,802,280	0	0	0	3,802,280
South Bay Aqueduct	0	46,152,684	13,752,003	5,559,293	0	65,463,980
California Aqueduct						
North San Joaquin Division	44,437,475	99,434,333	5,119,951	0	0	148,991,759
San Luis Division	84,344,297	82,384,668	5,857,382	0	0	172,586,347
South San Joaquin Division	0	190,840,801	6,218,418	0	0	197,059,219
Tehachapi Division	0	171,529,224	5,304,943	0	0	176,834,167
Mojave Division	0	94,796,211	3,516,195	0	0	98,312,406
Santa Ana Division	0	49,597,031	1,360,552	0	0	50,957,583
West Branch	0	185,968,541	7,001,240	0	0	192,969,781
Coastal Branch	0	13,355,877	0	0	0	13,355,877
San Joaquin Drainage Facilities	0	0	0	0	5,804,694	5,804,694
Other (Principally Unallocated Accruals)	0	1,488,914	0	0	3,884,677	5,373,591
Total	\$556,751,493	\$939,650,965	\$75,336,852	\$74,274,850	\$9,689,371	\$1,655,703,531

NOTES TO FINANCIAL STATEMENTS

1. Basis of Financial Statements

The accounting and the financial statements of the State Water Resources Development System are based on the principles and requirements of the Burns-Porter Act, the Central Valley Project Revenue Bonds, Oroville Division and the Central Valley Project Act, and other provisions of the California Water Code; and the Standard Provisions for Water Supply Contract and executed contracts related thereto.

The basic philosophy underlying these acts and contracts is that costs for construction and operation of the System be repaid by the beneficiaries of the System. Further details with regard to requirements for applications of funds and revenues are contained in Notes 4, 5, and 10.

2. Property, Plant, and Equipment

Property, plant, and equipment are recorded at cost, excluding interest during construction. Project costs are distributed to reaches and features of the Project and are subsequently allocated among project purposes in order to determine payments by beneficiaries. Such allocations are subject to adjustment in future years because the factors for calculating certain cost allocations have not been finalized.

The annual payments from Project beneficiaries generally include charges for current maintenance of

the facilities and for replacement deposits. Since there is adequate provision for maintaining the plant in full operating condition, the accumulated deposits for replacements are shown in the financial statements as a deduction from the property, plant, and equipment, in lieu of depreciation charges.

3. Funds Held by Trustee

The Department of Water Resources appointed the Bank of America N. T. & S. A., in San Francisco, California, as Trustee under the Resolution. The Trustee is required by the Resolution to establish and maintain funded reserves for (1) interest; (2) principal amount of Serial Bonds becoming due; (3) sinking funds for the payment or redemption of Term Bonds; and (4) general reserves to make good any deficiency in the Interest, Serial Maturity, or Sinking Funds, to pay power operating expenses to the extent that the operating accounts are insufficient, to pay extraordinary repair or rebuilding costs, and to pay certain obligations to the power companies which may be incurred under the Oroville-Thermalito Power Sale Contract.

An analysis of receipts and disbursements by fund during calendar year 1969 is presented below:

Fund	Balance December, 1968	Amount Transferred to Trustee by DWR	Investment Income	Transfers	Less Debt Service	Balance December, 1969
Interest Fund.....	\$12,032,875	\$5,394,000	\$732,834	----	\$10,448,333	\$7,711,376
Serial Maturity Fund.....	----	----	----	----	----	----
Sinking Fund.....	----	----	----	----	----	----
General Reserve Fund.....	162,608	10,579,852	130,669	-\$3,873,129	----	7,000,000
General Reserve Fund: Pacific Acct.....	----	----	33,317	3,873,129	----	3,906,446
Additional Sinking Fund.....	----	----	----	----	----	----
Power Contract Reserve Fund.....	----	----	----	----	----	----
Subtotal.....	\$12,195,483	\$15,973,852	\$896,820	----	\$10,448,333	\$18,617,822
Funds in Transit.....						----
Total.....						\$18,617,822
Classification						
Current.....						\$8,207,704
Long-Term.....						10,410,118
Total.....						\$18,617,822

Sources, purposes, and restrictions applicable to the funds held by the Trustee are as follows:

- a. *Investments:* Moneys held by the Trustee may be invested only in certificates of deposit secured by Federal Securities or in Federal Securities. All

income from the investment of moneys in any fund maintained by the Trustee shall be credited to such fund.

- b. *Interest Fund:* Revenue Bond proceeds sufficient to pay interest on bonds through April 1, 1970,

were placed in this fund. Commencing in February, 1970, semiannual allocations of power revenues sufficient to pay interest becoming due at the next interest payment date will be placed in this fund.

- c. *Serial Maturity Fund*: Commencing in 1971, semiannual allocations of power revenues sufficient to pay the principal amount of Serial Bonds becoming due during the next 12-month period will be placed in this fund.
- d. *Sinking Fund*: Commencing in 1988, semiannual installments of power revenues as set forth in supplemental Resolutions will be placed in this fund. Moneys in this fund shall be applied only for the payment or redemption of Term Bonds.
- e. *General Reserve Fund*: The balance of all power revenues not allocated to the above funds and not required for the \$1,500,000 annual allocation to the Operating Account, will be placed in this fund. A one-time allocation of \$1,650,000 from Federal flood control contributions also was placed in this fund. Moneys in this fund shall be applied to make good any deficiency in the Interest, Serial Maturity, or Sinking Funds, to pay power operating expenses to the extent that the operating accounts are insufficient, to pay extraordinary repair or rebuilding costs, and to pay certain obligations under the power companies which may be incurred under the Oroville-Thermalito Power Sale Contract.
- f. *General Reserve Fund—Pacific Account*: After \$7,000,000 has been allocated to the General Re-

serve Fund, the remainder of the moneys allocated to the General Reserve Fund prior to April 1, 1971, or \$5,000,000, whichever is less, shall be placed in this account. Moneys in this account shall be applied to clear any liability to Pacific Gas and Electric Company for a negative balance in the Energy Adjustment Account.

- g. *Additional Sinking Fund*: Moneys in the General Reserve Fund not currently required for the purposes of that fund and in excess of certain specified amounts on specified dates will be transferred to this fund for the payment or redemption of Term Bonds.
- h. *Power Contract Reserve Fund*: Certain cash payments which may be made by Pacific Gas and Electric Company for excess energy after October 31, 1984, and certain payments which may be received from a public power contractor or the State under a State Power Contract for the purpose of paying off negative balances in an energy adjustment account upon statutory cancellation of the Oroville-Thermalito Power Sale Contract will be deposited in this fund. Moneys in this fund shall be applied only to make payments to power contractors for negative balances in an energy adjustment account under provisions of the Oroville-Thermalito Power Sale Contract.

4. Current Assets

Current assets are subject to certain applications according to their source and purpose. An analysis by fund and planned application is presented below:

Fund	Construction	Operation and Maintenance	Debt Service and General Reserve	Total
California Water Resources Development Bond Fund:				
Bond Proceeds Account.....	\$5,284,797	----	----	\$5,284,797
Revenue Account.....	----	1,041,237	\$10,173,834	11,215,071
Replacement Sinking Fund Account.....	----	309,176	----	309,176
Central Valley Water Project Construction Fund:				
Miscellaneous Receipts.....	50,638,879	----	22,632,000	73,270,879
Reimbursement Account.....	13,506,963	----	----	13,506,963
Construction Account.....	8,986,318	----	----	8,986,318
Construction Operating Account.....	----	956,200	----	956,200
Funds Held by Trustee.....	----	----	7,770,877	7,770,877
Central Valley Water Project Revenue Fund:				
Operating Account:				
Current Operating Subaccount.....	----	84,462	----	84,462
Replacement Subaccount.....	----	111,000	----	111,000
Operating Reserve Subaccount.....	----	855,072	----	855,072
Revenues Available for Transfer to Trustee.....	----	----	4,693,950	4,693,950
Funds Held by Trustee.....	----	----	680,289	680,289
Total.....	\$78,416,957	\$3,357,147	\$45,950,950	\$127,725,054

Sources, purposes and restrictions applicable to the funds are as follows:

- a. *Bond Proceeds 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.

b. *Revenue Account:* Payments from contracting agencies (other than certain advance payments) and other income received are deposited in this account. Expenditures from this account are subject to the following priorities under the Burns-Porter Act:

- (1) Operation, maintenance, power and replacement costs;
- (2) Principal and interest on General Obligation Bonds;
- (3) Repayments to the California Water Fund for advances (see Note 7); and
- (4) Construction of additional facilities.

c. *Replacement Sinking Fund Account:* Payments received for replacement costs are deposited and accumulated with interest in this account. Expenditures are limited to the acquisition of replacements.

d. *Miscellaneous Receipts:* Federal contributions received as reimbursements for the costs allocated to flood control, Federal Open-Space Land Grants, state contributions received as reimbursements for the cost of recreation, state grants in aid of construction from Tideland Oil and Gas Appropriations, certain advance payments from contractors, and interest from investments are deposited in this account. Expenditures for construction and interest on the General Obligation Bonds are made in part from this account.

e. *Reimbursement Account:* Revenue Bond proceeds to reimburse the state for expenditures made, prior to the date of delivery of Revenue Bonds, for power construction costs of the Oroville Division, and interests from investments are deposited in this account. Expenditures for construction of the Project, excluding Oroville Division power costs, are made in part from this account.

f. *Construction Account:* Revenue Bond proceeds to pay the Oroville Division power construction costs, after the date of delivery of Series A of the Revenue Bonds, and interest from certain Construction Fund investments are deposited in this account. On the first anniversary of the completion date, any balance not required for future payments of costs chargeable to this account shall be transferred to the Trustee for deposit in the Serial Maturity Account.

g. *Construction Operating Account:* Revenue Bond proceeds to pay the Oroville Division power operating expenses for the first year of operations were deposited in this account. The Oroville Di-

vision Power Generation Facilities became operational on July 20, 1969. On March 1, 1970, out of the then unencumbered balance in this account, \$222,000 shall be transferred to the Replacement Subaccount and any balance up to \$400,000 shall be transferred to the Operating Reserve Subaccount. Any remaining balance on the first anniversary of the completion date shall be transferred to the Trustee for deposit in the Serial Maturity Account.

h. *Current Operating Subaccount:* Power revenues to pay current power operating expenses after the first anniversary of the completion date will be allocated to this account.

i. *Replacement Subaccount:* Power revenues adequate to provide a reserve for the payment of plant replacement costs will be allocated to this account.

j. *Operating Reserve Subaccount:* Power revenues allocated to this account provide a reserve for operations and shall be applied only to pay power operating expenses to the extent that moneys in the Current Operating Subaccount or the Replacement Subaccount are insufficient to do so.

k. *Revenues Available for Transfer to Trustee:* This amount represents accrued power sales and interest earnings that will be transferred to the Trustee when received. They are subject to the purposes and restrictions outlined in Note 3.

l. *Funds Held by Trustee:* These funds are subject to the purposes and restrictions outlined in Note 3.

5. Water Resources Development General Obligation Bonds

The Burns-Porter Act authorized the issuance of General Obligation Bonds in the amount of \$1,750,000,000 for construction of the State Water Resources Development System. This amount includes \$130,000,000 for financial assistance to local agencies as provided 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. To the extent 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 authorizations

as of December 31, 1969, is summarized below:

Funds	State Water Facilities	Davis-Grunsky Projects	Additional Facilities	Total
Bonds Authorized.....	\$1,620,000,000	\$130,000,000	----	\$1,750,000,000
Less:				
Bonds Issued.....	1,121,257,366	23,097,358	\$5,645,276	1,150,000,000
California Water Fund Advances.....	146,292,519	27,697,850	-173,990,369	----
Balance Available.....	\$352,450,115	\$79,204,792	\$168,345,093	\$600,000,000

General Obligation Bonds outstanding as of December 31, 1969, with their net interest rates and maturity dates are shown below:

Date of Issue	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
7/1/66	F	100,000,000	3.927%	7/1/1976-2016
12/1/66	G	100,000,000	4.110%	12/1/1976-2016
4/1/67	H	100,000,000	3.695%	4/1/1977-2017
8/1/67	I	100,000,000	4.093%	8/1/1977-2017
11/1/67	K	100,000,000	4.685%	11/1/1977-2017
8/1/68	L	100,000,000	4.772%	8/1/1978-2018
10/1/68	M	100,000,000	4.860%	10/1/1978-2018
Total...		\$1,150,000,000	4.021%	

6. Central Valley Project Revenue Bonds

The Department of Water Resources on March 19, 1968, adopted "Resolution No. DWR-OD2-Creating an Issue of State of California, Department of Water Resources Central Valley Revenue Bonds, Oroville Division". This Resolution was adopted pursuant to the provisions of the Central Valley Project Act, and authorized the issuance of Revenue Bonds in the amount of \$261,169,000. Proceeds from the sales of bonds will be used to pay those costs apportioned to the power facilities of the Oroville Division, power operating expenses for the first year of operation, and interest on bonds from date of issue through first year of operation. All other payments of principal and interest are secured by a first and direct charge and lien upon revenues derived from the sale of power to California electrical utility companies. Annual debt service requirements cannot exceed \$14,410,000 in any calendar year. Payment of bond service will not constitute a debt, liability, or obligation of the State of California.

Revenue Bonds outstanding as of December 31, 1969, with their net interest rates and maturity dates, are shown below:

Date of Issue	Series	Amount	Net Interest Rates	Maturity Dates
4/1/68	A	\$150,000,000	5.197%	4/1/1972-2018
4/1/69	B	94,995,000	5.293%	4/1/1972-2018
		\$244,995,000		

7. Advances from California Water Fund

Advances from the 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 the Revenue Account, as shown in Note 4. Repayments are not expected to begin until the latter part of the presently programmed construction period.

8. Grants in Aid of Construction

Grants in aid of construction consist of construction expenditures financed from the Investment Fund, California Water Fund, and General Fund from special appropriations made prior to the effective date of the Burns-Porter Act (November 8, 1960), and state grants from Tideland Oil and Gas Appropriations. These amounts are not required to be repaid to the fund from which they were appropriated. Administrative expenses and grants made to agencies under the Davis-Grunsky Local Project Assistance Program, which totaled \$42,790,022 on December 31, 1969, are deducted in the financial statements from grants in aid of construction.

9. Construction Contract Commitments and Contingent Liabilities

The Department of Water Resources has entered into long-term construction contract commitments for the State Water Facilities. The uncompleted por-

tion of these commitments was approximately \$256,700,000 as of December 31, 1969.

In addition contingent liabilities exist where certain contractors who have participated in the construction of the project have made claims for additional payments from the Department. The aggregate of the claims is approximately \$16,138,000 and in the opinion of the Department moneys available for the construction of the State Water Facilities and the Oroville Power Project will be adequate to cover whatever amounts may be payable with respect to such claims. The \$16,138,000 aggregate of the claims includes \$15,860,000 claimed in a suit filed on September 23, 1968 (*McNamara Corporation v. State of California*, San Francisco Superior Court No. 595815).

10. Revenues

The State has entered into long-term contracts with 31 local agencies for a project water supply. These contracts provide for payments by the agencies calculated to reimburse the State, over the project repayment period, for all capital costs allocated to the purpose of water supply in excess of those net revenues to be realized from Oroville-Thermalito Power sales, with interest thereon. Annual operation and maintenance costs of the System are recovered generally as incurred and these annual charges also include provisions for future plant replacements. Outstanding statements of charges to water supply contractors due in 1970 total \$45,943,235.

The Department of Water Resources entered into a contract with Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas and Electric Company for the sale of all electrical energy generated by the Oroville Division Power Generation Facilities. Commencing on full-operation date, the companies will pay the Department \$8,075,000 semiannually until the termination of the contract. The obligation of the companies to make these payments is not dependent upon the ability of the Department to deliver or the ability of the companies to take Oroville-Thermalito power, nor can the companies offset against this obligation any moneys which may be owed them by the Department. In 1969, a total of 2,611,500,000 kilowatt-hours of Oroville-Thermalito power was generated. About 80 percent of this power was sold to the companies for \$10,969,081; a portion was used by project pumping plants; and the remainder was banked in the Energy Adjustment Account. As of December 31, 1969, the Account had a balance of 435,400,000 kilowatt-hours, with a value of \$1,001,754.

Costs allocated to flood control are repaid by the Federal Government. The Davis-Dolwig Act provides for the State to repay the project costs allocated to recreation and fish and wildlife enhancement. It is expected that provision will be made in the future for repayment of costs incurred for planning and preliminary work in connection with the San Joaquin Drainage Facilities.

**OROVILLE DIVISION POWER
GENERATION FACILITIES**

EXHIBIT I

BALANCE

Oroville
December,

ASSETS

	1969	1968
PROPERTY, PLANT, AND EQUIPMENT (Note 2)	\$238,226,713	\$119,800,951
Less Allowance for Replacements	111,000	-
	<u>238,115,713</u>	<u>119,800,951</u>
LONG-TERM FUNDS HELD BY TRUSTEE (Note 3).	10,410,118	4,443,933
CURRENT ASSETS (Note 4)		
Cash	79,571	532,497
Investments	9,793,500	19,313,659
Funds Held by Revenue Bond Trustee (Note 3). .	8,207,704	7,751,550
Accrued Interest Receivable	638,216	783,196
Accounts Receivable	4,943,668	1,805,291
Prepaid Insurance	475,509	-
	<u>24,138,168</u>	<u>30,186,193</u>
	<u>\$272,663,999</u>	<u>\$154,431,077</u>

The accompanying notes are an integral part of these statements.

SHEET

Power Project
1969 and 1968

LIABILITIES

CAPITALIZATION

	<u>1969</u>	<u>1968</u>
Oroville Power Revenue Bonds (Note 5)	\$244,995,000	\$150,000,000
Accumulated Net Revenues (Exhibit II)	<u>21,723,398</u>	<u>-3,255,780</u>
	266,718,398	146,744,220

CONTINGENT LIABILITIES (Note 6)

CURRENT LIABILITIES

Accounts Payable.	199,357	396,502
Contract Retentions	2,322,289	4,393,612
Due to Other State Funds	137,670	958,855
Accrued Interest on Revenue Bonds	<u>3,286,285</u>	<u>1,937,888</u>
	5,945,601	7,686,857
	<u>\$272,663,999</u>	<u>\$154,431,077</u>

EXHIBIT II

STATEMENT OF OPERATIONS

Oroville Power Project
Years Ended December, 1969 and 1968

	<u>1969</u>	<u>1968</u>	<u>Total 1968-1969</u>
OPERATING REVENUES (Note 7)			
Power Sales			
Hyatt-Thermalito Complex	\$11,970,835	\$ 2,027,919	\$13,998,754
Other	750,000	-	750,000
	<u>12,720,835</u>	<u>2,027,919</u>	<u>14,748,754</u>
OPERATING EXPENSES			
Power Plant			
Operations and Maintenance	342,303	-	342,303
Insurance Expense	180,984	-	180,984
Fiduciaries Compensation	6,625	-	6,625
Provisions for Replacements	111,000	-	111,000
	<u>640,912</u>	<u>-</u>	<u>640,912</u>
NET OPERATING REVENUES	<u>12,079,923</u>	<u>2,027,919</u>	<u>14,107,842</u>
OTHER INCOME			
Capital Cost Repayments			
Federal Government (Flood Control)	22,108,800	-	22,108,800
Investment Earnings	1,999,927	1,475,240	3,457,167
Other	1,650,000	29,036	1,679,036
	<u>37,838,650</u>	<u>3,532,195</u>	<u>41,370,845</u>
INCOME DEDUCTIONS			
Interest and Discount on			
Oroville Power Revenue Bonds	12,859,472	6,787,975	19,647,447
NET REVENUES	<u>\$24,979,178</u>	<u>\$-3,255,780</u>	<u>\$21,723,398</u>

The accompanying notes are an integral part of these statements.

SOURCES AND APPLICATIONS OF FUNDS

Oroville Power Project
Years Ended December, 1969 and 1968

	<u>1969</u>	<u>1968</u>	<u>Total 1952-1969</u>
SOURCES OF FUNDS			
Net Revenues (Exhibit II).	\$ 24,979,178	\$ -3,255,780	\$ 21,723,398
Oroville Power Revenue Bonds (Note 5)	94,995,000	150,000,000	244,995,000
	<u>\$119,974,178</u>	<u>\$146,744,220</u>	<u>\$266,718,398</u>
APPLICATIONS OF FUNDS			
Construction Expenditures	\$118,314,762	\$119,800,951	\$238,115,713
Reserves for Operations and Debt Repayment (Note 3)	6,422,339	12,195,483	18,617,822
Working Capital, Other than Funds Held by Trustee	-4,762,923	14,747,786	9,984,863
	<u>\$119,974,178</u>	<u>\$146,744,220</u>	<u>\$266,718,398</u>

The accompanying notes are an integral part of these statements.

SCHEDULE A

CHANGES IN FUNDS

Oroville Power Project
Year Ended December, 1969

		1969		Balance
		<u>Receipts</u>	<u>Disbursements</u>	<u>December 1969</u>
CENTRAL VALLEY WATER PROJECT CONSTRUCTION FUND:				
Construction Account	\$	951,890	\$ 7,778,702	\$ 6,313,114
Construction Operating Account.	-		529,912	970,088
Funds Held by Trustee		<u>12,167,552</u>	<u>17,923,565</u>	<u>4,484,592</u>
		13,119,442	26,232,179	11,767,794
CENTRAL VALLEY WATER PROJECT REVENUE FUND:				
Current Operating Subaccount .		84,462		84,462
Replacement Subaccount		111,000	111,000	
Operating Reserve Subaccount .		855,072		855,072
Funds Held by Trustee		<u>24,465,457</u>	<u>10,743,838</u>	<u>15,784,357</u>
		<u>25,515,991</u>	<u>10,854,838</u>	<u>16,723,891</u>
		<u>\$38,635,433</u>	<u>\$37,087,017</u>	<u>\$28,491,685</u>

NOTES TO FINANCIAL STATEMENTS

1. Basis of Financial Statements

These financial statements, issued by the State of California Department of Water Resources, are based on the principles and requirements of the Central Valley Project Act (California Water Code, Section 11100 et seq.) and the Department's resolution entitled "Resolution creating an Issue of State of California Department of Water Resources Central Valley Project Revenue Bonds, Oroville Division," dated March 19, 1968 (hereafter called the "Resolution"). The Oroville Power Project consists of the specific power facilities of the Oroville Division of the California State Water Resources Development System and an apportioned part of the multiple purpose facilities of such Oroville Division.

The principal specific power facilities are the Edward Hyatt (Oroville) Powerplant and Switchyard, the Thermalito Powerplant and Switchyard and the 230,000 volt Oroville-Thermalito Transmission Lines and tap transmission lines to Table Mountain Substation.

2. Property, Plant, and Equipment

Property, plant, and equipment are recorded at cost, excluding interest during construction.

Construction costs of the Oroville Power Project as of December 31, 1969 total \$238,226,713. Of this total, Central Valley Project Revenue Bonds have financed a total of \$216,117,913. This includes \$188,484,259 which reimbursed the State of California for a portion of the money expended, on or prior to the delivery date of the Series A Bonds, to pay power construction costs, and \$2,584,673 for reimbursements to the California General Fund required by statute.

The balance of \$22,108,800 was financed from accumulated net revenues in the Central Valley Water Project Construction Fund. This surplus adjustment of \$22,108,800 completes the reimbursement for Oroville Power Project costs to December 31, 1969, which were financed from funds prior to the sale of Revenue Bonds.

The annual power revenues include reserves for current operation and maintenance of the project and for replacement deposits. Since there is adequate provision for maintaining the plant in full operating condition, the accumulated deposits for replacement are shown in the financial statements as a deduction from the property, plant, and equipment, in lieu of depreciation charges.

3. Funds Held by Trustee

The Department of Water Resources appointed the Bank of America N.T.&S.A., in San Francisco, California, as Trustee under the Resolution. The Trustee is required by the Resolution to establish and maintain funded reserves for (1) interest; (2) principal amount of Serial Bonds becoming due; (3) sinking funds for the payment or redemption of Term Bonds; and (4) general reserves to make good any deficiency in the Interest, Serial Maturity, or Sinking Funds, to pay power operating expenses to the extent that the operating accounts are insufficient, to pay extraordinary repair or rebuilding costs, and to pay certain obligations to the power companies which may be incurred under the Oroville-Thermalito Power Sale Contract.

An analysis of receipts and disbursements by fund during calendar year 1969 is presented below:

Fund	Balance December, 1968	Amount Transferred to Trustee by DWR	Investment Income	Transfers	Less Debt Service	Balance December, 1969
Interest Fund.....	\$12,032,875	\$5,394,000	\$732,834	----	\$10,448,333	\$7,711,376
Serial Maturity Fund.....	----	----	----	----	----	----
Sinking Fund.....	----	----	----	----	----	----
General Reserve Fund.....	162,608	10,579,852	130,669	-\$3,873,129	----	7,000,000
General Reserve Fund: Pacific Acct.....	----	----	33,317	3,873,129	----	3,906,446
Additional Sinking Fund.....	----	----	----	----	----	----
Power Contract Reserve Fund.....	----	----	----	----	----	----
Subtotal.....	\$12,195,483	\$15,973,852	\$896,820	----	\$10,448,333	\$18,617,822
Funds in Transit.....						----
Total.....						\$18,617,822
Classification						
Current.....						\$8,207,704
Long-Term.....						10,410,118
Total.....						\$18,617,822

Sources, purposes, and restrictions applicable to the funds held by the Trustee are as follows:

a. *Investments*: Moneys held by the Trustee may be invested only in certificates of deposit secured by Federal Securities or in Federal Securities. All income from the investment of moneys in any fund maintained by the Trustee shall be credited to such fund.

b. *Interest Fund*: Revenue Bond proceeds sufficient to pay interest on bonds through April 1, 1970, were placed in this fund. Commencing in February, 1970, semiannual allocations of power revenues sufficient to pay interest becoming due at the next interest payment date will be placed in this fund.

c. *Serial Maturity Fund*: Commencing in 1971, semiannual allocations of power revenues sufficient to pay the principal amount of Serial Bonds becoming due during the next 12-month period will be placed in this fund.

d. *Sinking Fund*: Commencing in 1988, semiannual installments of power revenues as set forth in supplemental Resolutions will be placed in this fund. Moneys in this fund shall be applied only for the payment or redemption of Term Bonds.

e. *General Reserve Fund*: The balance of all power revenues not allocated to the above funds and not required for the \$1,500,000 annual allocation to the Operating Account, will be placed in this fund. A one-time allocation of \$1,650,000 from Federal flood control contributions also was placed in this fund. Moneys in this fund shall be applied to make good any deficiency in the Interest, Serial Maturity, or Sinking Funds, to pay power operating expenses to the extent that the operating accounts are insufficient, to pay extraordinary repair

or rebuilding costs, and to pay certain obligations to the power companies which may be incurred under the Oroville-Thermalito Power Sale Contract.

f. *General Reserve Fund—Pacific Account*: After \$7,000,000 has been allocated to the General Reserve Fund, the remainder of the moneys allocated to the General Reserve Fund prior to April 1, 1971, or \$5,000,000, whichever is less shall be placed in this account. Moneys in this account shall be applied to clear any liability to Pacific Gas and Electric Company for a negative balance in the Energy Adjustment Account.

g. *Additional Sinking Fund*: Moneys in the General Reserve Fund not currently required for the purposes of that fund and in excess of certain specified amounts on specified dates will be transferred to this fund for the payment or redemption of Term Bonds.

h. *Power Contract Reserve Fund*: Certain cash payments which may be made by Pacific Gas and Electric Company for excess energy after October 31, 1984, and certain payments which may be received from a public power contractor or the State under a State Power Contract for the purpose of paying off negative balances in an energy adjustment account upon statutory cancellation of the Oroville-Thermalito Power Sale Contract will be deposited in this fund. Moneys in this fund shall be applied only to make payments to power contractors for negative balances in an energy adjustment account under provisions of the Oroville-Thermalito Power Sale Contract.

4. Current Assets

Current assets are subject to certain applications according to their source and purpose. An analysis by fund and planned application is presented below:

Fund	Construction	Operation and Maintenance	Debt Service and General Reserve	Total
Central Valley Water Project Construction Fund:				
Construction Account.....	\$8,715,791	----	----	\$8,715,791
Operating Account.....	----	\$751,218	----	751,218
Central Valley Water Project Revenue Fund:				
Current Operating Subaccount.....	----	84,462	----	84,462
Replacement Subaccount.....	----	111,000	----	111,000
Operating Reserve Subaccount.....	----	855,072	----	855,072
Revenues Available for Transfer to Trustee.....	----	----	4,693,950	4,693,950
Funds held by Trustee.....	----	----	8,207,704	8,207,704
Investment Earnings of Trustee.....	----	----	243,462	243,462
Prepaid Insurance.....	270,527	204,982	----	475,509
Total.....	\$8,986,318	\$2,006,734	\$13,145,116	\$24,138,168

Sources, purposes, and restrictions applicable to the funds are as follows:

a. *Construction Account:* Revenue Bond proceeds to pay the Oroville Division power construction costs, after the date of delivery of Series A of the Revenue Bonds, and interest from certain construction fund investments were deposited in this account. On July 20, 1970, the first anniversary of the completion date, any balance not required for future payments of costs chargeable to this account shall be transferred to the Trustee for deposit in the Serial Maturity Account.

b. *Construction Operating Account:* Revenue Bond proceeds to pay the Oroville Division power operating expenses for the first year of operations were deposited in this account. The Oroville Division Power Generation Facilities became operational on July 20, 1969. On March 1, 1970, out of the then unencumbered balance in this account, \$222,000 shall be transferred to the Replacement Subaccount and any balance up to \$400,000 shall be transferred to the Operating Reserve Subaccount. Any remaining balance on July 20, 1970, the first anniversary of the completion date, shall be transferred to the Trustee for deposit in the Serial Maturity Account.

c. *Current Operating Subaccount:* Power revenues to pay current power operating expenses after the first anniversary of the completion date will be allocated to this account.

d. *Replacement Subaccount:* Power revenues adequate to provide a reserve for the payment of plant replacement costs will be allocated to this account.

e. *Operating Reserve Subaccount:* Power revenues allocated to this account provide a reserve for operations and shall be applied only to pay power operating expenses to the extent that moneys in the Current Operating Subaccount or the Replacement Subaccount are insufficient to do so.

f. *Revenues Available for Transfer to Trustee:* This amount represents accrued power sales revenues and interest earnings that will be transferred to the Trustee when received. They are subject to the purposes and restrictions outlined in Note 3.

g. *Funds Held by Trustee:* These funds are subject to the purposes and restrictions outlined in Note 3.

5. Central Valley Project Revenue Bonds

The Department of Water Resources on March 19, 1968 adopted a resolution pursuant to the Central Valley Project Act authorizing the issuance of Revenue

Bonds in the amount of \$261,169,000. Proceeds from the sales of such bonds will be used to pay construction costs apportioned to the Oroville Power Project including power operating expenses for the first year of operation, and interest on bonds from date of issue through first year of operation. Payments of principal and interest on the bonds are secured by a first and direct charge and lien upon revenues from the Oroville Power Project, including payments for power from certain California electric utility companies. Annual debt service requirements cannot exceed \$14,-410,000 in any calendar year. Payment of bond service will not constitute a debt, liability, or obligation of the State of California.

Revenue Bonds outstanding as of December 31, 1969 with their net interest rates and maturity dates are shown below:

Date of Bonds	Series	Amount	Net Interest Rates	Maturity Dates
4/1/68	A	\$150,000,000	5.197%	4/1/1972-2018
4/1/69	B	94,995,000	5.293%	4/1/1972-2018
Total...		\$244,995,000		

6. Contingent Liabilities

Certain contractors who have participated in the construction of the Oroville Division have made claims for additional payments from the Department. The aggregate of the claims is approximately \$16,138,000 and in the opinion of the Department moneys available for the construction of the State Water Facilities and the Oroville Power Project will be adequate to cover whatever amounts may be payable with respect to such claims. The \$16,138,000 aggregate of the claims include \$15,860,000 claimed in a suit filed on September 23, 1968 (*McNamara Corporation v. State of California*, San Francisco Superior Court No. 595815).

7. Revenues from Production of Electrical Energy

Production of electric energy by the power generation facilities of the Oroville Division began on March 6, 1968, when the first unit of Thermalito powerplant was placed in operation. Total generation delivered to the Table Mountain Substation during 1969 was 2.6 billion kilowatt-hours. Of this amount approximately 436 million kilowatt-hours were entered to the Department's credit in the energy adjustment accounts provided for in the Oroville-Thermalito Power Sale Contract.

Production of electrical energy and revenues from their sale are shown below:

	Total Through December, 1968	Calendar Year 1969	Total Through December, 1969
Production			
Total Kilowatt-hours Delivered.....	616,000,000	2,611,462,226	3,227,462,226
Energy Adjustment Account Banked (Kilowatt-hours).....	426,000,000	435,538,445	861,538,445
Revenues			
Received.....	\$963,130	\$10,969,081	\$11,932,211
Banked.....	\$1,064,788	\$1,001,754	\$2,066,542

The Department of Water Resources entered into a contract with Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas and Electric Company (hereafter called the "Companies") for the sale of all electrical energy generated by the Oroville Power Project. Some of the provisions of the contract are summarized below. Copies of the Power Sale Contract are on file with the Department, the Trustee and the Paying Agents for the bonds.

The Power Sale Contract is dated November 29, 1967 and will continue in effect until November 29, 2017 or until all Revenue Bonds secured by revenues from the contract have been retired, whichever is later, subject to certain statutory rights of cancellation and the retention by the Department of such Federal Power Commission license and other rights except water rights necessary for the full performance by it of the Power Sale Contract.

Power generated prior to July 20, 1969 was either sold to or banked with Pacific Gas and Electric under the terms of interim letter agreements. Commencing on July 20, 1969 which was the full operation date of the Oroville Power Project, the Companies are paying the Department \$8,075,000 semi-annually.

These payments will continue until the termination of the Power Sale Contract. The obligation of the Companies to make these payments is not dependent upon the ability of the Department to deliver or the ability of the Companies to take Oroville-Thermalito power, nor can the Companies offset against this obligation any moneys which may be owed them by the Department.

The semi-annual payment to be made by the Companies is related to an annual amount of net energy of 2.1 billion kilowatt-hours. If computed net energy in any 12-month period ending October 31 is more than 2.1 billion kilowatt-hours, the excess is entered as positive number in the energy adjustment accounts. If a deficiency occurs, a negative number will be entered in these accounts. Balances in the energy adjustment accounts are accumulated at 6% per year and are eventually required to be paid in cash.

8. Insurance

In accordance with the requirements of the Revenue Bond Resolution, the Department has obtained insurance coverage on the Project and revenues of the Project. The following table is a summary of the insurance policies in force as of December 31, 1969:

Type of Insurance	Period Covered	Amount of Coverage	Premiums Paid
1. Loss of revenue due to insufficient water flow in the Feather River upstream from Oroville Dam.	4/ 1/69 to 4/ 1/70 4/ 1/70 to 4/ 1/71	\$7,000,000 \$9,150,000	\$962,750
2. Loss of Revenue due to physical damage to facilities and machinery breakdown of Oroville Division. Such insurance shall be subject to deductibles of \$1,000,000 for earthquake or flood.	1/15/68 to 4/ 1/69 4/ 1/69 to 4/ 1/70 4/ 1/70 to 4/ 1/71	\$1,200,000 \$7,000,000 \$16,150,000	321,304
3. Physical Damage Insurance on specific power facilities of the Oroville Division with \$1,000,000 self-insured for flood or earthquake and \$100,000 for other risks.	4/ 1/68 to 4/ 1/71	\$25,000,000	778,162
4. Public Liability Insurance. a. Policy covering only the project. b. General State of California policy covering amounts in excess of \$1,000,000.	3/19/68 to 4/19/71	\$1,000,000 \$50,000,000	13,768
5. Liability to Power Sale Contractor (Article 29 of Power Sale Contract) due to reduction in electrical generation and transmission capabilities on account of physical damage.	2/12/69 to 7/20/72	\$10,000,000	99,940
Total.....			\$2,175,924

The names of the issuers of such policies, the amount thereof, and the property or risk covered are detailed below:

1. *Water Deficiency Insurance:* Insurance against loss of Revenues under the Power Sale Contract during the period from April 1, 1969 to April 1, 1971 due to insufficient water flow in the Feather River upstream from Oroville Dam. Such coverage insures such Revenues of \$7,000,000 from April 1, 1969 to April 1, 1970 and \$9,150,000, less any excess over \$7,000,000, of such Revenues from April 1, 1970 to April 1, 1971.

Issuer	Participation
Aetna Casualty Company-----	5%
Aetna Insurance Company-----	3
American Home-----	8
Continental Casualty-----	5
Employers Group-----	5
Federal Insurance-----	1.5
Fireman's Fund Insurance Company-----	20
General Accident Group (Potomac)-----	2
Hartford Insurance Group-----	10
Home Insurance Company-----	5
Insurance Company of North America-----	2.5
Underwriters of Lloyds of London and British Companies-----	25
St. Paul Fire & Marine-----	5
United States Fire-----	3
	100%

2. *Physical Damage Use and Occupancy Insurance:* Insurance against loss of Revenues under the Power Sale Contract and interim letter agreements during the period from January 15, 1968 to April 1, 1971 due to all risks of physical damage (excluding machinery breakdown) to facilities of Oroville Division occurring prior to April 1, 1970. Such coverage insures such Revenues of \$1,200,000 from January 15, 1968 to April 1, 1969; \$7,000,000 from April 1, 1969 to April 1, 1971. Such insurance provides for deductibles of \$1,000,000 for earthquake or flood and \$100,000 for other risks.

Issuer	Participation
Aetna Casualty Company-----	5%
Aetna Insurance Company-----	3
American Home-----	14
Appalachian Insurance-----	4
Centennial Insurance-----	1.5
Commerce & Industry-----	1
Continental Casualty-----	5
Continental (Marine Office of America)-----	2.5
Eagle Star (Cravens-Dargan)-----	10
Employers Group-----	1
Employers Mutual Fire-----	1
Federal Insurance-----	1.5
Fireman's Fund Insurance Company-----	2.5
General Accident Group (Potomac)-----	2

(Continued)

Issuer	Participation
Great American Insurance Company-----	6
Hartford Insurance Group-----	10
Lumbermens Mutual (Kemper Insurance Group)-----	10
Maryland Casualty-----	2
National Union Fire-----	2.5
Reliance Insurance Companies-----	3.5
St. Paul Fire & Marine-----	5
Union of Canton (Deans & Homer)-----	2
United States Fire-----	5
	100%

Machinery Breakdown Use and Occupancy Insurance: Insurance against loss of Revenues under the Power Sale Contract and interim letter agreements during the period from January 15, 1968 to April 1, 1971 due to machinery breakdown of turbine and generation units, transformers and other electrical apparatus of Oroville Division occurring prior to April 1, 1970. Such coverage insures such Revenues of \$1,200,000 from January 15, 1968 to April 1, 1969; \$7,000,000 from April 1, 1969 to April 1, 1970; and \$16,150,000 from April 1, 1970 to April 1, 1971. Such insurance provides for deductibles of 25 days for machinery breakdown of turbine and generation units and \$100,000 for machinery breakdown of other apparatus.

Issuer	Participation
Kemper Insurance Group-----	100%

3. *Physical Damage Insurance (Fire Cover):* Physical damage insurance against the risks of fire, lightning, extended coverage, vandalism, malicious mischief and sprinkler leakage on the specific power facilities of the Oroville Division in the amount of \$25,000,000 with a maximum self-insured retention of \$100,000.

Issuer	Participation
Aetna Casualty Company-----	10%
Aetna Insurance Company-----	2
Continental (Marine Office of America)-----	2.5
Fireman's Fund Insurance Company-----	15.5
Hartford Insurance Group-----	10
Kemper Insurance Group-----	50
Reliance Insurance Companies-----	5
Travelers Insurance-----	5
	100%

Physical Damage Insurance (Difference in Conditions Cover): Physical damage insurance against all risks excluding fire, lightning, extended coverage, vandalism, malicious mischief, sprinkler leakage and machinery breakdown on the specific power facilities of the Oroville Division in the amounts of:

- (a) \$5,000,000 in excess of \$1,000,000 for flood or earthquake and \$100,000 for other risks.

Issuer	Participation
Aetna Casualty Company.....	10%
Aetna Insurance Company.....	2
Continental (Marine Office of America).....	2.5
Fireman's Fund Insurance Company.....	15.5
Hartford Insurance Group.....	10
Kemper Insurance Group.....	50
Reliance Insurance Companies.....	5
Travelers Insurance.....	5
	100%

- (b) \$11,000,000 each occurrence in excess of

Issuer	Participation
(as in (a) above)	

- (c) \$10,000,000 in excess of \$15,000,000.

Issuer	Participation
(as in (a) above)	

Machinery Breakdown Insurance: Insurance against the risk of machinery breakdown of turbine generator units, transformers and other electrical apparatus of the Oroville Division in the amount of \$25,000,000 with a deductible amount of \$100,000.

Issuer	Participation
Kemper Insurance Group.....	100%

4. *Public Liability Insurance:* Insurance against public liability in the amount, per occurrence, of \$1,000,000, with no deductible amount.

Issuer	Participation
Fireman's Fund Insurance Company.....	100%

Excess Public Liability Insurance: State of California comprehensive liability policies in the amounts of:

- (a) \$4,000,000 each occurrence in excess of \$1,000,000.

Issuer	Participation
Underwriters of Lloyds of London and British Companies.....	100%

- (b) \$11,000,000 each occurrence in excess of \$5,000,000.

Issuer	Participation
(as in (a) above)	

- (c) \$35,000,000 each occurrence in excess of \$16,000,000.

Issuer	Participation
American Reinsurance.....	\$4,000,000
Employers Liability Insurance Company.....	5,250,000
Employers Mutual Life Insurance Company.....	2,000,000
Employers Surplus Lines.....	6,250,000
Insurance Company of the State of Pennsylvania.....	9,000,000
North Star Reinsurance Company.....	3,000,000
Underwriters of Lloyds of London and British Companies.....	1,000,000
Underwriters of Lloyds of London and British Companies.....	4,500,000

5. *Physical Loss or Damage Insurance:* Insurance against liability to the Power Sale Contractor under Article 29 of Power Sale Contract, due to reduction in generation or transmission capability of turbine generator units, transformers, and other electrical apparatus of the Oroville Division, in the amount of \$10,000,000 at the rate of \$.0405 per kilowatt day.

Issuer	Participation
Kemper Insurance Group.....	100%

APPENDIX B
DATA AND COMPUTATIONS USED
IN DETERMINING WATER CHARGES FOR 1971

APPENDIX B - DATA AND COMPUTATIONS USED IN DETERMINING WATER CHARGES FOR 1971

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APPENDIX B

DATA AND COMPUTATIONS USED IN DETERMINING WATER CHARGES FOR 1971

Those statements of charges to be furnished by the State on or before July 1 of each year are described in Article 29(e) of the "Standard Provisions for Water Supply Contract", which provides 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 Article 29(e) requires a comprehensive annual redetermination of all water supply aspects of the State Water Project for the entire project repayment period. This annual redetermination is specifically provided for in Article 22(f), concerning the Delta Water Charge, and in Article 28, with regard to the Transportation Charge.

This appendix documents such a redetermination for the substantiation of water charges to be paid by contractors during calendar year 1971.

Character of Water Charges

Most of the facilities of the State Water Project are necessary either (a) for the conservation and development of a project water supply in and above the Sacramento-San Joaquin Delta or (b) for the transportation of such a supply from points in and above the Delta to project service areas. The Standard Provisions classify these facilities, respectively, as "project conservation facilities" and "project transportation facilities".

Project Conservation Facilities

- Frenchman Dam and Lake
- Grizzly Valley Dam and Lake Davis
- Oroville Dam and Lake Oroville
- Oroville Power Facilities
- Delta Facilities (Peripheral Canal)
- Upper Eel River Development
- A portion of the California Aqueduct (all of San Luis Dam, Reservoir, and Pumping-Generating Plant, and a portion of the works between the Delta Facilities and Dos Amigos Pumping Plant)

Project Transportation Facilities

- Grizzly Valley Pipeline
- North Bay Aqueduct
- South Bay Aqueduct (including Del Valle Dam and Lake Del Valle)
- The remaining portion of the California Aqueduct (the remaining portion of the works between the Delta Facilities and Dos Amigos Pumping Plant and all works south thereof, including Dos Amigos Pumping Plant, Pyramid and Castaic Dams and Lakes, Perris Dam and Lake Perris, and Cedar Springs Dam and Silverwood Lake)

The Standard Provisions provide for two basic annual charges:

- The Delta Water Charge, which will be paid by all contractors and which will return to the State all reimbursable costs of the project conservation facilities.
- The Transportation Charge, in addition to the Delta Water Charge, which will be paid by those contractors served from the project transportation facilities and which will return to the State all reimbursable costs of such facilities.

The Delta Water Charge is essentially a commodity assessment on each acre-foot of project water the contractors are entitled to receive under their contracts. The unit charge is calculated so that, if applied to each acre-foot of all such entitlements for the remainder of the project repayment period, all outstanding reim-

bursable costs of the project conservation facilities will be returned to the State, with appropriate interest, by the end of the period. Reimbursable costs include those allocated to water supply and power generation. Outstanding reimbursable costs exclude (a) those returned to the State through actual pay-

ments of the Delta Water Charge and (b) all those returned and to be returned to the State through sales of power generated in connection with the project conservation facilities.

Article 22(g) of the Standard Provisions requires that the Delta Water Charge be adjusted, as necessary, to reimburse the costs of those supplemental conservation facilities constructed in the future to supply "supplemental water" in addition to the "minimum project yield" (4,230,000 acre-feet annually). Article 22(g) further provides that the redetermined Charge will be paid both by contractors for "supplemental water" and by contractors supplied by the present "minimum project yield". Thus, the Delta Water Charge is "open-ended".

The Transportation Charge is essentially an assessment for that use of the project transportation facilities required to deliver water provided within the "minimum project yield" from points in and above the Sacramento-San Joaquin Delta to the vicinity of each contractor's turnout. The annual charge is based on each contractor's proportionate share of the reimbursable costs for constructing and operating the project transportation facilities. Certain variations are allowed in the method of amortizing each contractor's share of reimbursable capital costs. The contractor's share of reimbursable operating costs is repaid essentially in the year such costs are incurred by the State.

Composition of Water Charges

The Delta Water Charge and the Transportation Charge each consists of three components:

- A capital cost component, which will return to the State all reimbursable capital costs.
- A minimum operation, maintenance, power, and replacement (OMP&R) component, which will return to the State all reimbursable operating costs that are incurred irrespective of water quantities actually delivered to the contractors.
- A variable OMP&R component, which will return to the State all reimbursable operating costs that are incurred in amounts that depend on, and vary with, water quantities actually delivered to the contractors.

The time and method of payment are the same for corresponding components of the Delta Water Charge and the Transportation Charge:

- The capital cost component is paid in two semi-annual installments, due January 1 and July 1 of each year, on the basis of statements furnished by the State on or before July 1 of the preceding year.

- The minimum OMP&R component is paid in 12 equal installments, due the first of each month, also on the basis of statements furnished by the State on or before July 1 of the preceding year.
- The variable OMP&R component is paid in varying monthly amounts, due the 15th of the second month following actual water delivery, on the basis of a unit charge per acre-foot established on or before July 1 of the preceding year and applied to actual monthly delivery quantities as determined by the State on or before the 15th of the month following actual delivery.

Scope of Redetermination

This redetermination covers the rates to be used in calculating Delta Water Charges for 1971 and all Transportation Charges for each contractor for each year of the project repayment period. It is based on all aspects of the State Water Project as known on December 31, 1969.

Such redetermined Transportation Charges that are applicable to prior years through 1970 do not equal those amounts actually paid by contractors under statements previously furnished by the State. The amounts of overpayment or underpayment (the differences between the redetermined amounts and those under statements previously furnished) are accumulated, with appropriate interest credits or debits, and are deducted from or added to the respective components of the Transportation Charge for 1971. These adjustment computations are shown in the attachments accompanying the statement of charges furnished to each contractor and are reflected in the revised copies of Tables C through G of the contract, also furnished with the statement of charges.

In accordance with Article 22(b) of the Standard Provisions, the Delta Water Charge is established as \$3.50 per acre-foot of entitlement through 1969. Furthermore, Article 22(b) was being amended, as of December 31, 1969, to establish the Delta Water Charge for 1970 as \$6.65 per acre-foot of entitlement.¹⁵⁸ The Delta Water Charge for 1971 is to be based on rates determined in accordance with Article 22(f). This determination is described herein. The Standard Provisions do not require a projection of future annual Delta Water Charges, as is required for the Transportation Charge.

This redetermination generally excludes those charges associated with project water service other than the Delta Water Charge and the Transportation

¹⁵⁸ See pp. 27-28.

Charge. These other charges (and the manner by which such charges are treated herein) are:

- Advances of funds, pursuant to Article 24(d) of the Standard Provisions, for excess capacity constructed by the State at the request of contractors. (Information on required advances is included herein because these charges are covered in the July 1 statements. However, any advances which are projected to exceed the additional capital costs for such excess capacity in completed aqueduct reaches have not been credited to future capital cost components of the Transportation Charges projected herein.)
- Advances of funds, pursuant to Article 10(d) of the Standard Provisions, for delivery structures (turnouts) constructed by the State at the request of contractors. (Partial information is included herein concerning the actual and projected capital costs of such delivery structures. Statements concerning these costs, and data in support of such statements, are furnished to the appropriate contractors at various times and are not part of the July 1 statements.)
- Payments of the surcharge, pursuant to Article 30(d) of the Standard Provisions, on that project water applied to "excess lands". (Initial payments of the surcharge are due to the State in 1971, based on project water applied to "excess lands" in 1970 as determined by the contractors and their retail agencies.)
- Payments for the sale and service of surplus project water under short-term contracts executed pursuant to Article 21 of the Standard Provisions and/or under the so-called "Agricultural and Ground Water Replenishment" provisions. (This redetermination does not include information concerning the future sale and service of surplus water. However, the redetermined variable OMP&R components for 1968 and 1969 include charges associated with surplus water deliveries since surplus water was marketed during these years at the same unit variable OMP&R components as entitlement water.)¹⁵⁴

Organization of Information

The computational procedure and relationships among summary tabulations for this redetermination are outlined on Figure B-1. All tables indicated thereon are bound at the end of this appendix—all figures indicated thereon are interspersed among the narrative sections of this appendix.

Bases for Allocating Reimbursable Costs Among Contractors

This section concerns how reimbursable costs of aqueduct reaches of the project transportation facilities

are allocated among contractors for determining the Transportation Charge. Reimbursable costs of the project conservation facilities are not allocated directly among contractors since, conceptually, the Delta Water Charge is a unit commodity charge rather than a use-of-facilities charge.

Allocation of the reimbursable costs of aqueduct reaches among contractors is based on two specific applications of the proportionate-use-of-facilities method:

- Allocation of reimbursable capital costs and minimum operating costs of each reach is based on the proportionate maximum annual use of that reach by the respective contractors under planned conditions of full project development.
- Allocation of reimbursable variable operating costs of each reach is based on the proportionate actual annual use of that reach by the respective contractors.

Planned Maximum Annual Use of Aqueduct Reaches

The specific application of the proportionate-use-of-facilities method for allocating reimbursable capital and minimum operating costs among contractors is set forth in Article 24(b) of the Standard Provisions:

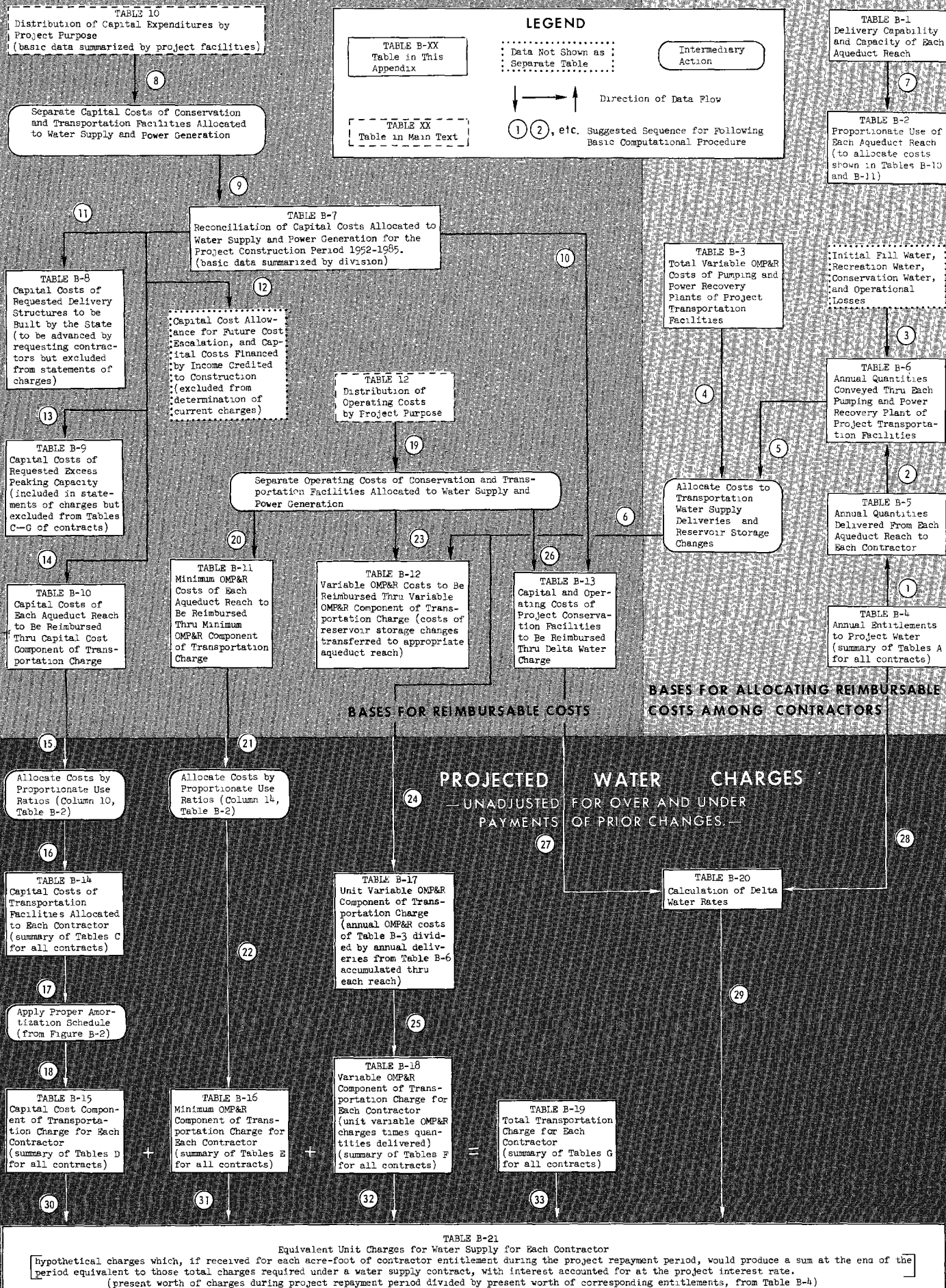
" . . . The measure of the proportionate use of each contractor of each reach shall be the average of the following two ratios: (i) the ratio of the contractor's maximum annual entitlement to be delivered from or through the reach to the total of the maximum annual entitlements of all contractors to be delivered from or through the reach; and (ii) the ratio of the capacity provided in the reach for the transport and delivery of project water to the contractor to the total capacity provided in the reach for the transport and delivery of project water to all contractors served from or through the reach. . . ."

Aqueduct Reaches. Table B-1 shows the current designation of each aqueduct reach and summarizes information on contractor entitlements and reach capacities.

The current designations of aqueduct reaches differ somewhat from those shown in Article 23 or Table I of the respective contracts. These differences reflect modifications required under subsequently executed contracts and changes in the locations of major delivery structures requested pursuant to Article 10(a) of the Standard Provisions. Furthermore, reach nomenclature has been revised in certain instances to describe reach termini more accurately and to reflect route modifications.

¹⁵⁴ See p. 23.

FIGURE B-1. RELATIONSHIPS OF DATA USED TO SUBSTANTIATE STATEMENTS OF CHARGES



The current designations of aqueduct reaches are the same as shown in last year's bulletin.

Maximum Deliveries From Each Reach. The maximum annual entitlement to be delivered to each contractor and the buildup in annual entitlements to the maximum are established in Table A of each contract. However, the portions of each contractor's maximum annual entitlement to be delivered from each aqueduct reach are not contractually specified. The maximum annual amounts to be delivered from each reach, as shown in Table B-1, are based on contractor requests that have been approved by the Department. These reach amounts are the same as shown in last year's bulletin—except that delivery of the San Geronio Pass Water Agency's entitlement is now provided for at the tailrace of the Devil Canyon Powerplant, rather than at the south portal of the San Bernardino Tunnel, in accordance with a contract amendment being proposed at the end of 1969.¹⁵⁵

The maximum monthly quantity that the State is obligated to deliver to each contractor, expressed as a percentage of that contractor's annual entitlement (also shown in Table B-1), is set forth either in Article 12(b) of the Standard Provisions or in the Special Provisions of the contract.

Total Capacity Provided for Water Supply. The reach conveyance capacity provided for delivery of water to each contractor does not necessarily correspond with maximum monthly delivery capabilities provided for by the respective contracts. Pursuant to Article 17(b) of the Standard Provisions, regulatory storage reservoirs may be used in conjunction with aqueduct conveyance capacity for the delivery of maximum monthly amounts.

Under the planned mode of aqueduct operations, annual entitlements destined for delivery to the respective contractors will be conveyed:

- At varying flows corresponding to the monthly demands for project water, for those contractors in the Feather River, North Bay, and San Joaquin Valley areas.
- At uniform flows, regulated, in most instances, to monthly demands for project water by storage reservoirs within the respective service areas, for those contractors within the Central Coastal and Southern California areas (other than those contractors to be served from Silverwood Lake storage).
- Partially at uniform flows, regulated to monthly demands for project water by storage reservoirs, and partially at varying flows corresponding to monthly demands, for those South Bay and Southern California contractors to be served from Lake Del Valle and Silverwood Lake storage, respectively.

In addition, the total capacity provided in each aqueduct reach for delivery of water to contractors includes that required to compensate for:

- Water losses due to evaporation and seepage from that reach and from all reaches down-aqueduct therefrom.
- Scheduled and unscheduled outages of the aqueduct system.
- Disruption of otherwise uniform flows in reaches between a delivery structure and a down-aqueduct storage reservoir so that project water may be delivered from the structure at varying flows (thus necessitating the provision of "compensating regulation capacity" in reaches between the structure and the reservoir to convey water to storage when actual varying deliveries from the structure are less than equivalent uniform deliveries).

Furthermore, certain contractors have requested "excess capacity" in specified aqueduct reaches pursuant to a procedure contained in Article 12(b) of the Standard Provisions—subject to the advance of funds, in accordance with Article 24(d), for the additional costs incurred by the Department for constructing such capacity.

The design capacity of certain reaches exceeds the minimum capacity necessary for the delivery of water to contractors. Such additional capacity is required (a) for conveying water consumed in project-associated recreation developments and (b) in rounding total theoretical requirements upward to even increments of reach capacity due to practical design limitations.

The reach capacities summarized in Table B-1 are the same as shown in last year's bulletin—except that 32 cubic feet per second of capacity has been added in Reach 26A (South Portal, San Bernardino Tunnel through Devil Canyon Powerplant) for the delivery of project water to the San Geronio Pass Water Agency.

Proportionate Use of Capacity by Water Supply Contractors. The capacity included in each reach for the delivery of maximum annual entitlements to each contractor is shown in Table B-2, together with associated annual water quantities.

The capacities and water quantities to be used as the basis for proportionate-use allocations of reimbursable capital costs are shown in Column 8, and of reimbursable minimum OMP&R costs, in Column 12. The capacities summarized in Column 12 include requested "excess capacity", while those summarized in Column 8 do not. Pursuant to Article 24(d) of the Standard Provisions, all additional capital costs (commonly referred to as "incremental costs") to be incurred for constructing excess capacity will be borne

¹⁵⁵ See pp. 27–28.

by the requesting contractors. Therefore, excess capacity does not affect proportionate-use allocations of capital costs among water supply contractors. Pursuant to those contract amendments which specifically provide for excess capacity, however, all minimum OMP&R costs of aqueduct reaches which contain such capacity are allocated among contractors on the basis of proportionate-use factors which account for such capacity in the common denominator.

The reach capacities and water quantities associated with the delivery of maximum annual entitlements to the respective contractors, shown in Table B-2, are based on procedures contained in Settlement Letter No. 3.¹⁵⁶

One procedure covered in Settlement Letter No. 3 concerns the dual storage-conveyance use of reservoirs included in the project transportation facilities. Generally, proportionate-use cost allocations of reservoir storage will be based solely on storage capacities provided therein for delivery of water to each contractor. In special cases where a reservoir also performs a conveyance function, use of the reservoir for conveying deliveries will be taken as a proportionate share (based on conveyance capacities) of the estimated costs of the least expensive alternative means for conveying water through the terrain to be occupied by the reservoir. Under this special procedure, the total estimated reimbursable costs of the reservoir and of the alternative conveyance means are proportionately reduced, for cost allocation purposes, so as to equal the estimated reimbursable costs of the storage capacity. (In other words, the estimated savings to be realized from construction of a joint storage-conveyance facility are proportionately distributed between the costs of the two functions.)

Pyramid, Castaic, and Silverwood Lakes will each perform conveyance functions.

Shown below are preliminary ratios (derived as shown on page 104 of Bulletin 132-69) that can be applied to the estimated reimbursable costs of the respective reservoirs to separate the costs of storage and conveyance functions. Final ratios will be determined after construction of the reservoirs is complete.

Reservoir Function	Pyramid Lake	Castaic Lake	Silverwood Lake
Storage.....	0.78860005	0.87241928	0.87151372
Conveyance.....	0.21139995	0.12758072	0.12848628
Total.....	1.00000000	1.00000000	1.00000000

¹⁵⁶ Letters from W. R. Gianelli to the responsible officer of each contracting agency, "Proportionate Use Cost Allocations Pursuant to Water Supply Contract Article 24(b)," May 9, 1967. (See p. 214, Bulletin 132-68.)

Bases for Variable Annual Use of Facilities

Under the Department's procedures, variable OMP&R costs (including credits for the value of power recovery generation as negative costs) are incurred only in those aqueduct reaches which contain pumping and/or power recovery plants. For cost allocation and repayment, however, portions of such costs are transferred (a) to reaches down-aqueduct from such plants and (b) to charge components other than the variable OMP&R components paid by water contractors—depending on the function performed by the water conveyed.

Allocation Procedure. Actual annual water quantities conveyed through each aqueduct pumping or power recovery plant form the original basis for proportionate use allocations of variable OMP&R costs. The annual water quantities so conveyed perform several specific functions. These functions, and the treatment of variable OMP&R costs of each pumping and power recovery plant allocated thereto, are:

1. *Quantities Made Available to Contractors From Down-Aqueduct Delivery Structures.* The costs allocated to such quantities constitute those variable OMP&R costs of the reach in which the plant is located that are reimbursed by water contractors. These allocated costs are, in turn, suballocated among the contractors based upon the annual quantities delivered to each respective contractor.
2. *Quantities Required to Initially Fill Down-Aqueduct Reaches and Reservoirs to Operational Levels.* The costs allocated to such quantities are transferred to the capital costs of the respective down-aqueduct reaches and reservoirs so filled. (Under present procedures, reservoirs will be initially filled as rapidly as the availability of offpeak conveyance capacity permits. The initial fill quantities for a reservoir are determined as those positive storage accretions, measured from the maximum storage within one year to the maximum storage within the next, which first accumulate to an amount equal the gross storage capacity of the reservoir, less any flood control storage reservation.)
3. *Quantities Consumed in Down-Aqueduct Project-Associated Recreation Developments.* The costs allocated to such quantities constitute those variable OMP&R costs of the reach in which the plant is located that are reimbursed by General Fund appropriations; not by the water contractors.

4. *Quantities Subsequently Lost Through Evaporation and Seepage From All Down-Aqueduct Reaches.* The costs allocated to such quantities are transferred to the minimum OMP&R costs of the down-aqueduct reaches from which such quantities are lost.
5. *Quantities Placed in Down-Aqueduct Reservoir Storage Subsequent to Initial Fill and Delivered to Contractors in Subsequent Years.* The costs allocated to such quantities are transferred to the minimum OMP&R costs of the respective down-aqueduct reservoirs.

Items 2 and 5 above both concern the variable OMP&R costs of up-aqueduct plants associated with annual storage accretions within the project transportation facilities. Such costs are allocated among contractors based upon planned maximum annual use of the respective storage reservoirs—either as capital costs or minimum OMP&R costs of the reservoirs. During years when deliveries down-aqueduct from such a reservoir are made up, in whole or in part, from storage withdrawals, variable OMP&R costs are established for the reservoir which are representative of the original variable OMP&R costs of placing the water into storage. Such representative variable OMP&R costs are taken to be equivalent to the product of (a) the variable OMP&R costs per acre-foot of delivering water to the reservoir during the year of storage withdrawal, multiplied by (b) the amount of storage withdrawals delivered down-aqueduct, in acre-feet. The amount of variable OMP&R costs established for the reservoir is directly offset, in the same year, by a credit to the minimum OMP&R costs of the reservoir.

The costs of the Delta Pumping Plant are allocated between project transportation and conservation facilities—the San Luis Pumping-Generating Plant is classified as a project conservation facility. Under present procedures, the following variable-type OMP&R costs are transferred to the capital costs (during initial fill) and the minimum OMP&R costs (subsequent to initial fill) of San Luis Reservoir:

- Variable OMP&R costs of the Delta Pumping Plant which are allocated to annual water quantities that compensate for losses due to evaporation and seepage from San Luis Reservoir (and from the portion of the Aqueduct allocated to water conservation) and/or that cause a net annual accretion in San Luis Reservoir storage.
- All variable-type OMP&R costs (including power credits) of the San Luis Pumping-Generating Plant.

In those years when releases from San Luis Reservoir cause a net annual storage depletion in order to

make deliveries to contractors down-aqueduct therefrom, a portion of the minimum OMP&R costs of the Reservoir is transferred to the transportation variable OMP&R costs of the Delta Pumping Plant. This transfer is in an amount equal to the variable OMP&R cost per acre-foot of delivery through the Delta Pumping Plant for that year, multiplied by the acre-feet of deliveries derived from San Luis Reservoir storage for that year.

Refinements Re Variable OMP&R Cost Allocations. Present procedures concerning the allocation of variable OMP&R costs reflect a refinement of those used for last year's redetermination. This refinement pertains to those variable OMP&R costs of up-aqueduct plants which are allocated to storage accretions, subsequent to initial fill, for reservoirs of the project transportation facilities.

In last year's redetermination, such costs were designated as variable OMP&R costs of the respective reservoirs and were allocated to contractors down-aqueduct from such reservoirs in proportion to annual quantities delivered during years of storage accretions. Admittedly, that allocation procedure could not guarantee that the group of contractors paying for costs associated with transporting storage accretions during a particular year would be the same group of contractors whose deliveries actually would be served from such storage in succeeding years. For such a guarantee, reimbursement of operating costs would have to be carried over from one year to another, and such an "inventory" charge is not directly provided for by the Standard Provisions.

In this year's redetermination, a form of "inventory" charge is established for reservoirs, which charge operates on the minimum OMP&R costs of the reservoirs. The costs of placing water into storage following initial fill, are added to the minimum OMP&R costs of reservoirs. In subsequent years of storage withdrawals, such costs are transferred to the variable OMP&R costs of the reservoirs with offsetting credits to the minimum OMP&R costs of the reservoirs. (Since storage first must be withdrawn following initial fill, the effect of this "inventory" charge on the minimum OMP&R costs of the reservoirs is that the application of offsetting credits will always precede the application of any additional costs.) Thus, minimum OMP&R costs are used as a type of "holding account" for costs which are associated with placing water into storage for the project transportation facilities—similar to the procedure initiated in last year's redetermination with regard to the portion of the Delta Pumping Plant costs which are associated with placing water into San Luis Reservoir storage.

Bases for Costs. The actual and projected annual variable OMP&R costs for each aqueduct pumping

and power recovery plant are summarized in Table B-3. These costs include the following:

- Cost of power and energy used, exclusive of associated power transmission charges. (Transmission costs are now classified as minimum OMP&R costs, rather than variable OMP&R costs as treated in previous years' redeterminations.)
- Value of power and energy produced (treated as a negative cost).
- Annual payments to sinking fund reserves to finance periodic replacement of plant machinery components having economic lives shorter than the project repayment period.

Excluded are costs for salaries of plant operations and maintenance personnel. Since such costs are incurred in annual amounts that do not vary with actual water quantities delivered, they are classified as minimum OMP&R costs.

Bases for Water Conveyance. Table B-4 summarizes the schedules of annual entitlements as set forth in Table A of each contract. The years of initial water delivery that are basic to these schedules are set forth in Article 6(a) of each contract as modified, in certain instances, through written notifications by the State.

Table B-5 presents a summary of the actual and projected water quantities delivered and to be delivered from each aqueduct reach to each contractor.

Table B-6 summarizes the estimated total respective quantities conveyed or to be conveyed through each pumping or power recovery plant for each year of the project repayment period for each of the following functions:

1. Made available to contractors from down-aqueduct delivery structures ("Deliveries, Water Supply").
2. Required to initially fill down-aqueduct reaches and reservoirs to operational levels ("Initial Fill Water").
3. Consumed in down-aqueduct project-associated recreation developments ("Deliveries, Recreation").
4. Lost through evaporation and seepage from all down-aqueduct reaches ("Operational Losses").
5. Placed in down-aqueduct reservoir storage subsequent to the initial fill of such storage ("Reservoir Storage Changes").

In addition, Table B-6 summarizes the estimated total quantities of project water to be stored in San Luis Reservoir (a project conservation facility) and to be lost through evaporation and seepage from the Reservoir and the portion of the Aqueduct which is allocated to water conservation (all such quantities included under the heading "Conservation Water").

In this redetermination, the quantities shown in Table B-6 are the basis for those cost allocations that depend on variable annual use of project facilities.

Bases for Reimbursable Costs

Tables 10 and 12 (Chapter V) summarize (a) the capital and operating costs of all project facilities, respectively, and (b) the allocation of these costs to the various project purposes. This redetermination is concerned only with those costs of project facilities which are allocated to water supply and power generation.

Capital Costs

Of the \$2,463,680,000 in capital costs shown allocated to water supply and power generation in Table 10 for purposes of the current financial analysis (excluding \$680,278,000 in principal and interest payments to the Corps of Engineers after 1985), only about \$2,265,378,000 would be returned to the State under payments of Delta Water and Transportation Charges and electric power sales on the basis of current prices. (For the annual redetermination of water charges, the Department excludes those allowances included in the financial analysis for future price escalation.) Table B-7 presents a reconciliation of the estimated total capital costs of each project conservation facility and each aqueduct reach—as estimated for (a) the current financial analysis and (b) the current redetermination of annual water charges.

Certain miscellaneous income that is realized as a consequence of capital expenditures but cannot be returned to the fund that financed the original expenditures is treated as "miscellaneous receipts" in the financial analysis. For charge redeterminations, however, such miscellaneous income is deducted from the associated capital costs. The notable example of such income is that realized from the sale of lands originally purchased for Airpoint Reservoir, financed by a special legislative appropriation.

The costs for delivery structures and for requested excess capacities also are not covered by Delta Water and Transportation Charges and are to be covered by funds advanced by the concerned contractors, described below:

Costs of Delivery Structures. Costs of delivery structures constructed by the State are paid directly by each contractor requesting such structures. The Department has established the following general procedures concerning the time and method of payment for the capital costs of a delivery structure constructed by the State:

- The State estimates the cost of the structure at least one year prior to the date the invoice is furnished, to assist the contractor in budgeting funds. This estimate is based on information provided by the contractor.

- The actual invoice is furnished to the contractor at least 60 days prior to initiation of construction of the structure. The invoice is based on re-estimated costs reflecting the actual plans and specifications for the structure.
- Funds covering the estimated costs of the structure must be deposited with the State prior to the initiation of construction.
- The invoice is adjusted when the final costs of the structure are determined after construction is complete.

Estimated capital costs of all requested delivery structures to be constructed by the State are tabulated for each reach and each contractor in Table B-8. The costs shown therein are incomplete in many respects and are not to be construed as those preliminary estimates or invoices to be furnished by the State as outlined above. Table B-8 is included in this appendix to account for all items of project costs associated with water supply. The following tabulation indicates the general location and construction status of the delivery structures requested as of the end of 1969:

Project Facility	Number of Delivery Structures				
	Requested by Agencies	Under Construction		Completed	
		by State	by Agencies	by State	by Agencies
Oroville Division.....	6	0	1	2	3
North Bay Aqueduct (Phase I).....	2	0	0	2	0
South Bay Aqueduct.....	19	1	0	12	6
California Aqueduct:					
North San Joaquin Division.....	4	0	0	0	4
San Luis Division (Served by the federal Central Valley Project)					
South San Joaquin Division.....	39	22	0	7	0
Tehachapi Division.....	1	0	0	0	0
Mojave Division.....	15	13	0	0	0
Santa Ana Division.....	10	4	0	0	0
West Branch.....	5	4	0	0	0
Coastal Branch (Phase I).....	2	0	0	2	0
Total.....	103	44	1	25	13

Costs of Requested Excess Capacity. Amendments have been executed to the contracts with three agencies which provide for excess capacity in the project transportation facilities. These amendments, and the estimated additional costs to be incurred by the State by reason of such amendments, are listed below:

1. The Metropolitan Water District of Southern California:
 - a. Pursuant to Amendment 2 as modified by Amendment 7, 188 cubic feet per second in reaches from Kettleman City to the Junction of the West Branch..... \$10,551,100
 - b. Pursuant to Amendments 4 and 5, providing for future enlargement of Lake Perris. \$14,315,490
 - c. Pursuant to Amendment 6, 787 cubic feet per second in the reach from Silverwood Lake to the South Portal of the San Bernardino Tunnel. \$6,823,844
- Subtotal, The Metropolitan Water District of Southern California..... \$31,690,434

2. San Gabriel Valley Municipal Water District; pursuant to Amendment 3, 21 cubic feet per second in the reach from Silverwood Lake to the South Portal of the San Bernardino Tunnel. \$182,156
 3. Antelope Valley-East Kern Water Agency; pursuant to Amendment 4, 19 cubic feet per second in the reaches of the West Branch from the Junction to the Peace Valley Pipeline. \$109,000
- TOTAL, ALL AGENCIES..... \$31,981,590

Pursuant to Amendment 7 of the contract with The Metropolitan Water District of Southern California, the 809 cubic feet per second excess capacity which was provided in reaches of the West Branch at the District's request is reclassified as basic capacity of the project transportation facilities. This aspect of Amendment 7 requires certain prepayments of the District's capital cost component of the Transportation Charge.¹⁵⁷

¹⁵⁷ See p. 27.

Listed in Table B-9 are estimates of the annual amounts for:

- Additional costs to be incurred by the State for requested excess capacity.
- The required annual advances, by water contractors, of funds for such costs.
- Any credits for those total advances which are estimated to be in excess of additional costs and which will be applied to the respective contractors' accounts.

Provision for the potential enlargement of Lake Perris at the request of The Metropolitan Water District of Southern California will affect the reimbursable costs of the Santa Ana Valley Pipeline—however, excess capacity will not necessarily be provided therein for the District. Because of the potential enlargement, the Pipeline must be designed to pass the basic flow to a higher terminal water surface elevation in Lake Perris than would otherwise be necessary. This requires pipe sections of greater cross-sectional area than would otherwise be necessary. Amendment 5 of the contract with The Metropolitan Water District of Southern California specifically provides that the additional costs to be incurred because of the Pipeline modifications will be allocated to the District, and returned to the State through payments of the Transportation Charge. The estimated additional costs that will be repaid through the District's capital cost component for the aqueduct reach from Devil Canyon Powerplant to Barton Road are as follows (all reimbursable costs for the reach from Barton Road to Lake Perris will be borne by the District in any event):

1970-----	\$1,907,000
1971-----	\$4,516,000
1972-----	\$276,000
Total-----	\$6,699,000

Guidelines Re Distribution of "General Capital Costs" Among Facilities and Reaches. The costs of most of the Department's construction programs for the Project are incurred for more than one facility or reach. These costs must be distributed among facilities and reaches for purposes of computing water charges. The Department is applying the following guidelines for distributing these general capital costs:

- Design costs will be distributed on the basis of estimated total capital costs.
- Departmental costs of construction programs will be distributed on the basis of direct construction contract costs.

- Costs of preconsolidation programs will be distributed on the basis of mileage in each subsidence area.
- Departmental costs of rights-of-way programs, other than direct land costs, will be distributed on the basis of mileage.
- Departmental costs of the Monitor and Control System and the cost of the Control System Model will be determined on the basis of direct construction contract costs of the Monitor and Control System.
- Design and construction costs of Operations and Maintenance Centers and Subcenters will be distributed on the basis of the estimated direct minimum OMP&R costs to be incurred in 1973 for the facilities and reaches served by the Centers and Subcenters.

Recognizing that the actual total capital costs of the Project will not be known for many years, the Department is applying the following guidelines as to those distributions which are based on the estimated total capital costs of facilities and reaches:

- Such distributions will be retroactively adjusted for the period from 1961 through 1968 based upon estimated total capital costs as shown in Bulletin 132-69.
- Distribution factors derived from estimated total capital costs shown in Bulletin 132-69 will continue to be used to distribute costs for the next five years from 1969 through 1973.
- In 1974, the estimated total capital costs to be shown in Bulletin 132-74 will be used to retroactively adjust distributions for the period from 1961 through 1973.
- Distribution factors derived from estimated total capital costs to be shown in Bulletin 132-74 will continue to be used to distribute costs until project construction is completed.
- Upon completion of the Project, actual total capital costs will be used to retroactively adjust distributions for the period from 1961 through completion of project construction.

Annual Operating Costs

Allowances for future price escalation are not included in those projected annual operating costs summarized in Table 12.¹⁵⁸ Furthermore, the allocation of normal operating costs incurred for reaches which include excess capacity is reflected in the allocation factors shown in Column 14 of Table B-2. Therefore, all of the estimated operating costs that Table 12 shows as allocable to water supply and power generation

¹⁵⁸ See p. 59.

will be returned to the State through payments of the minimum and variable OMP&R components of Delta Water and Transportation Charges and through a portion of the revenues from electric power sales.

All reimbursable operating costs of conservation facilities are returned to the State through payments of the minimum OMP&R component of the Delta Water Charge.

The composition of those operating costs to be reimbursed through payments of the variable OMP&R component of the Transportation Charge was previously described in this appendix under the heading "Basis for Variable Annual Use of Facilities". Therefore, the remainder of this section centers on those costs to be reimbursed through payments of the minimum OMP&R component of the Transportation Charge.

Minimum Operating Costs. The following operating costs are considered to be incurred irrespective of the annual amounts of project water delivered to the contractors and are therefore classified as minimum OMP&R costs:

- All direct labor charges for field operations and maintenance personnel, including associated indirect costs.
- Electric power transmission costs (classified as variable OMP&R costs in previous redeterminations).
- All costs for equipment, materials, and supplies and for replacement of works other than rotating machinery of pumping and power recovery plants.
- Portions of the variable OMP&R costs (or credits) of all up-aqueduct pumping and power recovery plants which are allocable to the annual conveyance of water subsequently (a) lost to evaporation and seepage from respective aqueduct reaches and/or (b) placed into storage in respective reservoirs of the project transportation facilities.
- Credits, which offset those costs referred to in (b) above, equivalent to the variable OMP&R costs of conveying from the Delta those deliveries derived from storage withdrawals.¹⁵⁹
- A distributed share of those "general operating costs" and "direct operating costs" which cannot be identified solely with one facility or aqueduct reach.

The allocation of "general operating costs" among facilities and reaches has been studied by representatives of the Department and the contractors during the past two years.¹⁶⁰ This redetermination accounts for certain procedural refinements as a result of these studies.

Refinements Re Distribution of "General Operating Costs" Among Facilities and Reaches. All costs incurred by the State must be identified with specific facilities and aqueduct reaches in order to determine those costs to be reimbursed by the contractors.

Certain of the Department's work programs for the Project cannot be identified directly with individual facilities or reaches. The costs of these programs are incurred for groups of facilities and reaches, or for the Project as a whole, and must be distributed among such facilities and reaches to provide a basis for determining contractor charges.

Heretofore, the Department has classified the costs of all work programs which continue beyond the project construction period as either (a) "direct operating costs," those that can be identified with a particular facility or reach; or (b) "general operating costs," those which must be allocated among facilities and aqueduct reaches.

The only reference in the Standard Provisions to the required distribution of "general operating costs" among facilities and reaches is contained in Article 25(b), which provides, in part:

"That such minimum operation, maintenance, power, and replacement costs as are incurred generally for the Project transportation facilities first shall be allocated to each aqueduct reach in an amount which bears the same proportion to the total amount of such general costs that the amount of costs incurred directly for the reach bears to the total of all direct costs for all aqueduct reaches."

Thus, the contractual definition of "general operating costs" must be only those OMP&R costs incurred generally for *all* aqueduct reaches. The other costs the Department has heretofore classified as "general operating costs" are properly designated as either "general administration costs" or "direct operating costs." These three revised classifications, and the basis for distributing the costs of each among facilities and reaches, are described below:

1. *General operating costs* are the costs of the Department's programs related to the engineering support for physical operations and maintenance of all facilities and reaches. Such programs through fiscal year 1968-69 include those for Engineering for Water Operations and Maintenance, Operations Water Quality Control, Communication Systems Engineering, Water Program Management and Operations, and Coordinated Inter-agency Projects Operation. Such programs after fiscal year 1968-69 include Communications Systems Engineering, Operations Engineering, Civil Maintenance Engineering, Technical Development Engineering, and Earthquake Engineering (after 1972). These general operating costs for

¹⁵⁹ See p. 107.
¹⁶⁰ See p. 29.

the period from 1960–1973 shall be distributed among all project facilities in operation in 1973 in proportion to estimated direct annual minimum OMP&R costs for 1973. In addition, these general operating costs will also be distributed to project facilities which will not be operational until after 1973 based on the “present worths” in 1973 of the initial year’s estimated direct minimum OMP&R costs. Facilities to be operational after 1973 include the following:

- a. North Bay Aqueduct (Phase II)
- b. Coastal Branch (Phase II)
- c. Buttes Reservoir
- d. Peripheral Canal
- e. Upper Eel River Development
- f. Abbey Bridge Reservoir
- g. Dixie Refuge Reservoir

When the actual 1973 direct minimum OMP&R costs are known, the prior distributions for 1960–1973, mentioned above, shall be redetermined based on the actual 1973 costs and the “present worths” in 1973 of the initial year’s estimated direct annual minimum OMP&R costs for those facilities not operational until after 1973.

Commencing in 1973, all general operating costs will be distributed among facilities in proportion to actual direct annual minimum OMP&R costs for each year for facilities in operation and “present worths” of the initial year’s estimated direct minimum OMP&R costs in that year for those facilities not yet in operation.

After construction of all project facilities, each year’s general operating costs will be distributed among facilities in proportion to actual direct annual minimum OMP&R costs for that year and will be classified as minimum OMP&R costs for that year.

2. *General administration costs* are the costs of the Department’s programs related to overall project administration. Such programs include Water Contracts Negotiation and Administration, Project Repayment and Financial Analysis, and Utility Accounting.

The costs of general administration programs shall be distributed annually among facilities and reaches based upon the Department’s annual direct labor charges incurred for such facilities and reaches. While such administration costs are applicable to all aqueduct reaches, they are not considered to be general operating costs for the following reasons:

- a. These programs are associated not only with operations, but also with planning and construction.
- b. These programs are primarily concerned with the recovery of project costs.

- c. In relation to the Project, these programs are similar to the Department’s administrative functions, the costs of which are allocated to all department programs on the basis of direct labor charges of such programs.

3. *Direct operating costs* include the costs of those programs formerly classified as “general operating costs.” Examples of how the costs of these programs will be distributed among facilities and reaches are described below:

- *Power Contract Management Programs* will be distributed among pumping and power recovery plants on the basis of the maximum to-be-installed capacity of each plant in proportion to the total maximum to-be-installed capacity of all project plants.
- *Development of an Operations Control Plan* will be capitalized and distributed among facilities and reaches of the Project based on estimated total construction contract costs of the Monitor and Control System.
- *Operations Studies Coordinated with Other Agencies* will be distributed among project conservation facilities based on estimated direct minimum OMP&R costs for 1973.
- *Water Program Management and Operations Studies* are identified to specific divisions of the Project. Distributions of these costs among reaches and features within the divisions identified will be based on estimated direct minimum OMP&R costs for 1973.
- *Acoustical Velocity Meter Program* will be capitalized and distributed among reaches of the California Aqueduct in proportion to direct construction costs charged to reaches for the Acoustical Velocity Meters.
- *Planning and Support of Water O&M—Various District Offices* will be distributed among reaches and features within each district based on estimated direct annual operations costs for 1973.
- *Establishment of Feather River Channel Characteristics* will be assigned to Oroville Dam and Lake Oroville.
- *Water Rights for State Water Facilities*, when not identified by work orders to specific facilities (such as the Upper Eel River Development) or specific programs which are not reimbursable by water contractors (such as the Davis-Grunsky Program), will be distributed among project conservation facilities (excluding the California Aqueduct and Abbey and Dixie Dams and Reservoirs) based on estimated total capital costs shown in Bulletin 132-69.

- *Earthquake Engineering* will be distributed among the capital costs of facilities and reaches (excluding the Upper Eel River Development, the San Joaquin Drainage Facilities, and the Davis-Grunsky Program), based on estimated total capital costs as shown in Bulletin 132-69. Direct costs incurred for the Upper Eel River Development, the San Joaquin Drainage Facilities, and the Davis-Grunsky Program will be charged directly to those facilities. General earthquake engineering study costs incurred subsequent to 1972 will be classified and distributed as general operating costs.

Costs to Be Returned to the State Through Payments Under the Transportation Charge

Table B-10 presents the actual and projected annual capital costs of each aqueduct reach that will eventually be returned to the State, with interest, through contractor payments of the capital cost component of the Transportation Charge.

The actual and projected costs to be reimbursed through payments of the minimum and variable OMP&R components of the Transportation Charge are shown in Tables B-11 and B-12, respectively. The costs shown in Table B-12 constitute the portion of those costs shown in Table B-3 which are allocable to the water supply delivery quantities shown in Table B-6.

Costs to Be Returned Through Payments Under the Delta Water Charges and the Power Sale Contract

Summarized in Table B-13 are the actual and projected capital and operating costs of each project conservation facility to be reimbursed through payments (a) of the Delta Water Charge and (b) Oroville power sales. The operating costs included in that tabulation are the same as those for project conservation facilities shown in Table 12 to be allocable to water supply and power generation.

Not included in Table B-13 are the credits to be applied to the reimbursable capital costs of the project

Figure B-2. Criteria for Amortization Schedules

Contractor	Amortization of Allocated Capital Costs in 50 Equal Annual Installments, With Initial Payment Due in:								
	1963	1964	1965	1966	1968	1970	1971	a	b
Alameda County FC&WCD, Zone 7	• °	--	--	--	--	--	--	--	--
Alameda County WD	•	--	--	--	--	--	--	--	--
Antelope Valley-East Kern WA	•	--	--	--	--	--	--	--	--
County of Butte	--	--	--	--	--	--	--	--	•
City of Yuba City	--	--	--	--	--	--	--	--	•
Coachella Valley County WD	--	•	--	--	--	--	--	--	--
Crestline-Lake Arrowhead WD	--	•	--	--	--	--	--	--	--
Desert WA	• d	--	--	--	--	--	--	--	--
Devil's Den WD	--	--	--	--	--	--	--	•	--
Dudley Ridge WD	--	--	--	--	--	--	--	•	--
Empire West Side ID	--	--	--	--	--	--	--	•	--
Hacienda WD	--	--	--	--	--	--	--	•	--
Kern County WA: Ag use	--	--	--	--	--	--	--	•	--
M&I use	--	--	•	--	--	--	--	--	--
Kings County	--	--	--	--	•	--	--	--	--
Little Rock Creek ID	--	•	--	--	--	--	--	--	--
Metropolitan WD	•	--	--	--	--	--	--	--	--
Mojave WA	--	•	--	--	--	--	--	--	--
Napa County FC&WCD	--	--	--	•	--	--	--	--	--
Oak Flat WD	--	--	--	--	--	--	--	•	--
Palmdale ID	--	•	--	--	--	--	--	--	--
Plumas County FC&WCD	--	--	--	--	--	•	--	--	--
San Bernardino Valley MWD	•	--	--	--	--	--	--	--	--
San Gabriel Valley MWD	• d	--	--	--	--	--	--	--	--
San Geronimo Pass WA	• d	--	--	--	--	--	--	--	--
San Luis Obispo County FC&WCD	--	• e	--	--	--	--	--	--	--
Santa Barbara County FC&WCD	--	• e	--	--	--	--	--	--	--
Santa Clara County FC&WD	•	--	--	--	--	--	--	--	--
Solano County FC&WCD	--	--	--	--	--	--	•	--	--
Tulare Lake Basin in WSD	--	--	--	--	--	--	--	•	--
Upper Santa Clara Valley WA	--	•	--	--	--	--	--	--	--
Ventura County FCD	--	•	--	--	--	--	--	--	--

• Amortization of allocated capital costs on basis of equivalent unit rate applied to annual entitlements (Table B-4) within project repayment period.

• Payments on Delta Water Charge only.

• Principal payments on each annual capital cost prior to 1971 delayed until calendar year 1972, except payments for 1963.

• Deferred and added to 1964 payment with accrued interest.

• Exception: all principal and interest payments for costs of "Coastal Stub" are assumed deferred until 1976.

conservation facilities, pursuant to negotiated settlements concerning the magnitude of incurred planning costs.¹⁶¹ These credits are as follows:

Year	Categories			Total	Delta Water Charge Credit
	2b	3	4		
1960----					\$4,850,000 ^a
1961-----	\$187,217	\$59,005	\$244,310	\$490,532	\$431,527
1962-----	219,358	124,734	259,922	604,014	479,280
1963-----	450,685	85,566	28,058	564,309	478,743
1964-----	636,700	70,653	114,630	821,983	751,330
1965-----	626,568	128,002	136,967	891,537	763,535
1966-----	684,142	41,717	51,766	777,625	735,908
Total..	\$2,804,670	\$509,677	\$835,653	\$4,150,000	\$3,640,323 ^b

Category 2b—Portions of programs which are necessary for the Project but benefit areas outside of the Project.

Category 3—Programs which are not necessary for the design, construction, or operation of the Project although they produce benefits to the Project as well as benefits outside of the Project.

Category 4—Project costs which are not part of the "project facilities" as defined by the Standard Provisions. (Such excluded costs are for the San Joaquin Drainage Facilities, Davis-Grunsky Program, etc.)

^a Net credit applied December 31, 1960, pursuant to Settlement Letter No. 1 for capital costs incurred in the period 1952 through 1960.

^b Net credit, applied in the annual amounts shown, pursuant to a proposed settlement for capital costs incurred in the period 1961 through 1966. (The sum of Categories 2b and 4.)

Project Water Charges

This section summarizes the redetermination of past and projected components of the Transportation Charge for the annual revision of Tables C through G included in each water contract. This section also includes a derivation of future unit Delta Water Charges. Equivalent unit charges for each acre-foot of such project water service are also summarized herein for each contractor.

Transportation Charges

The accumulation of the allocated costs of each aqueduct reach to each contractor forms the basis for the annual components of the Transportation Charge.

Allocated Capital Costs. Table B-14 summarizes each contractor's share of those capital costs of aqueduct reaches presented in Table B-10, as determined by application of those proportionate-use ratios presented in Column 10 of Table B-2. These allocated capital costs are to be set forth in Table C of the respective contracts.

Criteria as to the types of amortization schedules applicable to the allocated capital costs shown in Table B-14 for the respective contractors are summarized in Figure B-2. The accounting of interest charges included in the capital cost components of the Transportation Charge follows the procedure established in Settlement Letter No. 2.

¹⁶¹ See p. 29.

Capital Cost Components. Table B-15 summarizes the capital cost components of the Transportation Charge for each contractor for each year of the project repayment period. These estimated components, subsequently adjusted for prior overpayments and/or underpayments, are to be set forth in Tables D of the respective contracts.

Minimum OMP&R Components. Table B-16 summarizes the minimum OMP&R components of the Transportation Charge for each contractor for each year of the project repayment period. These estimated components, subsequently adjusted for prior overpayments and/or underpayments, are to be set forth in Tables E of the respective contracts. These components represent the accumulated share of those reach costs presented in Table B-11, as determined by application of the proportionate-use ratios shown for each reach for each contractor in Column 14 of Table B-2.

Variable OMP&R Components. Article 26(a) of the Standard Provisions specifies the following procedure for calculating the variable OMP&R component of the Transportation Charge:

- An annual charge per acre-foot of projected water deliveries to all contractors served from or through each reach is determined so as to return to the State the projected variable OMP&R costs to be incurred for the reach.
- The total annual variable OMP&R component for any contractor for a given reach is obtained by multiplying the unit charge associated with that reach by the quantity of water actually delivered from or through the reach to the contractor.

Table B-17 presents a summary of the actual and projected total variable OMP&R costs for each acre-foot of conveyance through each aqueduct plant and reservoir for each year of the project repayment period. The data summarized in Table B-17 have been derived by dividing the costs shown in Table B-12 by the water conveyance quantities shown in Table B-5. Table B-17 shows the cumulative unit costs or credits from the Delta through the particular plant or reservoir listed in the table headings. These cumulative unit costs constitute the actual and projected unit variable OMP&R component for deliveries through the various plants in accordance with Article 26(a) of the Standard Provisions.

Table B-18 summarizes the variable OMP&R components of the Transportation Charge for each contractor for each year of the project repayment period. Table B-18 is developed from the costs per acre-foot as shown in Table B-17 and the delivery quantities for each contractor from each reach as shown in Table B-5. These estimated components, subsequently ad-

justed for prior overpayment and/or underpayments, are to be set forth in Tables F of the respective contracts.

Total Annual Charges. Annual Transportation Charges for each contractor are summarized in Table B-19. These estimated payments, subsequently adjusted for prior overpayments and/or underpayments, are to be set forth in Tables G of the respective contracts. The amounts shown in Table B-19 represent the sums of the corresponding amounts in Tables B-15, B-16, and B-18.

Delta Water Charges per Acre-Foot of Entitlement

Payments of the Delta Water Charge through December 31, 1969 were based on \$3.50 per acre-foot of project water entitlement, in accordance with Article 22(b) of the Standard Provisions. Payments of the Charge during 1970 will be based on \$6.65 per acre foot of entitlement in accordance with amendments of Article 22(b) which were being executed as of the end of 1969.¹⁶² The Delta Water Charge after December 31, 1970 will be determined by the State in accordance with the formula specified in Article 22(c) of the Standard Provisions. For this redetermination, the formula of Article 22(c) may be paraphrased so as to be applicable for any given year of the project repayment period as follows:

- The present worths, at the project interest rate, of all costs of appropriate project conservation facilities, allocated to water supply and power generation, that have been incurred, and that are estimated to be incurred, during the entire project repayment period; *minus*
- *The present worths*, at the project interest rate, of all revenues from the sale of power that have been realized, and that are estimated to be realized, during the project repayment period; *minus*
- The present worths, at the project interest rate, of all Delta Water Charges received or billed for payment in years prior to the given year; *the above quantities all divided by*
- The present worths, at the project interest rate, of the annual entitlements to project water for the given year and for the remaining years of the project repayment period.

The future Delta Water Charges, per acre-foot of entitlement, applicable after December 31, 1970, are herein calculated on the following two alternative bases as to the time when the costs of the authorized Upper Eel River Development initially would be included in the calculation:

- In accordance with the present provisions of Articles 22(e) and 22(g), whereby all such costs will be included in the calculation of the Charge after December 31, 1970.

- In accordance with an original understanding whereby the costs of each facility of the Development will be included in the calculation of the Charge in years when the State first incurs major construction costs for the respective facility.¹⁶³

This redetermination assumes the following schedule of events for an Upper Eel River Development sized so as to meet only the estimated needs for maintaining the present "minimum project yield": (a) construction of the Dos Rios-Grindstone Tunnel by the State would commence in 1976; (b) construction of the Stony Creek Conveyance Channel by the State would commence in 1985; (c) initial payments to the Corps of Engineers by the State would commence in 1986 under an assumed contract executed pursuant to the Water Supply Act of 1958 for a "block" of water conservation storage initially used for water supply; and (d) initial payments on the "block" of such storage reserved for future use would commence in 1994.

The calculation of the Delta Water Charge under the two alternative bases is summarized in Table B-20. However, the statements of charges supported by this redetermination include the Delta Water Charge as calculated under the present provisions of the contracts. Pursuant to Article 22(f), upon each such computation of the rates to be used in determining the components of the Delta Water Charge, a document establishing such rates shall be prepared by the State and attached to each contract as an amendment of that article. This bulletin constitutes the document referred to in Article 22(f) for Delta Water Charges to be paid in 1971.

Equivalent Total Water Charges

A summary of total charges is shown in Table B-21 in terms of the equivalent charge for each acre-foot of project water entitlements to be delivered to the respective contractors. These equivalent charges may be defined as those hypothetical payments for each acre-foot to be delivered during the project repayment period that would provide the same total sum at the end of the period as those annual payments to be made under the Delta Water Charge and Transportation Charge, with interest taken into account at the project interest rate. However, these equivalent unit charges do not reflect contractor payments of charges associated with project water service other than the Delta Water Charge and the Transportation Charge. Furthermore, the potential charges for surplus water service to the contractors will be considerably less than the charges for project water entitlements. Thus, the equivalent unit charges for total project water deliveries are expected to be less than those summarized in Table B-21, depending on the extent of future surplus water deliveries to the respective contractors.

¹⁶² See pp. 27-28.

¹⁶³ See pp. 26-27, Bulletin 132-69.

TABLE B-1

DELIVERY CAPABILITY AND CAPACITY OF EACH AQUEDUCT REACH

(in cubic feet per second unless otherwise noted)

Sheet 1 of 2

Reach No.	Reach Description	Water Supply Contractors Served From Reach	Maximum Deliveries From Reach		Total Capacity Provided for Water Supply Deliveries (a)	Additional Capacity (b)	Total Reach Capacity
			Annual Entitlements (acre-feet)	Monthly (percent of annual)			
	UPPER FEATHER DIVISION						
	Pipeline, Grizzly Valley Dam to Portola Reservoir	Plumas County Flood Control and Water Conservation District	2,700	11	8	0	8
	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 Thru Napa Turnout Reservoir	Napa County Flood Control and Water Conservation District	25,000	11	46	0	46
	SOUTH BAY AQUEDUCT						
1	Bethany Reservoir Thru 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 Lake Del Valle(h	Future Contractor - South Bay	12,000 (c	11	29,301 AF	0	29,301 AF
6	Del Valle Junction Thru South Livermore Turnout	Alameda County Flood Control and Water Conservation District, Zone 7	29,000	11	363	0	363
7	South Livermore Turnout Thru Vallecitos Turnout	Alameda County Water District	37,000	11 (d	305	0	305
8	Vallecitos Turnout Thru Alameda-Bayside Turnout	Alameda County Water District Future Contractor - South Bay	5,000 25,000 (c	11 (d 11	255	0	255
9	Alameda-Bayside Turnout Thru 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	--	-	-	8,423	74	10,300 (e
2A	Bethany Reservoir to Orestimba Creek	Oak Flat Water District	5,700	18	8,122	74	10,000 (e
2B	Orestimba Creek to O'Neill Forebay	--	-	-	8,070	74	10,000 (e
3	O'Neill Forebay to Dos Amigos Pumping Plant	--	-	-	8,059	74	8,133 (f
4	Dos Amigos Pumping Plant to Panoche Creek	--	-	-	8,047	74	8,121 (f
5	Panoche Creek to Five Points	--	-	-	8,033	74	8,107 (f
6	Five Points to Arroyo Pasaajero	--	-	-	8,011	74	8,085 (f
7	Arroyo Pasaajero to Kettleman City	--	-	-	8,004	74	8,078 (f
8C	Kettleman City Thru Milham Avenue	Empire West Side Irrigation District County of Kings Tulare Lake Basin Water Storage District	3,000 4,000 61,050	18 11 18	8,183	74	8,257
8D	Milham Avenue Thru Avenal Gap	Dudley Ridge Water District Hacienda Water District Tulare Lake Basin Water Storage District	57,700 8,500 48,950	18 18 18	7,985	115	8,100
9	Avenal Gap Thru Twisselman Road	Kern County Water Agency - Agriculture	46,900	18	7,194	106	7,300
10A	Twisselman Road Thru Lost Hills	Kern County Water Agency - Agriculture	265,800	18	7,044	106	7,150
11B	Lost Hills to 7th Standard Road	Kern County Water Agency - Agriculture	126,300	18	6,239	111	6,350
12D	7th Standard Road Thru Elk Hills Road	Kern County Water Agency - Agriculture	3,700	18	5,856	94	5,950
12E	Elk Hills Road Thru Tupman Road	Kern County Water Agency - Agriculture Kern County Water Agency - M&I	130,800 77,400	18 11	5,833	117	5,950
13B	Tupman Road to Buena Vista Pumping Plant	Kern County Water Agency - Agriculture Kern County Water Agency - M&I	86,800 25,200	18 11	5,296	54	5,350
14A	Buena Vista Pumping Plant Thru Santiago Creek	Kern County Water Agency - Agriculture	37,500	18	4,981	69	5,050
14B	Santiago Creek Thru Old River Road	Kern County Water Agency - Agriculture	60,700	18	4,861	39	4,900
14C	Old River Road to Wheeler Ridge Pumping Plant	Kern County Water Agency - Agriculture	32,500	18	4,673	27	4,700

a) For detailed breakdown of capacities provided for delivery of water to each contractor, see Table B-2.

b) Additional capacity includes that provided for practical design considerations and for project purposes other than water supply.

c) Maximum annual entitlement of a future contractor is considered, for allocation purposes, to be 25,000 acre-feet in Reach 8; 10,000 acre-feet in Reaches 6 and 7; and 22,000 acre-feet in Reaches 1, 2, 4, and 5 of the South Bay Aqueduct and Reach 1 of the California Aqueduct.

d) Maximum monthly delivery is 11% of annual entitlement, with 16 cfs (5,000 acre-feet) delivered in Reach 8 and the balance in Reach 7.

e) Total reach capacities for both project conservation facilities and project transportation facilities. Required capacities for project transportation facilities are 8,497 cfs in Reach 1, 8,196 cfs in Reach 2A, and 8,144 cfs in Reach 2B.

f) Total reach capacities required for the State Water Project - not the State's share of design capacities of reaches as constructed.

DELIVERY CAPABILITY AND CAPACITY OF EACH AQUEDUCT REACH

(in cubic feet per second unless otherwise noted)

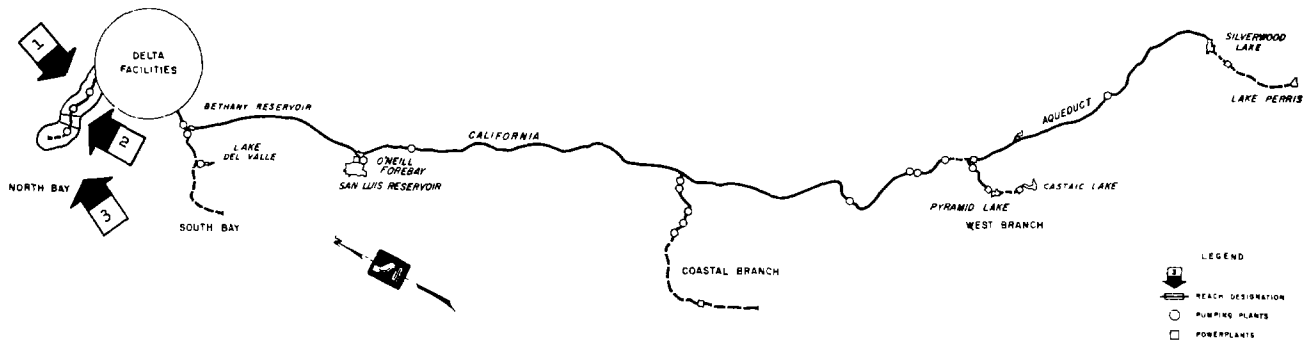
Sheet 2 of 2

Reach No.	Reach Description	Water Supply Contractors Served From Reach	Maximum Deliveries From Reach		Total Capacity Provided for Water Supply Deliveries (a)	Additional Capacity (b)	Total Reach Capacity
			Annual Entitlements (acre-feet)	Monthly (percent of annual)			
	CALIFORNIA AQUEDUCT (Continued)						
15A	Wheeler Ridge Pumping Plant to Wind Gap Pumping Plant	Kern County Water Agency - Agriculture	70,000	18	4,570	30	4,600
16A	Wind Gap Pumping Plant to A.D. Edmonston Pumping Plant	Kern County Water Agency - Agriculture Kern County Water Agency - M&I	74,100 12,000	18 11	4,360	40	4,400
17E	A.D. Edmonston Pumping Plant to Carley V. Porter Tunnel	Kern County Water Agency - M&I	5,000	11	4,108	42	4,150
17F	Carley V. Porter Tunnel to Junction, West Branch, California Aqueduct	--	-	-	4,099	51	4,150
18A	Junction, West Branch, California Aqueduct Thru Cottonwood Powerplant	--	-	-	1,617	26	1,643
19	Cottonwood Powerplant to Fairmont	Antelope Valley-East Kern Water Agency	69,600	8-1/3	1,616	27	1,643
19C	Buttes Junction Thru Buttes Reservoir (h)	Antelope Valley-East Kern Water Agency	-	-	27,800 AF	-	27,800 AF
20A	Fairmont Thru 70th Street West	Antelope Valley-East Kern Water Agency	47,100	8-1/3	1,499	21	1,520
20B	70th Street West to Palmdale	Palmdale Irrigation District	17,300	8-1/3	1,428	22	1,450
21	Palmdale to Littlerock Creek	Littlerock Creek Irrigation District Antelope Valley-East Kern Water Agency	2,300 10,800	8-1/3 8-1/3	1,397	21	1,418
22A	Littlerock Creek to Pearblossom Pumping Plant	Antelope Valley-East Kern Water Agency	10,900	8-1/3	1,376	21	1,397
22B	Pearblossom Pumping Plant to West Fork Mojave River	Coachella Valley County Water District Desert Water Agency Mojave Water Agency	23,100 38,100 50,800	11 11 8-1/3	1,360	16	1,376
23	West Fork Mojave River to Silverwood Lake	--	-	-	1,181	12	1,193
24	Cedar Springs Dam and Silverwood Lake (h)	Crestline-Lake Arrowhead Water Agency	5,800	11	72,640 AF	-	72,640 AF
25	Silverwood Lake to South Portal, San Bernardino Tunnel	--	-	-	2,011	9	2,020
26A	South Portal, San Bernardino Tunnel Thru Devil Canyon Powerplant	The Metropolitan Water District of Southern California San Bernardino Valley Municipal Water District San Gabriel Valley Municipal Water District San Geronimo Pass Water Agency	284,000 88,900 28,800 17,300	11 11 10 11	1,203	8	1,211
28G	Devil Canyon Powerplant Thru Barton Road	San Bernardino Valley Municipal Water District	13,700	11	444	25	469
28H	Barton Road to Lake Perris	--	-	-	419	25	444
28J	Perris Dam and Lake Perris (h)	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	--	-	-	3,122	7	3,129
29F	Oso Pumping Plant Thru Quail Embankment	--	-	-	3,121	8	3,129
29G	Quail Embankment Thru Pyramid Powerplant	--	-	-	3,098	7	3,105
29H	Pyramid Dam and Lake (h)	--	-	-	156,090 AF	-	156,090 AF
29J	Pyramid Lake Thru Castaic Powerplant	--	-	-	3,085	7	3,092
30	Castaic Dam and Lake (h)	The Metropolitan Water District of Southern California Upper Santa Clara Valley Water Agency Ventura County Flood Control District	1,455,000 41,500 20,000	11 11 11	332,000 AF	-	332,000 AF
	COASTAL BRANCH						
31A	Avenal Gap to Devil's Den Pumping Plant	Devil's Den Water District Kern County Water Agency - Agriculture	12,700 105,100	18 18 (g)	449	1	450
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 Thru Santa Maria Terminus	San Luis Obispo County Flood Control and Water Conservation District Santa Barbara County Flood Control and Water Conservation District	10,000 57,700	8-1/3 8-1/3	102	0	102

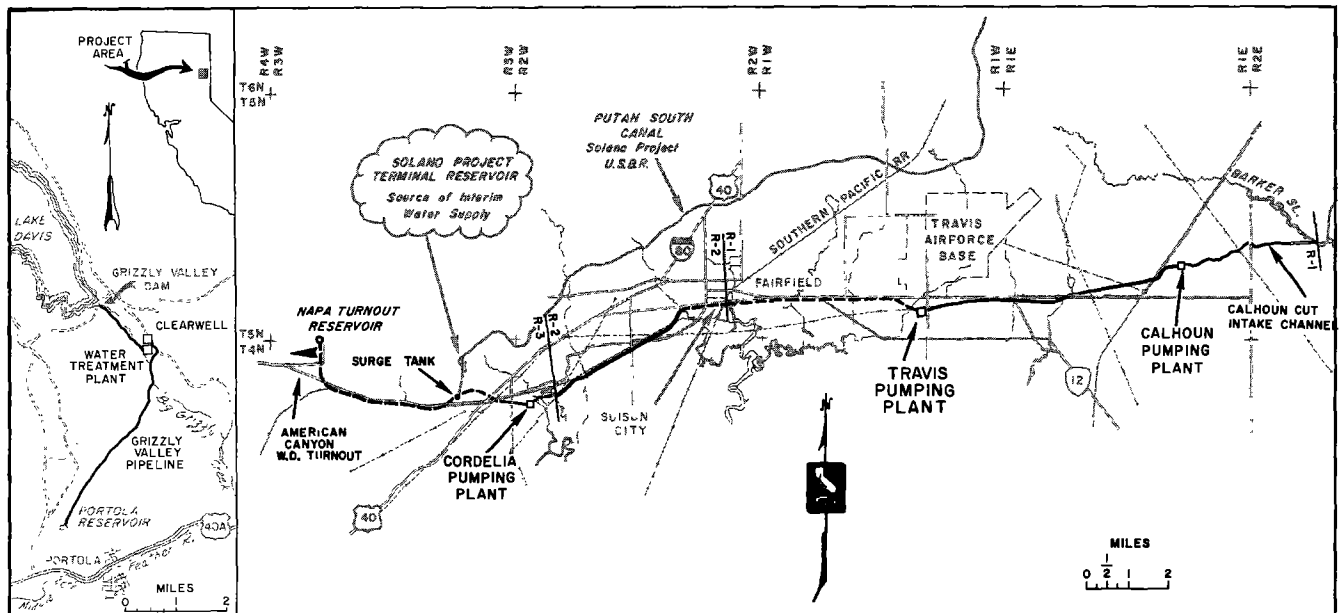
g) Water will be delivered thru available capacity at less than 18% of maximum annual entitlement.

h) AF: storage capacity in acre-feet.

TABLE B-2
PROPORTIONATE USE OF EACH AQUEDUCT REACH
(in units as shown)

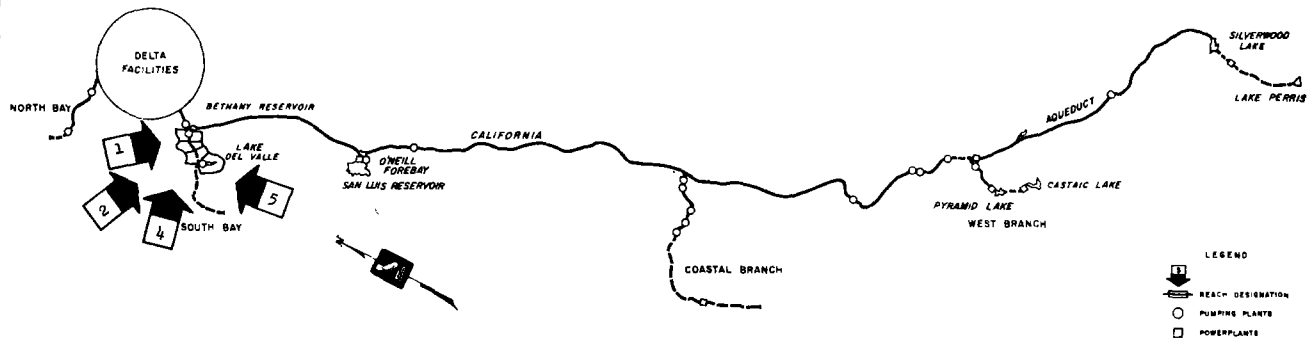


WATER SUPPLY CONTRACTOR	MEASURE OF USE	MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH	ESTIMATED OPERATIONAL LOSSES WITHIN REACH	CAPACITY PROVIDED IN REACH				
				FOR DELIVERY OF ENTITLEMENTS	FOR COMPENSATION OF			SUBTOTAL
					OPERATIONAL LOSSES	SCHEDULED OUTAGES	DOWNSTREAM REGULATION	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
PIPELINE, GRIZZLY VALLEY DAM TO PORTOLA RESERVOIR								
Plumas County Flood Control and Water Conservation District	Q AF C CFS	2700.0 8.00000	0	2700.0 8.00000	0	0	0	2700.0 8.00000
Totals	Q AF C CFS	2700.0 8.00000	0	2700.0 8.00000	0	0	0	2700.0 8.00000
REACH 1 - LINDSEY SLOUGH TO SUISUN CITY								
Napa County Flood Control and Water Conservation District	Q AF C CFS	0 0	398.1 .65524	25000.0 45.58219	557.3 .91727	0	0	25557.3 46.49946
Solano County Flood Control and Water Conservation District	Q AF C CFS	0 0	601.9 .99069	37800.0 68.92028	842.7 1.38703	0	0	38642.7 70.30731
Totals	Q AF C CFS	0 0	1000.0 1.64593	62800.0 114.50247	1400.0 2.30430	0	0	64200.0 116.80677
REACH 2 - SUISUN CITY TO CORDELIA PUMPING PLANT								
Napa County Flood Control and Water Conservation District	Q AF C CFS	0 0	159.2 .26203	25000.0 45.58219	159.2 .26203	0	0	25159.2 45.84422
Solano County Flood Control and Water Conservation District	Q AF C CFS	37800.0 68.92028	240.8 .39634	37800.0 68.92028	240.8 .39634	0	0	38040.8 69.31662
Totals	Q AF C CFS	37800.0 68.92028	400.0 .65837	62800.0 114.50247	400.0 .65837	0	0	63200.0 115.16094
REACH 3 - CORDELIA PUMPING PLANT THRU NAPA TURNOUT RESERVOIR								
Napa County Flood Control and Water Conservation District	Q AF C CFS	25000.0 45.58219	0	25000.0 45.58219	0	0	0	25000.0 45.58219
Totals	Q AF C CFS	25000.0 45.58219	0	25000.0 45.58219	0	0	0	25000.0 45.58219

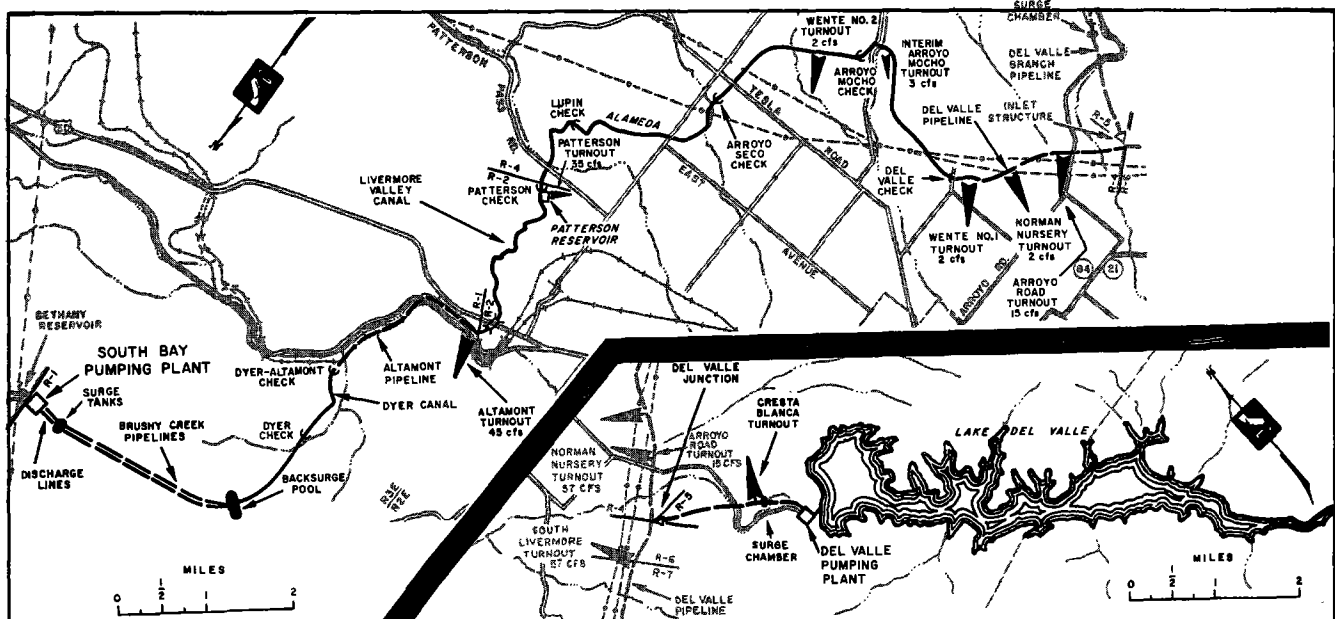


PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS		CAPACITY PROVIDED IN REACH		PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS		MEASURE OF USE	WATER SUPPLY CONTRACTOR
RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS	FOR REQUESTED EXCESS PEAKING	TOTAL FOR WATER SUPPLY CONTRACTORS	RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS		
(9)	(10)	(11)	(12)	(13)	(14)	(15)	
PIPELINE, GRIZZLY VALLEY DAM TO PORTOLA RESERVOIR							
1.00000000	1.00000000	0	8.2700.0	1.00000000	1.00000000	Q AF C CFS	Plumas County Flood Control and Water Conservation District
1.00000000	1.00000000	0	8.2700.0	1.00000000	1.00000000	Q AF C CFS	Totals
LINDSEY SLOUGH TO SUISUN CITY - REACH 1							
.39808879	.39808876	0	25557.3	.39808879	.39808876	Q AF C CFS	Napa County Flood Control and Water Conservation District
.60191121	.60191124	0	38642.7	.60191121	.60191124	Q AF C CFS	Solano County Flood Control and Water Conservation District
1.00000000	1.00000000	0	64200.0	1.00000000	1.00000000	Q AF C CFS	Totals
1.00000000	1.00000000	0	116.80677	1.00000000	1.00000000	Q AF C CFS	
SUISUN CITY TO CORDELIA PUMPING PLANT - REACH 2							
.39808861	.39808861	0	25159.2	.39808861	.39808861	Q AF C CFS	Napa County Flood Control and Water Conservation District
.60191139	.60191139	0	38940.8	.60191139	.60191139	Q AF C CFS	Solano County Flood Control and Water Conservation District
1.00000000	1.00000000	0	63200.0	1.00000000	1.00000000	Q AF C CFS	Totals
1.00000000	1.00000000	0	115.16084	1.00000000	1.00000000	Q AF C CFS	
CORDELIA PUMPING PLANT THRU NAPA TURNOUT RESERVOIR - REACH 3							
1.00000000	1.00000000	0	25000.0	1.00000000	1.00000000	Q AF C CFS	Napa County Flood Control and Water Conservation District
1.00000000	1.00000000	0	45.58219	1.00000000	1.00000000	Q AF C CFS	Totals
1.00000000	1.00000000	0	45.58219	1.00000000	1.00000000	Q AF C CFS	

TABLE B-2 (Continued)
PROPORTIONATE USE OF EACH AQUEDUCT REACH
(in units as shown)

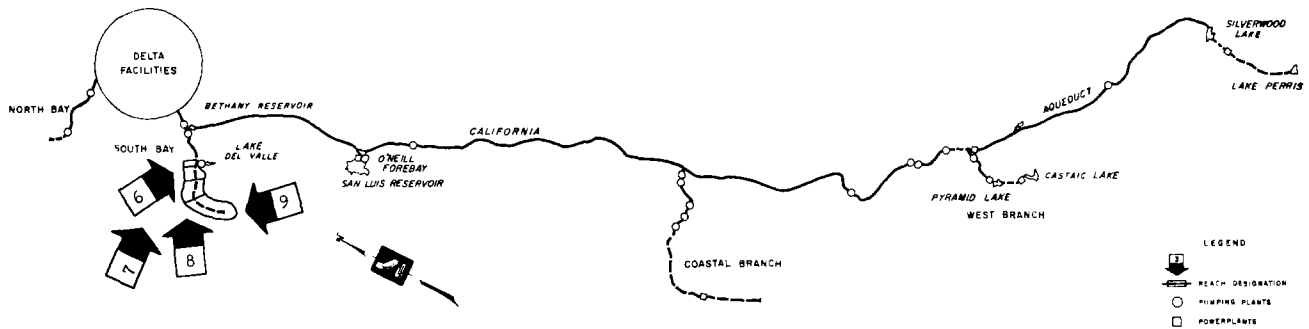


WATER SUPPLY CONTRACTOR	MEASURE OF USE	MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH	ESTIMATED OPERATIONAL LOSSES WITHIN REACH	CAPACITY PROVIDED IN REACH				
				FOR DELIVERY OF ENTITLEMENTS	FOR COMPENSATION OF			SUBTOTAL
					OPERATIONAL LOSSES	SCHEDULED OUTAGES	DOWNSTREAM REGULATION	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
REACH 1 - BETHANY RESERVOIR THRU ALTAMONT TURNOUT								
Santa Clara County Flood Control and Water District	Q AF C CFS	0 0	85.3 .11782	100000.0 149.02297	1721.6 2.37801	0 1.70237	0 0	101721.6 153.10335
Alameda County Water District	Q AF C CFS	0 0	35.8 .04945	42000.0 62.60515	712.5 .98417	0 .71499	0 0	42712.5 64.30431
Alameda County Flood Control and Water Conservation District, Zone 7	Q AF C CFS	0 0	39.1 .05401	46000.0 68.55218	719.2 .99203	0 .79308	0 0	46718.2 70.32729
Future Contractor - South Bay	Q AF C CFS	0 0	19.8 .02735	22000.0 9.71128	1577.7 2.17925	0 .37452	0 0	23577.7 12.26505
Totals	Q AF C CFS	0 0	180.0 .24863	210000.0 289.89158	4730.0 6.53346	0 3.57496	0 0	214730.0 300.00000
REACH 2 - ALTAMONT TURNOUT THRU PATTERSON RESERVOIR								
Santa Clara County Flood Control and Water District	Q AF C CFS	0 0	113.7 .15705	100000.0 149.02297	1636.3 2.26019	0 1.80551	0 .01517	101636.3 153.10334
Alameda County Water District	Q AF C CFS	0 0	47.7 .06589	42000.0 62.60515	676.7 .93472	0 .75832	0 .00637	42676.7 64.30455
Alameda County Flood Control and Water Conservation District, Zone 7	Q AF C CFS	17000.0 23.48174	52.2 .07210	46000.0 68.55218	679.1 .93802	0 .83053	0 .00595	46679.1 70.32769
Future Contractor - South Bay	Q AF C CFS	0 0	26.4 .03647	22000.0 9.71128	1557.9 2.15190	0 .39721	0 .00352	23557.9 12.26391
Totals	Q AF C CFS	17000.0 23.48174	240.0 .33151	210000.0 289.89158	4550.0 6.28483	0 3.79157	0 .03202	214550.0 300.00000
REACH 4 - PATTERSON RESERVOIR TO DEL VALLE JUNCTION								
Santa Clara County Flood Control and Water District	Q AF C CFS	0 0	416.8 .57572	100000.0 149.02297	1522.6 2.10314	0 2.11419	0 .03540	101522.6 153.27570
Alameda County Water District	Q AF C CFS	0 0	175.0 .24173	42000.0 62.60515	629.0 .86883	0 .88796	0 .01495	42629.0 64.37679
Alameda County Flood Control and Water Conservation District, Zone 7	Q AF C CFS	0 0	121.6 .16796	29000.0 45.07044	625.9 .86592	0 .61311	1500.0 23.49799	31135.9 70.04746
Future Contractor - South Bay	Q AF C CFS	0 0	96.6 .13343	22000.0 9.71128	1531.5 2.11543	0 .46512	0 .00422	23531.5 12.30005
Totals	Q AF C CFS	0 0	810.0 1.11884	193000.0 266.40984	4310.0 5.95332	0 4.00038	1500.0 23.55446	199819.0 300.00000
REACH 5 - DEL VALLE JUNCTION THRU LAKE DEL VALLE								
Santa Clara County Flood Control and Water District	Q AF C AF	8936.0 0	1105.8 321.0	100000.0 8936.0	1105.8 321.0	0	0	9257.0
Alameda County Water District	Q AF C AF	3669.0 0	454.0 132.0	42000.0 3669.0	454.0 132.0	0	0	3901.0
Alameda County Flood Control and Water Conservation District, Zone 7	Q AF C AF	4083.0 0	505.3 147.0	29000.0 4083.0	505.3 147.0	0	0	4230.0
Future Contractor - South Bay	Q AF C AF	12000.0 11596.0	1434.9 417.0	22000.0 11596.0	1434.9 417.0	0	0	12013.0
Totals	Q AF C AF	12000.0 28284.0	3500.0 1017.0	193000.0 28284.0	3500.0 1017.0	0	0	29301.0

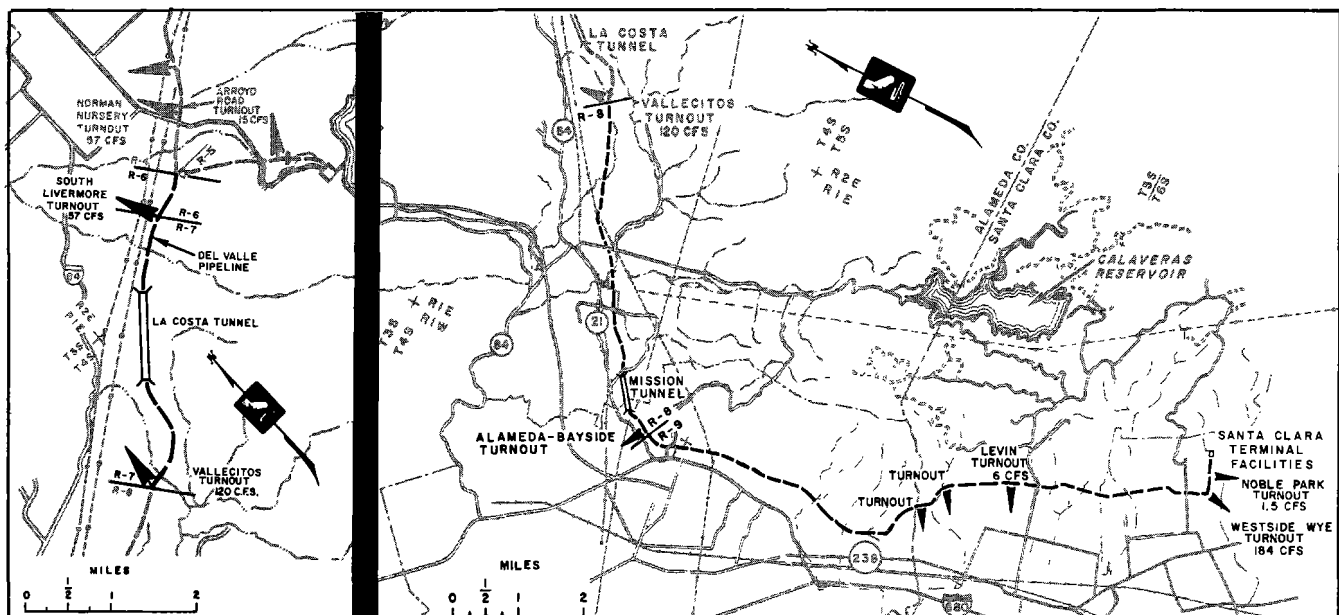


PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS		CAPACITY PROVIDED IN REACH		PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS		MEASURE OF USE	WATER SUPPLY CONTRACTOR
RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS	FOR REQUESTED EXCESS PEAKING	TOTAL FOR WATER SUPPLY CONTRACTORS	RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS		
(9)	(10)	(11)	(12)	(13)	(14)	(15)	
BETHANY RESERVOIR THRU ALTAMONT TURNOUT - REACH 1							
.47371862			101721.6	.47371862		Q AF	Santa Clara County Flood Control and Water District
.51034450	.49203156	0	153.10335	.51034450	.49203156	C CFS	
.19891259			42712.5	.19891259		Q AF	Alameda County Water District
.21434770	.20663014	0	64.30431	.21434770	.20663014	C CFS	
.21756718			46718.2	.21756718		Q AF	Alameda County Flood Control and Water Conservation District, Zone 7
.23442430	.22599574	0	70.32729	.23442430	.22599574	C CFS	
.10980161			23577.7	.10980161		Q AF	Future Contractor - South Bay
.04088350	.07534256	0	12.26505	.04088350	.07534256	C CFS	
1.00000000	1.00000000	0	214730.0	1.00000000	1.00000000	Q AF	Totals
1.00000000	1.00000000	0	300.00000	1.00000000	1.00000000	C CFS	
ALTAMONT TURNOUT THRU PATTERSON RESERVOIR - REACH 2							
.47371848			101636.3	.47371848		Q AF	Santa Clara County Flood Control and Water District
.51034613	.49203231	0	153.10384	.51034613	.49203231	C CFS	
.19891261			42676.7	.19891261		Q AF	Alameda County Water District
.21434854	.20663057	0	64.30456	.21434854	.20663057	C CFS	
.21756747			46679.1	.21756747		Q AF	Alameda County Flood Control and Water Conservation District, Zone 7
.23442563	.22599655	0	70.32769	.23442563	.22599655	C CFS	
.10980144			23557.9	.10980144		Q AF	Future Contractor - South Bay
.04087970	.07534057	0	12.26391	.04087970	.07534057	C CFS	
1.00000000	1.00000000	0	214550.0	1.00000000	1.00000000	Q AF	Totals
1.00000000	1.00000000	0	300.00000	1.00000000	1.00000000	C CFS	
PATTERSON RESERVOIR TO DEL VALLE JUNCTION - REACH 4							
.51062826			101522.6	.51062826		Q AF	Santa Clara County Flood Control and Water District
.51091900	.51077363	0	153.27570	.51091900	.51077363	C CFS	
.21441110			42629.0	.21441110		Q AF	Alameda County Water District
.21458930	.21450020	0	64.37679	.21458930	.21450020	C CFS	
.15660425			31135.9	.15660425		Q AF	Alameda County Flood Control and Water Conservation District, Zone 7
.23349153	.19504789	0	70.04746	.23349153	.19504789	C CFS	
.11835639			23531.5	.11835639		Q AF	Future Contractor - South Bay
.04100017	.07967828	0	12.30005	.04100017	.07967828	C CFS	
1.00000000	1.00000000	0	198319.0	1.00000000	1.00000000	Q AF	Totals
1.00000000	1.00000000	0	300.00000	1.00000000	1.00000000	C CFS	
DEL VALLE JUNCTION THRU LAKE DEL VALLE - REACH 5							
.31592778	.31592778		9257.0	.31592778	.31592778	Q AF	Santa Clara County Flood Control and Water District
.12972254	.12972254		3801.0	.12972254	.12972254	Q AF	Alameda County Water District
.14436367	.14436367		4230.0	.14436367	.14436367	Q AF	Alameda County Flood Control and Water Conservation District, Zone 7
.40998601	.40998601		12013.0	.40998601	.40998601	Q AF	Future Contractor - South Bay
1.00000000	1.00000000		29301.0	1.00000000	1.00000000	Q AF	Totals
						C AF	

TABLE B-2 (Continued)
PROPORTIONATE USE OF EACH AQUEDUCT REACH
(in units as shown)

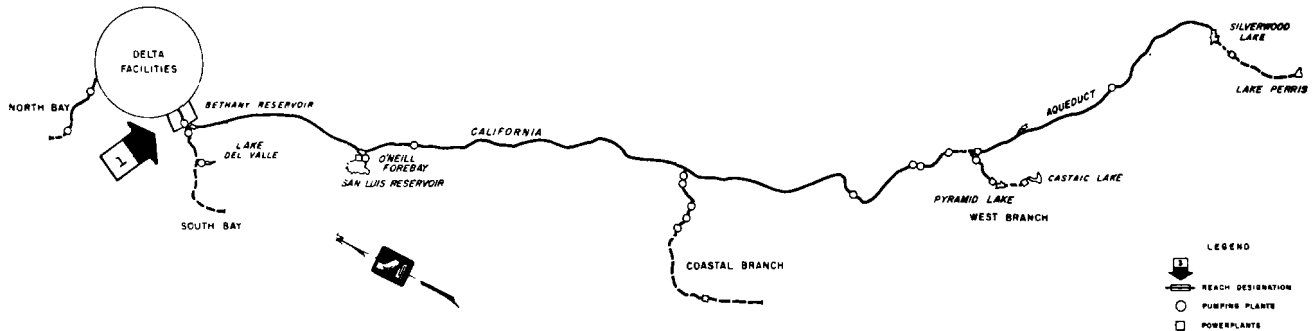


WATER SUPPLY CONTRACTOR	MEASURE OF USE	MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH	ESTIMATED OPERATIONAL LOSSES WITHIN REACH	CAPACITY PROVIDED IN REACH				
				FOR DELIVERY OF ENTITLEMENTS	FOR COMPENSATION OF OPERATIONAL LOSSES	SCHEDULED OUTAGES	DOWNSTREAM REGULATION	SUBTOTAL
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
REACH 6 - DEL VALLE JUNCTION THRU SOUTH LIVERMORE TURNOUT								
Santa Clara County Flood Control and Water District	Q AF C CFS	0 0	0 0	100000.0 184.00000	0 0	0 0	0 0	100000.0 184.00000
Alameda County Water District	Q AF C CFS	0 0	0 0	42000.0 76.57808	0 0	0 0	0 0	42000.0 76.57808
Alameda County Flood Control and Water Conservation District, Zone 7	Q AF C CFS	29000.0 52.87534	0 0	29000.0 52.87534	0 0	0 0	0 0	29000.0 52.87534
Future Contractor - South Bay	Q AF C CFS	0 5.12466	0 0	10000.0 49.54658	0 0	0 0	0 0	10000.0 49.54658
Totals	Q AF C CFS	29000.0 58.00000	0 0	181000.0 363.00000	0 0	0 0	0 0	181000.0 363.00000
REACH 7 - SOUTH LIVERMORE TURNOUT THRU VALLECITOS TURNOUT								
Santa Clara County Flood Control and Water District	Q AF C CFS	0 0	0 0	100000.0 184.00000	0 0	0 0	0 0	100000.0 184.00000
Alameda County Water District	Q AF C CFS	37000.0 67.46165	0 0	42000.0 76.57808	0 0	0 0	0 0	42000.0 76.57808
Future Contractor - South Bay	Q AF C CFS	-15000.0 -27.34932	0 0	10000.0 44.42192	0 0	0 0	0 0	10000.0 44.42192
Totals	Q AF C CFS	22000.0 40.11233	0 0	152000.0 305.00000	0 0	0 0	0 0	152000.0 305.00000
REACH 8 - VALLECITOS TURNOUT THRU ALAMEDA-BAYSIDE TURNOUT								
Santa Clara County Flood Control and Water District	Q AF C CFS	0 0	0 0	100000.0 184.00000	0 0	0 0	0 0	100000.0 184.00000
Alameda County Water District	Q AF C CFS	5000.0 16.00000	0 0	5000.0 16.00000	0 0	0 0	0 0	5000.0 16.00000
Future Contractor - South Bay	Q AF C CFS	25000.0 45.58219	0 0	25000.0 55.00000	0 0	0 0	0 0	25000.0 55.00000
Totals	Q AF C CFS	30000.0 61.58219	0 0	130000.0 255.00000	0 0	0 0	0 0	130000.0 255.00000
REACH 9 - ALAMEDA-BAYSIDE TURNOUT THRU SANTA CLARA TERMINAL FACILITIES								
Santa Clara County Flood Control and Water District	Q AF C CFS	100000.0 184.00000	0 0	100000.0 184.00000	0 0	0 0	0 0	100000.0 184.00000
Totals	Q AF C CFS	100000.0 184.00000	0 0	100000.0 184.00000	0 0	0 0	0 0	100000.0 184.00000

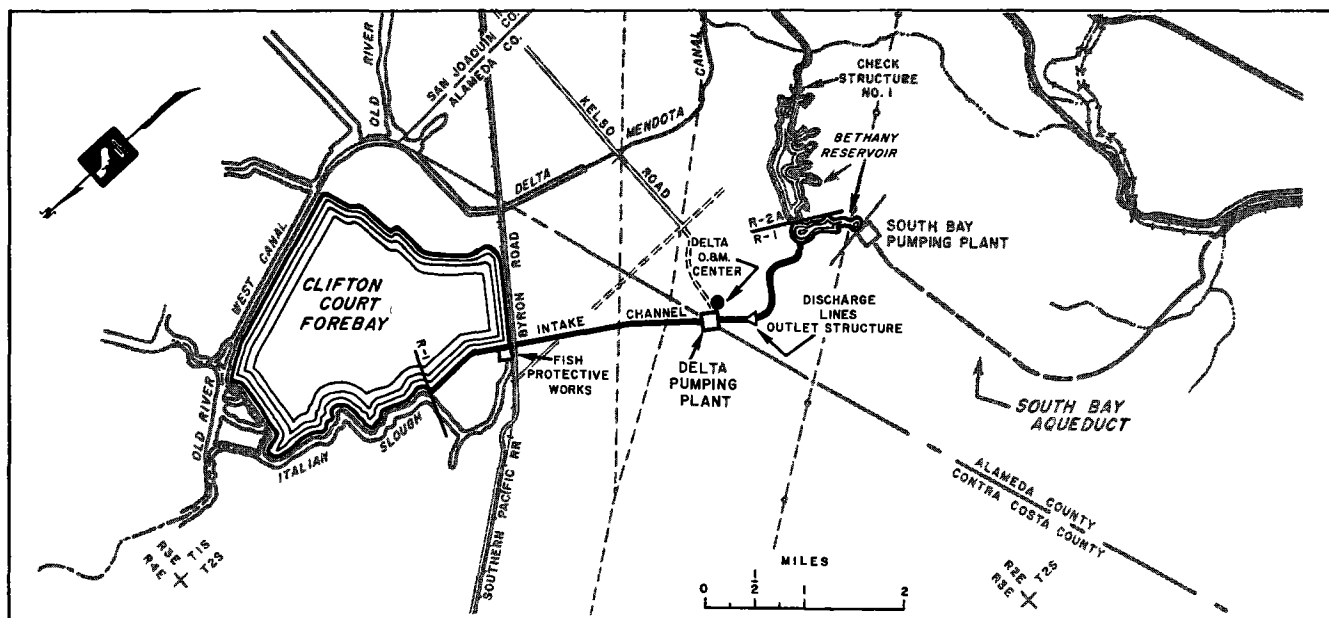


PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS		CAPACITY PROVIDED IN REACH		PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS		MEASURE OF USE	WATER SUPPLY CONTRACTOR
RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS	FOR REQUESTED EXCESS PEAKING	TOTAL FOR WATER SUPPLY CONTRACTORS	RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS		
(9)	(10)	(11)	(12)	(13)	(14)	(15)	
DEL VALLE JUNCTION THRU SOUTH LIVERMORE TURNOUT - REACH 6							
.55248619 .50688705	.52968662	0	100000.0 184.00000	.55248619 .50688705	.52968662	Q AF C CFS	Santa Clara County Flood Control and Water District
.23204420 .21095390	.22150155	0	42000.0 76.57808	.23204420 .21095390	.22150155	Q AF C CFS	Alameda County Water District
.16022099 .14566209	.15294154	0	29000.0 52.87534	.16022099 .14566209	.15294154	Q AF C CFS	Alameda County Flood Control and Water Conservation District, Zone 7
.05524862 .13649196	.09587029	0	10000.0 49.54658	.05524862 .13649196	.09587029	Q AF C CFS	Future Contractor - South Bay
1.00000000 1.00000000	1.00000000	0	181000.0 363.00000	1.00000000 1.00000000	1.00000000	Q AF C CFS	Totals
SOUTH LIVERMORE TURNOUT THRU VALLECITOS TURNOUT - REACH 7							
.65789474 .60327869	.63058671	0	100000.0 184.00000	.65789474 .60327869	.63058671	Q AF C CFS	Santa Clara County Flood Control and Water District
.27631579 .25107567	.26369573	0	42000.0 76.57808	.27631579 .25107567	.26369573	Q AF C CFS	Alameda County Water District
.06578947 .14564564	.10571756	0	10000.0 44.42192	.06578947 .14564564	.10571756	Q AF C CFS	Future Contractor - South Bay
1.00000000 1.00000000	1.00000000	0	152000.0 305.00000	1.00000000 1.00000000	1.00000000	Q AF C CFS	Totals
VALLECITOS TURNOUT THRU ALAMEDA-BAYSIDE TURNOUT - REACH 8							
.76923077 .72156863	.74539970	0	100000.0 184.00000	.76923077 .72156863	.74539970	Q AF C CFS	Santa Clara County Flood Control and Water District
.03846154 .06274510	.05060332	0	5000.0 16.00000	.03846154 .06274510	.05060332	Q AF C CFS	Alameda County Water District
.19230769 .21568627	.20399698	0	25000.0 55.00000	.19230769 .21568627	.20399698	Q AF C CFS	Future Contractor - South Bay
1.00000000 1.00000000	1.00000000	0	130000.0 255.00000	1.00000000 1.00000000	1.00000000	Q AF C CFS	Totals
ALAMEDA-BAYSIDE TURNOUT THRU SANTA CLARA TERMINAL FACILITIES - REACH 9							
1.00000000 1.00000000	1.00000000	0	100000.0 194.00000	1.00000000 1.00000000	1.00000000	Q AF C CFS	Santa Clara County Flood Control and Water District
1.00000000 1.00000000	1.00000000	0	100000.0 194.00000	1.00000000 1.00000000	1.00000000	Q AF C CFS	Totals

TABLE B-2 (Continued)
PROPORTIONATE USE OF EACH AQUEDUCT REACH
(in units as shown)

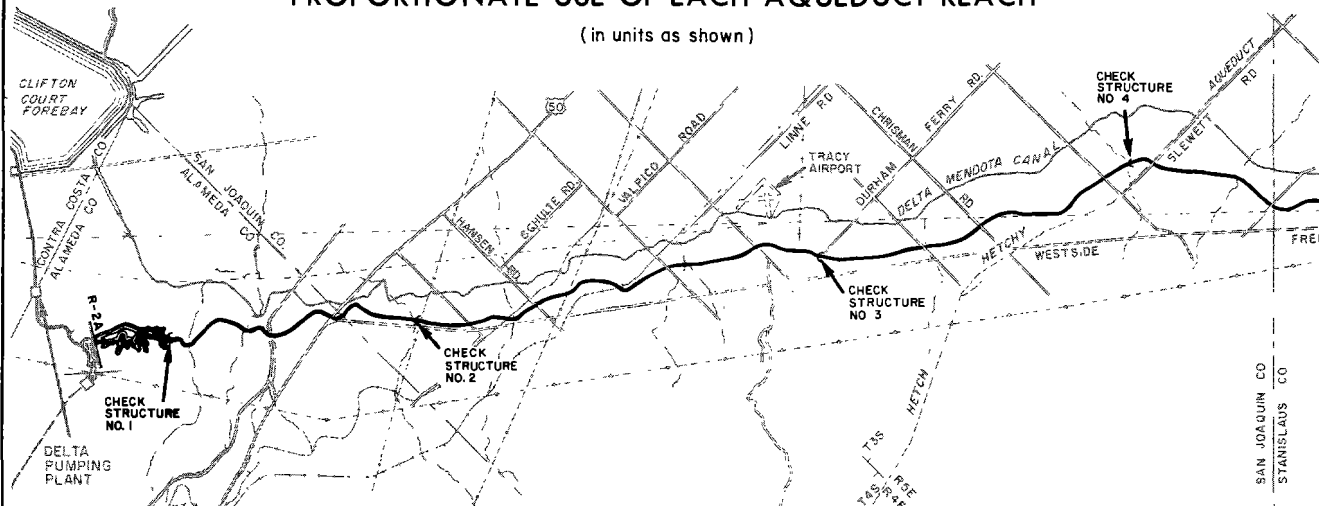


WATER SUPPLY CONTRACTOR	MEASURE OF USE	MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH	ESTIMATED OPERATIONAL LOSSES WITHIN REACH	CAPACITY PROVIDED IN REACH				
				FOR DELIVERY OF ENTITLEMENTS	FOR COMPENSATION OF			SUBTOTAL
					OPERATIONAL LOSSES	SCHEDULED OUTAGES	DOWNSTREAM REGULATION	
REACH 1 - DELTA THRU BETHANY RESERVOIR	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	284.2 .46777	2011500.0 2863.14267	130540.2 205.17212	0 184.59464	0 0	2142040.2 3252.90943
San Bernardino Valley Municipal Water District	Q AF C CFS	0 0	14.6 .02403	102600.0 172.33413	7392.9 11.96853	0 .73805	0 0	109992.9 185.04071
San Gabriel Valley Municipal Water District	Q AF C CFS	0 0	4.1 .00675	28800.0 45.15128	2075.2 3.35961	0 1.25674	0 0	30875.2 49.76763
San Geronimo Pass Water Agency	Q AF C CFS	0 0	2.5 .00412	17300.0 29.05110	1246.7 2.01831	0 .12679	0 0	18546.7 31.19620
Crestline-Lake Arrowhead Water Agency	Q AF C CFS	0 0	.8 .00132	5800.0 9.75185	417.9 .67657	0 .03854	0 0	6217.9 10.46696
Mojave Water Agency	Q AF C CFS	0 0	7.2 .01185	50800.0 70.16895	3262.9 5.37049	0 5.26267	0 0	54062.9 80.80211
Desert Water Agency	Q AF C CFS	0 0	5.4 .00889	38100.0 63.98093	2447.0 4.02762	0 .24977	0 0	40547.0 68.25832
Coachella Valley County Water District	Q AF C CFS	0 0	3.3 .00543	23100.0 38.80295	1483.8 2.44221	0 .14775	0 0	24583.8 41.39291
Antelope Valley-East Kern Water Agency	Q AF C CFS	0 0	19.2 .03160	138400.0 191.16896	6026.3 9.91886	0 14.33768	0 0	144426.3 215.42550
Littlerock Creek Irrigation District	Q AF C CFS	0 0	.3 .00049	2300.0 3.17694	116.0 .19092	0 .23827	0 0	2416.0 3.60613
Palmdale Irrigation District	Q AF C CFS	0 0	2.4 .00395	17300.0 23.89612	835.2 1.37470	0 1.79221	0 0	18135.2 27.06303
Ventura County Flood Control District	Q AF C CFS	0 0	2.8 .00461	20000.0 27.62557	1098.8 1.72616	0 2.10417	0 0	21098.8 31.45590
Upper Santa Clara Valley Water Agency	Q AF C CFS	0 0	5.8 .00955	41500.0 57.32306	2279.9 3.58165	0 4.36613	0 0	43779.9 65.27084
Kern County Water Agency (Municipal and Industrial)	Q AF C CFS	0 0	16.3 .02683	119600.0 218.06521	3403.1 5.60127	0 0	0 0	123003.1 223.66648
Kern County Water Agency (Agriculture)	Q AF C CFS	0 0	140.9 .23191	1033800.0 3058.92860	27659.0 45.52481	0 0	0 0	1061459.0 3104.45341
Santa Barbara County Flood Control and Water Conservation District	Q AF C CFS	0 0	8.1 .01333	57700.0 79.69977	3250.6 5.01957	0 6.10693	0 0	60950.6 90.82627
San Luis Obispo County Flood Control and Water Conservation District	Q AF C CFS	0 0	3.5 .00576	25000.0 34.53197	1107.7 1.75692	0 2.61585	0 0	26107.7 38.90474
Devil's Den Water District	Q AF C CFS	0 0	1.7 .00280	12700.0 37.89123	322.9 .53147	0 0	0 0	13022.9 38.42270
Dudley Ridge Water District	Q AF C CFS	0 0	7.8 .01284	57700.0 172.15151	1060.9 1.74617	0 0	0 0	58760.9 173.89768
Tulare Lake Basin Water Storage District	Q AF C CFS	0 0	14.8 .02436	110000.0 328.19179	1913.7 3.14982	0 0	0 0	111913.7 331.34161
Hacienda Water District	Q AF C CFS	0 0	1.1 .00181	8500.0 25.36027	156.1 .25693	0 0	0 0	8656.1 25.61720
Empire West Side Irrigation District	Q AF C CFS	0 0	.4 .00066	3000.0 8.95069	49.8 .08198	0 0	0 0	3049.8 9.03267
County of Kings	Q AF C CFS	0 0	.5 .00082	4000.0 7.29315	66.5 .10944	0 0	0 0	4066.5 7.40259
Oak Flat Water District	Q AF C CFS	0 0	.8 .00132	5700.0 17.00630	30.4 .05004	0 0	0 0	5730.4 17.05634
Santa Clara County Flood Control and Water District	Q AF C CFS	0 0	13.5 .02222	100000.0 149.02297	1735.1 2.40023	0 1.70237	0 0	101735.1 153.12557
Alameda County Water District	Q AF C CFS	0 0	5.7 .00938	42000.0 62.60515	718.2 .99355	0 .71499	0 0	42718.2 64.31369
Alameda County Flood Control and Water Conservation District, Zone 7	Q AF C CFS	0 0	6.2 .01020	46000.0 68.55218	724.4 1.00223	0 .78308	0 0	46724.4 70.33749
Future Contractor - South Bay	Q AF C CFS	0 0	3.1 .00510	22000.0 9.71128	1580.8 2.18435	0 .37452	0 0	23580.8 12.27015
Totals	Q AF C CFS	0 0	577.0 .94970	4145200.0 7873.53658	203002.0 322.23653	0 227.55115	0 0	4348202.0 8423.32426

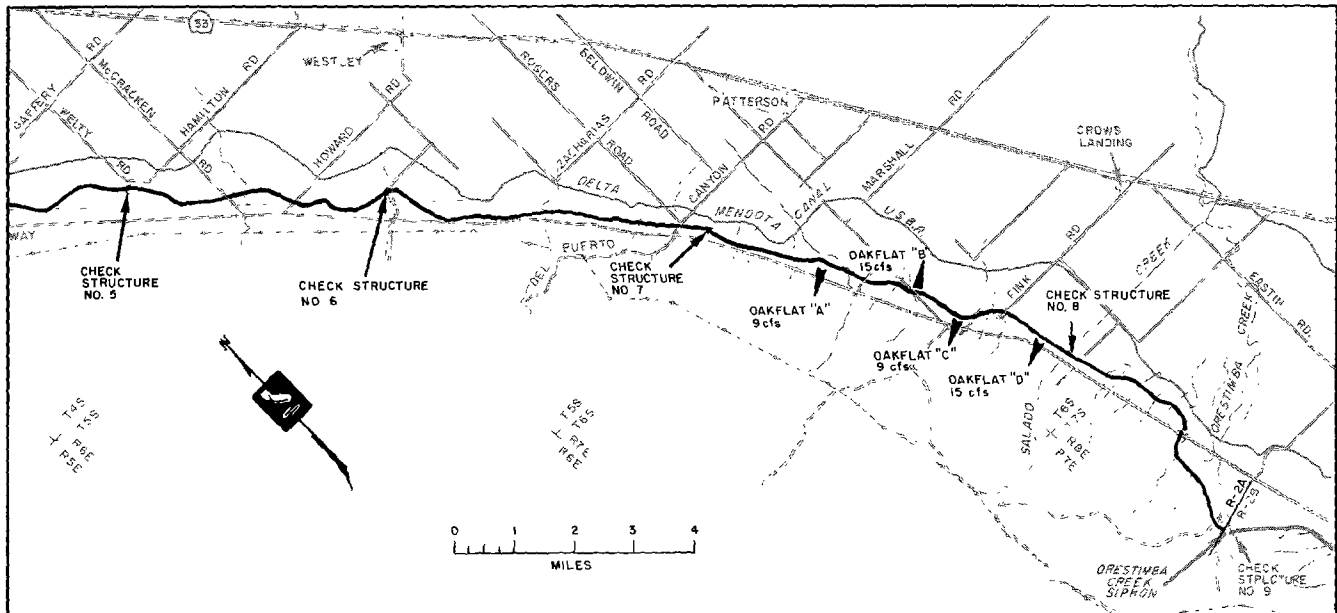


PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS		CAPACITY PROVIDED IN REACH		PROPORTIONATE USE FOR ALLOCATION OF MINIMUM O&M&R COSTS		MEASURE OF USE	WATER SUPPLY CONTRACTOR
RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS	FOR REQUESTED EXCESS PEAKING	TOTAL FOR WATER SUPPLY CONTRACTORS	RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS		
(9)	(10)	(11)	(12)	(13)	(14)	(15)	
DELTA THRU BETHANY RESERVOIR - REACH 1							
.49262665			2142040.2	.49262665		Q AF	The Metropolitan Water District of Southern California
.38617882	.43940274	0	3252.90943	.38617882	.43940274	C CFS	
.02529618			109992.9	.02529618		Q AF	San Bernardino Valley Municipal Water District
.02196766	.02363192	0	185.04071	.02196766	.02363192	C CFS	
.00710068			30875.2	.00710068		Q AF	San Gabriel Valley Municipal Water District
.00590831	.00650450	0	49.76763	.00590831	.00650450	C CFS	
.00426537			18546.7	.00426537		Q AF	San Geronimo Pass Water Agency
.00370355	.00398446	0	31.19620	.00370355	.00398446	C CFS	
.00142999			6217.9	.00142999		Q AF	Crestline-Lake Arrowhead Water Agency
.00124262	.00133630	0	10.46696	.00124262	.00133630	C CFS	
.01243339			54062.9	.01243339		Q AF	Mojave Water Agency
.00959266	.01101303	0	80.80211	.00959266	.01101303	C CFS	
.00932500			40547.0	.00932500		Q AF	Desert Water Agency
.00810349	.00871425	0	68.25832	.00810349	.00871425	C CFS	
.00565379			24583.8	.00565379		Q AF	Coachella Valley County Water District
.00491408	.00528393	0	41.39291	.00491408	.00528393	C CFS	
.03321518			144426.3	.03321518		Q AF	Antelope Valley-East Kern Water Agency
.02557488	.02939503	0	215.42550	.02557488	.02939503	C CFS	
.00055563			2416.0	.00055563		Q AF	Littlerock Creek Irrigation District
.00042811	.00049187	0	3.60613	.00042811	.00049187	C CFS	
.00417074			18135.2	.00417074		Q AF	Palmdale Irrigation District
.00321287	.00369180	0	27.06303	.00321287	.00369180	C CFS	
.00485230			21098.8	.00485230		Q AF	Ventura County Flood Control District
.00373438	.00429334	0	31.45590	.00373438	.00429334	C CFS	
.01006851			43779.9	.01006851		Q AF	Upper Santa Clara Valley Water Agency
.00774882	.00890866	0	65.27084	.00774882	.00890866	C CFS	
.02828827			123003.1	.02828827		Q AF	Kern County Water Agency (Municipal and Industrial)
.02655323	.02742075	0	223.66648	.02655323	.02742075	C CFS	
.24411446			1061459.0	.24411446		Q AF	Kern County Water Agency (Agriculture)
.36855442	.30633444	0	3104.45341	.36855442	.30633444	C CFS	
.01401743			60950.6	.01401743		Q AF	Santa Barbara County Flood Control and Water Conservation District
.01078271	.01240007	0	90.82627	.01078271	.01240007	C CFS	
.00600425			26107.7	.00600425		Q AF	San Luis Obispo County Flood Control and Water Conservation District
.00461869	.00531147	0	38.90474	.00461869	.00531147	C CFS	
.00299501			13022.9	.00299501		Q AF	Devil's Den Water District
.00456147	.00377824	0	38.42270	.00456147	.00377824	C CFS	
.01351384			58760.9	.01351384		Q AF	Dudley Ridge Water District
.02064478	.01707931	0	173.89768	.02064478	.01707931	C CFS	
.02573793			111913.7	.02573793		Q AF	Tulare Lake Basin Water Storage District
.03933621	.03253707	0	331.34161	.03933621	.03253707	C CFS	
.00199073			8656.1	.00199073		Q AF	Hacienda Water District
.00304122	.00251598	0	25.61720	.00304122	.00251598	C CFS	
.00070139			3049.8	.00070139		Q AF	Empire West Side Irrigation District
.00107234	.00088687	0	9.03267	.00107234	.00088687	C CFS	
.00093521			4066.5	.00093521		Q AF	County of Kings
.00087882	.00090702	0	7.40259	.00087882	.00090702	C CFS	
.00131788			5730.4	.00131788		Q AF	Oak Flat Water District
.00202489	.00167139	0	17.05634	.00202489	.00167139	C CFS	
.02339705			101735.1	.02339705		Q AF	Santa Clara County Flood Control and Water District
.00763519	.02078790	0	153.12557	.00763519	.02078790	C CFS	
.00982434			42718.2	.00982434		Q AF	Alameda County Water District
.00763519	.00872976	0	64.31369	.00763519	.00872976	C CFS	
.01074568			46724.4	.01074568		Q AF	Alameda County Flood Control and Water Conservation District, Zone 7
.00835033	.00954800	0	70.33749	.00835033	.00954800	C CFS	
.00542312			23580.8	.00542312		Q AF	Future Contractor - South Bay
.00145669	.00343990	0	12.27015	.00145669	.00343990	C CFS	
1.00000000			4348202.0	1.00000000		Q AF	Totals
1.00000000	1.00000000	0	8423.32426	1.00000000	1.00000000	C CFS	

TABLE B-2 (Continued)
PROPORTIONATE USE OF EACH AQUEDUCT REACH
(in units as shown)

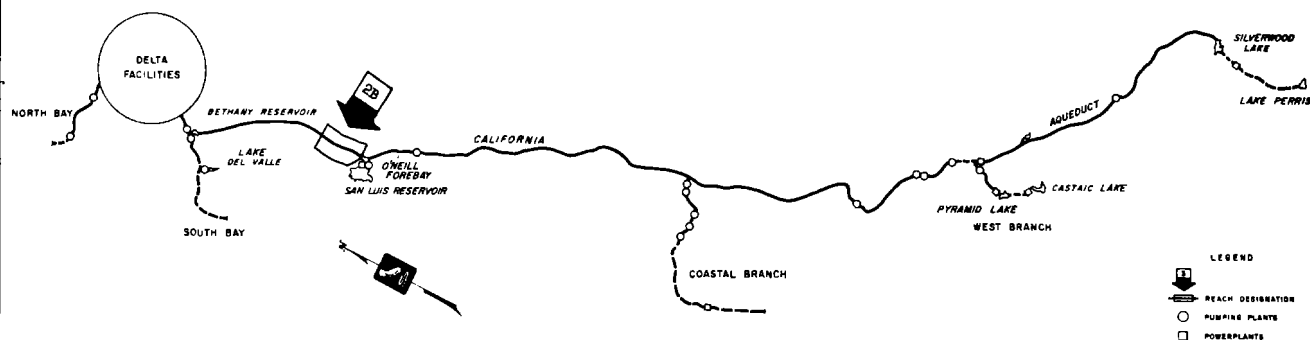


WATER SUPPLY CONTRACTOR	MEASURE OF USE	MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH	ESTIMATED OPERATIONAL LOSSES WITHIN REACH	CAPACITY PROVIDED IN REACH				SUBTOTAL
				FOR DELIVERY OF ENTITLEMENTS	FOR COMPENSATION OF OPERATIONAL LOSSES	SCHEDULED OUTAGES	DOWNSIDE REGULATION	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
REACH 2A - BETHANY RESERVOIR TO ORESTIMBA CREEK								
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	11067.2 18.21585	2011500.0 2863.14267	130256.0 204.70435	184.59464 0	0 0	2141756.0 3252.44166
San Bernardino Valley Municipal Water District	Q AF C CFS	0 0	568.3 .93538	102600.0 172.33413	7378.3 11.94450	0 .73805	0 0	109978.3 185.01668
San Gabriel Valley Municipal Water District	Q AF C CFS	0 0	159.5 .26253	28800.0 45.15128	2071.1 3.35286	0 1.25674	0 0	30871.1 49.76088
San Geronimo Pass Water Agency	Q AF C CFS	0 0	95.8 .15768	17300.0 29.05110	1244.2 2.01419	0 .12679	0 0	18544.2 31.19208
Crestline-Lake Arrowhead Water Agency	Q AF C CFS	0 0	32.1 .05283	5800.0 9.75185	417.1 .67525	0 .03854	0 0	6217.1 10.46564
Mojave Water Agency	Q AF C CFS	0 0	279.3 .45971	50800.0 70.16895	3255.7 5.35864	0 5.26267	0 0	54055.7 80.79026
Desert Water Agency	Q AF C CFS	0 0	209.5 .34482	38100.0 63.98093	2441.6 4.01873	0 .24977	0 0	40541.6 68.24943
Coachella Valley County Water District	Q AF C CFS	0 0	127.0 .20903	23100.0 38.80295	1480.5 2.43678	0 .14775	0 0	24580.5 41.38748
Antelope Valley-East Kern Water Agency	Q AF C CFS	0 0	746.2 1.22819	138400.0 191.16896	6007.1 9.88726	0 14.33768	0 0	144407.1 215.39390
Littlerock Creek Irrigation District	Q AF C CFS	0 0	12.5 .02057	2300.0 3.17694	115.7 .19043	0 .23827	0 0	2415.7 3.60564
Palmdale Irrigation District	Q AF C CFS	0 0	93.7 .15422	17300.0 23.89612	832.8 1.37075	0 1.79221	0 0	18132.8 27.05908
Ventura County Flood Control District	Q AF C CFS	0 0	109.0 .17941	20000.0 27.62557	1096.0 1.72155	0 2.10417	0 0	21096.0 31.45129
Upper Santa Clara Valley Water Agency	Q AF C CFS	0 0	226.2 .37231	41500.0 57.32306	2274.1 3.57210	0 4.36613	0 0	43774.1 65.26129
Kern County Water Agency (Municipal and Industrial)	Q AF C CFS	0 0	635.5 1.04599	119600.0 218.06521	3386.8 5.57444	0 0	0 0	122986.8 223.63965
Kern County Water Agency (Agriculture)	Q AF C CFS	0 0	5484.2 9.02662	1033800.0 3058.92860	27518.1 45.29290	0 0	0 0	1061318.1 3104.22150
Santa Barbara County Flood Control and Water Conservation District	Q AF C CFS	0 0	314.9 .51830	57700.0 79.69977	3242.5 5.00624	0 6.10693	0 0	60942.5 90.81294
San Luis Obispo County Flood Control and Water Conservation District	Q AF C CFS	0 0	134.9 .22204	25000.0 34.53197	1104.2 1.75116	0 2.61585	0 0	26104.2 38.89898
Devil's Den Water District	Q AF C CFS	0 0	67.3 .11077	12700.0 37.89123	321.2 .52867	0 0	0 0	13021.2 38.41990
Dudley Ridge Water District	Q AF C CFS	0 0	303.6 .49971	57700.0 172.15151	1053.1 1.73333	0 0	0 0	58753.1 173.88484
Tulare Lake Basin Water Storage District	Q AF C CFS	0 0	578.2 .95168	110000.0 328.19179	1898.9 3.12546	0 0	0 0	111898.9 331.31725
Hacienda Water District	Q AF C CFS	0 0	44.7 .07357	8500.0 25.36027	155.0 .25512	0 0	0 0	8655.0 25.61539
Empire West Side Irrigation District	Q AF C CFS	0 0	15.8 .02601	3000.0 8.95069	49.4 .08132	0 0	0 0	3049.4 9.03201
County of Kings	Q AF C CFS	0 0	21.0 .03457	4000.0 7.29315	66.0 .10862	0 0	0 0	4066.0 7.40177
Oak Flat Water District	Q AF C CFS	5700.0 17.00630	29.6 .04872	5700.0 17.00630	29.6 .04872	0 0	0 0	5729.6 17.05502
Totals	Q AF C CFS	5700.0 17.00630	21356.0 35.15051	3935200.0 7583.64500	197695.0 314.75337	223.97619 0	0 0	4132895.0 8122.37456

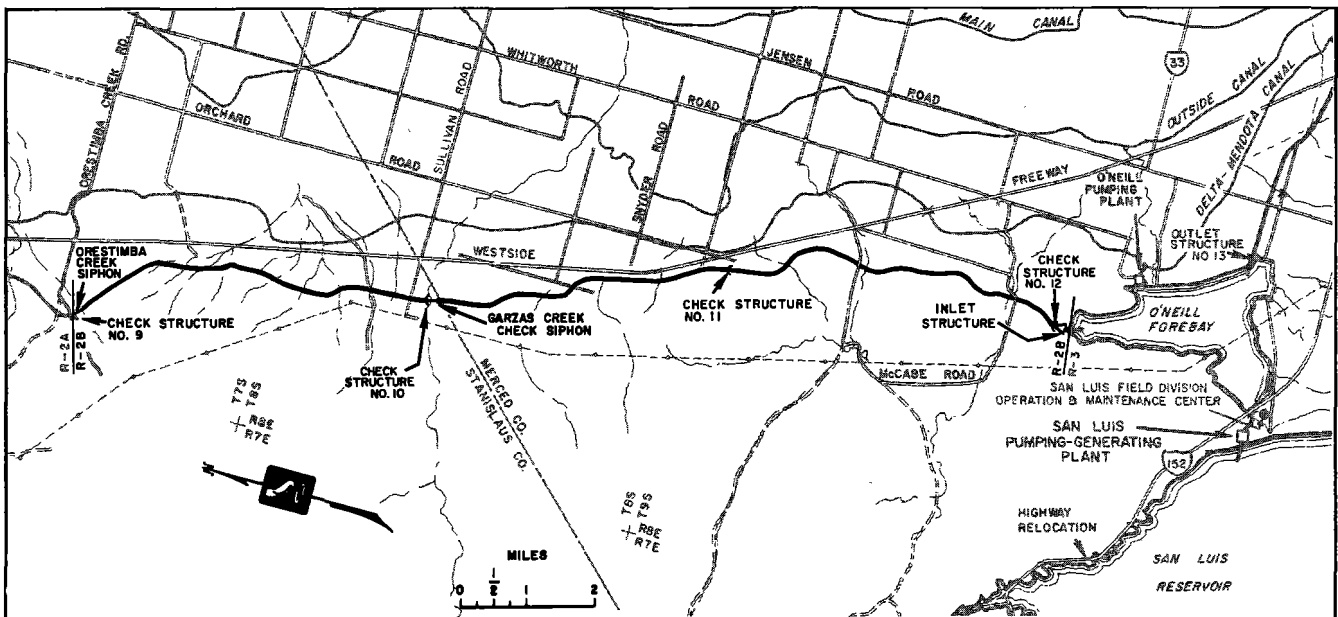


PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS		CAPACITY PROVIDED IN REACH		PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS		MEASURE OF USE	WATER SUPPLY CONTRACTOR
RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS	FOR REQUESTED EXCESS PEAKING	TOTAL FOR WATER SUPPLY CONTRACTORS	RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS		
(9)	(10)	(11)	(12)	(13)	(14)	(15)	
BETHANY RESERVOIR TO ORESTIMBA CREEK - REACH 2A							
.51822173	.45932582	0	2141756.0	.51822173	.45932582	Q AF	The Metropolitan Water District of Southern California
.40042990		0	3252.44166	.40042990		C CFS	
.02661047	.02469456	0	109978.3	.02661047	.02469456	Q AF	San Bernardino Valley Municipal Water District
.02277864		0	185.01668	.02277864		C CFS	
.00746961	.00679800	0	30871.1	.00746961	.00679800	Q AF	San Gabriel Valley Municipal Water District
.00612640		0	49.76088	.00612640		C CFS	
.00448698	.00416362	0	18544.2	.00448698	.00416362	Q AF	San Geronimo Pass Water Agency
.00384027		0	31.19208	.00384027		C CFS	
.00150430	.00139640	0	6217.1	.00150430	.00139640	Q AF	Crestline-Lake Arrowhead Water Agency
.00128850		0	10.46564	.00128850		C CFS	
.01307938	.01151300	0	54055.7	.01307938	.01151300	Q AF	Mojave Water Agency
.00994663		0	80.79026	.00994663		C CFS	
.00980949	.00910607	0	40541.5	.00980949	.00910607	Q AF	Desert Water Agency
.00840264		0	68.24943	.00840264		C CFS	
.00594753	.00552151	0	24580.5	.00594753	.00552151	Q AF	Coachella Valley County Water District
.00509549		0	41.38748	.00509549		C CFS	
.03494091	.03072975	0	144407.1	.03494091	.03072975	Q AF	Antelope Valley-East Kern Water Agency
.02651859		0	215.39390	.02651859		C CFS	
.00058450	.00051421	0	2415.7	.00058450	.00051421	Q AF	Littlerock Creek Irrigation District
.00044391		0	3.60564	.00044391		C CFS	
.00438743	.00385943	0	18132.8	.00438743	.00385943	Q AF	Palmdale Irrigation District
.00333142		0	27.05908	.00333142		C CFS	
.00510441	.00448829	0	21096.0	.00510441	.00448829	Q AF	Ventura County Flood Control District
.00387218		0	31.45129	.00387218		C CFS	
.01059163	.00931319	0	43774.1	.01059163	.00931319	Q AF	Upper Santa Clara Valley Water Agency
.00803476		0	65.26129	.00803476		C CFS	
.02975803	.02864590	0	122986.8	.02975803	.02864590	Q AF	Kern County Water Agency (Municipal and Industrial)
.02753378		0	223.63965	.02753378		C CFS	
.25679774	.31948963	0	1061318.1	.25679774	.31948963	Q AF	Kern County Water Agency (Agriculture)
.38218153		0	3104.22150	.38218153		C CFS	
.01474572	.01296315	0	60942.5	.01474572	.01296315	Q AF	Santa Barbara County Flood Control and Water Conservation District
.01118059		0	90.81294	.01118059		C CFS	
.00631620	.00555266	0	26104.2	.00631620	.00555266	Q AF	San Luis Obispo County Flood Control and Water Conservation District
.00478911		0	38.89898	.00478911		C CFS	
.00315062	.00394038	0	13021.2	.00315062	.00394038	Q AF	Devil's Den Water District
.00473013		0	38.41990	.00473013		C CFS	
.01421597	.01781205	0	58753.1	.01421597	.01781205	Q AF	Dudley Ridge Water District
.02140813		0	173.88484	.02140813		C CFS	
.02707519	.03393294	0	111898.9	.02707519	.03393294	Q AF	Tulare Lake Basin Water Storage District
.04079069		0	331.31725	.04079069		C CFS	
.00209417	.00262393	0	8655.0	.00209417	.00262393	Q AF	Hacienda Water District
.00315368		0	25.61539	.00315368		C CFS	
.00073784	.00092491	0	3049.4	.00073784	.00092491	Q AF	Empire West Side Irrigation District
.00111199		0	9.03201	.00111199		C CFS	
.00098381	.00094755	0	4066.0	.00098381	.00094755	Q AF	County of Kings
.00091128		0	7.40177	.00091128		C CFS	
.00138634	.00174305	0	5729.6	.00138634	.00174305	Q AF	Oak Flat Water District
.00209976		0	17.05502	.00209976		C CFS	
1.00000000	1.00000000	0	4132895.0	1.00000000	1.00000000	Q AF	Totals
1.00000000		0	8122.37456	1.00000000		C CFS	

TABLE B-2 (Continued)
PROPORTIONATE USE OF EACH AQUEDUCT REACH
(in units as shown)

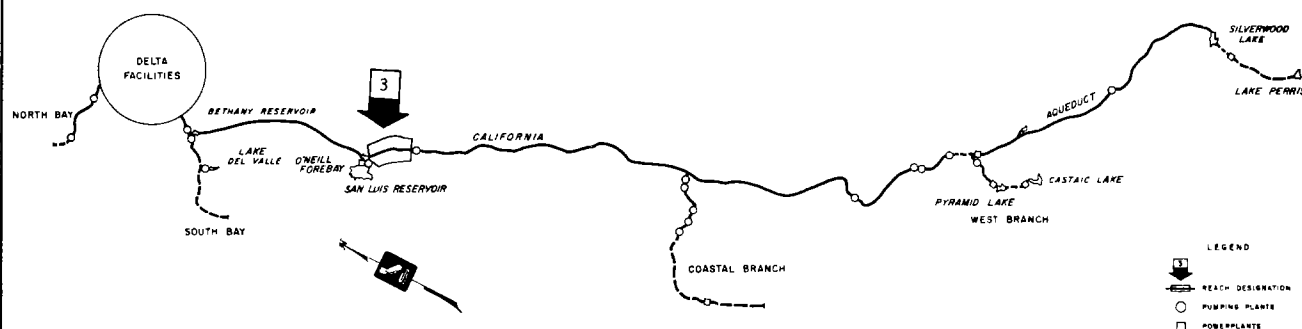


WATER SUPPLY CONTRACTOR	MEASURE OF USE	MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH	ESTIMATED OPERATIONAL LOSSES WITHIN REACH	CAPACITY PROVIDED IN REACH				SUBTOTAL
				FOR DELIVERY OF ENTITLEMENTS	FOR COMPENSATION OF OPERATIONAL LOSSES	SCHEDULED OUTAGES	DOWNSTREAM REGULATION	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
REACH 2B - ORESTIMBA CREEK TO O'NEILL FOREBAY								
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	3499.7 5.76027	2011500.0 2863.14267	119188.8 186.48850	0 184.59464	0 0	2130688.8 3234.22581
San Bernardino Valley Municipal Water District	Q AF C CFS	0 0	179.7 .29577	102600.0 172.33413	6810.0 11.00912	0 .73805	0 0	109410.0 184.08130
San Gabriel Valley Municipal Water District	Q AF C CFS	0 0	50.4 .08296	28800.0 45.15128	1911.6 3.09033	0 1.25674	0 0	30711.6 49.49835
San Geronimo Pass Water Agency	Q AF C CFS	0 0	30.3 .04987	17300.0 29.05110	1148.4 1.85651	0 .12679	0 0	18448.4 31.03440
Crestline-Lake Arrowhead Water Agency	Q AF C CFS	0 0	10.2 .01679	5800.0 9.75185	385.0 .62242	0 .03854	0 0	6185.0 10.41281
Mojave Water Agency	Q AF C CFS	0 0	88.3 .14534	50800.0 70.16895	2976.4 4.89893	0 5.26267	0 0	53776.4 80.33055
Desert Water Agency	Q AF C CFS	0 0	66.2 .10896	38100.0 63.98093	2232.1 3.67391	0 .24977	0 0	40332.1 67.90461
Coachella Valley County Water District	Q AF C CFS	0 0	40.2 .06617	23100.0 38.80295	1353.5 2.22775	0 .14775	0 0	24453.5 41.17845
Antelope Valley-East Kern Water Agency	Q AF C CFS	0 0	236.0 .38844	138400.0 191.16896	5260.9 8.65907	0 14.33768	0 0	143660.9 214.16571
Littlerock Creek Irrigation District	Q AF C CFS	0 0	3.9 .00642	2300.0 3.17694	103.2 .16986	0 .23827	0 0	2403.2 3.58507
Palmdale Irrigation District	Q AF C CFS	0 0	29.6 .04872	17300.0 23.89612	739.1 1.21653	0 1.79221	0 0	18039.1 26.90486
Ventura County Flood Control District	Q AF C CFS	0 0	34.5 .05678	20000.0 27.62557	987.0 1.54214	0 2.10417	0 0	20987.0 31.27188
Upper Santa Clara Valley Water Agency	Q AF C CFS	0 0	71.5 .11768	41500.0 57.32306	2047.9 3.19979	0 4.36613	0 0	43547.9 64.88898
Kern County Water Agency (Municipal and Industrial)	Q AF C CFS	0 0	201.0 .33083	119600.0 218.06521	2751.3 4.52845	0 0	0 0	122351.3 222.59366
Kern County Water Agency (Agriculture)	Q AF C CFS	0 0	1734.3 2.85454	1033800.0 3058.92860	22033.9 36.26628	0 0	0 0	1055833.9 3095.19488
Santa Barbara County Flood Control and Water Conservation District	Q AF C CFS	0 0	99.6 .16393	57700.0 79.69977	2927.6 4.48794	0 6.10693	0 0	60627.6 90.29464
San Luis Obispo County Flood Control and Water Conservation District	Q AF C CFS	0 0	42.7 .07028	25000.0 34.53197	969.3 1.52912	0 2.61585	0 0	25969.3 38.67694
Devil's Den Water District	Q AF C CFS	0 0	21.3 .03506	12700.0 37.89123	253.9 .41790	0 0	0 0	12953.9 38.30913
Dudley Ridge Water District	Q AF C CFS	0 0	96.0 .15801	57700.0 172.15151	749.5 1.23362	0 0	0 0	58449.5 173.38513
Tulare Lake Basin Water Storage District	Q AF C CFS	0 0	182.9 .30104	110000.0 328.19179	1320.7 2.17378	0 0	0 0	111320.7 330.36557
Hacienda Water District	Q AF C CFS	0 0	14.1 .02321	8500.0 25.36027	110.3 .18155	0 0	0 0	8610.3 25.54182
Empire West Side Irrigation District	Q AF C CFS	0 0	5.0 .00823	3000.0 8.95069	33.6 .05531	0 0	0 0	3033.6 9.00600
County of Kings	Q AF C CFS	0 0	6.6 .01086	4000.0 7.29315	45.0 .07405	0 0	0 0	4045.0 7.36720
Totals	Q AF C CFS	0 0	6744.0 11.10016	3929500.0 7566.63870	176339.0 279.60286	0 223.97619	0 0	4105839.0 8070.21775

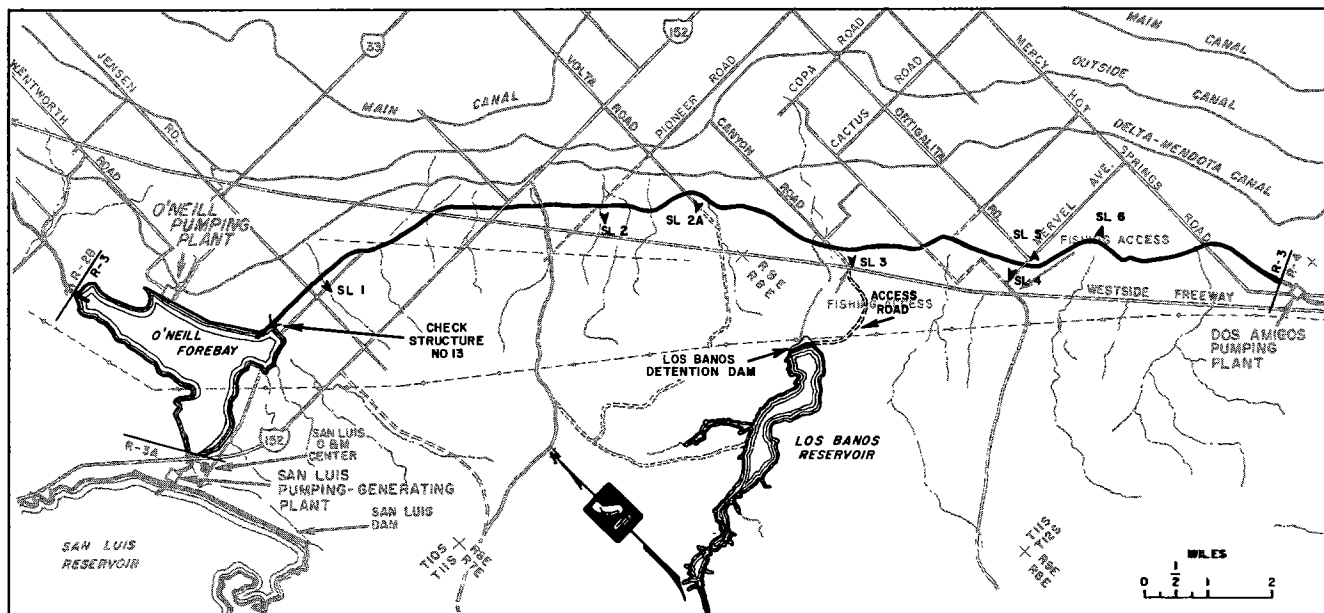


PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS		CAPACITY PROVIDED IN REACH		PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS		MEASURE OF USE	WATER SUPPLY CONTRACTOR
RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS	FOR REQUESTED EXCESS PEAKING	TOTAL FOR WATER SUPPLY CONTRACTORS	RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS		
(9)	(10)	(11)	(12)	(13)	(14)	(15)	
ORESTIMBA CREEK TO O'NEILL FOREBAY - REACH 2B							
.51894115	.45985090	0	2130688.8	.51894115	.45985090	Q AF	The Metropolitan Water District of Southern California
.40076066		0	3234.22581	.40076066		C CFS	
.02664742	.02472869	0	109410.0	.02664742	.02472869	Q AF	San Bernardino Valley Municipal Water District
.02280995		0	184.08130	.02280995		C CFS	
.00747998	.00680672	0	30711.6	.00747998	.00680672	Q AF	San Gabriel Valley Municipal Water District
.00613346		0	49.49835	.00613346		C CFS	
.00449321	.00416938	0	18448.4	.00449321	.00416938	Q AF	San Geronio Pass Water Agency
.00384555		0	31.03440	.00384555		C CFS	
.00150639	.00139833	0	6185.0	.00150639	.00139833	Q AF	Crestline-Lake Arrowhead Water Agency
.00129028		0	10.41281	.00129028		C CFS	
.01309754	.01152575	0	53776.4	.01309754	.01152575	Q AF	Mojave Water Agency
.00995395		0	80.33055	.00995395		C CFS	
.00982311	.00911867	0	40332.1	.00982311	.00911867	Q AF	Desert Water Agency
.00841422		0	67.90461	.00841422		C CFS	
.00595579	.00552915	0	24453.5	.00595579	.00552915	Q AF	Coachella Valley County Water District
.00510252		0	41.17845	.00510252		C CFS	
.03498941	.03076360	0	143660.9	.03498941	.03076360	Q AF	Antelope Valley-East Kern Water Agency
.02653779		0	214.16571	.02653779		C CFS	
.00058531	.00051477	0	2403.2	.00058531	.00051477	Q AF	Littlerock Creek Irrigation District
.00044423		0	3.58507	.00044423		C CFS	
.00439352	.00386368	0	18039.1	.00439352	.00386368	Q AF	Palmdale Irrigation District
.00333385		0	26.90486	.00333385		C CFS	
.00511150	.00449324	0	20987.0	.00511150	.00449324	Q AF	Ventura County Flood Control District
.00387497		0	31.27188	.00387497		C CFS	
.01060633	.00932344	0	43547.9	.01060633	.00932344	Q AF	Upper Santa Clara Valley Water Agency
.00804055		0	64.88898	.00804055		C CFS	
.02979934	.02869073	0	122351.3	.02979934	.02869073	Q AF	Kern County Water Agency (Municipal and Industrial)
.02758211		0	222.59366	.02758211		C CFS	
.25715424	.32034362	0	1055833.9	.25715424	.32034362	Q AF	Kern County Water Agency (Agriculture)
.38353301		0	3095.19488	.38353301		C CFS	
.01476619	.01297741	0	60627.6	.01476619	.01297741	Q AF	Santa Barbara County Flood Control and Water Conservation District
.01118862		0	90.29464	.01118862		C CFS	
.00632497	.00555876	0	25969.3	.00632497	.00555876	Q AF	San Luis Obispo County Flood Control and Water Conservation District
.00479255		0	38.67694	.00479255		C CFS	
.00315500	.00395099	0	12953.9	.00315500	.00395099	Q AF	Devil's Den Water District
.00474698		0	38.30913	.00474698		C CFS	
.01423570	.01786013	0	58449.5	.01423570	.01786013	Q AF	Dudley Ridge Water District
.02148457		0	173.38513	.02148457		C CFS	
.02711278	.03402458	0	111320.7	.02711278	.03402458	Q AF	Tulare Lake Basin Water Storage District
.04093639		0	330.36557	.04093639		C CFS	
.00209709	.00263102	0	8610.3	.00209709	.00263102	Q AF	Hacienda Water District
.00316495		0	25.54182	.00316495		C CFS	
.00073885	.00092740	0	3033.6	.00073885	.00092740	Q AF	Empire West Side Irrigation District
.00111595		0	9.00600	.00111595		C CFS	
.00098518	.00094904	0	4045.0	.00098518	.00094904	Q AF	County of Kings
.00091289		0	7.36720	.00091289		C CFS	
1.00000000	1.00000000	0	4105839.0	1.00000000	1.00000000	Q AF	Totals
1.00000000		0	8070.21775	1.00000000		C CFS	

TABLE B-2 (Continued)
PROPORTIONATE USE OF EACH AQUEDUCT REACH
(in units as shown)

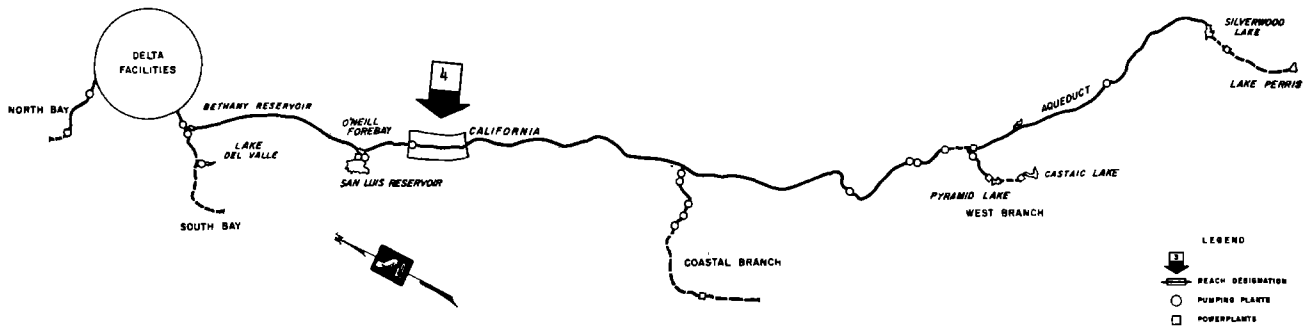


WATER SUPPLY CONTRACTOR	MEASURE OF USE	MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH	ESTIMATED OPERATIONAL LOSSES WITHIN REACH	CAPACITY PROVIDED IN REACH				
				FOR DELIVERY OF ENTITLEMENTS	FOR COMPENSATION OF OPERATIONAL LOSSES	FOR COMPENSATION OF SCHEDULED OUTAGES	FOR COMPENSATION OF DOWNSTREAM REGULATION	SUBTOTAL
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
REACH 3 - O'NEILL FOREBOY TO DOS AMIGOS PUMPING PLANT								
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	3668.9 6.03876	2011500.0 2863.14267	115689.1 180.72823	184.59464 0	0 0	2127189.1 3223.46554
San Bernardino Valley Municipal Water District	Q AF C CFS	0 0	188.4 .31009	102600.0 172.33413	6630.3 10.71335	0 .73805	0 0	109230.3 163.78553
San Gabriel Valley Municipal Water District	Q AF C CFS	0 0	52.9 .08707	28800.0 45.15128	1861.2 3.00737	0 1.25674	0 0	30661.2 49.41539
San Geronimo Pass Water Agency	Q AF C CFS	0 0	31.8 .05234	17300.0 29.05110	1118.1 1.80664	0 1.2679	0 0	19418.1 30.98653
Crestline-Lake Arrowhead Water Agency	Q AF C CFS	0 0	10.7 .01761	5800.0 9.75185	374.8 .60563	0 .03854	0 0	6174.8 10.39602
Mojave Water Agency	Q AF C CFS	0 0	92.6 .15241	50800.0 70.16895	2888.1 4.75359	0 5.26267	0 0	53688.1 80.18521
Desert Water Agency	Q AF C CFS	0 0	69.4 .11423	38100.0 63.98093	2165.9 3.56495	0 .74977	0 0	40265.9 67.79565
Coachella Valley County Water District	Q AF C CFS	0 0	42.1 .06929	23100.0 38.80295	1313.3 2.16159	0 .14775	0 0	24413.3 41.11228
Antelope Valley-East Kern Water Agency	Q AF C CFS	0 0	247.4 .40720	138400.0 191.16896	5024.9 8.27063	0 14.33768	0 0	143424.9 213.77727
Littlerock Creek Irrigation District	Q AF C CFS	0 0	4.1 .00675	2300.0 3.17694	99.3 .16344	0 .23827	0 0	2399.3 3.57885
Palmdale Irrigation District	Q AF C CFS	0 0	31.1 .05119	17300.0 23.89612	709.5 1.16781	0 1.79221	0 0	18009.5 26.85614
Ventura County Flood Control District	Q AF C CFS	0 0	36.1 .05942	20000.0 27.62557	952.5 1.48536	0 2.10417	0 0	20952.5 31.21510
Upper Santa Clara Valley Water Agency	Q AF C CFS	0 0	75.0 .12345	41500.0 57.32306	1976.4 3.08211	0 4.36613	0 0	43476.4 64.77130
Kern County Water Agency (Municipal and Industrial)	Q AF C CFS	0 0	210.7 .34680	119600.0 218.06521	2550.3 4.19762	0 0	0 0	122150.3 222.26283
Kern County Water Agency (Agriculture)	Q AF C CFS	0 0	1818.1 2.99247	1033800.0 3058.92860	20299.6 33.41174	0 0	0 0	1054099.6 3092.34034
Santa Barbara County Flood Control and Water Conservation District	Q AF C CFS	0 0	104.4 .17184	57700.0 79.69977	2828.0 4.32401	0 6.10693	0 0	60528.0 90.13071
San Luis Obispo County Flood Control and Water Conservation District	Q AF C CFS	0 0	44.7 .07357	25000.0 34.53197	926.6 1.45884	0 2.61585	0 0	25926.6 38.60666
Devil's Den Water District	Q AF C CFS	0 0	22.3 .03670	12700.0 37.89123	232.6 .38284	0 0	0 0	12932.6 38.27407
Dudley Ridge Water District	Q AF C CFS	0 0	100.6 .16558	57700.0 172.15151	653.5 1.07561	0 0	0 0	58353.5 173.22712
Tulare Lake Basin Water Storage District	Q AF C CFS	0 0	191.7 .31553	110000.0 328.19179	1137.8 1.87274	0 0	0 0	111137.8 330.06453
Hacienda Water District	Q AF C CFS	0 0	14.8 .02436	8500.0 25.36027	96.2 .15834	0 0	0 0	8596.2 25.51861
Empire West Side Irrigation District	Q AF C CFS	0 0	5.2 .00856	3000.0 8.95069	28.6 .04708	0 0	0 0	3028.6 8.99777
County of Kings	Q AF C CFS	0 0	7.0 .01152	4000.0 7.29315	33.4 .06310	0 0	0 0	4033.4 7.35634
Totals	Q AF C CFS	0 0	7070.0 11.63674	3929500.0 7566.63870	169595.0 268.50270	0 223.97619	0 0	4099095.0 8052.11759

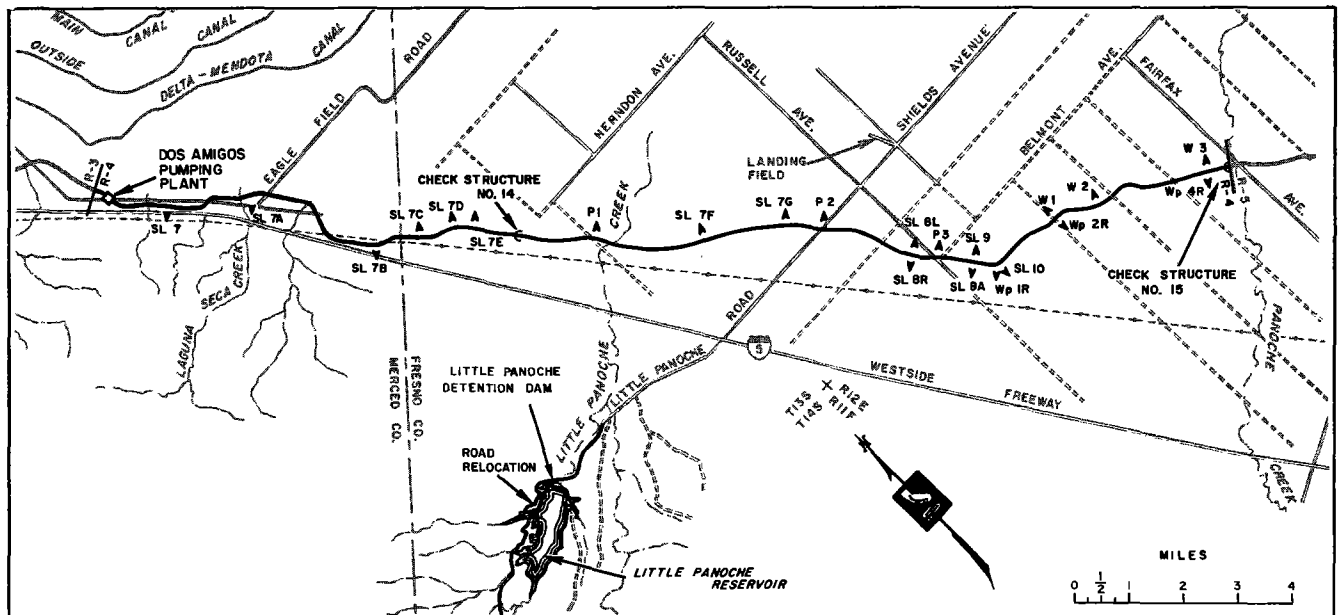


PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS		CAPACITY PROVIDED IN REACH		PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS		MEASURE OF USE	WATER SUPPLY CONTRACTOR
RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS	FOR REQUESTED EXCESS PEAKING	TOTAL FOR WATER SUPPLY CONTRACTORS	RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS		
(9)	(10)	(11)	(12)	(13)	(14)	(15)	
O'NEILL FOREBAY TO DOS AMIGOS PUMPING PLANT - REACH 3							
.51894116		0	2127189.1	.51894116		Q AF	The Metropolitan Water District of Southern California
.40059790	.45976953	0	3228.46554	.40059790	.45976953	C CFS	
.02664742		0	109230.3	.02664742		Q AF	San Bernardino Valley Municipal Water District
.02280467	.02472604	0	183.78553	.02280467	.02472604	C CFS	
.00747999		0	30661.2	.00747999		Q AF	San Gabriel Valley Municipal Water District
.00613161	.00680580	0	49.41539	.00613161	.00680580	C CFS	
.00449321		0	18418.1	.00449321		Q AF	San Geronimo Pass Water Agency
.00384466	.00416893	0	30.98453	.00384466	.00416893	C CFS	
.00150638		0	6174.8	.00150638		Q AF	Crestline-Lake Arrowhead Water Agency
.00128997	.00139818	0	10.39602	.00128997	.00139818	C CFS	
.01309755		0	53688.1	.01309755		Q AF	Mojave Water Agency
.00994963	.01152359	0	80.18521	.00994963	.01152359	C CFS	
.00982312		0	40265.9	.00982312		Q AF	Desert Water Agency
.00841229	.00911771	0	67.79565	.00841229	.00911771	C CFS	
.00595578		0	24413.3	.00595578		Q AF	Coachella Valley County Water District
.00510134	.00552856	0	41.11228	.00510134	.00552856	C CFS	
.03498941		0	143424.9	.03498941		Q AF	Antelope Valley-East Kern Water Agency
.02652614	.03075777	0	213.77727	.02652614	.03075777	C CFS	
.00058532		0	2399.3	.00058532		Q AF	Littlerock Creek Irrigation District
.00044405	.00051469	0	3.57865	.00044405	.00051469	C CFS	
.00439353		0	18009.5	.00439353		Q AF	Palmdale Irrigation District
.00333239	.00386296	0	26.85614	.00333239	.00386296	C CFS	
.00511149		0	20952.5	.00511149		Q AF	Ventura County Flood Control District
.00387327	.00449238	0	31.21510	.00387327	.00449238	C CFS	
.01060634		0	43476.4	.01060634		Q AF	Upper Santa Clara Valley Water Agency
.00803702	.00932168	0	64.77130	.00803702	.00932168	C CFS	
.02979933		0	122150.3	.02979933		Q AF	Kern County Water Agency (Municipal and Industrial)
.02757905	.02868919	0	222.26283	.02757905	.02868919	C CFS	
.25715423		0	1054099.6	.25715423		Q AF	Kern County Water Agency (Agriculture)
.38370706	.32043064	0	3092.34034	.38370706	.32043064	C CFS	
.01476619		0	60528.0	.01476619		Q AF	Santa Barbara County Flood Control and Water Conservation District
.01118369	.01297494	0	90.13071	.01118369	.01297494	C CFS	
.00632496		0	25926.6	.00632496		Q AF	San Luis Obispo County Flood Control and Water Conservation District
.00479043	.00555769	0	38.60666	.00479043	.00555769	C CFS	
.00315499		0	12932.6	.00315499		Q AF	Devil's Den Water District
.00474916	.00395208	0	38.27407	.00474916	.00395208	C CFS	
.01423570		0	58353.5	.01423570		Q AF	Dudley Ridge Water District
.02149455	.01786513	0	173.22712	.02149455	.01786513	C CFS	
.02711276		0	111137.8	.02711276		Q AF	Tulare Lake Basin Water Storage District
.04095542	.03403409	0	330.06453	.04095542	.03403409	C CFS	
.00209710		0	8596.2	.00209710		Q AF	Hacienda Water District
.00316643	.00263176	0	25.51861	.00316643	.00263176	C CFS	
.00073885		0	3028.6	.00073885		Q AF	Empire West Side Irrigation District
.00111647	.00092766	0	8.99777	.00111647	.00092766	C CFS	
.00098519		0	4038.4	.00098519		Q AF	County of Kings
.00091280	.00094900	0	7.35634	.00091280	.00094900	C CFS	
1.00000000		0	4099095.0	1.00000000		Q AF	Totals
1.00000000	1.00000000	0	8059.11759	1.00000000	1.00000000	C CFS	

TABLE B-2 (Continued)
PROPORTIONATE USE OF EACH AQUEDUCT REACH
(in units as shown)

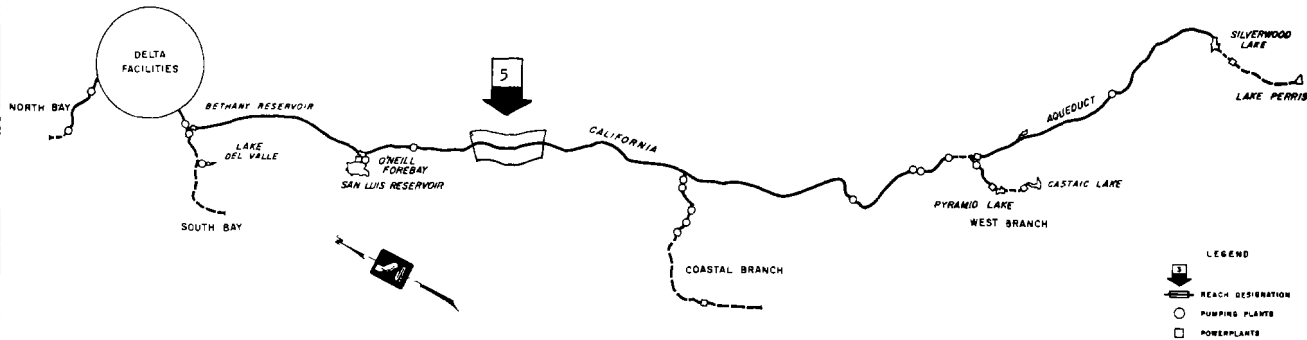


WATER SUPPLY CONTRACTOR	MEASURE OF USE	MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH	ESTIMATED OPERATIONAL LOSSES WITHIN REACH	CAPACITY PROVIDED IN REACH				SUBTOTAL
				FOR DELIVERY OF ENTITLEMENTS	FOR COMPENSATION OF OPERATIONAL LOSSES	SCHEDULED OUTAGES	DOWNSTREAM REGULATION	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
REACH 4 - DOS AMIGOS PUMPING PLANT TO PANOCHÉ CREEK								
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	4566.7 7.51648	2011500.0 2863.14267	112020.2 174.68947	184.59464 0	0 0	2123520.2 3222.42678
San Bernardino Valley Municipal Water District	Q AF C CFS	0 0	234.5 .38597	102600.0 172.33413	6441.9 10.40326	0 .73805	0 0	109041.9 183.47544
San Gabriel Valley Municipal Water District	Q AF C CFS	0 0	65.8 .10830	28800.0 45.15128	1808.3 2.92030	0 1.25674	0 0	30608.3 49.32832
San Geronimo Pass Water Agency	Q AF C CFS	0 0	39.5 .06501	17300.0 29.05110	1086.3 1.75430	0 .12679	0 0	18386.3 30.93219
Crestline-Lake Arrowhead Water Agency	Q AF C CFS	0 0	13.3 .02189	5800.0 9.75185	364.1 .58802	0 .03854	0 0	6164.1 10.37841
Mojave Water Agency	Q AF C CFS	0 0	115.3 .18978	50800.0 70.16895	2795.5 4.60118	0 5.26267	0 0	53595.5 80.03280
Desert Water Agency	Q AF C CFS	0 0	86.4 .14221	38100.0 63.98093	2096.5 3.45072	0 .24977	0 0	40196.5 67.68142
Coachella Valley County Water District	Q AF C CFS	0 0	52.4 .08625	23100.0 38.80295	1271.2 2.09229	0 .14775	0 0	24371.2 41.04299
Antelope Valley-East Kern Water Agency	Q AF C CFS	0 0	307.9 .50678	138400.0 191.16896	4777.5 7.86343	0 14.33768	0 0	143177.5 213.37007
Little Rock Creek Irrigation District	Q AF C CFS	0 0	5.1 .00839	2300.0 3.17694	95.2 .15669	0 .23827	0 0	2395.2 3.57190
Palmdale Irrigation District	Q AF C CFS	0 0	38.7 .06370	17300.0 23.89612	678.4 1.11662	0 1.79221	0 0	17978.4 26.80495
Ventura County Flood Control District	Q AF C CFS	0 0	45.0 .07407	20000.0 27.62557	916.4 1.42594	0 2.10417	0 0	20916.4 31.15568
Upper Santa Clara Valley Water Agency	Q AF C CFS	0 0	93.3 .15357	41500.0 57.32306	1901.4 2.95866	0 4.36613	0 0	43401.4 64.64785
Kern County Water Agency (Municipal and Industrial)	Q AF C CFS	0 0	262.2 .43156	119600.0 218.06521	2339.6 3.85082	0 0	0 0	121939.6 221.91603
Kern County Water Agency (Agriculture)	Q AF C CFS	0 0	2263.0 3.72474	1033800.0 3058.92860	18481.5 30.41927	0 0	0 0	1052281.5 3089.34787
Santa Barbara County Flood Control and Water Conservation District	Q AF C CFS	0 0	129.9 .21381	57700.0 79.69977	2723.6 4.15217	0 6.10693	0 0	60423.6 89.95887
San Luis Obispo County Flood Control and Water Conservation District	Q AF C CFS	0 0	55.7 .09168	25000.0 34.53197	881.9 1.38527	0 2.61585	0 0	25881.9 38.53309
Devil's Den Water District	Q AF C CFS	0 0	27.8 .04576	12700.0 37.89123	210.3 .34614	0 0	0 0	12910.3 38.23737
Dudley Ridge Water District	Q AF C CFS	0 0	125.3 .20623	57700.0 172.15151	552.9 .91003	0 0	0 0	58252.9 173.06154
Tulare Lake Basin Water Storage District	Q AF C CFS	0 0	238.6 .39272	110000.0 328.19179	946.1 1.55721	0 0	0 0	110946.1 329.74900
Hacienda Water District	Q AF C CFS	0 0	18.4 .03028	8500.0 25.36027	81.4 .13398	0 0	0 0	8581.4 25.49425
Empire West Side Irrigation District	Q AF C CFS	0 0	6.5 .01070	3000.0 8.95069	23.4 .03852	0 0	0 0	3023.4 8.98921
County of Kings	Q AF C CFS	0 0	8.7 .01432	4000.0 7.29315	31.4 .05167	0 0	0 0	4031.4 7.34482
Totals	Q AF C CFS	0 0	8800.0 14.48420	3929500.0 7566.63870	162525.0 256.86596	223.97619 0	0 0	4092025.0 8047.48085

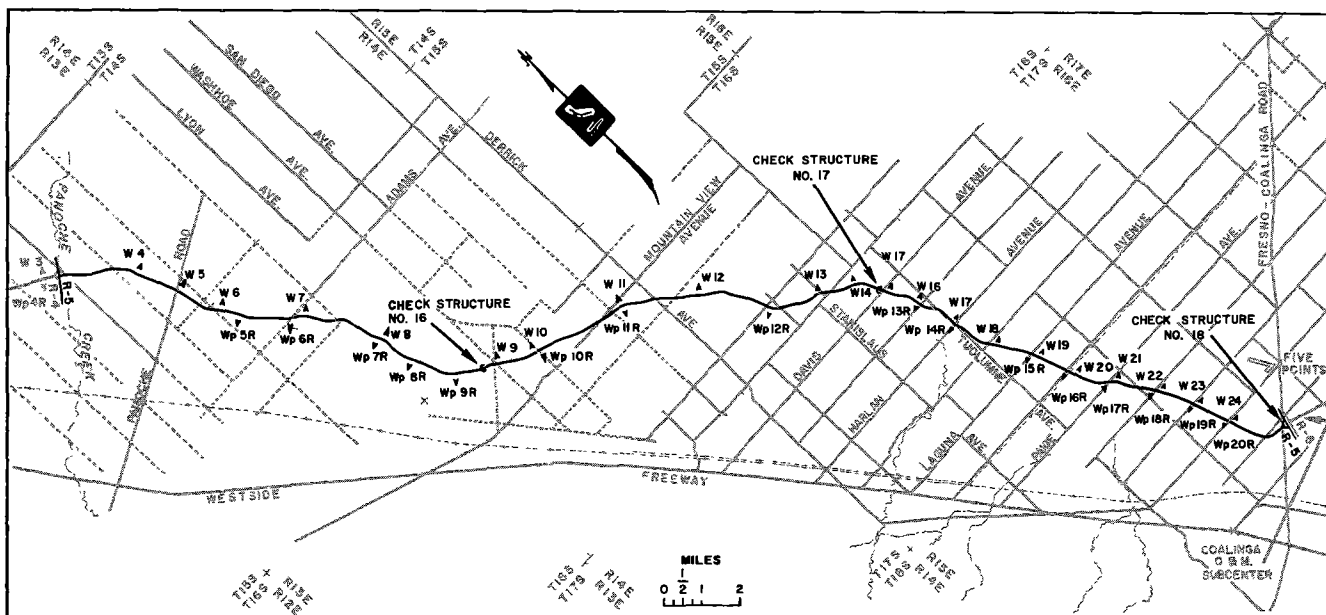


PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS		CAPACITY PROVIDED IN REACH		PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS		MEASURE OF USE	WATER SUPPLY CONTRACTOR
RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS	FOR REQUESTED EXCESS PEAKING	TOTAL FOR WATER SUPPLY CONTRACTORS	RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS		
(9)	(10)	(11)	(12)	(13)	(14)	(15)	
DOS AMIGOS PUMPING PLANT TO PANOCHÉ CREEK - REACH 4							
.51894116		0	2123520.2	.51894116		Q AF	The Metropolitan Water District
.40042677	.45968397	0	3222.42678	.40042677	.45968397	C CFS	of Southern California
.02664742		0	109041.9	.02664742		Q AF	San Bernardino Valley Municipal
.02279911	.02472327	0	183.47544	.02279911	.02472327	C CFS	Water District
.00747999		0	30608.3	.00747999		Q AF	San Gabriel Valley Municipal
.00612966	.00680482	0	49.32832	.00612966	.00680482	C CFS	Water District
.00449320		0	18386.3	.00449320		Q AF	San Geronimo Pass Water Agency
.00384371	.00416846	0	30.93219	.00384371	.00416846	C CFS	
.00150637		0	6164.1	.00150637		Q AF	Crestline-Lake Arrowhead Water Agency
.00128965	.00139801	0	10.37841	.00128965	.00139801	C CFS	
.01309755		0	53595.5	.01309755		Q AF	Mojave Water Agency
.00994508	.01152131	0	90.03280	.00994508	.01152131	C CFS	
.00982313		0	40196.5	.00982313		Q AF	Desert Water Agency
.00841026	.00911670	0	67.68142	.00841026	.00911670	C CFS	
.00595578		0	24371.2	.00595578		Q AF	Coachella Valley County Water District
.00510010	.00552794	0	41.04299	.00510010	.00552794	C CFS	
.03498940		0	143177.5	.03498940		Q AF	Antelope Valley-East Kern Water Agency
.02651390	.03075165	0	213.37007	.02651390	.03075165	C CFS	
.00058533		0	2395.2	.00058533		Q AF	Littlerock Creek Irrigation District
.00044385	.00051459	0	3.57190	.00044385	.00051459	C CFS	
.00439352		0	17978.4	.00439352		Q AF	Palmdale Irrigation District
.00333085	.00386218	0	26.80495	.00333085	.00386218	C CFS	
.00511150		0	20916.4	.00511150		Q AF	Ventura County Flood Control District
.00387148	.00449149	0	31.15568	.00387148	.00449149	C CFS	
.01060634		0	43401.4	.01060634		Q AF	Upper Santa Clara Valley Water Agency
.00803330	.00931982	0	64.64785	.00803330	.00931982	C CFS	
.02979933		0	121939.6	.02979933		Q AF	Kern County Water Agency
.02757584	.02868758	0	221.91603	.02757584	.02868758	C CFS	(Municipal and Industrial)
.25715422		0	1052281.5	.25715422		Q AF	Kern County Water Agency
.38389006	.32052214	0	3089.34787	.38389006	.32052214	C CFS	(Agriculture)
.01476619		0	80423.6	.01476619		Q AF	Santa Barbara County Flood Control
.01117851	.01297235	0	89.95887	.01117851	.01297235	C CFS	and Water Conservation District
.00632496		0	25881.9	.00632496		Q AF	San Luis Obispo County Flood Control
.00478822	.00555659	0	38.53309	.00478822	.00555659	C CFS	and Water Conservation District
.00315499		0	12910.3	.00315499		Q AF	Devil's Den Water District
.00475147	.00395323	0	38.23737	.00475147	.00395323	C CFS	
.01423572		0	58252.9	.01423572		Q AF	Dudley Ridge Water District
.02150506	.01787039	0	173.06154	.02150506	.01787039	C CFS	
.02711276		0	110946.1	.02711276		Q AF	Tulare Lake Basin Water Storage
.04097543	.03404410	0	329.74900	.04097543	.03404410	C CFS	District
.00209710		0	8581.4	.00209710		Q AF	Hacienda Water District
.00316798	.00263254	0	25.49425	.00316798	.00263254	C CFS	
.00073885		0	3023.4	.00073885		Q AF	Empire West Side Irrigation District
.00111702	.00092794	0	8.98921	.00111702	.00092794	C CFS	
.00098519		0	4031.4	.00098519		Q AF	County of Kings
.00091269	.00094893	0	7.34482	.00091269	.00094893	C CFS	
1.00000000		0	4092025.0	1.00000000		Q AF	Totals
1.00000000	1.00000000	0	8047.48085	1.00000000	1.00000000	C CFS	

TABLE B-2 (Continued)
PROPORTIONATE USE OF EACH AQUEDUCT REACH
(in units as shown)

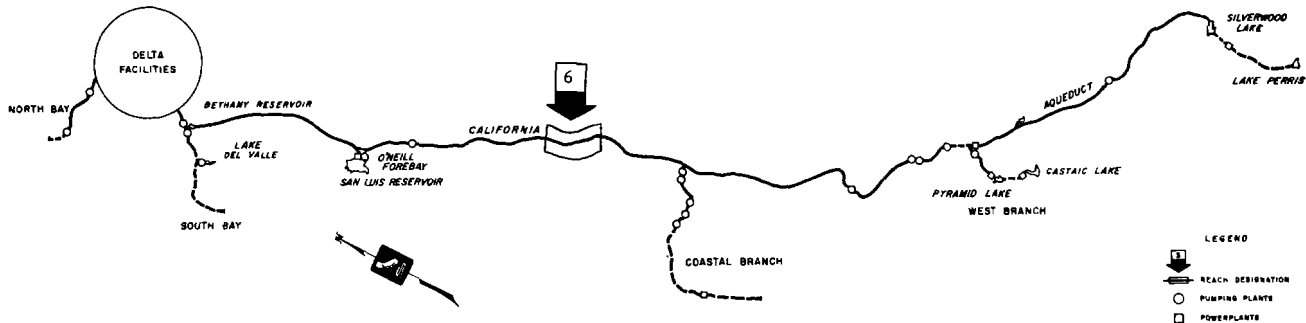


WATER SUPPLY CONTRACTOR	MEASURE OF USE	MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH	ESTIMATED OPERATIONAL LOSSES WITHIN REACH	CAPACITY PROVIDED IN REACH				SUBTOTAL
				FOR DELIVERY OF ENTITLEMENTS	FOR COMPENSATION OF OPERATIONAL LOSSES	SCHEDULED OUTAGES	DOWNSTREAM REGULATION	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
REACH 5 - PANOCHÉ CREEK TO FIVE POINTS								
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	6878.6 11.32171	2011500.0 2863.14267	107453.5 167.17299	0 184.59464	0 0	2118953.5 3214.91030
San Bernardino Valley Municipal Water District	Q AF C CFS	0 0	353.2 .58134	102600.0 172.33413	6207.4 10.01729	0 .73805	0 0	108807.4 183.08947
San Gabriel Valley Municipal Water District	Q AF C CFS	0 0	99.1 .16311	28800.0 45.15128	1742.5 2.81200	0 1.25674	0 0	30542.5 49.22002
San Geronimo Pass Water Agency	Q AF C CFS	0 0	59.6 .09810	17300.0 29.05110	1046.8 1.68929	0 .12679	0 0	18346.8 30.86718
Crestline-Lake Arrowhead Water Agency	Q AF C CFS	0 0	20.0 .03292	5800.0 9.75185	350.8 .56613	0 .03854	0 0	6150.8 10.35652
Mojave Water Agency	Q AF C CFS	0 0	173.6 .28573	50800.0 70.16895	2680.2 4.41140	0 5.26267	0 0	53480.2 79.84302
Desert Water Agency	Q AF C CFS	0 0	130.2 .21430	38100.0 63.98093	2010.1 3.30851	0 .24977	0 0	40110.1 67.53921
Coachella Valley County Water District	Q AF C CFS	0 0	78.9 .12986	23100.0 38.80295	1218.8 2.00604	0 .14775	0 0	24318.8 40.95674
Antelope Valley-East Kern Water Agency	Q AF C CFS	0 0	463.8 .76338	138400.0 191.16896	4469.6 7.35665	0 14.33768	0 0	142869.6 212.86329
Littlerock Creek Irrigation District	Q AF C CFS	0 0	7.8 .01284	2300.0 3.17694	90.1 .14830	0 .23827	0 0	2390.1 3.56351
Palmdale Irrigation District	Q AF C CFS	0 0	58.2 .09579	17300.0 23.89612	639.7 1.05292	0 1.79221	0 0	17939.7 26.74125
Ventura County Flood Control District	Q AF C CFS	0 0	67.7 .11143	20000.0 27.62557	871.4 1.35187	0 2.10417	0 0	20871.4 31.08161
Upper Santa Clara Valley Water Agency	Q AF C CFS	0 0	140.6 .23142	41500.0 57.32306	1808.1 2.80509	0 4.36613	0 0	43308.1 64.49428
Kern County Water Agency (Municipal and Industrial)	Q AF C CFS	0 0	395.0 .65014	119600.0 218.06521	2077.4 3.41926	0 0	0 0	121677.4 221.48447
Kern County Water Agency (Agriculture)	Q AF C CFS	0 0	3408.6 5.61032	1033800.0 3058.92860	16218.5 26.69453	0 0	0 0	1050018.5 3085.62313
Santa Barbara County Flood Control and Water Conservation District	Q AF C CFS	0 0	195.7 .32211	57700.0 79.69977	2593.7 3.93836	0 6.10693	0 0	60293.7 89.74506
San Luis Obispo County Flood Control and Water Conservation District	Q AF C CFS	0 0	83.8 .13793	25000.0 34.53197	826.2 1.29359	0 2.61585	0 0	25826.2 38.44141
Devil's Den Water District	Q AF C CFS	0 0	41.8 .06880	12700.0 37.89123	182.5 .30038	0 0	0 0	12887.5 38.19161
Dudley Ridge Water District	Q AF C CFS	0 0	188.7 .31059	57700.0 172.15151	427.6 .70380	0 0	0 0	58127.6 172.85531
Tulare Lake Basin Water Storage District	Q AF C CFS	0 0	359.4 .59155	110000.0 328.19179	707.5 1.16449	0 0	0 0	110707.5 329.35628
Hacienda Water District	Q AF C CFS	0 0	27.8 .04576	8500.0 25.36027	63.0 .10370	0 0	0 0	8563.0 25.46397
Empire West Side Irrigation District	Q AF C CFS	0 0	9.8 .01613	3000.0 8.95069	16.9 .02782	0 0	0 0	3016.9 8.97851
County of Kings	Q AF C CFS	0 0	13.1 .02156	4000.0 7.29315	22.7 .03735	0 0	0 0	4022.7 7.33050
Totals	Q AF C CFS	0 0	13255.0 21.81682	3929500.0 7566.63870	153725.0 242.38176	0 223.97619	0 0	4083225.0 8032.99665

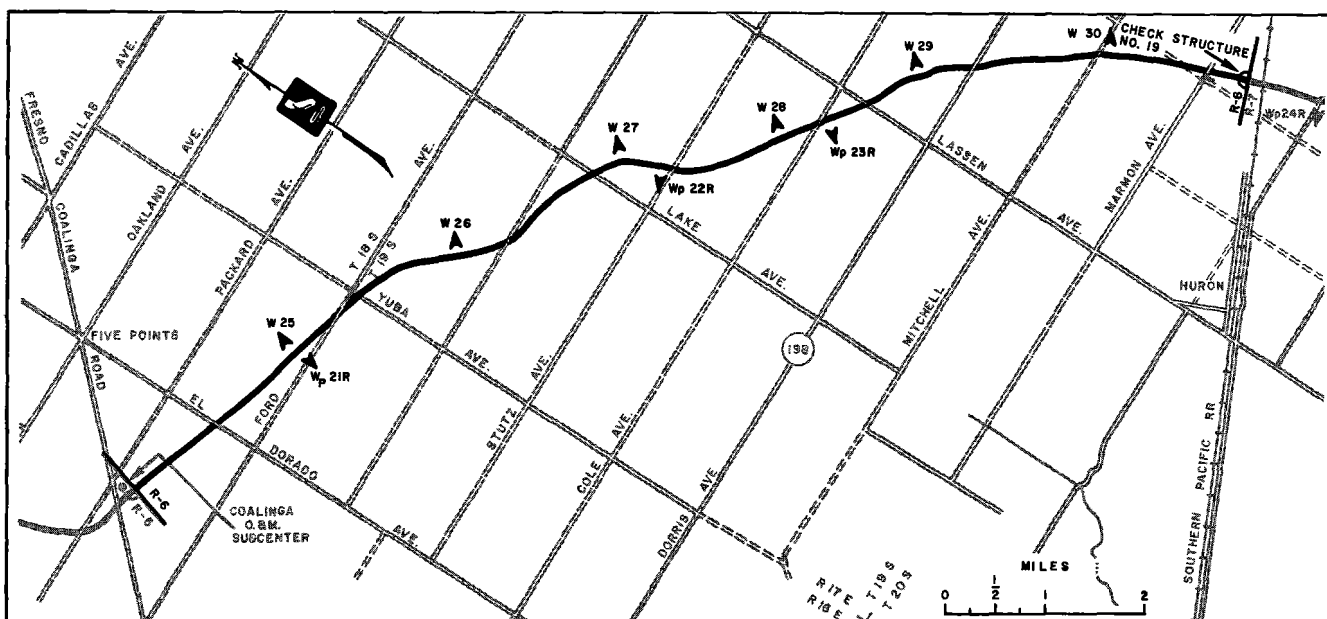


PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS		CAPACITY PROVIDED IN REACH		PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS		MEASURE OF USE	WATER SUPPLY CONTRACTOR
RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS	FOR REQUESTED EXCESS PEAKING	TOTAL FOR WATER SUPPLY CONTRACTORS	RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS		
(9)	(10)	(11)	(12)	(13)	(14)	(15)	
PANACHE CREEK TO FIVE POINTS - REACH 5							
.51894115	.45957712	0	2118953.5	.51894115	.45957712	Q AF	The Metropolitan Water District of Southern California
.40021308			3214.91030	.40021308		C CFS	
.02664742	.02471980	0	108807.4	.02664742	.02471980	Q AF	San Bernardino Valley Municipal Water District
.02279218			183.08947	.02279218		C CFS	
.00747999	.00680361	0	40542.5	.00747999	.00680361	Q AF	San Gabriel Valley Municipal Water District
.00612723			49.22002	.00612723		C CFS	
.00449321	.00416788	0	18346.8	.00449321	.00416788	Q AF	San Geronimo Pass Water Agency
.00384255			30.86718	.00384255		C CFS	
.00150636	.00139780	0	6150.9	.00150636	.00139780	Q AF	Crestline-Lake Arrowhead Water Agency
.00128925			10.35652	.00128925		C CFS	
.01309754	.01151846	0	53480.2	.01309754	.01151846	Q AF	Mojave Water Agency
.00993938			79.84302	.00993938		C CFS	
.00982314	.00911543	0	40110.1	.00982314	.00911543	Q AF	Desert Water Agency
.00840772			67.53921	.00840772		C CFS	
.00595578	.00552717	0	24318.8	.00595578	.00552717	Q AF	Coachella Valley County Water District
.00509856			40.95674	.00509856		C CFS	
.03498940	.03074401	0	142869.6	.03498940	.03074401	Q AF	Antelope Valley-East Kern Water Agency
.02649862			212.86329	.02649862		C CFS	
.00058535	.00051448	0	2390.1	.00058535	.00051448	Q AF	Littlerock Creek Irrigation District
.00044361			3.56351	.00044361		C CFS	
.00439351	.00386122	0	17939.7	.00439351	.00386122	Q AF	Palmdale Irrigation District
.00332893			26.74125	.00332893		C CFS	
.00511150	.00449037	0	20871.4	.00511150	.00449037	Q AF	Ventura County Flood Control District
.00386924			31.08161	.00386924		C CFS	
.01060635	.00931751	0	43308.1	.01060635	.00931751	Q AF	Upper Santa Clara Valley Water Agency
.00802867			64.49428	.00802867		C CFS	
.02979934	.02868559	0	121677.4	.02979934	.02868559	Q AF	Kern County Water Agency (Municipal and Industrial)
.02757184			221.48447	.02757184		C CFS	
.25715421	.32063639	0	1050018.5	.25715421	.32063639	Q AF	Kern County Water Agency (Agriculture)
.38411856			3085.62313	.38411856		C CFS	
.01476620	.01296912	0	60293.7	.01476620	.01296912	Q AF	Santa Barbara County Flood Control and Water Conservation District
.01117205			89.74506	.01117205		C CFS	
.00632495	.00555520	0	25826.2	.00632495	.00555520	Q AF	San Luis Obispo County Flood Control and Water Conservation District
.00478544			36.44141	.00478544		C CFS	
.00315498	.00395466	0	12882.5	.00315498	.00395466	Q AF	Devil's Den Water District
.00475434			38.19161	.00475434		C CFS	
.01423571	.01787693	0	58127.6	.01423571	.01787693	Q AF	Dudley Ridge Water District
.02151816			172.85531	.02151816		C CFS	
.02711276	.03405659	0	110707.5	.02711276	.03405659	Q AF	Tulare Lake Basin Water Storage District
.04100042			329.35628	.04100042		C CFS	
.00209712	.00263352	0	8563.0	.00209712	.00263352	Q AF	Hacienda Water District
.00316992			25.46397	.00316992		C CFS	
.00073885	.00092828	0	3016.9	.00073885	.00092828	Q AF	Empire West Side Irrigation District
.00111770			8.97851	.00111770		C CFS	
.00098518	.00094886	0	4022.7	.00098518	.00094886	Q AF	County of Kings
.00091255			7.33050	.00091255		C CFS	
1.00000000	1.00000000	0	4083225.0	1.00000000	1.00000000	Q AF	Totals
1.00000000			8032.99655	1.00000000		C CFS	

TABLE B-2 (Continued)
PROPORTIONATE USE OF EACH AQUEDUCT REACH
(in units as shown)

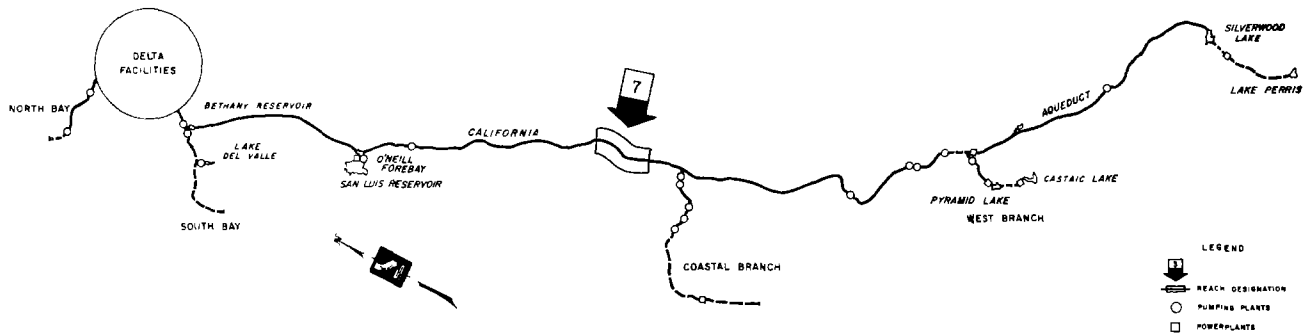


WATER SUPPLY CONTRACTOR	MEASURE OF USE	MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH	ESTIMATED OPERATIONAL LOSSES WITHIN REACH	CAPACITY PROVIDED IN REACH				SUBTOTAL
				FOR DELIVERY OF ENTITLEMENTS	FOR COMPENSATION OF OPERATIONAL LOSSES	SCHEDULED OUTAGES	DOWNSTREAM REGULATION	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
REACH 6 - FIVE POINTS TO ARROYO PASAJERO								
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	2197.7 3.61726	2011500.0 2863.14267	100574.9 155.85128	184.59464 0	0 0	2112074.9 3203.58859
San Bernardino Valley Municipal Water District	Q AF C CFS	0 0	112.9 .18583	102600.0 172.33413	5854.2 9.43595	0 .73805	0 0	108454.2 182.50813
San Gabriel Valley Municipal Water District	Q AF C CFS	0 0	31.7 .05218	28800.0 45.15128	1643.4 2.64889	0 1.25674	0 0	30443.4 49.05691
San Geronimo Pass Water Agency	Q AF C CFS	0 0	19.0 .03127	17300.0 29.05110	987.2 1.59119	0 .12679	0 0	18287.2 30.76908
Crestline-Lake Arrowhead Water Agency	Q AF C CFS	0 0	6.4 .01053	5800.0 9.75185	330.8 .53321	0 .03854	0 0	6130.8 10.32360
Mojave Water Agency	Q AF C CFS	0 0	55.5 .09135	50800.0 70.16895	2506.6 4.12567	0 5.26267	0 0	53306.6 79.55729
Desert Water Agency	Q AF C CFS	0 0	41.6 .06847	38100.0 63.98093	1879.9 3.09421	0 .24977	0 0	39979.9 67.32491
Coachella Valley County Water District	Q AF C CFS	0 0	25.2 .04148	23100.0 38.80295	1139.9 1.87618	0 .14775	0 0	24239.9 40.82688
Antelope Valley-East Kern Water Agency	Q AF C CFS	0 0	148.2 .24393	138400.0 191.16896	4005.8 6.59327	0 14.33768	0 0	142405.8 212.09991
Littlerock Creek Irrigation District	Q AF C CFS	0 0	2.5 .00412	2300.0 3.17694	82.3 .13546	0 .23827	0 0	2382.3 3.55067
Palmdale Irrigation District	Q AF C CFS	0 0	18.6 .03061	17300.0 23.89612	581.5 .95713	0 1.79221	0 0	17881.5 26.64546
Ventura County Flood Control District	Q AF C CFS	0 0	21.6 .03555	20000.0 27.62557	803.7 1.24044	0 2.10417	0 0	20803.7 30.97018
Upper Santa Clara Valley Water Agency	Q AF C CFS	0 0	44.9 .07390	41500.0 57.32306	1667.5 2.57367	0 4.36613	0 0	43167.5 64.26286
Kern County Water Agency (Municipal and Industrial)	Q AF C CFS	0 0	126.2 .20772	119600.0 218.06521	1682.4 2.76912	0 0	0 0	121282.4 220.83433
Kern County Water Agency (Agriculture)	Q AF C CFS	0 0	1089.0 1.79242	1033800.0 3058.92860	12809.9 21.08421	0 0	0 0	1046609.9 3080.01281
Santa Barbara County Flood Control and Water Conservation District	Q AF C CFS	0 0	62.5 .10287	57700.0 79.69977	2398.0 3.61625	0 6.10693	0 0	60098.0 89.42295
San Luis Obispo County Flood Control and Water Conservation District	Q AF C CFS	0 0	26.8 .04411	25000.0 34.53197	742.4 1.15566	0 2.61585	0 0	25742.4 38.30348
Devil's Den Water District	Q AF C CFS	0 0	13.4 .02206	12700.0 37.89123	140.7 .23158	0 0	0 0	12840.7 38.12281
Dudley Ridge Water District	Q AF C CFS	0 0	60.3 .09925	57700.0 172.15151	238.9 .39321	0 0	0 0	57938.9 172.54472
Tulare Lake Basin Water Storage District	Q AF C CFS	0 0	114.8 .18895	110000.0 328.19179	348.1 .57294	0 0	0 0	110348.1 328.76473
Hacienda Water District	Q AF C CFS	0 0	8.9 .01465	8500.0 25.36027	35.2 .05794	0 0	0 0	8535.2 25.41821
Empire West Side Irrigation District	Q AF C CFS	0 0	3.1 .00510	3000.0 8.95069	7.1 .01169	0 0	0 0	3007.1 8.96238
County of Kings	Q AF C CFS	0 0	4.2 .00691	4000.0 7.29315	9.6 .01579	0 0	0 0	4009.6 7.30894
Totals	Q AF C CFS	0 0	4235.0 6.97052	3929500.0 7566.63870	140470.0 220.56494	223.97619 0	0 0	4069970.0 8011.17983

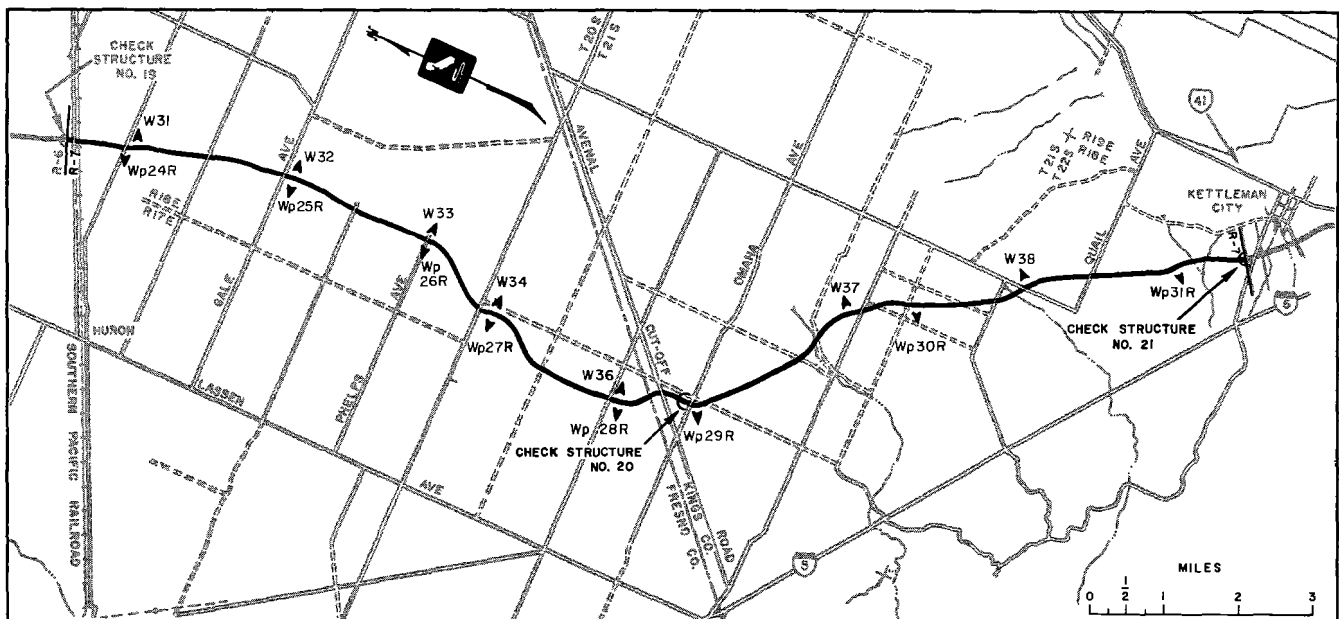


PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS		CAPACITY PROVIDED IN REACH		PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS		MEASURE OF USE	WATER SUPPLY CONTRACTOR
RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS	FOR REQUESTED EXCESS PEAKING	TOTAL FOR WATER SUPPLY CONTRACTORS	RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS		
(9)	(10)	(11)	(12)	(13)	(14)	(15)	
FIVE POINTS TO ARROYO PASAJERO - REACH 6							
.51894115 .39988974	.45941544	0	2112074.9 3203.58859	.51894115 .39988974	.45941544	Q AF C CFS	The Metropolitan Water District of Southern California
.02664742 .02278168	.02471455	0	108454.2 182.50813	.02664742 .02278168	.02471455	Q AF C CFS	San Bernardino Valley Municipal Water District
.00748001 .00612356	.00680178	0	30443.4 49.05691	.00748001 .00612356	.00680178	Q AF C CFS	San Gabriel Valley Municipal Water District
.00449320 .00384077	.00416698	0	18287.2 30.76908	.00449320 .00384077	.00416698	Q AF C CFS	San Geronio Pass Water Agency
.00150635 .00128865	.00139750	0	6130.8 10.32360	.00150635 .00128865	.00139750	Q AF C CFS	Crestline-Lake Arrowhead Water Agency
.01309754 .00993078	.01151416	0	53306.6 79.55729	.01309754 .00993078	.01151416	Q AF C CFS	Mojave Water Agency
.00982314 .00840387	.00911351	0	39979.9 67.32491	.00982314 .00840387	.00911351	Q AF C CFS	Desert Water Agency
.00595579 .00509624	.00552602	0	24239.9 40.82688	.00595579 .00509624	.00552602	Q AF C CFS	Coechella Valley County Water District
.03498940 .02647549	.03073244	0	142405.8 212.09991	.03498940 .02647549	.03073244	Q AF C CFS	Antelope Valley-East Kern Water Agency
.00058534 .00044321	.00051428	0	2382.3 3.55067	.00058534 .00044321	.00051428	Q AF C CFS	Littlerock Creek Irrigation District
.00439352 .00332604	.00385978	0	17881.5 26.64546	.00439352 .00332604	.00385978	Q AF C CFS	Palmdale Irrigation District
.00511151 .00386587	.00448869	0	20803.7 30.97018	.00511151 .00386587	.00448869	Q AF C CFS	Ventura County Flood Control District
.01060634 .00802165	.00931400	0	43167.5 64.26286	.01060634 .00802165	.00931400	Q AF C CFS	Upper Santa Clara Valley Water Agency
.02979933 .02756577	.02868255	0	121282.4 220.83433	.02979933 .02756577	.02868255	Q AF C CFS	Kern County Water Agency (Municipal and Industrial)
.25715420 .38446432	.32080926	0	1046609.9 3080.01281	.25715420 .38446432	.32080926	Q AF C CFS	Kern County Water Agency (Agriculture)
.01476620 .01116227	.01296424	0	60098.0 89.42295	.01476620 .01116227	.01296424	Q AF C CFS	Santa Barbara County Flood Control and Water Conservation District
.00632496 .00478125	.00555311	0	25742.4 38.30348	.00632496 .00478125	.00555311	Q AF C CFS	San Luis Obispo County Flood Control and Water Conservation District
.00315499 .00475870	.00395684	0	12840.7 38.12281	.00315499 .00475870	.00395684	Q AF C CFS	Devil's Den Water District
.01423571 .02153799	.01788685	0	57938.9 172.54472	.01423571 .02153799	.01788685	Q AF C CFS	Dudley Ridge Water District
.02711276 .04103824	.03407550	0	110348.1 328.76473	.02711276 .04103824	.03407550	Q AF C CFS	Tulare Lake Basin Water Storage District
.00209712 .00317284	.00263498	0	8535.2 25.41821	.00209712 .00317284	.00263498	Q AF C CFS	Hacienda Water District
.00073885 .00111873	.00092879	0	3007.1 8.96238	.00073885 .00111873	.00092879	Q AF C CFS	Empire West Side Irrigation District
.00098517 .00091234	.00094875	0	4009.6 7.30894	.00098517 .00091234	.00094875	Q AF C CFS	County of Kings
1.00000000 1.00000000	1.00000000	0	4069970.0 8011.17993	1.00000000 1.00000000	1.00000000	Q AF C CFS	Totals

TABLE B-2 (Continued)
PROPORTIONATE USE OF EACH AQUEDUCT REACH
(in units as shown)

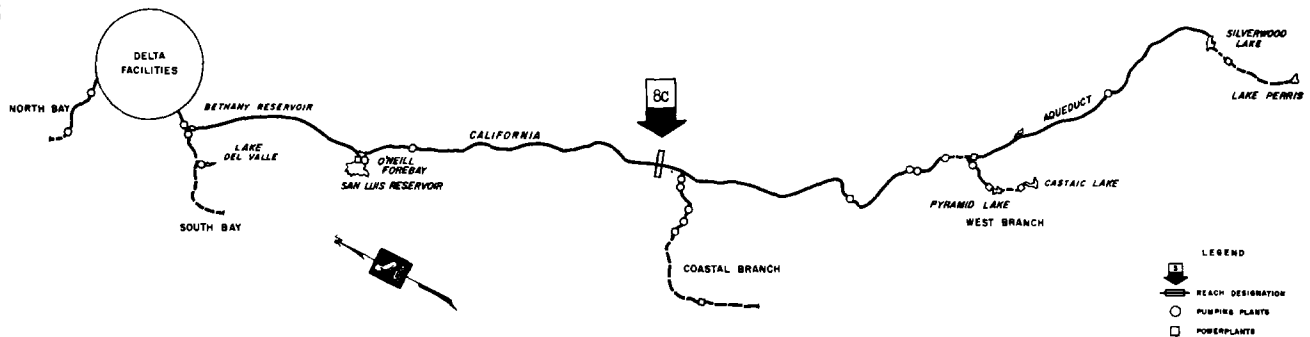


WATER SUPPLY CONTRACTOR	MEASURE OF USE	MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH	ESTIMATED OPERATIONAL LOSSES WITHIN REACH	CAPACITY PROVIDED IN REACH				SUBTOTAL
				FOR DELIVERY OF ENTITLEMENTS	FOR COMPENSATION OF OPERATIONAL LOSSES	SCHEDULED OUTAGES	DOWNSTREAM REGULATION	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
REACH 7 - ARROYO PASAJERO TO KETTLEMAN CITY								
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	2768.6 4,556.93	2011500.0 2863.14267	98377.2 152.23402	0 134.59464	0 0	2109877.2 3199.97133
San Bernardino Valley Municipal Water District	Q AF C CFS	0 0	142.2 .23405	102600.0 172.33413	5741.3 9.25012	0 .73805	0 0	108341.3 182.32230
San Gabriel Valley Municipal Water District	Q AF C CFS	0 0	39.9 .06567	28800.0 45.15128	1611.7 2.59671	0 1.25674	0 0	30411.7 49.00473
San Geronimo Pass Water Agency	Q AF C CFS	0 0	24.0 .03950	17300.0 29.05110	968.2 1.55992	0 .12679	0 0	18268.2 30.73781
Crestline-Lake Arrowhead Water Agency	Q AF C CFS	0 0	8.0 .01317	5800.0 9.75185	324.4 .52268	0 .03854	0 0	6124.4 10.31307
Mojave Water Agency	Q AF C CFS	0 0	69.9 .11505	50800.0 70.16895	2451.1 4.03432	0 5.26267	0 0	53251.1 79.46594
Desert Water Agency	Q AF C CFS	0 0	52.4 .08625	38100.0 63.98093	1838.3 3.02574	0 .24977	0 0	39938.3 67.25644
Coachella Valley County Water District	Q AF C CFS	0 0	31.8 .05234	23100.0 38.80295	1114.7 1.83470	0 .14775	0 0	24214.7 40.78540
Antelope Valley-East Kern Water Agency	Q AF C CFS	0 0	186.7 .30730	138400.0 191.16896	3857.6 6.34934	0 14.33768	0 0	142257.6 211.85598
Littlerock Creek Irrigation District	Q AF C CFS	0 0	3.1 .00510	2300.0 3.17694	79.8 .13134	0 .23827	0 0	2379.8 3.54655
Palmdale Irrigation District	Q AF C CFS	0 0	23.4 .03852	17300.0 23.89612	562.9 .92652	0 1.79221	0 0	17862.9 26.61485
Ventura County Flood Control District	Q AF C CFS	0 0	27.3 .04493	20000.0 27.62557	782.1 1.20489	0 2.10417	0 0	20782.1 30.93463
Upper Santa Clara Valley Water Agency	Q AF C CFS	0 0	56.6 .09315	41500.0 57.37306	1622.6 2.49977	0 4.36613	0 0	43122.6 64.18896
Kern County Water Agency (Municipal and Industrial)	Q AF C CFS	0 0	159.0 .26170	119600.0 218.06521	1556.2 2.56140	0 0	0 0	121156.2 220.62661
Kern County Water Agency (Agriculture)	Q AF C CFS	0 0	1371.9 2,258.05	1033800.0 3058.92860	11720.9 19.29179	0 0	0 0	1045520.9 3078.22039
Santa Barbara County Flood Control and Water Conservation District	Q AF C CFS	0 0	78.8 .12970	57700.0 79.69977	2335.5 3.51338	0 6.10693	0 0	60035.5 89.32008
San Luis Obispo County Flood Control and Water Conservation District	Q AF C CFS	0 0	33.7 .05547	25000.0 34.53197	715.6 1.11155	0 2.61585	0 0	25715.6 38.25937
Devil's Den Water District	Q AF C CFS	0 0	16.8 .02765	12700.0 37.89123	127.3 .20952	0 0	0 0	12827.3 38.10075
Dudley Ridge Water District	Q AF C CFS	0 0	75.9 .12493	57700.0 172.15151	178.6 .29396	0 0	0 0	57878.6 172.44547
Tulare Lake Basin Water Storage District	Q AF C CFS	0 0	144.6 .23800	110000.0 328.19179	233.3 .38399	0 0	0 0	110233.3 328.57578
Hacienda Water District	Q AF C CFS	0 0	11.2 .01843	8500.0 25.36027	26.3 .04329	0 0	0 0	8526.3 25.40356
Empire West Side Irrigation District	Q AF C CFS	0 0	3.9 .00642	3000.0 8.95069	4.0 .00659	0 0	0 0	3004.0 8.95728
County of Kings	Q AF C CFS	0 0	5.3 .00872	4000.0 7.29315	5.4 .00888	0 0	0 0	4005.4 7.30203
Totals	Q AF C CFS	0 0	5335.0 8,78104	3929500.0 7566.63870	136235.0 213.59442	0 223.97619	0 0	4065735.0 8004.20931

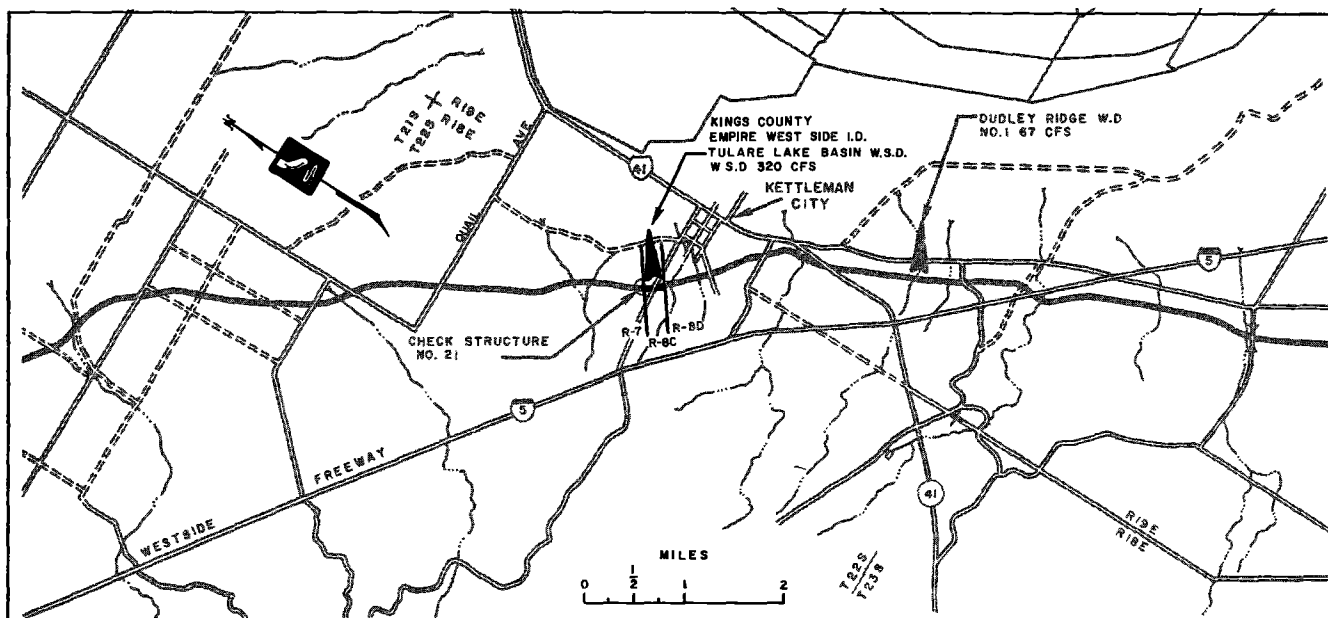


PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS		CAPACITY PROVIDED IN REACH		PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS		MEASURE OF USE	WATER SUPPLY CONTRACTOR
RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS	FOR REQUESTED EXCESS PEAKING	TOTAL FOR WATER SUPPLY CONTRACTORS	RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS		
(9)	(10)	(11)	(12)	(13)	(14)	(15)	
ARROYO PASAJERO TO KETTLEMAN CITY - REACH 7							
.51894115			2109877.2	.51894115		Q AF	The Metropolitan Water District of Southern California
.39978606	.45936361	0	3199.97133	.39978606	.45936361	C CFS	
.02664741			108341.3	.02664741		Q AF	San Bernardino Valley Municipal Water District
.02277830	.02471286	0	182.32230	.02277830	.02471286	C CFS	
.00748000			30411.7	.00748000		Q AF	San Gabriel Valley Municipal Water District
.00612237	.00680118	0	49.00473	.00612237	.00680118	C CFS	
.00449321			18268.2	.00449321		Q AF	San Geronimo Pass Water Agency
.00384021	.00416671	0	30.73781	.00384021	.00416671	C CFS	
.00150635			6124.4	.00150635		Q AF	Crestline-Lake Arrowhead Water Agency
.00128846	.00139740	0	10.31307	.00128846	.00139740	C CFS	
.01309753			53251.1	.01309753		Q AF	Mojave Water Agency
.00992802	.01151278	0	79.46594	.00992802	.01151278	C CFS	
.00982314			39938.3	.00982314		Q AF	Desert Water Agency
.00840263	.00911289	0	67.25644	.00840263	.00911289	C CFS	
.00595580			24214.7	.00595580		Q AF	Coachella Valley County Water District
.00509549	.00552565	0	40.78540	.00509549	.00552565	C CFS	
.03498939			142257.6	.03498939		Q AF	Antelope Valley-East Kern Water Agency
.02646807	.03072873	0	211.85598	.02646807	.03072873	C CFS	
.00058533			2379.8	.00058533		Q AF	Littlerock Creek Irrigation District
.00044309	.00051421	0	3.54655	.00044309	.00051421	C CFS	
.00439352			17862.9	.00439352		Q AF	Palmdale Irrigation District
.00332511	.00385931	0	26.61485	.00332511	.00385931	C CFS	
.00511152			20782.1	.00511152		Q AF	Ventura County Flood Control District
.00386480	.00448816	0	30.93463	.00386480	.00448816	C CFS	
.01060635			43122.6	.01060635		Q AF	Upper Santa Clara Valley Water Agency
.00801940	.00931287	0	64.18896	.00801940	.00931287	C CFS	
.02979934			121156.2	.02979934		Q AF	Kern County Water Agency (Municipal and Industrial)
.02756382	.02868158	0	220.62661	.02756382	.02868158	C CFS	
.25715422			1045520.9	.25715422		Q AF	Kern County Water Agency (Agriculture)
.38457520	.32086471	0	3078.22039	.38457520	.32086471	C CFS	
.01476621			60035.5	.01476621		Q AF	Santa Barbara County Flood Control and Water Conservation District
.01115914	.01296267	0	89.32008	.01115914	.01296267	C CFS	
.00632496			25715.6	.00632496		Q AF	San Luis Obispo County Flood Control and Water Conservation District
.00477991	.00555243	0	38.25937	.00477991	.00555243	C CFS	
.00315498			12827.3	.00315498		Q AF	Devil's Den Water District
.00476009	.00395753	0	38.10075	.00476009	.00395753	C CFS	
.01423570			57878.6	.01423570		Q AF	Dudley Ridge Water District
.02154435	.01789003	0	172.44547	.02154435	.01789003	C CFS	
.02711276			110233.3	.02711276		Q AF	Tulare Lake Basin Water Storage District
.04105037	.03408157	0	328.57578	.04105037	.03408157	C CFS	
.00209711			8526.3	.00209711		Q AF	Hacienda Water District
.00317377	.00263544	0	25.40356	.00317377	.00263544	C CFS	
.00073886			3004.0	.00073886		Q AF	Empire West Side Irrigation District
.00111907	.00092896	0	8.95728	.00111907	.00092896	C CFS	
.00098516			4005.4	.00098516		Q AF	County of Kings
.00091227	.00094872	0	7.30203	.00091227	.00094872	C CFS	
1.00000000			4065735.0	1.00000000		Q AF	Totals
1.00000000	1.00000000	0	8004.20931	1.00000000	1.00000000	C CFS	

TABLE B-2 (Continued)
PROPORTIONATE USE OF EACH AQUEDUCT REACH
(in units as shown)

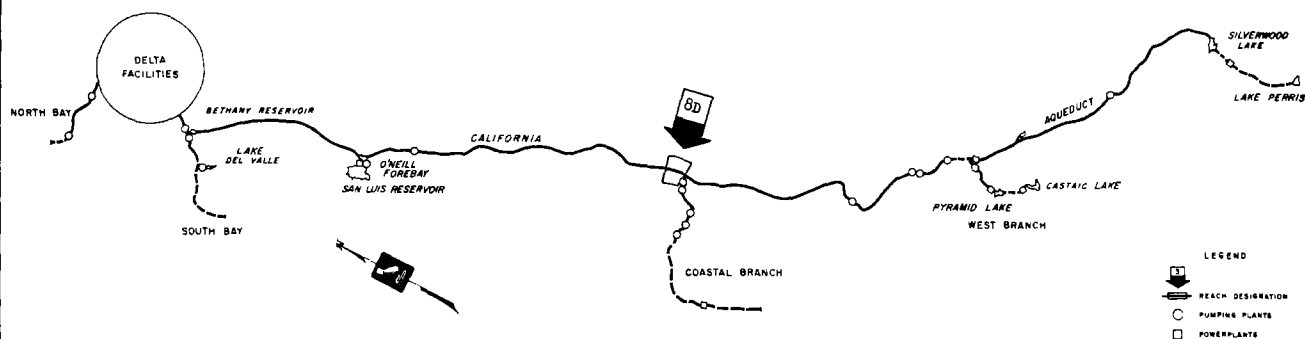


WATER SUPPLY CONTRACTOR	MEASURE OF USE	MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH	ESTIMATED OPERATIONAL LOSSES WITHIN REACH	CAPACITY PROVIDED IN REACH				SUBTOTAL
				FOR DELIVERY OF ENTITLEMENTS	FOR COMPENSATION OF OPERATIONAL LOSSES	SCHEDULED OUTAGES	DOWNSTREAM REGULATION	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
REACH 8C - KETTLEMAN CITY THRU MILHAM AVENUE								
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	51.9 .08542	2011500.0 2863.14267	95608.6 147.67709	184.59464 0	0 0	2107108.6 3195.41440
San Bernardino Valley Municipal Water District	Q AF C CFS	0 0	2.7 .00444	102600.0 172.33413	5599.1 9.01607	0 .73805	0 0	108199.1 182.08825
San Gabriel Valley Municipal Water District	Q AF C CFS	0 0	.7 .00115	28800.0 45.15128	1571.8 2.53104	0 1.25674	0 0	30371.8 48.93906
San Geronimo Pass Water Agency	Q AF C CFS	0 0	.4 .00066	17300.0 29.05110	944.2 1.52042	0 .12679	0 0	18244.2 30.69831
Crestline-Lake Arrowhead Water Agency	Q AF C CFS	0 0	.2 .00033	5800.0 9.75185	316.4 .50951	0 .03854	0 0	6116.4 10.29990
Mojave Water Agency	Q AF C CFS	0 0	1.3 .00214	50800.0 70.16895	2381.2 3.91927	0 5.26267	0 0	53181.2 79.35089
Desert Water Agency	Q AF C CFS	0 0	1.0 .00165	38100.0 63.98093	1785.9 2.93949	0 .24977	0 0	39885.9 67.17019
Coachella Valley County Water District	Q AF C CFS	0 0	.6 .00099	23100.0 38.80295	1082.9 1.78236	0 .14775	0 0	24182.9 40.73306
Antelope Valley-East Kern Water Agency	Q AF C CFS	0 0	3.5 .00576	138400.0 191.16896	3670.9 6.04204	0 14.33768	0 0	142070.9 211.54868
Littlerock Creek Irrigation District	Q AF C CFS	0 0	.1 .00017	2300.0 3.17694	76.7 .12624	0 .23827	0 0	2376.7 3.54145
Palmdale Irrigation District	Q AF C CFS	0 0	.4 .00066	17300.0 23.89612	539.5 .88800	0 1.79221	0 0	17839.5 26.57633
Ventura County Flood Control District	Q AF C CFS	0 0	.5 .00082	20000.0 27.62557	754.8 1.15996	0 2.10417	0 0	20754.8 30.88970
Upper Santa Clara Valley Water Agency	Q AF C CFS	0 0	1.1 .00181	41500.0 57.32306	1566.0 2.40661	0 4.36613	0 0	43066.0 64.09580
Kern County Water Agency (Municipal and Industrial)	Q AF C CFS	0 0	3.0 .00494	119600.0 218.06521	1397.2 2.29970	0 0	0 0	120997.2 220.36491
Kern County Water Agency (Agriculture)	Q AF C CFS	0 0	25.7 .04230	1033800.0 3058.92860	10349.0 17.03374	0 0	0 0	1044149.0 3075.96234
Santa Barbara County Flood Control and Water Conservation District	Q AF C CFS	0 0	1.5 .00247	57700.0 79.69977	2256.7 3.38368	0 6.10693	0 0	59956.7 89.19038
San Luis Obispo County Flood Control and Water Conservation District	Q AF C CFS	0 0	.6 .00099	25000.0 34.53197	681.9 1.05608	0 2.61585	0 0	25681.9 38.20390
Devil's Den Water District	Q AF C CFS	0 0	.3 .00049	12700.0 37.89123	110.5 .18187	0 0	0 0	12810.5 38.07310
Dudley Ridge Water District	Q AF C CFS	0 0	1.4 .00230	57700.0 172.15151	102.7 .16903	0 0	0 0	57802.7 172.32054
Tulare Lake Basin Water Storage District	Q AF C CFS	61050.0 182.14644	2.7 .00444	110000.0 328.19179	88.7 .14599	0 0	0 0	110088.7 328.33778
Hacienda Water District	Q AF C CFS	0 0	.2 .00033	8500.0 25.36027	15.1 .02486	0 0	0 0	8515.1 25.38513
Empire West Side Irrigation District	Q AF C CFS	3000.0 8.95069	.1 .00017	3000.0 8.95069	.00017 0	0 0	0 0	3000.1 8.95086
County of Kings	Q AF C CFS	4000.0 7.29315	.1 .00016	4000.0 7.29315	.1 .00016	0 0	0 0	4000.1 7.29331
Totals	Q AF C CFS	68050.0 198.39028	100.0 .16459	3929500.0 7566.63870	130900.0 204.81338	223.97619 0	0 0	4060400.0 7995.42827

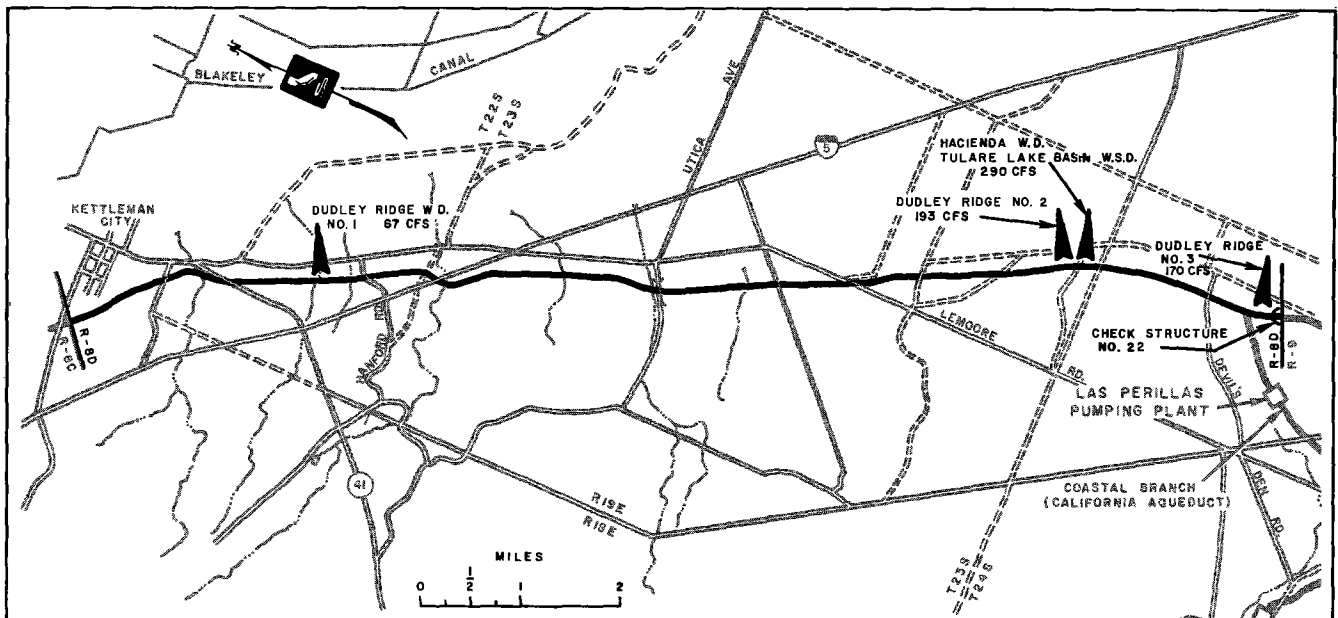


PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS		CAPACITY PROVIDED IN REACH		PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS		MEASURE OF USE	WATER SUPPLY CONTRACTOR
RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS	FOR REQUESTED EXCESS PEAKING	TOTAL FOR WATER SUPPLY CONTRACTORS	RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS		
(9)	(10)	(11)	(12)	(13)	(14)	(15)	
KETTELMAN CITY THRU MILHAM AVENUE - REACH 8C							
.51894114	.45929816	188.00000	2107108.6	.51894114	.46619410	Q AF	The Metropolitan Water District of Southern California
.39965519			3383.41440	.41344707		C CFS	
.02664740	.02471072	0	108199.1	.02664740	.02444913	Q AF	San Bernardino Valley Municipal Water District
.02277405		0	182.08825	.02225085		C CFS	
.00748000	.00680044	0	30371.8	.00748000	.00673013	Q AF	San Gabriel Valley Municipal Water District
.00612088		0	48.93906	.00598026		C CFS	
.00449320	.00416634	0	18244.2	.00449320	.00412224	Q AF	San Geronimo Pass Water Agency
.00383948		0	30.69831	.00375128		C CFS	
.00150635	.00139729	0	6116.4	.00150635	.00138249	Q AF	Crestline-Lake Arrowhead Water Agency
.00128822		0	10.29990	.00129863		C CFS	
.01309753	.01151103	0	53181.2	.01309753	.01139703	Q AF	Mojave Water Agency
.00992453		0	79.35089	.00969653		C CFS	
.00982315	.00911211	0	39885.9	.00982315	.00901561	Q AF	Desert Water Agency
.00840108		0	67.17019	.00820807		C CFS	
.00595579	.00552517	0	24182.9	.00595579	.00546665	Q AF	Coachella Valley County Water District
.00509454		0	40.73306	.00497751		C CFS	
.03498938	.03072405	0	142070.9	.03498938	.03042012	Q AF	Antelope Valley-East Kern Water Agency
.02645871		0	211.54868	.02585086		C CFS	
.00058534	.00051414	0	2376.7	.00058534	.00050905	Q AF	Littlerock Creek Irrigation District
.00044293		0	3.54145	.00043276		C CFS	
.00439353	.00385874	0	17839.5	.00439353	.00382056	Q AF	Palmdale Irrigation District
.00332394		0	26.57633	.00324758		C CFS	
.00511152	.00448747	0	20754.8	.00511152	.00444309	Q AF	Ventura County Flood Control District
.00386342		0	30.88970	.00377466		C CFS	
.01060634	.00931145	0	43066.0	.01060634	.00921937	Q AF	Upper Santa Clara Valley Water Agency
.00801656		0	64.09580	.00783239		C CFS	
.02979933	.02868035	0	120997.2	.02979933	.02836376	Q AF	Kern County Water Agency (Municipal and Industrial)
.02758136		0	220.36491	.02692819		C CFS	
.25715422	.32093468	0	1044149.0	.25715422	.31651560	Q AF	Kern County Water Agency (Agriculture)
.38471514		0	3075.96234	.37587698		C CFS	
.01476621	.01296069	0	59956.7	.01476621	.01283255	Q AF	Santa Barbara County Flood Control and Water Conservation District
.01115517		0	89.19038	.01089890		C CFS	
.00632497	.00555159	0	25681.9	.00632497	.00549671	Q AF	San Luis Obispo County Flood Control and Water Conservation District
.00477422		0	38.20390	.00466845		C CFS	
.00315498	.00395842	0	12810.5	.00315498	.00390372	Q AF	Devil's Den Water District
.00476186		0	38.07310	.00465246		C CFS	
.01423572	.01789405	0	57802.7	.01423572	.01764649	Q AF	Dudley Ridge Water District
.02155238		0	172.32054	.02105726		C CFS	
.02711277	.03408923	0	110088.7	.02711277	.03361753	Q AF	Tulare Lake Basin Water Storage District
.04106569		0	328.33778	.04012228		C CFS	
.00209711	.00263603	0	8515.1	.00209711	.00259956	Q AF	Hacienda Water District
.00317496		0	25.38513	.00310202		C CFS	
.00073887	.00092918	0	3000.1	.00073887	.00091632	Q AF	Empire West Side Irrigation District
.00111950		0	8.95086	.00109378		C CFS	
.00098515	.00094867	0	4000.1	.00098515	.00093819	Q AF	County of Kings
.00091219		0	7.29331	.00089123		C CFS	
1.00000000	1.00000000	188.00000	4060400.0	1.00000000	1.00000000	Q AF	Totals
1.00000000			8183.42827	1.00000000		C CFS	

TABLE B-2 (Continued)
PROPORTIONATE USE OF EACH AQUEDUCT REACH
(in units as shown)



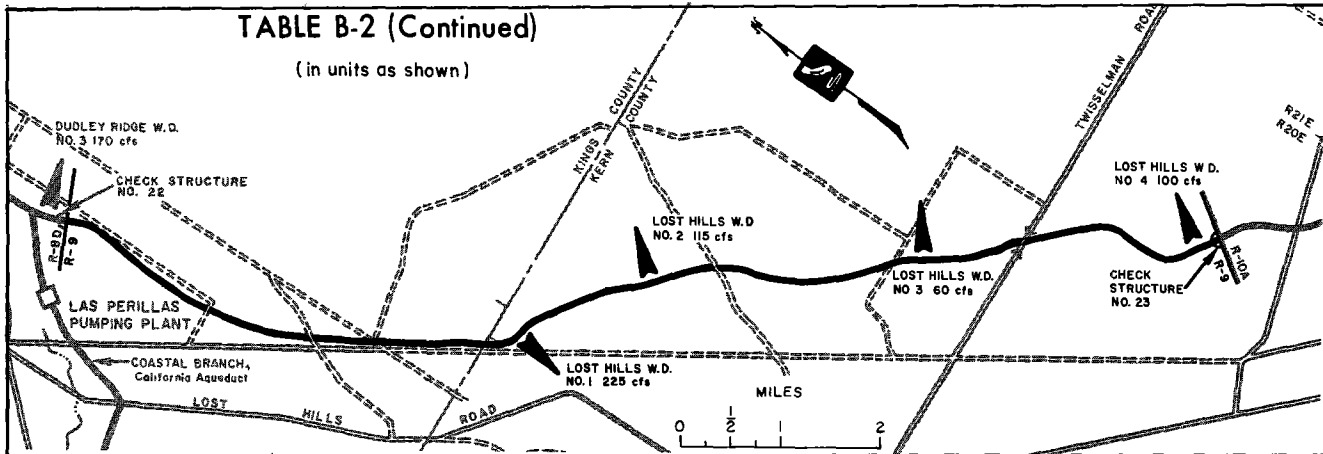
WATER SUPPLY CONTRACTOR	MEASURE OF USE	MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH	ESTIMATED OPERATIONAL LOSSES WITHIN REACH	CAPACITY PROVIDED IN REACH				SUBTOTAL
				FOR DELIVERY OF ENTITLEMENTS	FOR COMPENSATION OF OPERATIONAL LOSSES	SCHEDULED OUTAGES	DOWNSIDE REGULATION	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
REACH 8D - MILHAM AVENUE THRU AVENAL GAP								
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	3694.5 6.08089	2011500.0 2863.14267	95556.7 147.59167	184.59464	0	2107056.7 3195.32898
San Bernardino Valley Municipal Water District	Q AF C CFS	0 0	189.7 .31223	102600.0 172.33413	5596.4 9.01163	.73805	0	108196.4 182.08381
San Gabriel Valley Municipal Water District	Q AF C CFS	0 0	53.3 .08773	28800.0 45.15128	1571.1 2.52989	1.25674	0	30371.1 48.93791
San Geronimo Pass Water Agency	Q AF C CFS	0 0	32.0 .05267	17300.0 29.05110	943.8 1.51976	.12679	0	18243.8 30.69765
Crestline-Lake Arrowhead Water Agency	Q AF C CFS	0 0	10.7 .01761	5800.0 9.75185	316.2 .50918	.03854	0	6116.2 10.29957
Mojave Water Agency	Q AF C CFS	0 0	93.2 .15340	50800.0 70.16895	2379.9 3.91713	5.26267	0	53179.9 79.34875
Desert Water Agency	Q AF C CFS	0 0	69.9 .11505	38100.0 63.98093	1784.9 2.93784	.24977	0	39884.9 67.16854
Coachella Valley County Water District	Q AF C CFS	0 0	42.4 .06979	23100.0 38.80295	1082.3 1.78137	.14775	0	24182.3 40.73207
Antelope Valley-East Kern Water Agency	Q AF C CFS	0 0	249.1 .41000	138400.0 191.16896	3667.4 6.03628	14.33768	0	142067.4 211.54292
Littlerock Creek Irrigation District	Q AF C CFS	0 0	4.2 .00691	2300.0 3.17694	76.6 .12607	.23827	0	2376.6 3.54128
Palmdale Irrigation District	Q AF C CFS	0 0	31.3 .05152	17300.0 23.89612	539.1 .88734	1.79221	0	17839.1 26.57567
Ventura County Flood Control District	Q AF C CFS	0 0	36.4 .05991	20000.0 27.62557	754.3 1.15914	2.10417	0	20754.3 30.88888
Upper Santa Clara Valley Water Agency	Q AF C CFS	0 0	75.5 .12427	41500.0 57.32306	1564.9 2.40480	4.36613	0	43064.9 64.09399
Kern County Water Agency (Municipal and Industrial)	Q AF C CFS	0 0	212.2 .34927	119600.0 218.06521	1394.2 2.29476	0	0	120994.2 220.35997
Kern County Water Agency (Agriculture)	Q AF C CFS	-6400.0 -14.00000	1830.8 3.01337	1033800.0 3058.92860	10323.3 16.99144	0	0	1044123.3 3075.92004
Santa Barbara County Flood Control and Water Conservation District	Q AF C CFS	0 0	105.1 .17299	57700.0 79.69977	2255.2 3.38121	6.10693	0	59955.2 89.18791
San Luis Obispo County Flood Control and Water Conservation District	Q AF C CFS	0 0	45.0 .07407	25000.0 34.53197	681.3 1.05509	2.61585	0	25681.3 38.20291
Devil's Den Water District	Q AF C CFS	0 0	22.5 .03703	12700.0 37.89123	110.2 .18138	0	0	12810.2 38.07261
Dudley Ridge Water District	Q AF C CFS	57700.0 172.15151	101.3 .16673	57700.0 172.15151	101.3 .16673	0	0	57801.3 172.31824
Tulare Lake Basin Water Storage District	Q AF C CFS	48950.0 146.04535	86.0 .14155	48950.0 146.04535	86.0 .14155	0	0	49036.0 146.18690
Hacienda Water District	Q AF C CFS	8500.0 25.36027	14.9 .02453	8500.0 25.36027	14.9 .02453	0	0	8514.9 25.38480
Totals	Q AF C CFS	108750.0 329.55713	7000.0 11.52152	3861450.0 7368.24842	130800.0 204.64879	223.97619	0	3997250.0 7796.87340



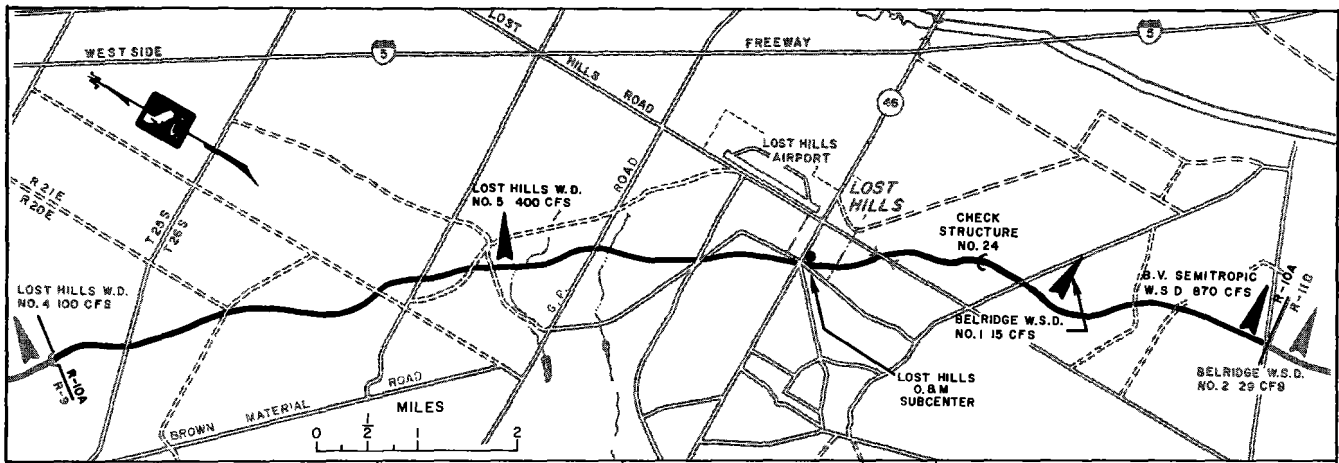
PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS		CAPACITY PROVIDED IN REACH		PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS		MEASURE OF USE	WATER SUPPLY CONTRACTOR
RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS	FOR REQUESTED EXCESS PEAKING	TOTAL FOR WATER SUPPLY CONTRACTORS	RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS	(15)	
(9)	(10)	(11)	(12)	(13)	(14)	(15)	
MILHAM AVENUE THRU AVENAL GAP - REACH 8D							
.52778676	.46880430	188.00000	2107056.7	.52778676	.47575203	Q AF	The Metropolitan Water District of Southern California
.40982184			3383.32898	.42371730		C CFS	
.02710161	.02522753	0	108196.4	.02710161	.02495260	Q AF	San Bernardino Valley Municipal Water District
.02335344			182.08381	.02280359		C CFS	
.00760751	.00694206	0	30371.1	.00760751	.00686817	Q AF	San Gabriel Valley Municipal Water District
.00627661			48.93791	.00612883		C CFS	
.00456980	.00425349	0	18243.8	.00456980	.00420714	Q AF	San Geronimo Pass Water Agency
.00393717			30.69765	.00384448		C CFS	
.00153202	.00142650	0	6116.2	.00153202	.00141095	Q AF	Crestline-Lake Arrowhead Water Agency
.00132099			10.29957	.00128989		C CFS	
.01332078	.01174889	0	53179.9	.01332078	.01162908	Q AF	Mojave Water Agency
.01017700			79.34875	.00993738		C CFS	
.00999058	.00930269	0	39884.9	.00999058	.00920128	Q AF	Desert Water Agency
.00861481			67.16854	.00841197		C CFS	
.00605731	.00564073	0	24182.3	.00605731	.00557923	Q AF	Coachella Valley County Water District
.00522415			40.73207	.00510115		C CFS	
.03558580	.03135878	0	142067.4	.03558580	.03103938	Q AF	Antelope Valley-East Kern Water Agency
.02713176			211.54292	.02649296		C CFS	
.00059530	.00052475	0	2376.6	.00059530	.00051940	Q AF	Littlerock Creek Irrigation District
.00045419			3.54128	.00044350		C CFS	
.00446843	.00393847	0	17839.1	.00446843	.00389834	Q AF	Palmdale Irrigation District
.00340850			26.57567	.00332825		C CFS	
.00519865	.00458017	0	20754.3	.00519865	.00453354	Q AF	Ventura County Flood Control District
.00396170			30.88888	.00386842		C CFS	
.01078713	.00950380	0	43064.9	.01078713	.00940703	Q AF	Upper Santa Clara Valley Water Agency
.00822047			64.09399	.00802693		C CFS	
.03030727	.02928494	0	120994.2	.03030727	.02895222	Q AF	Kern County Water Agency (Municipal and Industrial)
.02326261			220.35997	.02759718		C CFS	
.26153755	.32802221	0	1044123.3	.26153755	.32337797	Q AF	Kern County Water Agency (Agriculture)
.39450686			3075.92004	.38521839		C CFS	
.01501790	.01322842	0	59955.2	.01501790	.01309375	Q AF	Santa Barbara County Flood Control and Water Conservation District
.01143893			89.18791	.01116961		C CFS	
.00643279	.00566628	0	25681.3	.00643279	.00560860	Q AF	San Luis Obispo County Flood Control and Water Conservation District
.00489977			38.20291	.00478441		C CFS	
.00320877	.00404591	0	12810.2	.00320877	.00398843	Q AF	Devil's Den Water District
.00488306			38.07261	.00476809		C CFS	
.01447838	.01828966	0	57801.3	.01447838	.01802948	Q AF	Dudley Ridge Water District
.02210094			172.31824	.02158058		C CFS	
.01272230	.01551611	0	49036.0	.01228280	.01529539	Q AF	Tulare Lake Basin Water Storage District
.01274943			146.18690	.01830798		C CFS	
.00213286	.00269431	0	8514.9	.00213286	.00265599	Q AF	Hacienda Water District
.00325577			25.38480	.00317911		C CFS	
1.00000000	1.00000000	188.00000	3992250.0	1.00000000	1.00000000	Q AF	Totals
1.00000000			7984.87340	1.00000000		C CFS	

TABLE B-2 (Continued)

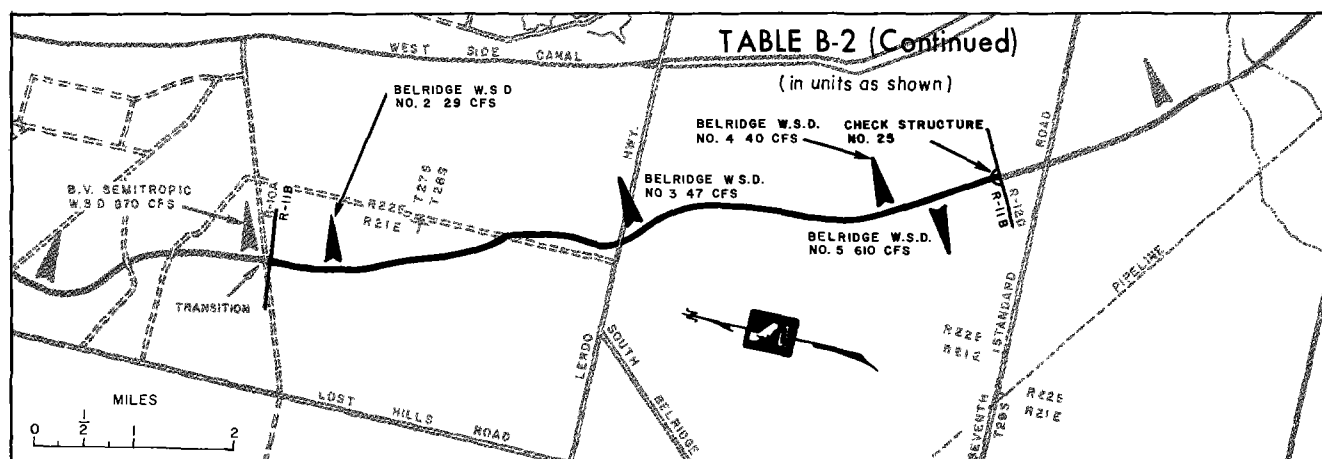
(in units as shown)



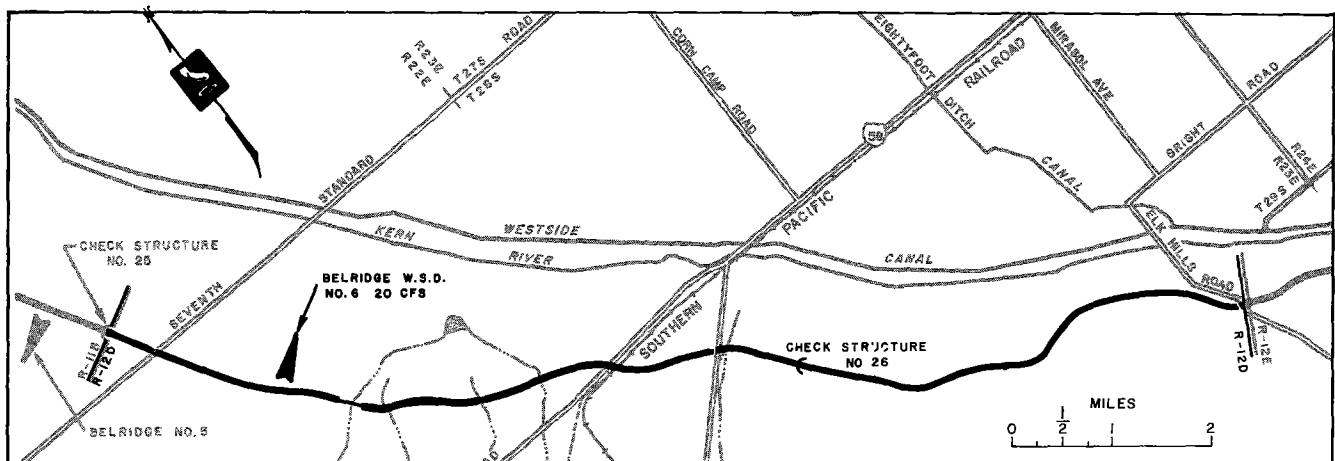
WATER SUPPLY CONTRACTOR	MEASURE OF USE	MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH	ESTIMATED OPERATIONAL LOSSES WITHIN REACH	CAPACITY PROVIDED IN REACH				SUBTOTAL
				FOR DELIVERY OF ENTITLEMENTS	FOR COMPENSATION OF OPERATIONAL LOSSES	SCHEDULED OUTAGES	DOWNSTREAM REGULATION	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
REACH 9 - AVENAL GAP THRU TWISSELMAN ROAD								
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	3780.1 6.22179	2011500.0 2863.14267	91862.2 141.51078	0 184.59464	0	2103362.6 3189.24809
San Bernardino Valley Municipal Water District	Q AF C CFS	0 0	194.1 .31948	102600.0 172.33413	5406.7 8.69940	0 .73805	0	108006.7 181.77158
San Gabriel Valley Municipal Water District	Q AF C CFS	0 0	54.5 .08970	28800.0 45.15128	1517.8 2.44216	0 1.25674	0	30317.8 48.85018
San Geronimo Pass Water Agency	Q AF C CFS	0 0	32.7 .05382	17300.0 29.05110	911.8 1.46709	0 .12679	0	18211.8 30.64498
Crestline-Lake Arrowhead Water Agency	Q AF C CFS	0 0	11.0 .01811	5800.0 9.75185	305.5 .49157	0 .03854	0	6105.5 10.28196
Mojave Water Agency	Q AF C CFS	0 0	95.4 .15702	50800.0 70.16895	2286.7 3.76373	0 5.26267	0	53086.7 79.19535
Desert Water Agency	Q AF C CFS	0 0	71.5 .11768	38100.0 63.98093	1715.0 2.82279	0 .24977	0	39815.0 67.05349
Coachella Valley County Water District	Q AF C CFS	0 0	43.4 .07143	23100.0 38.80295	1039.9 1.71158	0 .14775	0	24139.9 40.66228
Antelope Valley-East Kern Water Agency	Q AF C CFS	0 0	254.9 .41955	138400.0 191.16896	3418.3 5.62628	0 14.33766	0	141818.3 211.13292
Littlerock Creek Irrigation District	Q AF C CFS	0 0	4.3 .00708	2300.0 3.17694	72.4 .11916	0 .23827	0	2372.4 3.53437
Palmdale Irrigation District	Q AF C CFS	0 0	32.0 .05267	17300.0 23.89612	507.8 .83582	0 1.79221	0	17807.8 26.52415
Ventura County Flood Control District	Q AF C CFS	0 0	37.2 .06123	20000.0 27.62557	717.9 1.09923	0 2.10417	0	20717.9 30.82897
Upper Santa Clara Valley Water Agency	Q AF C CFS	0 0	77.3 .12723	41500.0 57.32306	1489.4 2.28053	0 4.36613	0	42989.4 63.96972
Kern County Water Agency (Municipal and Industrial)	Q AF C CFS	0 0	217.1 .35733	119600.0 218.06521	1182.0 1.94549	0 0	0	120782.0 220.01070
Kern County Water Agency (Agriculture)	Q AF C CFS	46900.0 139.92905	1694.5 2.78903	935100.0 2789.92860	7766.6 12.78329	0 0	0	942866.6 2802.71189
Totals	Q AF C CFS	46900.0 139.92905	6600.0 10.86315	3552200.0 6603.56832	120200.0 187.59890	215.25341 0	0	3672400.0 7006.42063
REACH 10A - TWISSELMAN ROAD THRU LOST HILLS								
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	4061.2 6.68446	2011500.0 2863.14267	88082.1 135.28899	0 184.59464	0	2099582.1 3183.02630
San Bernardino Valley Municipal Water District	Q AF C CFS	0 0	208.5 .34318	102600.0 172.33413	5212.6 8.37992	0 .73805	0	107812.6 181.45210
San Gabriel Valley Municipal Water District	Q AF C CFS	0 0	58.5 .09629	28800.0 45.15128	1463.3 2.35246	0 1.25674	0	30263.3 48.76048
San Geronimo Pass Water Agency	Q AF C CFS	0 0	35.2 .05794	17300.0 29.05110	879.1 1.41327	0 .12679	0	18179.1 30.59116
Crestline-Lake Arrowhead Water Agency	Q AF C CFS	0 0	11.8 .01942	5800.0 9.75185	294.5 .47346	0 .03854	0	6094.5 10.26385
Mojave Water Agency	Q AF C CFS	0 0	102.5 .16871	50800.0 70.16895	2191.3 3.60671	0 5.26267	0	52991.3 79.03833
Desert Water Agency	Q AF C CFS	0 0	76.9 .12657	38100.0 63.98093	1643.5 2.70511	0 .24977	0	39743.5 66.93581
Coachella Valley County Water District	Q AF C CFS	0 0	46.6 .07670	23100.0 38.80295	996.5 1.64015	0 .14775	0	24096.5 40.59085
Antelope Valley-East Kern Water Agency	Q AF C CFS	0 0	273.8 .45065	138400.0 191.16896	3163.4 5.20673	0 14.33768	0	141563.4 210.71337
Littlerock Creek Irrigation District	Q AF C CFS	0 0	4.6 .00757	2300.0 3.17694	68.1 .11208	0 .23827	0	2368.1 3.52729
Palmdale Irrigation District	Q AF C CFS	0 0	34.4 .05662	17300.0 23.89612	475.8 .78315	0 1.79221	0	17775.8 26.47148
Ventura County Flood Control District	Q AF C CFS	0 0	40.0 .06584	20000.0 27.62557	680.7 1.03800	0 2.10417	0	20680.7 30.76774
Upper Santa Clara Valley Water Agency	Q AF C CFS	0 0	83.0 .13661	41500.0 57.32306	1412.1 2.15330	0 4.36613	0	42912.1 63.84249
Kern County Water Agency (Municipal and Industrial)	Q AF C CFS	0 0	233.2 .38383	119600.0 218.06521	964.9 1.58816	0 0	0	120564.9 219.65337
Kern County Water Agency (Agriculture)	Q AF C CFS	265800.0 793.03071	1729.8 2.84713	888200.0 2649.99955	6072.1 9.99426	0 0	0	894272.1 2659.99381
Totals	Q AF C CFS	265800.0 793.03071	7000.0 11.52152	3505300.0 6463.63927	113600.0 176.73575	215.25341 0	0	3618900.0 6855.62843



PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS		CAPACITY PROVIDED IN REACH		PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS		MEASURE OF USE	WATER SUPPLY CONTRACTOR
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		
(9)	(10)	(11)	(12)	(13)	(14)	(15)	
AVENAL GAP THRU TWISSELMAN ROAD - REACH 9							
.57274867	.51396901	188.00000	2103362.2	.57274867	.52108733	Q AF	The Metropolitan Water District of Southern California
.45518936			3377.24809	.46942600		C CFS	
.02941039	.02767698	0	108006.7	.02941039	.02733801	Q AF	San Bernardino Valley Municipal Water District
.02594357			181.77158	.02526563		C CFS	
.00825558	.00761389	0	30317.8	.00825558	.00752279	Q AF	San Gabriel Valley Municipal Water District
.00697220			48.85018	.00679001		C CFS	
.00495910	.00466647	0	18211.8	.00495910	.00460932	Q AF	San Geronimo Pass Water Agency
.00437384			30.64498	.00425955		C CFS	
.00166254	.00156502	0	6105.5	.00166254	.00154585	Q AF	Crestline-Lake Arrowhead Water Agency
.00146751			10.28196	.00142916		C CFS	
.01445559	.01287942	0	53086.7	.01445559	.01273174	Q AF	Mojave Water Agency
.01130325			79.19535	.01100788		C CFS	
.01084168	.01020599	0	39815.0	.01084168	.01008094	Q AF	Desert Water Agency
.00957029			67.05349	.00932021		C CFS	
.00657333	.00618845	0	24139.9	.00657333	.00611262	Q AF	Coachella Valley County Water District
.00580357			40.66228	.00565192		C CFS	
.03861733	.03437577	0	141818.3	.03861733	.03398205	Q AF	Antelope Valley-East Kern Water Agency
.03013421			211.13292	.02934676		C CFS	
.00064601	.00057523	0	2372.4	.00064601	.00056864	Q AF	Littlerock Creek Irrigation District
.00050445			3.53437	.00049126		C CFS	
.00484909	.00431739	0	17807.8	.00484909	.00426793	Q AF	Palmdale Irrigation District
.00378569			26.52415	.00368677		C CFS	
.00564151	.00502081	0	20717.9	.00564151	.00496332	Q AF	Ventura County Flood Control District
.00440010			30.82897	.00428512		C CFS	
.01170608	.01041812	0	42989.4	.01170608	.01029883	Q AF	Upper Santa Clara Valley Water Agency
.00913016			63.96972	.00889157		C CFS	
.03288912	.03214521	0	120782.0	.03288912	.03173493	Q AF	Kern County Water Agency (Municipal and Industrial)
.03140130			220.01070	.03058074		C CFS	
.25674398	.32838224	0	942866.6	.25674398	.32315570	Q AF	Kern County Water Agency (Agriculture)
.40002050			2802.71189	.38956742		C CFS	
1.00000000	1.00000000	188.00000	3672400.0	1.00000000	1.00000000	Q AF	Totals
1.00000000			7194.42063	1.00000000		C CFS	
TWISSELMAN ROAD THRU LOST HILLS - REACH 10A							
.58017135	.52223261	188.00000	2099582.1	.58017135	.52938182	Q AF	The Metropolitan Water District of Southern California
.46429388			3371.02630	.47859229		C CFS	
.02979154	.02812957	0	107812.6	.02979154	.02777635	Q AF	San Bernardino Valley Municipal Water District
.02646761			181.45210	.02576117		C CFS	
.00836257	.00773752	0	30263.3	.00836257	.00764260	Q AF	San Gabriel Valley Municipal Water District
.00711247			48.76048	.00692264		C CFS	
.00502338	.00474279	0	18179.1	.00502338	.00468324	Q AF	San Geronimo Pass Water Agency
.00446220			30.59116	.00434310		C CFS	
.00168408	.00159061	0	6094.5	.00168408	.00157063	Q AF	Crestline-Lake Arrowhead Water Agency
.00149714			10.26385	.00145718		C CFS	
.01464293	.01308595	0	52991.3	.01464293	.01293209	Q AF	Mojave Water Agency
.01152897			79.03833	.01122125		C CFS	
.01098220	.01037292	0	39743.5	.01098220	.01024262	Q AF	Desert Water Agency
.00976363			66.93591	.00950303		C CFS	
.00665852	.00628966	0	24096.5	.00665852	.00621064	Q AF	Coachella Valley County Water District
.00592081			40.59085	.00576277		C CFS	
.03911780	.03492681	0	141563.4	.03911780	.03451663	Q AF	Antelope Valley-East Kern Water Agency
.03073582			210.71337	.02991546		C CFS	
.00065437	.00058444	0	2368.1	.00065437	.00057757	Q AF	Littlerock Creek Irrigation District
.00051451			3.52729	.00050078		C CFS	
.00491193	.00438661	0	17775.8	.00491193	.00433508	Q AF	Palmdale Irrigation District
.00386128			26.47148	.00375822		C CFS	
.00571464	.00510129	0	20680.7	.00571464	.00504140	Q AF	Ventura County Flood Control District
.00448795			30.76774	.00436871		C CFS	
.01185777	.01058510	0	42912.1	.01185777	.01046082	Q AF	Upper Santa Clara Valley Water Agency
.00931242			63.84249	.00906386		C CFS	
.03331534	.03267760	0	120564.9	.03331534	.03225002	Q AF	Kern County Water Agency (Municipal and Industrial)
.03203986			219.65337	.03118469		C CFS	
.24711158	.31755652	0	894272.1	.24711158	.31237849	Q AF	Kern County Water Agency (Agriculture)
.38800145			2659.99381	.37764539		C CFS	
1.00000000	1.00000000	188.00000	3618900.0	1.00000000	1.00000000	Q AF	Totals
1.00000000			7043.62843	1.00000000		C CFS	



WATER SUPPLY CONTRACTOR	MEASURE OF USE	MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH	ESTIMATED OPERATIONAL LOSSES WITHIN REACH	CAPACITY PROVIDED IN REACH				SUBTOTAL
				FOR DELIVERY OF ENTITLEMENTS	FOR OPERATIONAL LOSSES	FOR COMPENSATION OF SCHEDULED OUTAGES	FOR DOWNSTREAM REGULATION	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
REACH 11B - LOST HILLS TO 7TH STANDARD ROAD								
The Metropolitan Water District of Southern California	Q AF CFS	0 0	2442.4 4.02002	2011500.0 2863.14267	84020.9 128.60453	184.59464 0	0	2095520.9 3176.34184
San Bernardino Valley Municipal Water District	Q AF CFS	0 0	125.4 .20640	102600.0 172.33413	5004.1 8.03674	.73805 0	0	107604.1 181.10892
San Gabriel Valley Municipal Water District	Q AF CFS	0 0	35.2 .05794	28800.0 45.15128	1404.8 2.25617	0 1.25674	0	30204.8 48.66419
San Geronimo Pass Water Agency	Q AF CFS	0 0	21.1 .03473	17300.0 29.05110	843.9 1.35533	0 .12679	0	18143.9 30.53322
Crestline-Lake Arrowhead Water Agency	Q AF CFS	0 0	7.1 .01169	5800.0 9.75185	282.7 .45404	0 .03854	0	6082.7 10.24443
Mojave Water Agency	Q AF CFS	0 0	61.6 .10139	50800.0 70.16895	2088.8 3.43800	0 5.26267	0	52888.8 78.86962
Desert Water Agency	Q AF CFS	0 0	46.2 .07604	38100.0 63.98093	1566.6 2.57854	0 .24977	0	39666.6 66.80924
Coachella Valley County Water District	Q AF CFS	0 0	29.0 .04609	23100.0 38.80295	949.9 1.56345	0 .14775	0	24049.9 40.51415
Antelope Valley-East Kern Water Agency	Q AF CFS	0 0	164.7 .27108	138400.0 191.16896	2889.6 4.75608	0 14.33768	0	141289.6 210.26272
Littlerock Creek Irrigation District	Q AF CFS	0 0	2.8 .00461	2300.0 3.17694	63.5 .10451	0 .23827	0	2363.5 3.51972
Palmdale Irrigation District	Q AF CFS	0 0	20.7 .03407	17300.0 23.89612	441.4 .72653	0 1.79221	0	17741.4 26.41486
Ventura County Flood Control District	Q AF CFS	0 0	24.1 .03967	20000.0 27.62557	640.7 .97216	0 2.10417	0	20640.7 30.70190
Upper Santa Clara Valley Water Agency	Q AF CFS	0 0	49.9 .08213	41500.0 57.32306	1329.1 2.01669	0 4.36613	0	42829.1 63.70588
Kern County Water Agency (Municipal and Industrial)	Q AF CFS	0 0	140.3 .23092	119600.0 218.06521	731.7 1.20433	0 0	0	120331.7 219.26954
Kern County Water Agency (Agriculture)	Q AF CFS	126300.0 376.82385	730.5 1.20235	622400.0 1856.96884	4342.3 7.14713	0 0	0	626742.3 1864.11597
Totals	Q AF CFS	126300.0 376.82385	3900.0 6.41913	3239500.0 5670.60896	106600.0 165.21423	0 215.25341	0	3346100.0 6051.07620
REACH 12D - 7TH STANDARD ROAD THRU ELK HILLS ROAD								
The Metropolitan Water District of Southern California	Q AF CFS	0 0	4621.1 7.60601	2011500.0 2863.14267	81578.5 124.58451	184.59464 0	0	2093078.5 3172.32182
San Bernardino Valley Municipal Water District	Q AF CFS	0 0	237.3 .39058	102600.0 172.33413	4978.7 7.83034	0 .73805	0	107478.7 180.90252
San Gabriel Valley Municipal Water District	Q AF CFS	0 0	66.6 .10962	28800.0 45.15128	1369.6 2.19823	0 1.25674	0	30169.6 48.60625
San Geronimo Pass Water Agency	Q AF CFS	0 0	40.0 .06584	17300.0 29.05110	822.8 1.32060	0 .12679	0	18122.8 30.49849
Crestline-Lake Arrowhead Water Agency	Q AF CFS	0 0	13.4 .02205	5800.0 9.75185	275.6 .44235	0 .03854	0	6075.6 10.23274
Mojave Water Agency	Q AF CFS	0 0	116.6 .19191	50800.0 70.16895	2027.2 3.33661	0 5.26267	0	52827.2 78.76823
Desert Water Agency	Q AF CFS	0 0	87.5 .14402	38100.0 63.98093	1520.4 2.50250	0 .24977	0	39620.4 66.73320
Coachella Valley County Water District	Q AF CFS	0 0	53.0 .08723	23100.0 38.80295	921.9 1.51736	0 .14775	0	24021.9 40.46806
Antelope Valley-East Kern Water Agency	Q AF CFS	0 0	311.6 .51287	138400.0 191.16896	2724.9 4.48500	0 14.33768	0	141124.9 209.99164
Littlerock Creek Irrigation District	Q AF CFS	0 0	5.2 .00856	2300.0 3.17694	60.7 .09990	0 .23827	0	2360.7 3.51511
Palmdale Irrigation District	Q AF CFS	0 0	39.1 .06436	17300.0 23.89612	420.7 .69246	0 1.79221	0	17720.7 26.38079
Ventura County Flood Control District	Q AF CFS	0 0	45.5 .07489	20000.0 27.62557	616.6 .93249	0 2.10417	0	20616.6 30.66223
Upper Santa Clara Valley Water Agency	Q AF CFS	0 0	94.4 .15538	41500.0 57.32306	1279.2 1.93456	0 4.36613	0	42779.2 63.62375
Kern County Water Agency (Municipal and Industrial)	Q AF CFS	0 0	265.4 .43683	119600.0 218.06521	591.4 .97341	0 0	0	120191.4 219.03962
Kern County Water Agency (Agriculture)	Q AF CFS	3700.0 11.03918	1103.3 1.81596	496100.0 1480.14499	3611.8 5.94478	0 0	0	499711.8 1486.08977
Totals	Q AF CFS	3700.0 11.03918	7100.0 11.68611	3113200.0 5293.78471	102700.0 158.79510	0 215.25341	0	3215900.0 5667.83322



PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS		CAPACITY PROVIDED IN REACH		PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS		MEASURE OF USE	WATER SUPPLY CONTRACTOR
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		
(9)	(10)	(11)	(12)	(13)	(14)	(15)	
LOST HILLS TO 7TH STANDARD ROAD - REACH 11B							
.62625770	.57558975	188.00000	2095520.9	.62625770	.58274744	Q AF	The Metropolitan Water District of Southern California
.52492181			3364.34184	.53923718		C CFS	
.03215806	.03104405	0	107604.1	.03215806	.03059311	Q AF	San Bernardino Valley Municipal Water District
.02993003		0	181.10892	.02902816		C CFS	
.00902687	.00853455	0	30204.8	.00902687	.00841338	Q AF	San Gabriel Valley Municipal Water District
.00804224		0	48.66419	.00779990		C CFS	
.00542240	.00523416	0	18143.9	.00542240	.00515814	Q AF	San Geronio Pass Water Agency
.00504592		0	30.53322	.00489387		C CFS	
.00181785	.00175542	0	6082.7	.00181785	.00172991	Q AF	Crestline-Lake Arrowhead Water Agency
.00169299		0	10.24443	.00164198		C CFS	
.01580610	.01442004	0	52888.8	.01580610	.01422367	Q AF	Mojave Water Agency
.01303398		0	78.86962	.01264123		C CFS	
.01185458	.01144773	0	39666.6	.01185458	.01128139	Q AF	Desert Water Agency
.01104089		0	66.80924	.01070819		C CFS	
.00718744	.00694140	0	24049.9	.00718744	.00684053	Q AF	Coachella Valley County Water District
.00669536		0	40.51415	.00649361		C CFS	
.04222516	.03848657	0	141289.6	.04222516	.03796305	Q AF	Antelope Valley-East Kern Water Agency
.03474799		0	210.26272	.03370094		C CFS	
.00070635	.00064401	0	2363.5	.00070635	.00063524	Q AF	Littlerock Creek Irrigation District
.00058167		0	3.51972	.00056414		C CFS	
.00530211	.00483371	0	17741.4	.00530211	.00476795	Q AF	Palmdale Irrigation District
.00436532		0	26.41486	.00423378		C CFS	
.00616858	.00562119	0	20640.7	.00616858	.00554474	Q AF	Ventura County Flood Control District
.00507379		0	30.70190	.00492091		C CFS	
.01279971	.01166387	0	42829.1	.01279971	.01150525	Q AF	Upper Santa Clara Valley Water Agency
.01052802		0	63.70588	.01021079		C CFS	
.03596178	.03609912	0	120331.7	.03596178	.03555316	Q AF	Kern County Water Agency (Municipal and Industrial)
.03623645		0	219.26954	.03514455		C CFS	
.18730531	.24768443	0	626742.3	.18730531	.24304304	Q AF	Kern County Water Agency (Agriculture)
.30808354		0	1864.11597	.29878077		C CFS	
1.00000000	1.00000000	188.00000	3346100.0	1.00000000	1.00000000	Q AF	Totals
1.00000000			6239.07620	1.00000000		C CFS	
7TH STANDARD ROAD THRU ELK HILLS ROAD - REACH 12D							
.65085311	.60527969	188.00000	2093078.5	.65085311	.61234745	Q AF	The Metropolitan Water District of Southern California
.55970627			3360.32182	.57384179		C CFS	
.03342103	.03266922	0	107478.7	.03342103	.03215687	Q AF	San Bernardino Valley Municipal Water District
.03191740		0	180.90252	.03089270		C CFS	
.00938139	.00897860	0	30169.6	.00938139	.00884093	Q AF	San Gabriel Valley Municipal Water District
.00857581		0	48.60625	.00830048		C CFS	
.00563537	.00550817	0	18122.8	.00563537	.00542180	Q AF	San Geronio Pass Water Agency
.00538098		0	30.49849	.00520822		C CFS	
.00188924	.00184732	0	6075.6	.00188924	.00181834	Q AF	Crestline-Lake Arrowhead Water Agency
.00180541		0	10.23274	.00174744		C CFS	
.01642688	.01516215	0	52827.2	.01642688	.01493906	Q AF	Mojave Water Agency
.01389741		0	78.76823	.01345124		C CFS	
.01232016	.01204709	0	39620.4	.01232016	.01185809	Q AF	Desert Water Agency
.01177402		0	66.73320	.01139602		C CFS	
.00746973	.00730484	0	24021.9	.00746973	.00719023	Q AF	Coachella Valley County Water District
.00713995		0	40.46806	.00691073		C CFS	
.04388349	.04046660	0	141124.9	.04388349	.03987187	Q AF	Antelope Valley-East Kern Water Agency
.03704972		0	209.99164	.03586025		C CFS	
.00073407	.00067713	0	2360.7	.00073407	.00066717	Q AF	Littlerock Creek Irrigation District
.00062019		0	3.51511	.00060028		C CFS	
.00551034	.00508241	0	17720.7	.00551034	.00500769	Q AF	Palmdale Irrigation District
.00465448		0	25.38079	.00450505		C CFS	
.00641083	.00591035	0	20616.6	.00641083	.00582351	Q AF	Ventura County Flood Control District
.00540987		0	30.66223	.00523619		C CFS	
.01330240	.01226391	0	42779.2	.01330240	.01208371	Q AF	Upper Santa Clara Valley Water Agency
.01122541		0	63.62375	.01086502		C CFS	
.03737411	.03801001	0	120191.4	.03737411	.03738966	Q AF	Kern County Water Agency (Municipal and Industrial)
.03864592		0	219.03862	.03740520		C CFS	
.15538785	.20879251	0	499711.8	.15538785	.20458362	Q AF	Kern County Water Agency (Agriculture)
.26219716		0	1486.08977	.25377939		C CFS	
1.00000000	1.00000000	188.00000	3215900.0	1.00000000	1.00000000	Q AF	Totals
1.00000000			5855.83322	1.00000000		C CFS	

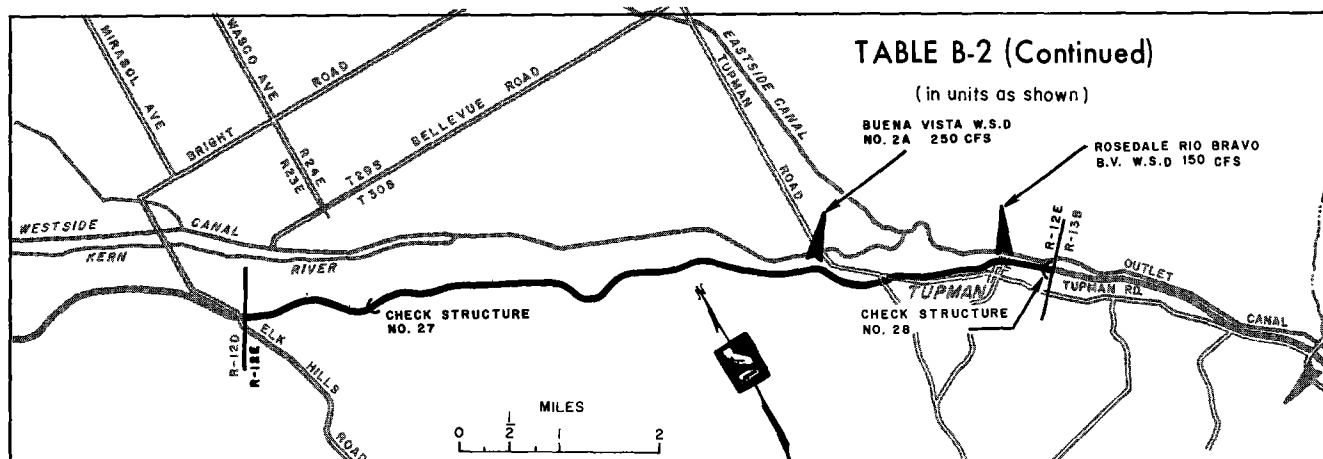
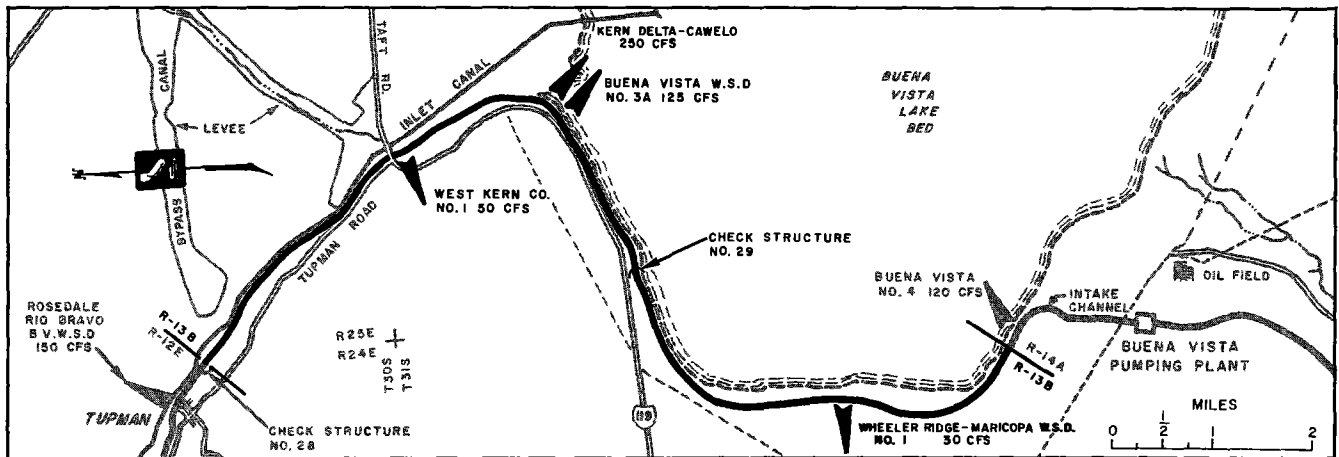


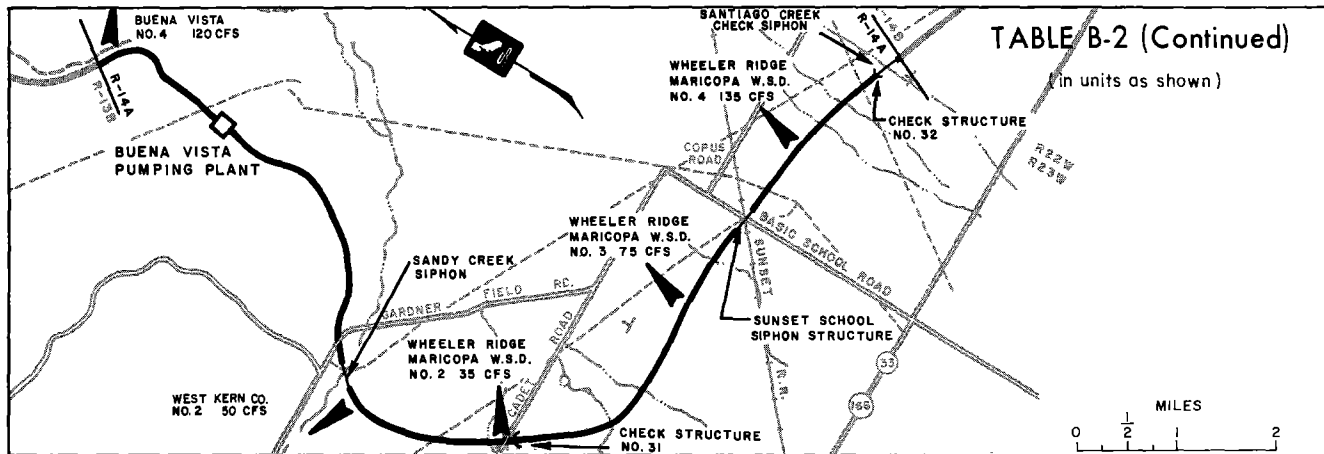
TABLE B-2 (Continued)

(in units as shown)

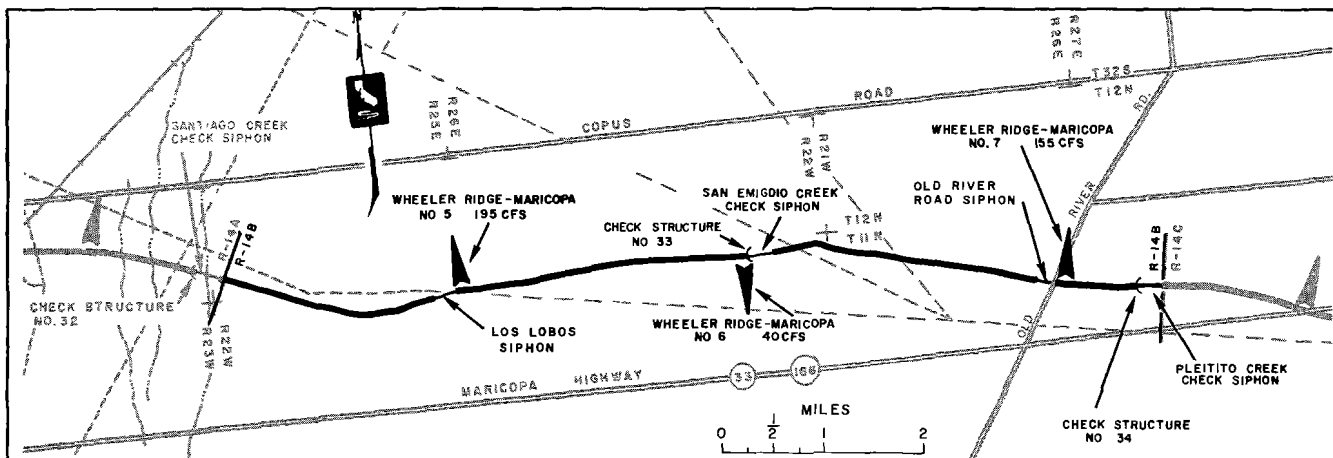
WATER SUPPLY CONTRACTOR	MEASURE OF USE	MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH	ESTIMATED OPERATIONAL LOSSES WITHIN REACH	CAPACITY PROVIDED IN REACH			
				FOR DELIVERY OF ENTITLEMENTS	FOR COMPENSATION OF OPERATIONAL LOSSES	SCHEDULED OUTAGES	DOWNSTREAM REGULATION
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
REACH 12E - ELK HILLS ROAD THRU TUPMAN ROAD							
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	2150.3 3.53925	2011500.0 2863.14267	76957.4 116.97850	0 184.59464	0 0
San Bernardino Valley Municipal Water District	Q AF C CFS	0 0	110.4 .18171	102600.0 172.33413	4641.4 7.43976	0 .73805	0 0
San Gabriel Valley Municipal Water District	Q AF C CFS	0 0	31.0 .05102	28800.0 45.15128	1303.0 2.08861	0 1.25674	0 0
San Geronimo Pass Water Agency	Q AF C CFS	0 0	18.6 .03061	17300.0 29.05110	782.8 1.25476	0 .12679	0 0
Crestline-Lake Arrowhead Water Agency	Q AF C CFS	0 0	6.2 .01021	5800.0 9.75185	262.2 .42030	0 .03854	0 0
Mojave Water Agency	Q AF C CFS	0 0	54.3 .08937	50800.0 70.16895	1910.6 3.14470	0 5.26267	0 0
Desert Water Agency	Q AF C CFS	0 0	40.7 .06699	38100.0 63.98093	1432.9 2.35848	0 .24977	0 0
Coachella Valley County Water District	Q AF C CFS	0 0	24.7 .04065	23100.0 36.80295	868.9 1.43013	0 .14775	0 0
Antelope Valley-East Kern Water Agency	Q AF C CFS	0 0	145.0 .23866	138400.0 191.16896	2413.3 3.97213	0 14.33768	0 0
Littlerock Creek Irrigation District	Q AF C CFS	0 0	2.4 .00395	2300.0 3.17694	55.5 .09134	0 .23427	0 0
Palmdale Irrigation District	Q AF C CFS	0 0	18.2 .02996	17300.0 23.89612	381.6 .62810	0 1.79221	0 0
Ventura County Flood Control District	Q AF C CFS	0 0	21.2 .03489	20000.0 27.62557	571.1 .85760	0 2.10417	0 0
Upper Santa Clara Valley Water Agency	Q AF C CFS	0 0	43.9 .07226	41500.0 57.32306	1184.8 1.77918	0 4.36613	0 0
Kern County Water Agency (Municipal and Industrial)	Q AF C CFS	77400.0 141.12247	123.5 .20327	119600.0 218.06521	326.0 .53658	0 0	0 0
Kern County Water Agency (Agriculture)	Q AF C CFS	130800.0 390.24988	509.6 .83877	492400.0 1469.10581	2508.5 4.12882	0 0	0 0
Totals	Q AF C CFS	208200.0 531.37235	3300.0 5.43157	3109500.0 5282.74553	95600.0 147.10899	0 215.25341	0 0
REACH 13B - TUPMAN ROAD TO BUENA VISTA PUMPING PLANT							
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	4251.2 6.99718	2011500.0 2863.14267	74907.1 113.43925	0 184.59464	0 0
San Bernardino Valley Municipal Water District	Q AF C CFS	0 0	218.2 .35931	102600.0 172.33413	4531.0 7.25805	0 .73805	0 0
San Gabriel Valley Municipal Water District	Q AF C CFS	0 0	61.3 .10090	28800.0 45.15128	1272.0 2.03759	0 1.25674	0 0
San Geronimo Pass Water Agency	Q AF C CFS	0 0	16.8 .06057	17300.0 29.05110	764.2 1.22415	0 .12679	0 0
Crestline-Lake Arrowhead Water Agency	Q AF C CFS	0 0	12.3 .02025	5800.0 9.75185	256.0 .41009	0 .03854	0 0
Mojave Water Agency	Q AF C CFS	0 0	107.3 .17661	50800.0 70.16895	1856.3 3.05533	0 5.26267	0 0
Desert Water Agency	Q AF C CFS	0 0	80.5 .13250	38100.0 63.98093	1392.2 2.29149	0 .24977	0 0
Coachella Valley County Water District	Q AF C CFS	0 0	48.8 .08032	23100.0 36.80295	844.2 1.38948	0 .14775	0 0
Antelope Valley-East Kern Water Agency	Q AF C CFS	0 0	286.6 .47172	138400.0 191.16896	2268.3 3.73347	0 14.33768	0 0
Littlerock Creek Irrigation District	Q AF C CFS	0 0	4.8 .00790	2300.0 3.17694	53.1 .08739	0 .23427	0 0
Palmdale Irrigation District	Q AF C CFS	0 0	36.0 .05925	17300.0 23.89612	363.4 .59814	0 1.79221	0 0
Ventura County Flood Control District	Q AF C CFS	0 0	41.9 .06896	20000.0 27.62557	549.9 .82271	0 2.10417	0 0
Upper Santa Clara Valley Water Agency	Q AF C CFS	0 0	86.9 .14303	41500.0 57.32306	1140.9 1.70692	0 4.36613	0 0
Kern County Water Agency (Municipal and Industrial)	Q AF C CFS	25200.0 45.94685	86.4 .14221	42200.0 76.94274	202.5 .33341	0 0	0 0
Kern County Water Agency (Agriculture)	Q AF C CFS	86800.0 258.97316	740.9 1.21947	361600.0 1078.85593	1998.9 3.29005	0 0	0 0
Totals	Q AF C CFS	112000.0 304.92001	6100.0 10.04018	2901300.0 4751.37318	92300.0 141.67747	0 215.25341	0 0



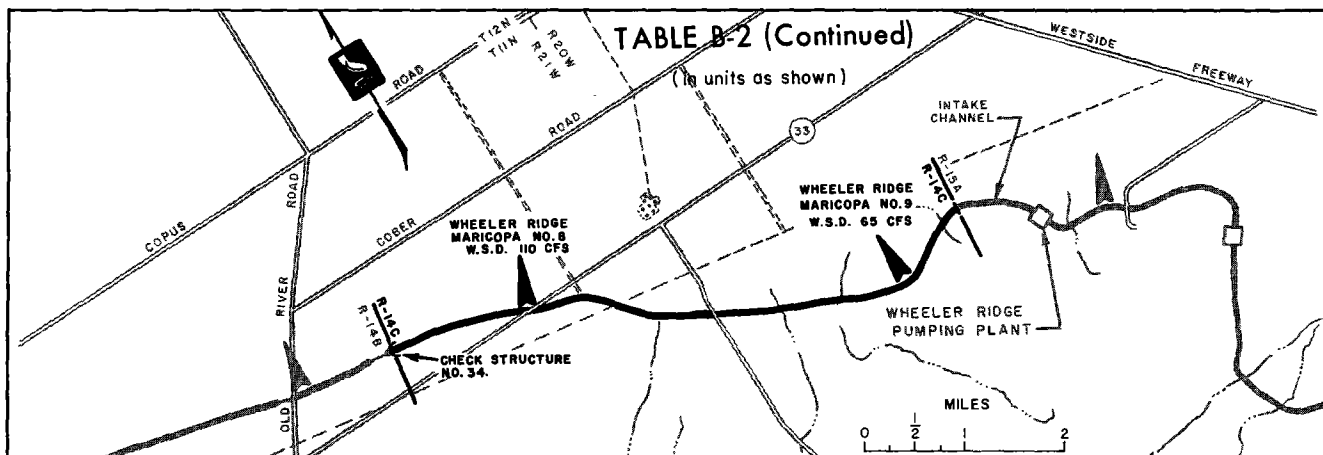
PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS		CAPACITY PROVIDED IN REACH		PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS		MEASURE OF USE	WATER SUPPLY CONTRACTOR
RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS	FOR REQUESTED EXCESS PEAKING	TOTAL FOR WATER SUPPLY CONTRACTORS	RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS		
(9)	(10)	(11)	(12)	(13)	(14)	(15)	
ELK HILLS ROAD THRU TUPMAN ROAD - REACH 12E							
.65160444	.60610827	188.00000	2088457.4	.65160444	.61318897	Q AF	The Metropolitan Water District of Southern California
.56061210			3352.71581	.57477349		C CFS	
.03345961	.03271816	0	107241.4	.03345961	.03220286	Q AF	San Bernardino Valley Municipal Water District
.03197670		0	180.51194	.03094610		C CFS	
.00932222	.00899157	0	30103.0	.00932222	.00885312	Q AF	San Gabriel Valley Municipal Water District
.00859091		0	48.49663	.00831403		C CFS	
.00564188	.00551643	0	18082.8	.00564188	.00542956	Q AF	San Geronio Pass Water Agency
.00539098		0	30.43265	.00521723		C CFS	
.00189142	.00185010	0	6062.2	.00189142	.00182095	Q AF	Crestline-Lake Arrowhead Water Agency
.00180877		0	10.21069	.00175047		C CFS	
.01644585	.01518261	0	52710.6	.01644585	.01495830	Q AF	Mojave Water Agency
.01391937		0	78.57632	.01347075		C CFS	
.01233439	.01206514	0	39532.9	.01233438	.01187505	Q AF	Desert Water Agency
.01179591		0	66.58918	.01141573		C CFS	
.00747336	.00731580	0	23968.9	.00747836	.00720053	Q AF	Coachella Valley County Water District
.00715324		0	40.38083	.00692269		C CFS	
.04393414	.04052108	0	140813.3	.04393414	.03992309	Q AF	Antelope Valley-East Kern Water Agency
.03710802		0	209.47877	.03591203		C CFS	
.00073492	.00067804	0	2355.5	.00073492	.00066803	Q AF	Littlerock Creek Irrigation District
.00062117		0	3.50655	.00060115		C CFS	
.00551671	.00508926	0	17681.6	.00551671	.00501413	Q AF	Palmdale Irrigation District
.00466181		0	26.31643	.00451156		C CFS	
.00641824	.00591831	0	20571.1	.00641824	.00583099	Q AF	Ventura County Flood Control District
.00541838		0	30.58734	.00524375		C CFS	
.01331778	.01228042	0	42684.8	.01331778	.01209924	Q AF	Upper Santa Clara Valley Water Agency
.01124307		0	63.46837	.01088071		C CFS	
.03741724	.03807068	0	119926.0	.03741724	.03744664	Q AF	Kern County Water Agency (Municipal and Industrial)
.03872411		0	218.60179	.03747604		C CFS	
.15441281	.20769413	0	494908.5	.15441281	.20348854	Q AF	Kern County Water Agency (Agriculture)
.26097546		0	1473.23463	.25296427		C CFS	
1.00000000	1.00000000	188.00000	3205100.0	1.00000000	1.00000000	Q AF	Totals
1.00000000			5833.10773	1.00000000		C CFS	
TUPMAN ROAD TO BUENA VISTA PUMPING PLANT - REACH 13B							
.69692247	.65787670	188.00000	2086307.1	.69692247	.66464178	Q AF	The Metropolitan Water District of Southern California
.61583094			3349.17656	.63236109		C CFS	
.03578668	.03554404	0	107131.0	.03578668	.03491750	Q AF	San Bernardino Valley Municipal Water District
.03530139		0	180.33023	.03404831		C CFS	
.01004543	.00976456	0	30072.0	.01004543	.00959625	Q AF	San Gabriel Valley Municipal Water District
.00948370		0	48.44561	.00914706		C CFS	
.00603427	.00599288	0	18064.2	.00603427	.00588725	Q AF	San Geronio Pass Water Agency
.00595149		0	30.40204	.00574024		C CFS	
.00202298	.00200991	0	6056.0	.00202298	.00197447	Q AF	Crestline-Lake Arrowhead Water Agency
.00199684		0	10.20048	.00192596		C CFS	
.01758963	.01647710	0	52656.3	.01758963	.01620441	Q AF	Mojave Water Agency
.01536458		0	78.48695	.01481919		C CFS	
.01319221	.01310729	0	39492.2	.01319221	.01287616	Q AF	Desert Water Agency
.01302236		0	66.52219	.01256011		C CFS	
.00799846	.00794772	0	23944.2	.00799846	.00780756	Q AF	Coachella Valley County Water District
.00789698		0	40.34018	.00761667		C CFS	
.04698968	.04397523	0	140668.3	.04698968	.04324825	Q AF	Antelope Valley-East Kern Water Agency
.04096078		0	209.24011	.03950682		C CFS	
.00078604	.00073586	0	2353.1	.00078604	.00072369	Q AF	Littlerock Creek Irrigation District
.00063567		0	3.50260	.00066133		C CFS	
.00590039	.00552311	0	17663.4	.00590039	.00543178	Q AF	Palmdale Irrigation District
.00514583		0	26.28647	.00496317		C CFS	
.00686461	.00642278	0	20549.9	.00686461	.00631662	Q AF	Ventura County Flood Control District
.00598094		0	30.55245	.00576864		C CFS	
.01424402	.01332721	0	42640.9	.01424402	.01310695	Q AF	Upper Santa Clara Valley Water Agency
.01241040		0	63.39611	.01196988		C CFS	
.01416438	.01464596	0	42402.5	.01416438	.01437747	Q AF	Kern County Water Agency (Municipal and Industrial)
.01512754		0	77.27605	.01459056		C CFS	
.12145875	.16664965	0	363598.9	.12145875	.16288986	Q AF	Kern County Water Agency (Agriculture)
.21184056		0	1082.14598	.20432097		C CFS	
1.00000000	1.00000000	188.00000	2993600.0	1.00000000	1.00000000	Q AF	Totals
1.00000000			5296.30401	1.00000000		C CFS	



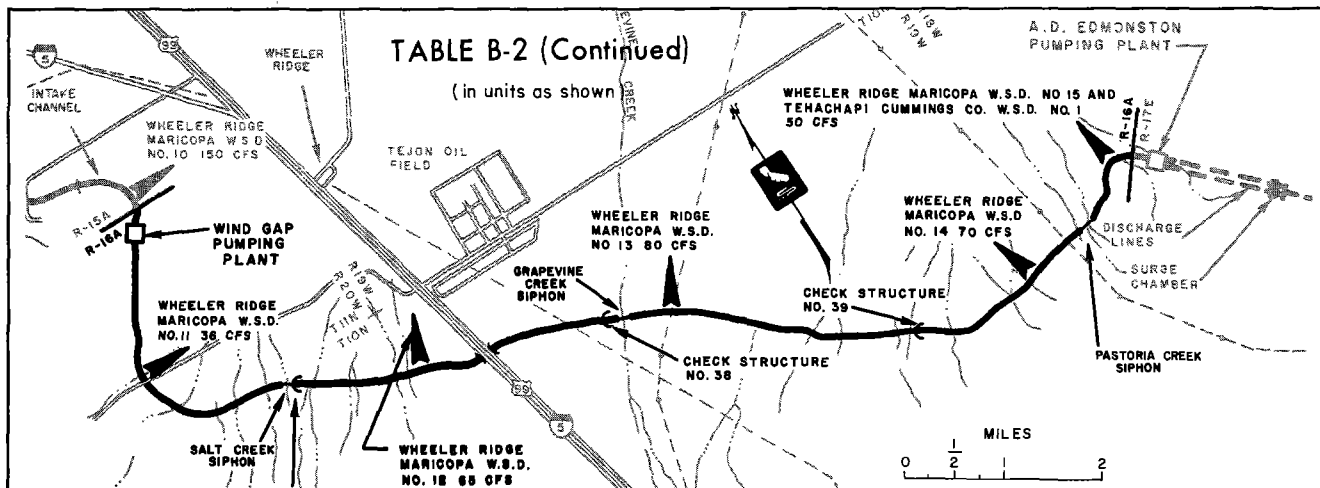
WATER SUPPLY CONTRACTOR	MEASURE OF USE	MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH	ESTIMATED OPERATIONAL LOSSES WITHIN REACH	CAPACITY PROVIDED IN REACH				SUBTOTAL
				FOR DELIVERY OF ENTITLEMENTS	FOR COMPENSATION OF OPERATIONAL LOSSES	SCHEDULED OUTAGES	DOWNSIDE REGULATION	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
REACH 14A - BUENA VISTA PUMPING PLANT THRU SANTIAGO CREEK								
The Metropolitan Water District of Southern California	Q AF CFS	0 0	3910.0 6.43559	2011500.0 2863.14267	70555.9 106.44207	0 184.59464	0	2082055.9 3154.17938
San Bernardino Valley Municipal Water District	Q AF CFS	0 0	200.8 0.33050	102600.0 172.33413	4312.7 6.89874	0 0.73805	0	106912.7 179.97092
San Gabriel Valley Municipal Water District	Q AF CFS	0 0	56.4 0.09283	28800.0 45.15128	1210.7 1.93669	0 1.25674	0	30010.7 48.34471
San Geronimo Pass Water Agency	Q AF CFS	0 0	33.9 0.05580	17300.0 29.05110	727.4 1.16358	0 0.12679	0	18027.4 30.34147
Crestline-Lake Arrowhead Water Agency	Q AF CFS	0 0	11.3 0.01860	5800.0 9.75185	243.7 0.38984	0 0.03854	0	6043.7 10.18023
Mojave Water Agency	Q AF CFS	0 0	98.7 0.16245	50800.0 70.16895	1749.0 2.87872	0 5.26267	0	52549.0 78.31034
Desert Water Agency	Q AF CFS	0 0	74.0 0.12180	38100.0 63.98093	1311.7 2.15899	0 0.24977	0	39411.7 66.38969
Coachella Valley County Water District	Q AF CFS	0 0	44.9 0.07390	23100.0 38.80295	795.4 1.30916	0 0.14775	0	23895.4 40.25986
Antelope Valley-East Kern Water Agency	Q AF CFS	0 0	263.6 0.43387	138400.0 191.16896	1981.7 3.26175	0 14.33768	0	140381.7 208.76839
Littlerock Creek Irrigation District	Q AF CFS	0 0	4.4 0.00724	2300.0 3.17694	48.3 0.07949	0 0.23827	0	2348.3 3.49470
Palmdale Irrigation District	Q AF CFS	0 0	33.1 0.05448	17300.0 23.89612	327.4 0.53889	0 1.79221	0	17627.4 26.22722
Ventura County Flood Control District	Q AF CFS	0 0	38.5 0.06337	20000.0 27.62557	508.0 0.75375	0 2.10417	0	20508.0 30.48349
Upper Santa Clara Valley Water Agency	Q AF CFS	0 0	79.9 0.13151	41500.0 57.32306	1054.0 1.56389	0 4.36613	0	42554.0 63.25308
Kern County Water Agency (Municipal and Industrial)	Q AF CFS	0 0	32.1 0.05284	17000.0 30.99589	116.1 0.19110	0 0	0	17116.1 31.18699
Kern County Water Agency (Agriculture)	Q AF CFS	37500.0 111.88357	518.4 0.85325	274800.0 819.88277	1258.0 2.07058	0 0	0	276058.0 821.95335
Totals	Q AF CFS	37500.0 111.88357	5400.0 8.88803	2789300.0 4446.45317	86200.0 131.63724	0 215.25341	0	2875500.0 4793.34382
REACH 14B - SANTIAGO CREEK THRU OLD RIVER ROAD								
The Metropolitan Water District of Southern California	Q AF CFS	0 0	2787.9 4.58869	2011500.0 2863.14267	66645.9 100.00648	0 184.59464	0	2078145.9 3147.74379
San Bernardino Valley Municipal Water District	Q AF CFS	0 0	143.1 0.23553	102600.0 172.33413	4111.9 6.56824	0 0.73805	0	106711.9 179.64042
San Gabriel Valley Municipal Water District	Q AF CFS	0 0	40.2 0.06617	28800.0 45.15128	1154.3 1.84386	0 1.25674	0	29954.3 48.25188
San Geronimo Pass Water Agency	Q AF CFS	0 0	24.1 0.03967	17300.0 29.05110	693.5 1.10778	0 0.12679	0	17993.5 30.28567
Crestline-Lake Arrowhead Water Agency	Q AF CFS	0 0	8.1 0.01333	5800.0 9.75185	232.4 0.37124	0 0.03854	0	6032.4 10.16163
Mojave Water Agency	Q AF CFS	0 0	70.4 0.11587	50800.0 70.16895	1650.3 2.71627	0 5.26267	0	52450.3 78.14789
Desert Water Agency	Q AF CFS	0 0	52.8 0.08691	38100.0 63.98093	1237.7 2.03719	0 0.24977	0	39337.7 66.26789
Coachella Valley County Water District	Q AF CFS	0 0	32.0 0.05267	23100.0 38.80295	750.5 1.23526	0 0.14775	0	23850.5 40.18596
Antelope Valley-East Kern Water Agency	Q AF CFS	0 0	188.0 0.30944	138400.0 191.16896	1718.1 2.82788	0 14.33768	0	140118.1 208.33452
Littlerock Creek Irrigation District	Q AF CFS	0 0	3.1 0.00510	2300.0 3.17694	43.9 0.07225	0 0.23827	0	2343.9 3.48746
Palmdale Irrigation District	Q AF CFS	0 0	23.6 0.03884	17300.0 23.89612	294.3 0.48441	0 1.79221	0	17594.3 26.17274
Ventura County Flood Control District	Q AF CFS	0 0	27.5 0.04526	20000.0 27.62557	469.5 0.69038	0 2.10417	0	20469.5 30.42012
Upper Santa Clara Valley Water Agency	Q AF CFS	0 0	57.0 0.09382	41500.0 57.32306	974.1 1.43238	0 4.36613	0	42474.1 63.12157
Kern County Water Agency (Municipal and Industrial)	Q AF CFS	0 0	22.9 0.03769	17000.0 30.99589	84.0 0.13826	0 0	0	17084.0 31.13415
Kern County Water Agency (Agriculture)	Q AF CFS	60700.0 181.10220	319.3 0.52555	237300.0 707.99920	739.6 1.21733	0 0	0	238039.6 709.21653
Totals	Q AF CFS	60700.0 181.10220	3800.0 6.25454	2751800.0 4334.56960	80800.0 122.74921	0 215.25341	0	2832600.0 4672.57222



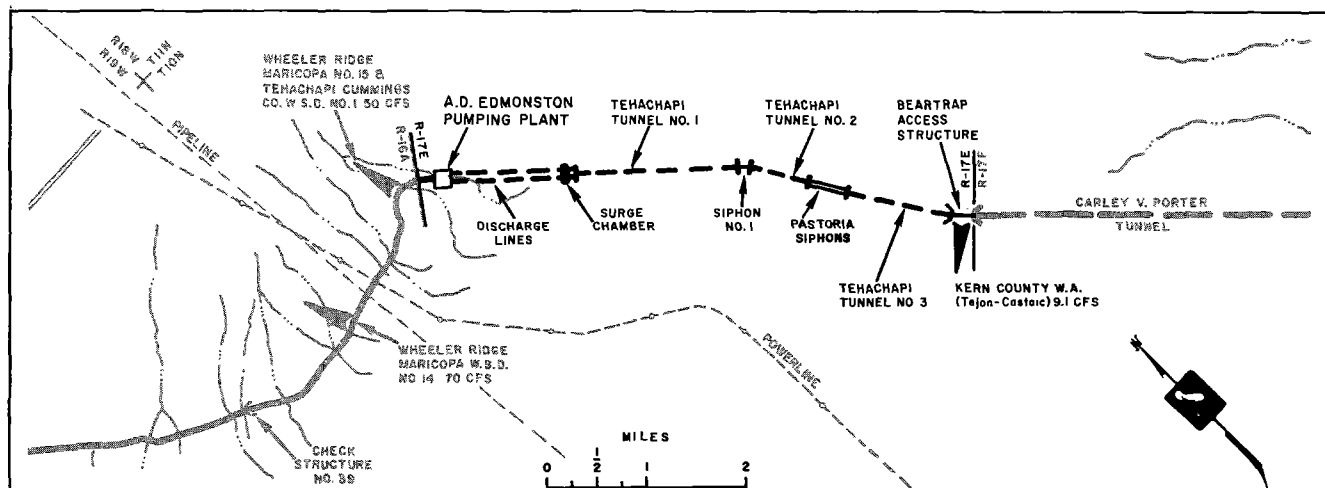
PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS		CAPACITY PROVIDED IN REACH		PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS		MEASURE OF USE	WATER SUPPLY CONTRACTOR
RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS	FOR REQUESTED EXCESS PEAKING	TOTAL FOR WATER SUPPLY CONTRACTORS	RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS		
(9)	(10)	(11)	(12)	(13)	(14)	(15)	
BUENA VISTA PUMPING PLANT THRU SANTIAGO CREEK - REACH 14A							
.72406743	.69105032	188.00000	2082055.9	.72406743	.69750337	Q AF	The Metropolitan Water District of Southern California
.65803320			3342.17938	.67093931		C CFS	
.03718056	.03736328	0	106912.7	.03718056	.03665478	Q AF	San Bernardino Valley Municipal Water District
.03754601		0	179.97092	.03612899		C CFS	
.01043669	.01026125	0	30010.7	.01043669	.01007092	Q AF	San Gabriel Valley Municipal Water District
.01008580		0	48.34471	.00970515		C CFS	
.00626931	.00629961	0	18027.4	.00626931	.00618017	Q AF	San Geronimo Pass Water Agency
.00632992		0	30.34147	.00609102		C CFS	
.00210179	.00211281	0	6043.7	.00210179	.00207273	Q AF	Crestline-Lake Arrowhead Water Agency
.00212383		0	10.18023	.00204367		C CFS	
.01827473	.01730602	0	52549.0	.01827473	.01699773	Q AF	Mojave Water Agency
.01633731		0	78.31034	.01572073		C CFS	
.01370603	.01377821	0	39411.7	.01370603	.01351685	Q AF	Desert Water Agency
.01385039		0	66.38969	.01332767		C CFS	
.00831000	.00835456	0	23895.4	.00831000	.00819606	Q AF	Coachella Valley County Water District
.00839912		0	40.25986	.00808213		C CFS	
.04881993	.04618687	0	140381.7	.04881993	.04536499	Q AF	Antelope Valley-East Kern Water Agency
.04355381		0	208.76839	.04191005		C CFS	
.00081666	.00077287	0	2348.3	.00081666	.00075911	Q AF	Littlerock Creek Irrigation District
.00072907		0	3.49470	.00070156		C CFS	
.00613020	.00580090	0	17627.4	.00613020	.00569765	Q AF	Palmdale Irrigation District
.00547159		0	26.22722	.00526509		C CFS	
.00713198	.00674576	0	20508.0	.00713198	.00662575	Q AF	Ventura County Flood Control District
.00635955		0	30.48349	.00611953		C CFS	
.01479882	.01399742	0	42554.0	.01479882	.01374841	Q AF	Upper Santa Clara Valley Water Agency
.01319602		0	63.25308	.01269799		C CFS	
.00595239	.00622935	0	17116.1	.00595239	.00610657	Q AF	Kern County Water Agency (Municipal and Industrial)
.00650631		0	31.18699	.00626076		C CFS	
.09600348	.13374077	0	276058.0	.09600348	.13050491	Q AF	Kern County Water Agency (Agriculture)
.17147807		0	821.95335	.16500635		C CFS	
1.00000000	1.00000000	188.00000	2875500.0	1.00000000	1.00000000	Q AF	Totals
1.00000000			4981.34382	1.00000000		C CFS	
SANTIAGO CREEK THRU OLD RIVER ROAD - REACH 14B							
.73365315	.70365858	188.00000	2078145.9	.73365315	.70996969	Q AF	The Metropolitan Water District of Southern California
.67366602			3335.74379	.68628623		C CFS	
.03767278	.03805925	0	106711.9	.03767278	.03731574	Q AF	San Bernardino Valley Municipal Water District
.03844572		0	179.64042	.03695870		C CFS	
.01057494	.01045073	0	29954.3	.01057484	.01025102	Q AF	San Gabriel Valley Municipal Water District
.01032662		0	48.25188	.00992720		C CFS	
.00635229	.00641694	0	17993.5	.00635229	.00629159	Q AF	San Geronimo Pass Water Agency
.00648158		0	30.28567	.00623089		C CFS	
.00212963	.00215218	0	6032.4	.00212963	.00211013	Q AF	Crestline-Lake Arrowhead Water Agency
.00217474		0	10.16163	.00209062		C CFS	
.01851666	.01762074	0	52450.3	.01851666	.01729729	Q AF	Mojave Water Agency
.01672481		0	78.14789	.01607792		C CFS	
.01388749	.01403490	0	39337.7	.01388749	.01376063	Q AF	Desert Water Agency
.01418232		0	66.26789	.01363376		C CFS	
.00842000	.00851020	0	23850.5	.00842000	.00834387	Q AF	Coachella Valley County Water District
.00860039		0	40.18596	.00826774		C CFS	
.04946625	.04702647	0	140118.1	.04946625	.04616419	Q AF	Antelope Valley-East Kern Water Agency
.04458669		0	208.33452	.04286214		C CFS	
.00082747	.00078692	0	2343.9	.00082747	.00077249	Q AF	Littlerock Creek Irrigation District
.00074637		0	3.48746	.00071750		C CFS	
.00621136	.00590636	0	17594.3	.00621136	.00579803	Q AF	Palmdale Irrigation District
.00560136		0	26.17274	.00538470		C CFS	
.00722640	.00686638	0	20469.5	.00722640	.00674247	Q AF	Ventura County Flood Control District
.00651036		0	30.42012	.00625855		C CFS	
.01499474	.01425185	0	42474.1	.01499474	.01399059	Q AF	Upper Santa Clara Valley Water Agency
.01350896		0	63.12157	.01298545		C CFS	
.00603121	.00634719	0	17084.0	.00603121	.00621833	Q AF	Kern County Water Agency (Municipal and Industrial)
.00666317		0	31.13415	.00640545		C CFS	
.08403573	.11790931	0	238039.6	.08403573	.11497394	Q AF	Kern County Water Agency (Agriculture)
.15178289		0	709.21653	.14591215		C CFS	
1.00000000	1.00000000	188.00000	2832600.0	1.00000000	1.00000000	Q AF	Totals
1.00000000			4860.57222	1.00000000		C CFS	



WATER SUPPLY CONTRACTOR	MEASURE OF USE	MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH	ESTIMATED OPERATIONAL LOSSES WITHIN REACH	CAPACITY PROVIDED IN REACH				SUBTOTAL
				FOR DELIVERY OF ENTITLEMENTS	FOR COMPENSATION OF OPERATIONAL LOSSES	SCHEDULED OUTAGES	DOWNSTREAM REGULATION	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
REACH 14C - OLD RIVER ROAD TO WHEELER RIDGE PUMPING PLANT								
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	2699.1 4.44253	2011500.0 2863.14267	63858.0 95.41779	0 184.59464	0 0	2075358.0 3143.15510
San Bernardino Valley Municipal Water District	Q AF C CFS	0 0	138.6 .22813	102600.0 172.33413	3968.8 6.33271	0 .73805	0 0	106568.8 179.40489
San Gabriel Valley Municipal Water District	Q AF C CFS	0 0	38.9 .06403	28800.0 45.15128	1114.1 1.77769	0 1.25674	0 0	29914.1 48.18571
San Geronimo Pass Water Agency	Q AF C CFS	0 0	23.4 .03851	17300.0 29.05110	669.4 1.06811	0 .12679	0 0	17969.4 30.24600
Crestline-Lake Arrowhead Water Agency	Q AF C CFS	0 0	7.8 .01284	5800.0 9.75185	224.3 .35791	0 .03854	0 0	6024.3 10.14830
Mojave Water Agency	Q AF C CFS	0 0	68.1 .11209	50800.0 70.16895	1579.9 2.60040	0 5.26267	0 0	52379.9 78.03202
Desert Water Agency	Q AF C CFS	0 0	51.1 .08411	38100.0 63.98093	1184.9 1.95029	0 .24977	0 0	39284.9 66.18098
Coachella Valley County Water District	Q AF C CFS	0 0	31.0 .05102	23100.0 38.80295	718.5 1.18259	0 .14775	0 0	23818.5 40.13329
Antelope Valley-East Kern Water Agency	Q AF C CFS	0 0	182.0 .29956	138400.0 191.16896	1530.1 2.51844	0 14.33768	0 0	139930.1 208.02508
Littlerock Creek Irrigation District	Q AF C CFS	0 0	3.0 .00494	2300.0 3.17694	40.8 .06715	0 .23827	0 0	2340.8 3.48236
Palmdale Irrigation District	Q AF C CFS	0 0	22.8 .03753	17300.0 23.89612	270.7 .44557	0 1.79221	0 0	17570.7 26.13390
Ventura County Flood Control District	Q AF C CFS	0 0	26.6 .04378	20000.0 27.62557	442.0 .64512	0 2.10417	0 0	20442.0 30.37486
Upper Santa Clara Valley Water Agency	Q AF C CFS	0 0	55.2 .09085	41500.0 57.32306	917.1 1.33856	0 4.36613	0 0	42417.1 63.02775
Kern County Water Agency (Municipal and Industrial)	Q AF C CFS	0 0	22.2 .03654	17000.0 30.99589	61.1 .10057	0 0	0 0	17061.1 31.09646
Kern County Water Agency (Agriculture)	Q AF C CFS	32500.0 96.96576	230.2 .37889	176600.0 526.89700	420.3 .69178	0 0	0 0	177020.3 527.58878
Totals	Q AF C CFS	32500.0 96.96576	3600.0 5.92535	2691100.0 4153.46740	77000.0 116.49467	215.25341 0	0 0	2768100.0 4485.21548
REACH 15A - WHEELER RIDGE PUMPING PLANT TO WIND GAP PUMPING PLANT								
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	606.9 .99892	2011500.0 2863.14267	61158.9 90.97526	0 184.59464	0 0	2072658.9 3138.71257
San Bernardino Valley Municipal Water District	Q AF C CFS	0 0	31.2 .05135	102600.0 172.33413	3830.2 6.10458	0 .73805	0 0	106430.2 179.17676
San Gabriel Valley Municipal Water District	Q AF C CFS	0 0	8.7 .01432	28800.0 45.15128	1075.2 1.71366	0 1.25674	0 0	29875.2 48.12168
San Geronimo Pass Water Agency	Q AF C CFS	0 0	5.3 .00872	17300.0 29.05110	646.0 1.02960	0 .12679	0 0	17946.0 30.20749
Crestline-Lake Arrowhead Water Agency	Q AF C CFS	0 0	1.8 .00296	5800.0 9.75185	216.5 .34507	0 .03854	0 0	6016.5 10.13546
Mojave Water Agency	Q AF C CFS	0 0	15.3 .02518	50800.0 70.16895	1511.8 2.48831	0 5.26267	0 0	52311.8 77.91993
Desert Water Agency	Q AF C CFS	0 0	11.5 .01893	38100.0 63.98093	1133.8 1.86617	0 .24977	0 0	39233.8 66.09687
Coachella Valley County Water District	Q AF C CFS	0 0	7.0 .01152	23100.0 38.80295	687.5 1.13157	0 .14775	0 0	23787.5 40.08227
Antelope Valley-East Kern Water Agency	Q AF C CFS	0 0	40.9 .06732	138400.0 191.16896	1348.1 2.21888	0 14.33768	0 0	139748.1 207.72552
Littlerock Creek Irrigation District	Q AF C CFS	0 0	3.0 .00115	2300.0 3.17694	37.8 .06221	0 .23827	0 0	2337.8 3.47742
Palmdale Irrigation District	Q AF C CFS	0 0	5.1 .00840	17300.0 23.89612	247.9 .40804	0 1.79221	0 0	17547.9 26.09637
Ventura County Flood Control District	Q AF C CFS	0 0	6.0 .00988	20000.0 27.62557	415.4 .60134	0 2.10417	0 0	20415.4 30.33108
Upper Santa Clara Valley Water Agency	Q AF C CFS	0 0	12.4 .02041	41500.0 57.32306	861.9 1.24771	0 4.36613	0 0	42361.9 62.93690
Kern County Water Agency (Municipal and Industrial)	Q AF C CFS	0 0	5.0 .00823	17000.0 30.99589	38.9 .06403	0 0	0 0	17038.9 31.05992
Kern County Water Agency (Agriculture)	Q AF C CFS	70000.0 208.84932	42.2 .06946	144100.0 429.93124	190.1 .31289	0 0	0 0	144290.1 430.24413
Totals	Q AF C CFS	70000.0 208.84932	800.0 1.31675	2658600.0 4056.50164	73400.0 110.56932	215.25341 0	0 0	2732000.0 4382.32437

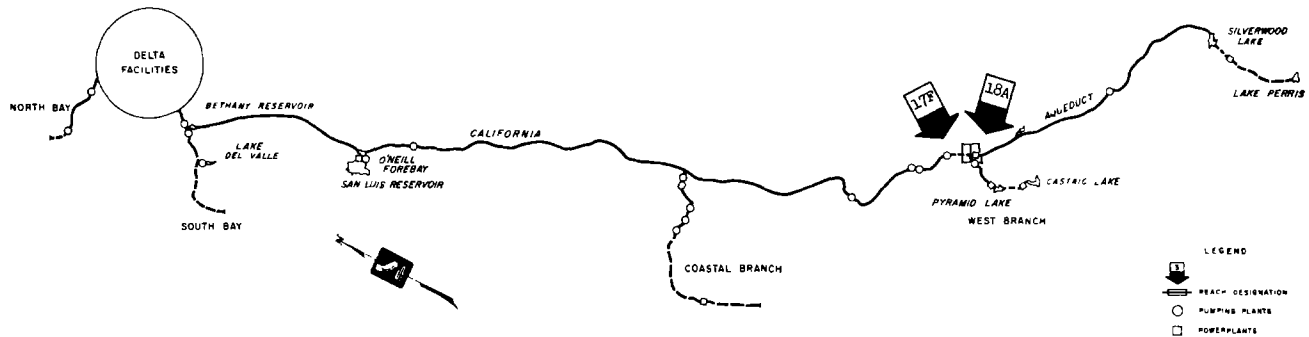


WATER SUPPLY CONTRACTOR	MEASURE OF USE	MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH	ESTIMATED OPERATIONAL LOSSES WITHIN REACH	CAPACITY PROVIDED IN REACH				SUBTOTAL
				FOR DELIVERY OF ENTITLEMENTS	FOR COMPENSATION OF OPERATIONAL LOSSES	SCHEDULED OUTAGES	DOWNSTEAM REGULATION	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
REACH 16A - WIND GAP PUMPING PLANT TO A. D. EDMONSTON PUMPING PLANT								
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	4126.7 6.79227	2011500.0 2863.14267	60552.0 89.97634	184.59464	0	2072052.0 3137.71365
San Bernardino Valley Municipal Water District	Q AF C CFS	0 0	211.9 .34877	102600.0 172.33413	3799.0 6.05323	.73805	0	106399.0 179.12541
San Gabriel Valley Municipal Water District	Q AF C CFS	0 0	59.5 .09793	28800.0 45.15128	1066.5 1.69934	1.25674	0	29866.5 48.10736
San Geronimo Pass Water Agency	Q AF C CFS	0 0	35.7 .05876	17300.0 29.05110	640.7 1.02088	.12679	0	17940.7 30.19877
Crestline-Lake Arrowhead Water Agency	Q AF C CFS	0 0	12.0 .01975	5800.0 9.75185	214.7 .34211	.03854	0	6014.7 10.13250
Mojave Water Agency	Q AF C CFS	0 0	104.2 .17191	50800.0 70.16895	1496.5 2.46313	.526267	0	52296.5 77.89475
Desert Water Agency	Q AF C CFS	0 0	78.1 .12855	38100.0 63.98093	1122.3 1.84724	.24977	0	39222.3 65.07794
Coachella Valley County Water District	Q AF C CFS	0 0	47.4 .07802	23100.0 38.80295	680.5 1.12005	.14775	0	23780.5 40.07075
Antelope Valley-East Kern Water Agency	Q AF C CFS	0 0	278.2 .45790	138400.0 191.16896	1307.2 2.15156	14.33768	0	139707.2 207.65820
Littlerock Creek Irrigation District	Q AF C CFS	0 0	4.7 .00774	2300.0 3.17694	37.1 .06106	.23827	0	2337.1 3.47627
Palmdale Irrigation District	Q AF C CFS	0 0	34.9 .05744	17300.0 23.89612	242.8 .39564	1.79221	0	17542.8 26.08797
Ventura County Flood Control District	Q AF C CFS	0 0	40.6 .06682	20000.0 27.62557	409.4 .59146	2.10417	0	20409.4 30.32120
Upper Santa Clara Valley Water Agency	Q AF C CFS	0 0	84.3 .13875	41500.0 57.32306	849.5 1.22730	4.36613	0	42349.5 62.91649
Kern County Water Agency (Municipal and Industrial)	Q AF C CFS	12000.0 21.87945	33.9 .05580	17000.0 30.99589	33.9 .05580	0	0	17033.9 31.05169
Kern County Water Agency (Agriculture)	Q AF C CFS	74100.0 221.08192	147.9 .24343	74100.0 221.08192	147.9 .24343	0	0	74247.9 221.32535
Totals	Q AF C CFS	86100.0 242.96137	5300.0 8.72344	2588600.0 3847.65232	72600.0 109.25257	215.25341	0	2661200.0 4172.15830
REACH 17E - A. D. EDMONSTON PUMPING PLANT TO CARLEY V. PORTER TUNNEL								
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	0 0	2011500.0 2863.14267	56425.3 83.18407	184.59464	0	2067925.3 3130.92138
San Bernardino Valley Municipal Water District	Q AF C CFS	0 0	0 0	102600.0 172.33413	3587.1 5.70446	.73805	0	106187.1 178.77664
San Gabriel Valley Municipal Water District	Q AF C CFS	0 0	0 0	28800.0 45.15128	1007.0 1.60141	1.25674	0	29807.0 48.00943
San Geronimo Pass Water Agency	Q AF C CFS	0 0	0 0	17300.0 29.05110	605.0 .96212	.12679	0	17905.0 30.14001
Crestline-Lake Arrowhead Water Agency	Q AF C CFS	0 0	0 0	5800.0 9.75185	202.7 .32236	.03854	0	6002.7 10.11275
Mojave Water Agency	Q AF C CFS	0 0	0 0	50800.0 70.16895	1392.3 2.29162	.526267	0	52192.3 77.72324
Desert Water Agency	Q AF C CFS	0 0	0 0	38100.0 63.98093	1044.2 1.71869	.24977	0	39144.2 65.94939
Coachella Valley County Water District	Q AF C CFS	0 0	0 0	23100.0 38.80295	633.1 1.04203	.14775	0	23733.1 39.99273
Antelope Valley-East Kern Water Agency	Q AF C CFS	0 0	0 0	138400.0 191.16896	1029.0 1.69366	14.33768	0	139429.0 207.20030
Littlerock Creek Irrigation District	Q AF C CFS	0 0	0 0	2300.0 3.17694	32.4 .05332	.23827	0	2332.4 3.46853
Palmdale Irrigation District	Q AF C CFS	0 0	0 0	17300.0 23.89612	207.9 .34220	1.79221	0	17507.9 26.03053
Ventura County Flood Control District	Q AF C CFS	0 0	0 0	20000.0 27.62557	368.8 .52464	2.10417	0	20368.8 30.25439
Upper Santa Clara Valley Water Agency	Q AF C CFS	0 0	0 0	41500.0 57.32306	765.2 1.08855	4.36613	0	42265.2 62.77774
Kern County Water Agency (Municipal and Industrial)	Q AF C CFS	5000.0 9.11644	0 0	5000.0 9.11644	0 0	0	0	5000.0 9.11644
Totals	Q AF C CFS	5000.0 9.11644	0 0	2502500.0 3604.69095	67300.0 100.52913	215.25341	0	2569800.0 3920.47349

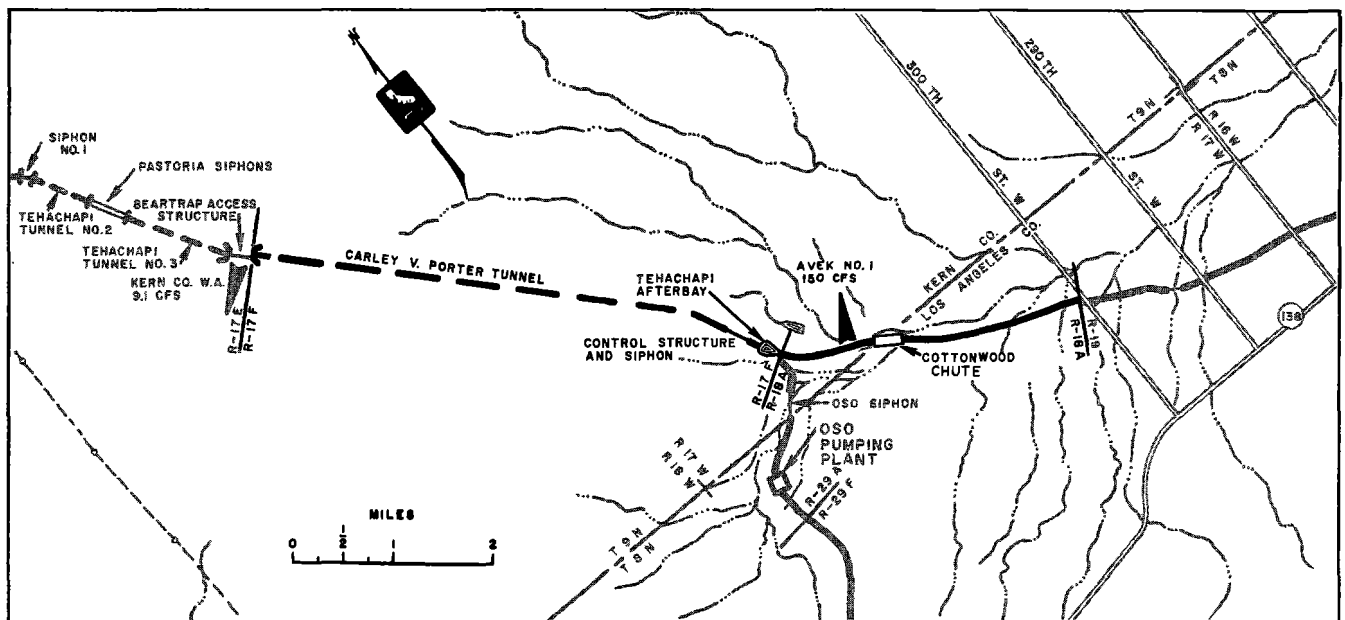


PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS		CAPACITY PROVIDED IN REACH		PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS		MEASURE OF USE	WATER SUPPLY CONTRACTOR
RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS	FOR REQUESTED EXCESS PEAKING	TOTAL FOR WATER SUPPLY CONTRACTORS	RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS		
(9)	(10)	(11)	(12)	(13)	(14)	(15)	
WIND GAP PUMPING PLANT TO A. D. EDMONSTON PUMPING PLANT - REACH 16A							
.77861566	.75533787	188.00000	2072052.0	.77861566	.77068316	Q AF	The Metropolitan Water District of Southern California
.75206007			3325.71365	.75206007		C CFS	
.03998159	.04145755	0	106399.0	.03998159	.04053195	Q AF	San Bernardino Valley Municipal Water District
.04293351			179.12541	.04108232		C CFS	
.01122294	.01137676	0	29866.5	.01122294	.01112817	Q AF	San Gabriel Valley Municipal Water District
.01154057			48.10736	.01103340		C CFS	
.00674158	.00698987	0	17940.7	.00674158	.00683383	Q AF	San Geronimo Pass Water Agency
.00723816			30.19877	.00692607		C CFS	
.00226015	.00234437	0	6014.7	.00226015	.00229201	Q AF	Crestline-Lake Arrowhead Water Agency
.00242860			10.13250	.00232388		C CFS	
.01965147	.01916080	0	52296.5	.01965147	.01875830	Q AF	Mojave Water Agency
.01867013			77.89475	.0186512		C CFS	
.01473858	.01528820	0	39222.3	.01473858	.01494676	Q AF	Desert Water Agency
.01583783			66.07794	.01515494		C CFS	
.00893601	.00927016	0	23780.5	.00893601	.00906311	Q AF	Coachella Valley County Water District
.00960432			40.07075	.00919021		C CFS	
.05249782	.05113510	0	139707.2	.05249782	.05006206	Q AF	Antelope Valley-East Kern Water Agency
.04977237			207.65820	.04762630		C CFS	
.00087821	.00083571	0	2337.1	.00037821	.00083775	Q AF	Littlerock Creek Irrigation District
.00081321			3.47627	.00079728		C CFS	
.00659206	.00642247	0	17542.8	.00659206	.00628766	Q AF	Palmdale Irrigation District
.00625787			26.08797	.00598326		C CFS	
.00766925	.00746838	0	20409.4	.00766925	.00731170	Q AF	Ventura County Flood Control District
.00726751			30.32120	.00695415		C CFS	
.01591369	.01549688	0	42349.5	.01591369	.01517177	Q AF	Upper Santa Clara Valley Water Agency
.01503003			62.91649	.01442986		C CFS	
.00640083	.00692172	0	17033.9	.00640083	.00676126	Q AF	Kern County Water Agency (Municipal and Industrial)
.00744260			31.05169	.00712169		C CFS	
.02790016	.04067416	0	74247.9	.02790016	.03933051	Q AF	Kern County Water Agency (Agriculture)
.95304817			221.32535	.05076085		C CFS	
1.00000000	1.00000000	188.00000	2661200.0	1.00000000	1.00000000	Q AF	Totals
1.00000000			4360.15830	1.00000000		C CFS	
A. D. EDMONSTON PUMPING PLANT TO CARLEY V. PORTER TUNNEL - REACH 17E							
.80470282	.80165539	188.00000	2067925.3	.80470282	.80626315	Q AF	The Metropolitan Water District of Southern California
.79860797			3318.92138	.80782349		C CFS	
.04132115	.04340997	0	106187.1	.04132115	.04241764	Q AF	San Bernardino Valley Municipal Water District
.04560078			178.77664	.04351413		C CFS	
.01159896	.01192239	0	29807.0	.01159896	.01164221	Q AF	San Gabriel Valley Municipal Water District
.01224582			48.00943	.01168547		C CFS	
.00696747	.00732766	0	17905.0	.00696747	.00715176	Q AF	San Geronimo Pass Water Agency
.00768745			30.14001	.00733606		C CFS	
.00233586	.00245767	0	6002.7	.00233586	.00239865	Q AF	Crestline-Lake Arrowhead Water Agency
.00257947			10.11275	.00246144		C CFS	
.02030987	.02006742	0	52192.3	.02030987	.01961383	Q AF	Mojave Water Agency
.01982496			77.72324	.01891779		C CFS	
.01523239	.01602709	0	39144.2	.01523239	.01564222	Q AF	Desert Water Agency
.01682179			65.94939	.01605204		C CFS	
.00923539	.00971819	0	23733.1	.00923539	.00948480	Q AF	Coachella Valley County Water District
.01020100			39.99273	.00973421		C CFS	
.05425675	.05355379	0	139429.0	.05425675	.05234459	Q AF	Antelope Valley-East Kern Water Agency
.05285084			207.20030	.05043243		C CFS	
.00090762	.00089617	0	2332.4	.00090762	.00087593	Q AF	Littlerock Creek Irrigation District
.00088472			3.46853	.00084424		C CFS	
.00681294	.00672629	0	17507.9	.00681294	.00657438	Q AF	Palmdale Irrigation District
.00663364			26.03053	.00633581		C CFS	
.00792622	.00782162	0	20368.8	.00792622	.00764506	Q AF	Ventura County Flood Control District
.00771702			30.25438	.00736390		C CFS	
.01644688	.01622984	0	42265.2	.01644688	.01586347	Q AF	Upper Santa Clara Valley Water Agency
.01601280			62.77774	.01528006		C CFS	
.00194568	.00213551	0	5000.0	.00194568	.00208231	Q AF	Kern County Water Agency (Municipal and Industrial)
.00232534			9.11644	.00221893		C CFS	
1.00000000	1.00000000	188.00000	2569900.0	1.00000000	1.00000000	Q AF	Totals
1.00000000			4108.47349	1.00000000		C CFS	

TABLE B-2 (Continued)
PROPORTIONATE USE OF EACH AQUEDUCT REACH
(in units as shown)

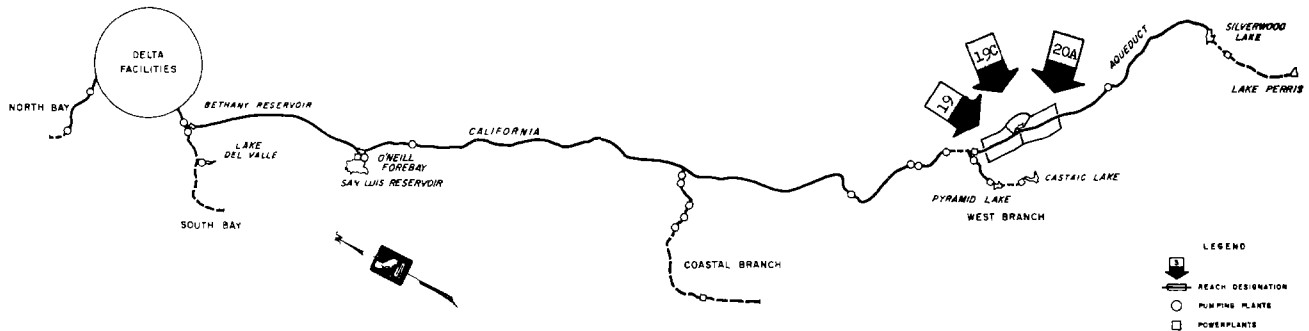


WATER SUPPLY CONTRACTOR	MEASURE OF USE	MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH	ESTIMATED OPERATIONAL LOSSES WITHIN REACH	CAPACITY PROVIDED IN REACH				
				FOR DELIVERY OF ENTITLEMENTS	FOR COMPENSATION OF			SUBTOTAL
					OPERATIONAL LOSSES	SCHEDULED OUTAGES	DOWNSTREAM REGULATION	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
REACH 17F - CARLEY V. PORTER TUNNEL TO JUNCTION, WEST BRANCH, CALIFORNIA AQUEDUCT								
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	80.6 .13266	2011500.0 2863.14267	56425.3 83.18407	0 184.59464	0 0	206125.3 3150.92138
San Bernardino Valley Municipal Water District	Q AF C CFS	0 0	4.2 .00691	102600.0 172.33413	3587.1 5.70446	0 .73805	0 0	106187.1 178.77664
San Gabriel Valley Municipal Water District	Q AF C CFS	0 0	1.2 .00198	28800.0 45.15128	1007.0 1.60141	0 1.25674	0 0	29807.0 43.00943
San Geronimo Pass Water Agency	Q AF C CFS	0 0	.7 .00115	17300.0 29.05110	605.0 .96212	0 .12679	0 0	17905.0 30.14001
Crestline-Lake Arrowhead Water Agency	Q AF C CFS	0 0	.2 .00033	5800.0 9.75185	202.7 .32236	0 .03854	0 0	6002.7 10.11275
Mojave Water Agency	Q AF C CFS	0 0	2.0 .00329	50800.0 70.16895	1392.3 2.29167	0 5.26267	0 0	52192.3 77.72324
Desert Water Agency	Q AF C CFS	0 0	1.5 .00247	38100.0 63.98093	1044.2 1.71869	0 .24977	0 0	39144.2 65.94939
Coachella Valley County Water District	Q AF C CFS	0 0	.9 .00148	23100.0 38.80295	633.1 1.04203	0 .14775	0 0	23733.1 39.99273
Antelope Valley-East Kern Water Agency	Q AF C CFS	0 0	5.4 .00889	138400.0 191.16896	1029.0 1.69366	0 14.33768	0 0	137420.0 207.20030
Littlerock Creek Irrigation District	Q AF C CFS	0 0	.1 .00016	2300.0 3.17694	32.4 .05332	0 .23827	0 0	2332.4 3.46953
Palmdale Irrigation District	Q AF C CFS	0 0	.7 .00115	17300.0 23.89612	207.9 .34220	0 1.79221	0 0	17507.9 26.03053
Ventura County Flood Control District	Q AF C CFS	0 0	.8 .00132	20000.0 27.62557	368.8 .52464	0 2.10417	0 0	20368.8 30.25438
Upper Santa Clara Valley Water Agency	Q AF C CFS	0 0	1.7 .00280	41500.0 57.32306	765.2 1.08855	0 4.36513	0 0	42265.2 62.77774
Totals	Q AF C CFS	0 0	100.0 .16459	2497500.0 3595.57451	67300.0 100.52913	0 215.25341	0 0	2564800.0 3711.45705
REACH 18A - JUNCTION, WEST BRANCH, CALIFORNIA AQUEDUCT THRU COTTONWOOD CHUTE								
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	459.5 .75631	556500.0 853.38233	29576.2 44.98480	0 31.51591	0 0	280076.2 920.48414
San Bernardino Valley Municipal Water District	Q AF C CFS	0 0	83.3 .13711	102600.0 172.33413	3582.9 5.69755	0 .73805	0 0	106182.9 178.76973
San Gabriel Valley Municipal Water District	Q AF C CFS	0 0	23.4 .03851	28800.0 45.15128	1005.4 1.59943	0 1.25674	0 0	27805.4 44.00745
San Geronimo Pass Water Agency	Q AF C CFS	0 0	14.1 .02321	17300.0 29.05110	604.3 .96097	0 .12679	0 0	17904.3 30.13286
Crestline-Lake Arrowhead Water Agency	Q AF C CFS	0 0	.7 .00174	5800.0 9.75185	202.5 .32203	0 .03854	0 0	6002.5 10.11242
Mojave Water Agency	Q AF C CFS	0 0	40.9 .06732	50800.0 70.16895	1390.3 2.28833	0 5.26267	0 0	52190.3 77.71995
Desert Water Agency	Q AF C CFS	0 0	30.7 .05053	38100.0 63.98093	1042.7 1.71622	0 .24977	0 0	39142.7 65.94692
Coachella Valley County Water District	Q AF C CFS	0 0	18.6 .03061	23100.0 38.80295	632.2 1.04055	0 .14775	0 0	23732.2 39.99125
Antelope Valley-East Kern Water Agency	Q AF C CFS	0 0	109.3 .17990	138400.0 191.16896	1023.6 1.68477	0 14.33768	0 0	139423.6 207.19141
Littlerock Creek Irrigation District	Q AF C CFS	0 0	1.8 .00296	2300.0 3.17694	32.3 .05316	0 .23827	0 0	2332.3 3.46837
Palmdale Irrigation District	Q AF C CFS	0 0	13.7 .02255	17300.0 23.89612	207.2 .34105	0 1.79221	0 0	17507.2 26.02938
Totals	Q AF C CFS	0 0	800.0 1.31675	981000.0 1500.86594	39300.0 60.69886	0 55.70538	0 0	1020300.0 1617.25979

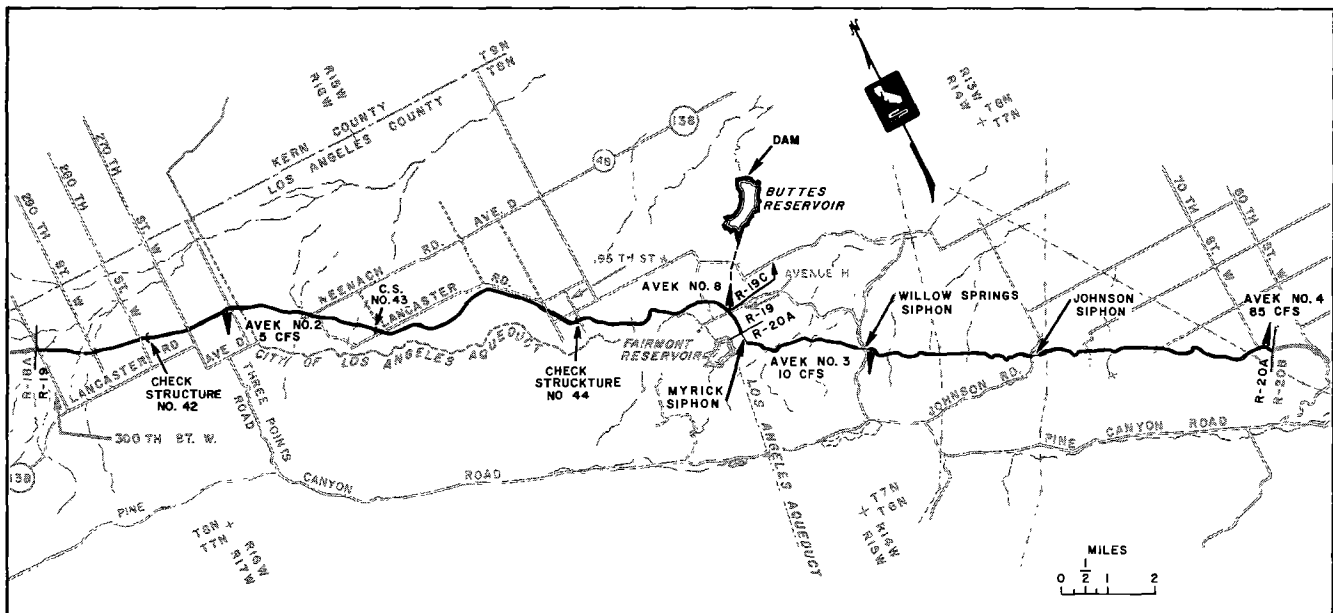


PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS		CAPACITY PROVIDED IN REACH		PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS		MEASURE OF USE	WATER SUPPLY CONTRACTOR
RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS	FOR REQUESTED EXCESS PEAKING	TOTAL FOR WATER SUPPLY CONTRACTORS	RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS		
(9)	(10)	(11)	(12)	(13)	(14)	(15)	
CARLEY V. PORTER TUNNEL TO JUNCTION, WEST BRANCH, CALIFORNIA AQUEDUCT - REACH 17F							
.80627156 .80046934	.80337045	188.00000	2067925.3 3318.92138	.80627156 .80961998	.80794577	Q AF C CFS	The Metropolitan Water District of Southern California
.04140171 .04570706	.04355438	0	106187.1 178.77664	.04140171 .04361090	.04250630	Q AF C CFS	San Bernardino Valley Municipal Water District
.01162157 .01227437	.01194797	0	29807.0 48.00943	.01162157 .01171145	.01166651	Q AF C CFS	San Gabriel Valley Municipal Water District
.00698105 .00770577	.00734341	0	17905.0 30.14001	.00698105 .00735238	.00716671	Q AF C CFS	San Geronio Pass Water Agency
.00234042 .00258548	.00246295	0	6002.7 10.11275	.00234042 .00246691	.00240367	Q AF C CFS	Crestline-Lake Arrowhead Water Agency
.02034946 .01987117	.02011032	0	52192.3 77.72324	.02034946 .01895986	.01965466	Q AF C CFS	Mojave Water Agency
.01526209 .01686100	.01606154	0	39144.2 65.94939	.01526209 .01608774	.01567491	Q AF C CFS	Desert Water Agency
.00925339 .01022477	.00973908	0	23733.1 39.99273	.00925339 .00975585	.00950462	Q AF C CFS	Coachella Valley County Water District
.05436252 .05297402	.05366827	0	139429.0 207.20030	.05436252 .05054458	.05245356	Q AF C CFS	Antelope Valley-East Kern Water Agency
.00090939 .00088678	.00089809	0	2332.4 3.46853	.00090939 .00084612	.00087775	Q AF C CFS	Littlerock Creek Irrigation District
.00682622 .00665511	.00674067	0	17507.9 26.03053	.00682622 .00634991	.00658807	Q AF C CFS	Palmdale Irrigation District
.00794167 .00773501	.00783834	0	20368.8 30.25438	.00794167 .00738027	.00766097	Q AF C CFS	Ventura County Flood Control District
.01647895 .01605012	.01626453	0	42265.2 62.77774	.01647895 .01531405	.01589650	Q AF C CFS	Upper Santa Clara Valley Water Agency
1.00000000 1.00000000	1.00000000	188.00000	2564800.0 4099.35705	1.00000000 1.00000000	1.00000000	Q AF C CFS	Totals
JUNCTION, WEST BRANCH, CALIFORNIA AQUEDUCT THRU COTTONWOOD CHUTE - REACH 18A							
.57441556 .57497506	.57469531	0	586076.2 929.88404	.57441556 .57497506	.57469531	Q AF C CFS	The Metropolitan Water District of Southern California
.10407027 .11053866	.10730447	0	106182.9 178.76973	.10407027 .11053866	.10730447	Q AF C CFS	San Bernardino Valley Municipal Water District
.02921278 .02968444	.02944861	0	29805.8 48.00745	.02921278 .02968444	.02944861	Q AF C CFS	San Gabriel Valley Municipal Water District
.01754808 .01863576	.01809192	0	17904.3 30.13886	.01754808 .01863576	.01809192	Q AF C CFS	San Geronio Pass Water Agency
.00588307 .00625281	.00606794	0	6002.5 10.11242	.00588307 .00625281	.00606794	Q AF C CFS	Crestline-Lake Arrowhead Water Agency
.05115192 .04805657	.04960424	0	52190.3 77.71995	.05115192 .04805657	.04960424	Q AF C CFS	Mojave Water Agency
.03836391 .04077695	.03957043	0	39142.7 65.94692	.03836391 .04077695	.03957043	Q AF C CFS	Desert Water Agency
.02326002 .02472778	.02399390	0	23732.2 39.99125	.02326002 .02472778	.02399390	Q AF C CFS	Coachella Valley County Water District
.13664961 .12811263	.13238112	0	139423.6 207.19141	.13664961 .12811263	.13238112	Q AF C CFS	Antelope Valley-East Kern Water Agency
.00228590 .00214460	.00221525	0	2332.3 3.46837	.00228590 .00214460	.00221525	Q AF C CFS	Littlerock Creek Irrigation District
.01715888 .01609474	.01662681	0	17507.2 26.02938	.01715888 .01609474	.01662681	Q AF C CFS	Palmdale Irrigation District
1.00000000 1.00000000	1.00000000	0	1020300.0 1617.25978	1.00000000 1.00000000	1.00000000	Q AF C CFS	Totals

TABLE B-2 (Continued)
PROPORTIONATE USE OF EACH AQUEDUCT REACH
(in units as shown)

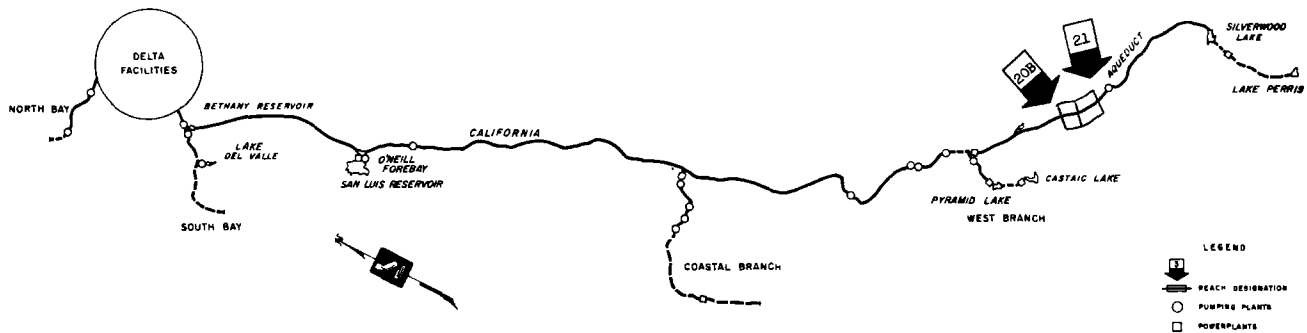


WATER SUPPLY CONTRACTOR	MEASURE OF USE	MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH	ESTIMATED OPERATIONAL LOSSES WITHIN REACH	CAPACITY PROVIDED IN REACH				SUBTOTAL
				FOR DELIVERY OF ENTITLEMENTS	FOR COMPENSATION OF OPERATIONAL LOSSES	SCHEDULED OUTAGES	DOWNSTREAM REGULATION	
REACH 19 - COTTONWOOD CHUTE TO FAIRMONT	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	2182.8 3.59274	556500.0 853.38233	29116.7 44.22849	0 31.51691	0 0	585616.7 929.12773
San Bernardino Valley Municipal Water District	Q AF C CFS	0 0	395.4 .65080	102600.0 172.33413	3499.6 5.56044	0 .73805	0 0	106099.6 178.63262
San Gabriel Valley Municipal Water District	Q AF C CFS	0 0	111.0 .18270	28800.0 45.15128	982.4 1.56092	0 1.25674	0 0	29782.4 47.96894
San Geronimo Pass Water Agency	Q AF C CFS	0 0	66.7 .10978	17300.0 29.05110	590.2 .93776	0 .12679	0 0	17890.2 30.11565
Crestline-Lake Arrowhead Water Agency	Q AF C CFS	0 0	22.3 .03670	5800.0 9.75185	197.8 .31429	0 .03854	0 0	5997.8 10.10468
Mojave Water Agency	Q AF C CFS	0 0	194.4 .31997	50800.0 70.16895	1349.4 2.22101	0 5.26267	0 0	52149.4 77.65263
Desert Water Agency	Q AF C CFS	0 0	145.8 .23998	38100.0 63.98093	1012.0 1.66569	0 .24977	0 0	39112.0 65.89639
Coachella Valley County Water District	Q AF C CFS	0 0	38.4 .14550	23100.0 38.80295	613.6 1.00994	0 .14775	0 0	23713.6 39.96064
Antelope Valley-East Kern Water Agency	Q AF C CFS	69600.0 96.13699	519.3 .85473	138400.0 191.16896	914.3 1.50487	0 14.33768	0 0	139314.3 207.01151
Littlerock Creek Irrigation District	Q AF C CFS	0 0	8.7 .01432	2300.0 3.17694	30.5 .05020	0 .23427	0 0	2330.5 3.46541
Palmdale Irrigation District	Q AF C CFS	0 0	65.2 .10732	17300.0 23.89612	193.5 .31850	0 1.79221	0 0	17493.5 26.00683
Totals	Q AF C CFS	69600.0 96.13699	3800.0 6.25454	981000.0 1500.86554	38500.0 59.37211	0 55.70538	0 0	1019500.0 1615.94303
REACH 19C - BUTTES JUNCTION THRU BUTTES RESERVOIR								
Antelope Valley-East Kern Water Agency	Q AF C AF	27800.0 0	0 0	27800.0 0	0 0	0 0	0 0	27800.0
Totals	Q AF C AF	27800.0 0	0 0	27800.0 0	0 0	0 0	0 0	27800.0
REACH 20A - FAIRMONT THRU 70TH STREET WEST								
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	2220.0 3.65397	556500.0 853.38233	26933.9 40.63575	0 31.51691	0 0	583433.9 925.53499
San Bernardino Valley Municipal Water District	Q AF C CFS	0 0	402.2 .66199	102600.0 172.33413	3104.2 4.90964	0 .73805	0 0	105704.2 177.98182
San Gabriel Valley Municipal Water District	Q AF C CFS	0 0	112.9 .18583	28800.0 45.15128	871.4 1.37822	0 1.25674	0 0	29671.4 47.78624
San Geronimo Pass Water Agency	Q AF C CFS	0 0	67.8 .11159	17300.0 29.05110	523.5 .82798	0 .12679	0 0	17823.5 30.00587
Crestline-Lake Arrowhead Water Agency	Q AF C CFS	0 0	22.8 .03753	5800.0 9.75185	175.5 .27759	0 .03854	0 0	5975.5 10.06798
Mojave Water Agency	Q AF C CFS	0 0	197.7 .32540	50800.0 70.16895	1155.0 1.90104	0 5.26267	0 0	51955.0 77.33266
Desert Water Agency	Q AF C CFS	0 0	148.3 .24409	38100.0 63.98093	866.2 1.42571	0 .24977	0 0	38966.2 65.65641
Coachella Valley County Water District	Q AF C CFS	0 0	89.9 .14797	23100.0 38.80295	525.2 .86444	0 .14775	0 0	23625.2 39.81514
Antelope Valley-East Kern Water Agency	Q AF C CFS	47100.0 65.05822	263.3 .43337	68800.0 95.03197	395.0 .55014	0 0	0 0	59195.0 95.68211
Littlerock Creek Irrigation District	Q AF C CFS	0 0	8.8 .01448	2300.0 3.17694	21.8 .03588	0 .23827	0 0	2321.8 3.45109
Palmdale Irrigation District	Q AF C CFS	0 0	65.3 .10913	17300.0 23.89612	128.3 .21118	0 1.79221	0 0	17428.3 25.89951
Totals	Q AF C CFS	47100.0 65.05822	3600.0 5.92935	911400.0 1404.72855	34700.0 53.11757	0 41.36770	0 0	946100.0 1499.21382



PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS		CAPACITY PROVIDED IN REACH		PROPORTIONATE USE FOR ALLOCATION OF MINIMUM O&P&R COSTS		MEASURE OF USE	WATER SUPPLY CONTRACTOR
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		
(9)	(10)	(11)	(12)	(13)	(14)	(15)	
COTTONWOOD CHUTE TO FAIRMONT - REACH 19							
.57441560			585616.7	.57441560		Q AF	The Metropolitan Water District of Southern California
.57497555	.57469557	0	929.12773	.57497555	.57469557	C CFS	
.10407023			106099.6	.10407023		Q AF	San Bernardino Valley Municipal Water District
.11054388	.10730706	0	176.53262	.11054388	.10730706	C CFS	
.02921275			29782.4	.02921275		Q AF	San Gabriel Valley Municipal Water District
.02968480	.02944877	0	47.96894	.02968480	.02944877	C CFS	
.01754801			17890.2	.01754801		Q AF	San Geronimo Pass Water Agency
.01863658	.01809230	0	30.11565	.01863658	.01809230	C CFS	
.00588308			5997.8	.00588308		Q AF	Crestline-Lake Arrowhead Water Agency
.00625312	.00606810	0	10.10468	.00625312	.00606810	C CFS	
.05115194			52149.4	.05115194		Q AF	Mojave Water Agency
.04805406	.04960300	0	77.65263	.04805406	.04960300	C CFS	
.03836390			39112.0	.03836390		Q AF	Desert Water Agency
.04077891	.03957141	0	65.89639	.04077891	.03957141	C CFS	
.02326003			23713.6	.02326003		Q AF	Coachella Valley County Water District
.02472899	.02399451	0	39.96064	.02472899	.02399451	C CFS	
.13664963			139314.3	.13664963		Q AF	Antelope Valley-East Kern Water Agency
.12810570	.13237766	0	207.01151	.12810570	.13237766	C CFS	
.00228593			2330.5	.00228593		Q AF	Littlerock Creek Irrigation District
.00214451	.00221522	0	3.46541	.00214451	.00221522	C CFS	
.01715890			17493.5	.01715890		Q AF	Palmdale Irrigation District
.01609390	.01662640	0	26.00683	.01609390	.01662640	C CFS	
1.00000000			1019500.0	1.00000000		Q AF	Totals
1.00000000	1.00000000	0	1615.94303	1.00000000	1.00000000	C CFS	
BUTTES JUNCTION THRU BUTTES RESERVOIR - REACH 19C							
1.00000000	1.00000000		27800.0	1.00000000	1.00000000	Q AF	Antelope Valley-East Kern Water Agency
						C AF	
1.00000000	1.00000000		27800.0	1.00000000	1.00000000	Q AF	Totals
						C AF	
FAIRMONT THRU 70TH STREET WEST - REACH 20A							
.61667255			583433.9	.61667255		Q AF	The Metropolitan Water District of Southern California
.61734689	.61700972	0	925.53499	.61734689	.61700972	C CFS	
.11172624			105704.2	.11172624		Q AF	San Bernardino Valley Municipal Water District
.11871677	.11522151	0	177.98182	.11871677	.11522151	C CFS	
.03136180			29671.4	.03136180		Q AF	San Gabriel Valley Municipal Water District
.03187420	.03161800	0	47.78624	.03187420	.03161800	C CFS	
.01883892			17823.5	.01883892		Q AF	San Geronimo Pass Water Agency
.02001440	.01942666	0	30.00587	.02001440	.01942666	C CFS	
.00631593			5975.5	.00631593		Q AF	Crestline-Lake Arrowhead Water Agency
.00671551	.00651572	0	10.06798	.00671551	.00651572	C CFS	
.05491491			51955.0	.05491491		Q AF	Mojave Water Agency
.05158214	.05324853	0	77.33266	.05158214	.05324853	C CFS	
.04118613			38966.2	.04118613		Q AF	Desert Water Agency
.04379389	.04249001	0	65.65641	.04379389	.04249001	C CFS	
.02497115			23625.2	.02497115		Q AF	Coachella Valley County Water District
.02655735	.02576424	0	39.81514	.02655735	.02576424	C CFS	
.07313709			69195.0	.07313709		Q AF	Antelope Valley-East Kern Water Agency
.06382152	.06847931	0	95.68211	.06382152	.06847931	C CFS	
.00245408			2321.8	.00245408		Q AF	Littlerock Creek Irrigation District
.00230193	.00237800	0	3.45109	.00230193	.00237800	C CFS	
.01842120			17428.3	.01842120		Q AF	Palmdale Irrigation District
.01727540	.01784830	0	25.39951	.01727540	.01784830	C CFS	
1.00000000			946100.0	1.00000000		Q AF	Totals
1.00000000	1.00000000	0	1499.21382	1.00000000	1.00000000	C CFS	

TABLE B-2 (Continued)
PROPORTIONATE USE OF EACH AQUEDUCT REACH
(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				
				FOR DELIVERY OF ENTITLEMENTS	OPERATIONAL LOSSES	FOR COMPENSATION OF SCHEDULED OUTAGES	DOWNSTREAM REGULATION	SUBTOTAL
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
REACH 20B - 70TH STREET WEST TO PALMDALE								
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	2077.2 3.41893	556500.0 853.38233	24713.9 36.98178	0 31.51691	0 0	581213.9 921.88102
San Bernardino Valley Municipal Water District	Q AF C CFS	0 0	376.3 .61936	102600.0 172.33413	2702.0 4.24765	0 .73805	0 0	105302.0 177.31983
San Gabriel Valley Municipal Water District	Q AF C CFS	0 0	105.6 .17381	28800.0 45.15128	758.5 1.19239	0 1.25674	0 0	29558.5 47.60041
San Geronimo Pass Water Agency	Q AF C CFS	0 0	63.5 .10452	17300.0 29.05110	455.7 .71639	0 .12679	0 0	17755.7 29.89428
Crestline-Lake Arrowhead Water Agency	Q AF C CFS	0 0	21.3 .03506	5800.0 9.75185	152.7 .24006	0 .03854	0 0	5952.7 10.03045
Mojave Water Agency	Q AF C CFS	0 0	185.0 .30450	50800.0 70.16895	957.3 1.57564	0 5.26267	0 0	51757.3 77.00726
Desert Water Agency	Q AF C CFS	0 0	138.7 .22829	38100.0 63.98093	717.9 1.18162	0 .24977	0 0	38817.9 65.41232
Coachella Valley County Water District	Q AF C CFS	0 0	84.1 .13842	23100.0 38.80295	435.3 .71647	0 .14775	0 0	23535.3 39.66717
Antelope Valley-East Kern Water Agency	Q AF C CFS	0 0	78.0 .12838	21700.0 29.97375	131.7 .21677	0 0	0 0	21831.7 30.19052
Littlerock Creek Irrigation District	Q AF C CFS	0 0	8.3 .01366	2300.0 3.17694	13.0 .02140	0 .23927	0 0	2313.0 3.43661
Palmdale Irrigation District	Q AF C CFS	17300.0 23.89612	62.0 .10205	17300.0 23.89612	62.0 .10205	0 1.79221	0 0	17362.0 25.79038
Totals	Q AF C CFS	17300.0 23.89612	3200.0 5.26698	864300.0 1339.67033	31100.0 47.19222	0 41.36770	0 0	895400.0 1428.23025
REACH 21 - PALMDALE TO LITTLOCK CREEK								
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	1191.5 1.96113	556500.0 853.38233	22636.7 33.56285	0 31.51691	0 0	579136.7 918.46209
San Bernardino Valley Municipal Water District	Q AF C CFS	0 0	215.9 .35536	102600.0 172.33413	2325.7 3.62829	0 .73805	0 0	104925.7 176.70047
San Gabriel Valley Municipal Water District	Q AF C CFS	0 0	60.6 .09974	28800.0 45.15128	652.9 1.01858	0 1.25674	0 0	29452.9 47.42660
San Geronimo Pass Water Agency	Q AF C CFS	0 0	36.4 .05991	17300.0 29.05110	392.2 .61187	0 .12679	0 0	17692.2 29.78976
Crestline-Lake Arrowhead Water Agency	Q AF C CFS	0 0	12.2 .02008	5800.0 9.75185	131.4 .20500	0 .03854	0 0	5931.4 9.99539
Mojave Water Agency	Q AF C CFS	0 0	106.1 .17463	50800.0 70.16895	772.3 1.27114	0 5.26267	0 0	51572.3 76.70276
Desert Water Agency	Q AF C CFS	0 0	79.6 .13102	38100.0 63.98093	579.2 .95333	0 .24977	0 0	38679.2 65.18403
Coachella Valley County Water District	Q AF C CFS	0 0	48.2 .07933	23100.0 38.80295	351.2 .57805	0 .14775	0 0	23451.2 39.52875
Antelope Valley-East Kern Water Agency	Q AF C CFS	10800.0 14.91781	44.8 .07374	21700.0 29.97375	53.7 .08839	0 0	0 0	21753.7 30.06214
Littlerock Creek Irrigation District	Q AF C CFS	7300.0 3.17694	4.7 .00774	7300.0 3.17694	4.7 .00774	0 .23827	0 0	7304.7 3.42295
Totals	Q AF C CFS	13100.0 18.09475	1800.0 2.96268	847000.0 1315.77421	27900.0 41.92524	0 39.57549	0 0	874900.0 1397.27494

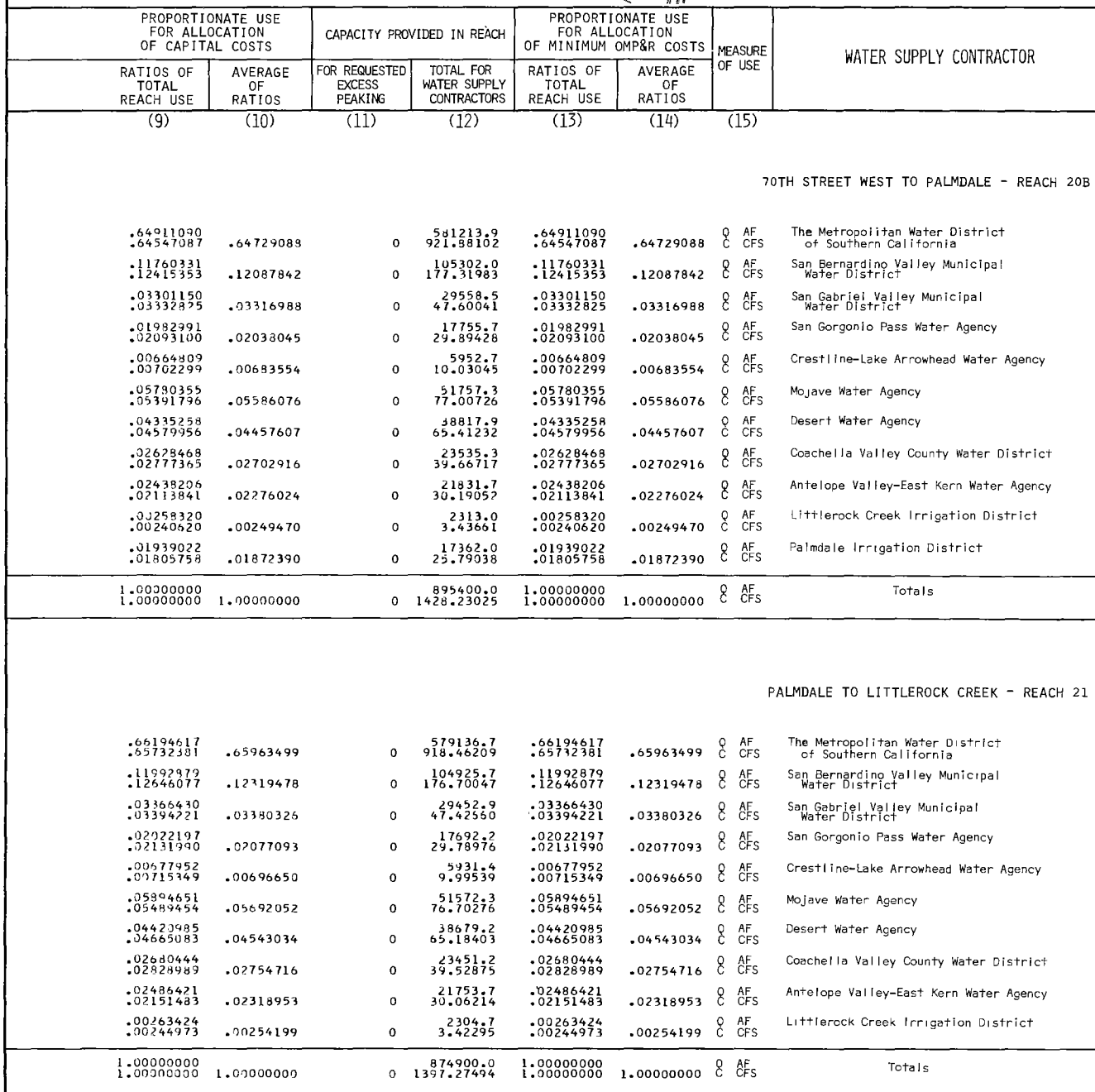
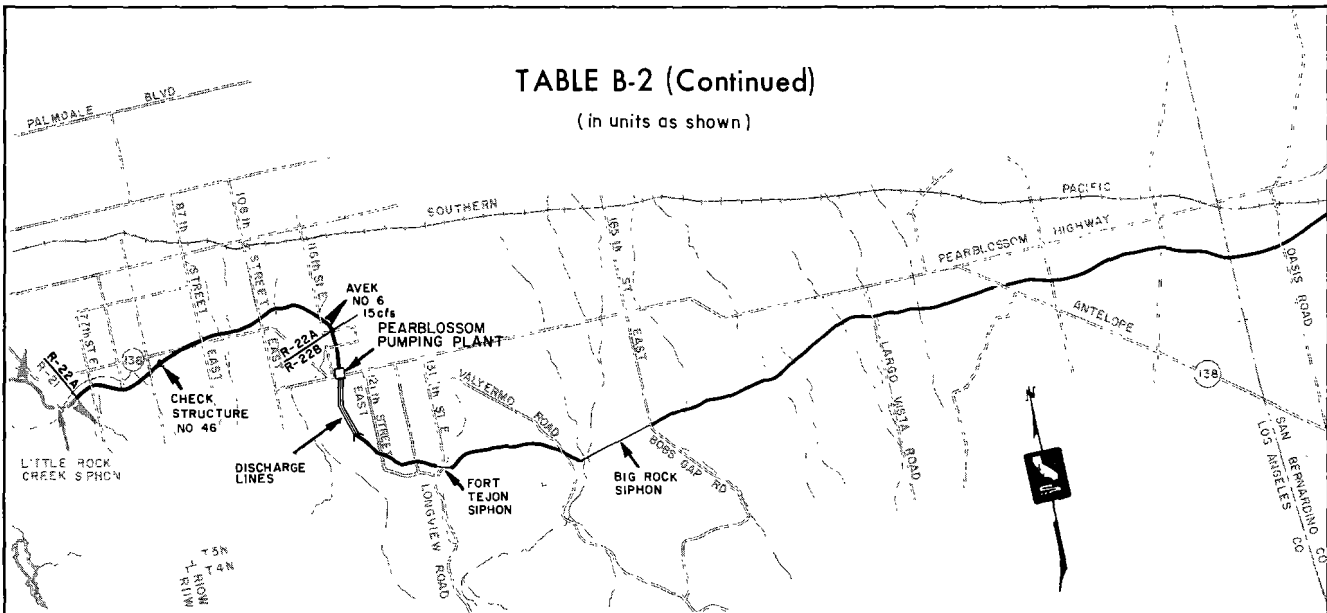
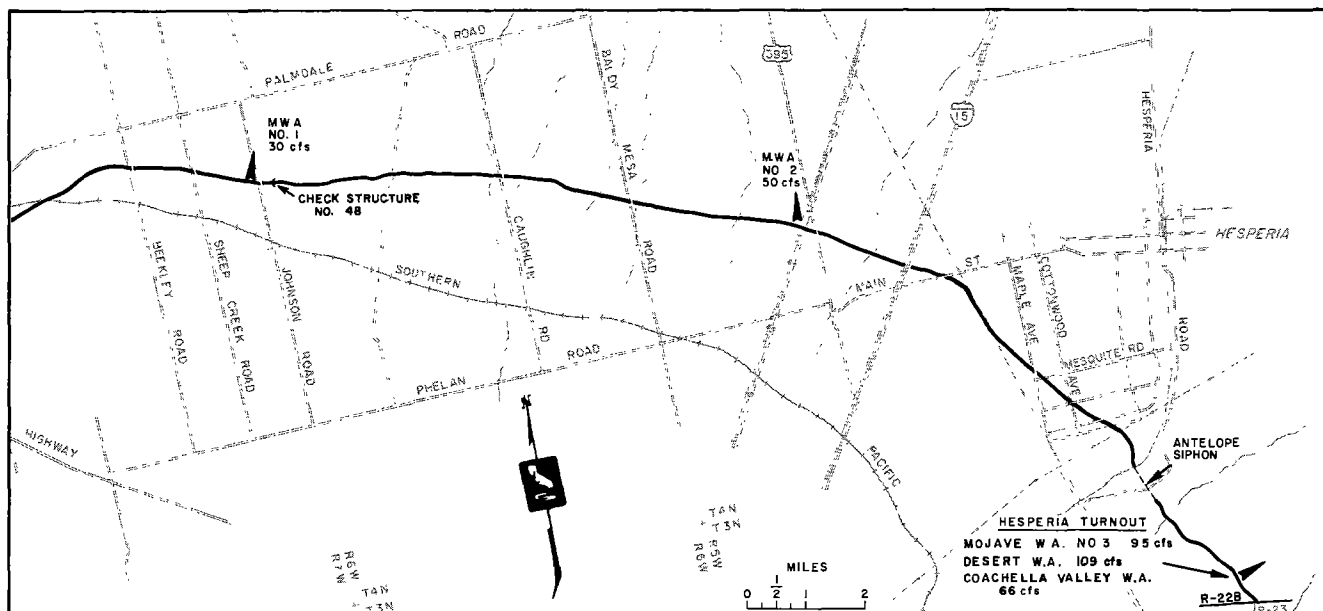


TABLE B-2 (Continued)

(in units as shown)

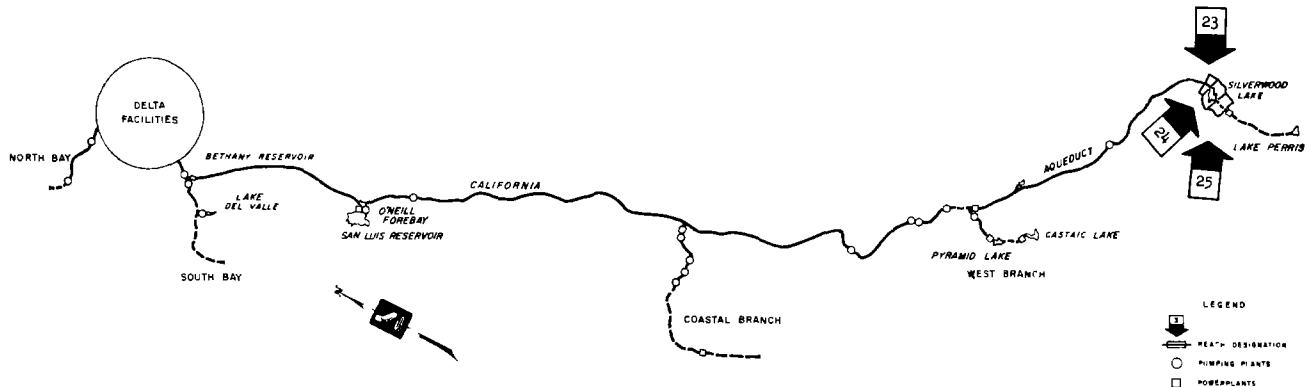


WATER SUPPLY CONTRACTOR	MEASURE OF USE	MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH	ESTIMATED OPERATIONAL LOSSES WITHIN REACH	CAPACITY PROVIDED IN REACH				SUBTOTAL
				FOR DELIVERY OF ENTITLEMENTS	FOR OPERATIONAL LOSSES	FOR COMPENSATION OF SCHEDULED OUTAGES	FOR DOWNSTREAM REGULATION	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
REACH 22A - LITTLEROCK CREEK TO PEARBLOSSOM PUMPING PLANT								
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	470.4 .77425	556500.0 853.38233	21445.2 31.60172	31.51691 0	0 0	277445.2 315.50096
San Bernardino Valley Municipal Water District	Q AF C CFS	0 0	85.2 .14023	102600.0 172.33413	2109.8 3.27293	0 .73905	0 0	104709.3 176.34511
San Gabriel Valley Municipal Water District	Q AF C CFS	0 0	23.9 .03934	28800.0 45.15128	592.3 .91884	0 1.25674	0 0	29392.3 47.32686
San Geronimo Pass Water Agency	Q AF C CFS	0 0	14.4 .02370	17300.0 29.05110	355.8 .55195	0 .12679	0 0	17655.8 29.72485
Crestline-Lake Arrowhead Water Agency	Q AF C CFS	0 0	4.8 .00790	5800.0 9.75185	119.2 .18492	0 .03954	0 0	5919.2 9.97531
Mojave Water Agency	Q AF C CFS	0 0	41.9 .06896	50800.0 70.16895	666.7 1.09651	0 5.26267	0 0	31466.7 76.52813
Desert Water Agency	Q AF C CFS	0 0	31.4 .05168	38100.0 63.98093	499.6 .82231	0 .24977	0 0	33599.6 65.05301
Coachella Valley County Water District	Q AF C CFS	0 0	19.1 .03144	23100.0 38.80295	303.0 .49872	0 .14775	0 0	23403.0 39.44942
Antelope Valley-East Kern Water Agency	Q AF C CFS	10900.0 15.05594	8.9 .01465	10900.0 15.05594	8.9 .01465	0 0	0 0	10900.0 15.07059
Totals	Q AF C CFS	10900.0 15.05594	700.0 1.15215	933900.0 1297.67946	76100.0 38.96255	32.33722 0	0 0	360700.0 1375.97924
REACH 22B - PEARBLOSSOM PUMPING PLANT TO WEST FORK MOJAVE RIVER								
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	7010.8 11.53930	556500.0 853.38233	20974.8 30.82747	31.51691 0	0 0	277474.8 315.72271
San Bernardino Valley Municipal Water District	Q AF C CFS	0 0	1270.2 2.09066	102600.0 172.33413	2024.6 3.13270	0 .73905	0 0	104624.6 176.20495
San Gabriel Valley Municipal Water District	Q AF C CFS	0 0	356.6 .08694	28800.0 45.15128	569.4 .87950	0 1.25674	0 0	29358.4 47.28757
San Geronimo Pass Water Agency	Q AF C CFS	0 0	214.2 .35256	17300.0 29.05110	341.4 .52826	0 .12679	0 0	17641.4 29.70615
Crestline-Lake Arrowhead Water Agency	Q AF C CFS	0 0	71.8 .11818	5800.0 9.75185	114.4 .17702	0 .03954	0 0	5914.4 9.96741
Mojave Water Agency	Q AF C CFS	50800.0 70.16895	624.3 1.02755	50800.0 70.16895	624.3 1.02755	0 5.26267	0 0	51424.3 76.45917
Desert Water Agency	Q AF C CFS	38100.0 52.62671	468.2 .77063	38100.0 63.98093	468.2 .77063	0 .24977	0 0	34568.2 65.09135
Coachella Valley County Water District	Q AF C CFS	23100.0 31.90754	293.9 .46728	23100.0 38.80295	283.9 .46728	0 .14775	0 0	23333.9 39.41793
Totals	Q AF C CFS	112000.0 154.70320	10300.0 16.95310	823000.0 1282.62352	25400.0 37.81041	39.33722 0	0 0	344400.0 1359.77115



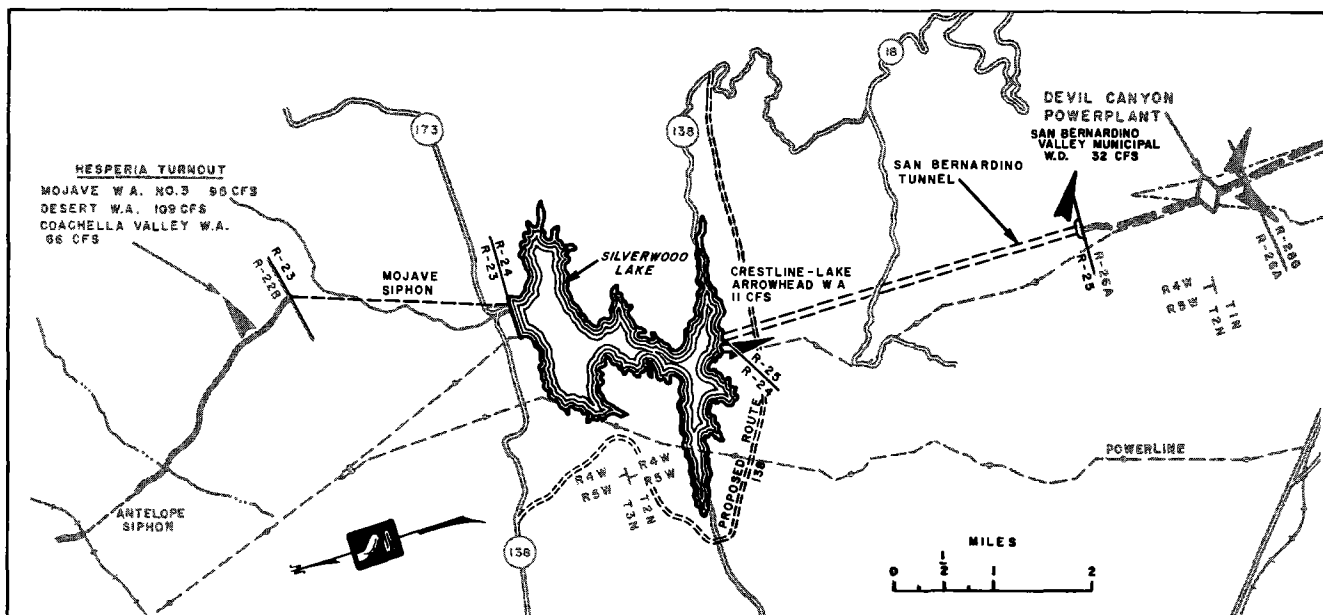
PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS		CAPACITY PROVIDED IN REACH		PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS		MEASURE OF USE	WATER SUPPLY CONTRACTOR
RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS	FOR REQUESTED EXCESS PEAKING	TOTAL FOR WATER SUPPLY CONTRACTORS	RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS		
(9)	(10)	(11)	(12)	(13)	(14)	(15)	
LITTLEROCK CREEK TO PEARBLOSSOM PUMPING PLANT - REACH 22A							
.67202930			577945.2	.67202930		Q AF	The Metropolitan Water District of Southern California
.66607179	.66905055	0	916.50096	.66607179	.66905055	C CFS	
.12175558	.12495765	0	104709.8	.12175558	.12495765	Q AF	San Bernardino Valley Municipal Water District
.12815972		0	176.34511	.12815972		C CFS	
.03417709	.03428607	0	29392.3	.03417709	.03428607	Q AF	San Gabriel Valley Municipal Water District
.03439504		0	47.32686	.03439504		C CFS	
.02053000	.02106816	0	17655.8	.02053000	.02106816	Q AF	San Geronio Pass Water Agency
.02160632		0	29.72985	.02160632		C CFS	
.00688279	.00706620	0	5919.2	.00688279	.00706620	Q AF	Crestline-Lake Arrowhead Water Agency
.00724961		0	9.97531	.00724961		C CFS	
.05984442	.05773081	0	51466.2	.05984442	.05773081	Q AF	Mojave Water Agency
.05561721		0	76.52813	.05561721		C CFS	
.04488326	.04608043	0	38599.6	.04488326	.04608043	Q AF	Desert Water Agency
.04727761		0	65.05301	.04727761		C CFS	
.02721279	.02794143	0	23403.0	.02721279	.02794143	Q AF	Coachella Valley County Water District
.02867007		0	39.44942	.02867007		C CFS	
.01268477	.01181870	0	10908.9	.01268477	.01181870	Q AF	Antelope Valley-East Kern Water Agency
.01095263		0	15.07059	.01095263		C CFS	
1.00000000	1.00000000	0	860000.0	1.00000000	1.00000000	Q AF	Totals
1.00000000			1375.97924	1.00000000		C CFS	
PEARBLOSSOM PUMPING PLANT TO WEST FORK MOJAVE RIVER - REACH 22B							
.68066337	.67705257	0	577474.8	.68066337	.67705257	Q AF	The Metropolitan Water District of Southern California
.67344178		0	915.72671	.67344178		C CFS	
.12331990	.12645206	0	104624.6	.12331990	.12645206	Q AF	San Bernardino Valley Municipal Water District
.12958422		0	176.20488	.12958422		C CFS	
.03461622	.03469615	0	29388.4	.03461622	.03469615	Q AF	San Gabriel Valley Municipal Water District
.03477609		0	47.28752	.03477609		C CFS	
.02079373	.02132008	0	17641.4	.02079373	.02132008	Q AF	San Geronio Pass Water Agency
.02184643		0	29.70615	.02184643		C CFS	
.00697124	.00715073	0	5914.4	.00697124	.00715073	Q AF	Crestline-Lake Arrowhead Water Agency
.00733021		0	9.96741	.00733021		C CFS	
.06061327	.05842136	0	51424.3	.06061327	.05842136	Q AF	Mojave Water Agency
.05622944		0	76.45917	.05622944		C CFS	
.04545992	.04663153	0	38568.2	.04545992	.04663153	Q AF	Desert Water Agency
.04780314		0	65.00133	.04780314		C CFS	
.02756235	.02827552	0	23383.9	.02756235	.02827552	Q AF	Coachella Valley County Water District
.02998869		0	39.41798	.02998869		C CFS	
1.00000000	1.00000000	0	848400.0	1.00000000	1.00000000	Q AF	Totals
1.00000000			1359.77115	1.00000000		C CFS	

TABLE B-2 (Continued)
PROPORTIONATE USE OF EACH AQUEDUCT REACH
(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				
				FOR DELIVERY OF ENTITLEMENTS	FOR COMPENSATION OF			SUBTOTAL
					OPERATIONAL LOSSES	SCHEDULED OUTAGES	DOWNSTREAM REGULATION	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
REACH 23 - WEST FORK MOJAVE RIVER TO SILVERWOOD LAKE								
The Metropolitan Water District of Southern California	Q AF C CFS	0 84.70080	0	556500.0 853.38233	13964.0 19.28817	31.51691	0	573464.0 904.18741
San Bernardino Valley Municipal Water District	Q AF C CFS	0 30.61495	0	102600.0 172.33413	754.4 1.04204	0 .73905	0	103354.4 174.11422
San Gabriel Valley Municipal Water District	Q AF C CFS	0 5.37046	0	28900.0 45.15128	211.3 .29256	0 1.25674	0	29011.3 46.70058
San Geronimo Pass Water Agency	Q AF C CFS	0 5.15498	0	17300.0 29.05110	127.2 .17570	0 .12679	0	17427.2 29.35359
Crestline-Lake Arrowhead Water Agency	Q AF C CFS	0 1.74043	0	5800.0 9.75185	42.6 .05884	0 .03954	0	5842.6 9.84923
Desert Water Agency	Q AF C CFS	0 0	0	0	0	0	1377.0 9.67948	1377.0 10.40587
Coachella Valley County Water District	Q AF C CFS	0 0	0	0	0	0	335.0 5.86890	335.0 6.30907
Totals	Q AF C CFS	0 127.58162	0	711000.0 1109.67069	15100.0 20.85731	34.84319	7212.0 15.54878	724312.0 1130.91977
REACH 24 - CEDAR SPRINGS DAM AND SILVERWOOD LAKE								
The Metropolitan Water District of Southern California	Q AF C AF	0 46050.0	4164.0 1053.0	556500.0 46050.0	13964.0 1053.0	0	0	540.3441* 4713.0
San Bernardino Valley Municipal Water District	Q AF C AF	0 16635.0	754.4 380.0	102600.0 16635.0	754.4 380.0	0	0	152.34812* 17815.0
San Gabriel Valley Municipal Water District	Q AF C AF	0 3118.0	211.8 71.0	28900.0 3118.0	211.8 71.0	0	0	42.76438* 3119.0
San Geronimo Pass Water Agency	Q AF C AF	0 2066.0	127.2 47.0	17300.0 2066.0	127.2 47.0	0	0	25.58833* 2113.0
Crestline-Lake Arrowhead Water Agency	Q AF C AF	0 5800.0 936.0	42.6 21.0	5800.0 936.0	42.6 21.0	0	0	4.61222* 957.0
Desert Water Agency	Q AF C AF	0 1377.0	0 32.0	0 1377.0	0 32.0	0	0	0* 1407.0
Coachella Valley County Water District	Q AF C AF	0 335.0	0 19.0	0 335.0	0 19.0	0	0	0* 354.0
Totals	Q AF C AF	0 71017.0	5300.0 1623.0	711000.0 71017.0	15100.0 1623.0	0	0	1070.23752* 77540.0
REACH 25 - SILVERWOOD LAKE TO SOUTH PORTAL, SAN BERNARDINO TUNNEL								
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	0	556500.0 854.21713	9800.0 13.53653	29.24512	0	546300.0 436.95378
San Bernardino Valley Municipal Water District	Q AF C CFS	0 0	0	102600.0 187.06932	0	0	0	102600.0 137.06932
San Gabriel Valley Municipal Water District	Q AF C CFS	0 0	0	28900.0 47.73699	0	0	0	28900.0 47.73699
San Geronimo Pass Water Agency	Q AF C CFS	0 0	0	17300.0 31.54288	0	0	0	17300.0 31.54288
Totals	Q AF C CFS	0 0	0	705200.0 1160.56132	9800.0 13.53653	29.24512	0	715300.0 1203.34297

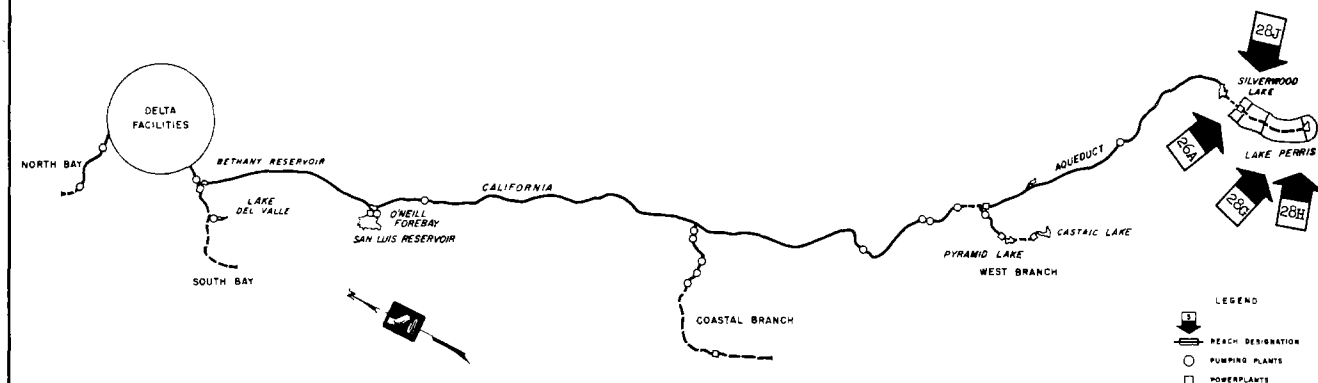
* CFS CAPACITY FOR CONVEYANCE OF ANNUAL QUANTITIES DELIVERED FROM OR THROUGH THE RESERVOIR, EXCLUDING RESERVOIR LOSSES.



PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS		CAPACITY PROVIDED IN REACH		PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS		MEASURE OF USE	WATER SUPPLY CONTRACTOR
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		
(9)	(10)	(11)	(12)	(13)	(14)	(15)	
WEST FORK MOJAVE RIVER TO SILVERWOOD LAKE - REACH 23							
.75326871	.77446614	0	570464.0	.78326871	.77446614	Q AF	The Metropolitan Water District of Southern California
.76566358			904.18741	.76566358		C CFS	
.14190951	.14467449	0	103354.4	.14190951	.14467449	Q AF	San Bernardino Valley Municipal Water District
.14743948			174.11422	.14743948		C CFS	
.03983430	.03969012	0	29011.8	.03983430	.03969012	Q AF	San Gabriel Valley Municipal Water District
.03954593			46.70058	.03954593		C CFS	
.02392821	.02439238	0	17427.2	.02392821	.02439238	Q AF	San Geronio Pass Water Agency
.02485655			29.35359	.02485655		C CFS	
.00802211	.00818121	0	5842.6	.00802211	.00818121	Q AF	Crestline-Lake Arrowhead Water Agency
.00834030			9.84923	.00834030		C CFS	
.00189067	.00535117	0	1377.0	.00189067	.00535117	Q AF	Desert Water Agency
.00981166			10.40587	.00981166		C CFS	
.00114649	.00324449	0	835.0	.00114649	.00324449	Q AF	Coachella Valley County Water District
.00534250			6.30907	.00534250		C CFS	
1.00000000	1.00000000	0	72312.0	1.00000000	1.00000000	Q AF	Totals
1.00000000			1180.91997	1.00000000		C CFS	
CEDAR SPRINGS DAM AND SILVERWOOD LAKE - REACH 24							
.78565483	.66607404		840.88441*	.78565483	.66607404	Q AF	The Metropolitan Water District of Southern California
.64644438			47103.0	.64644438		C AF	
.14234184	.22243002		152.34812*	.14234184	.22243002	Q AF	San Bernardino Valley Municipal Water District
.23421733			17015.0	.23421733		C AF	
.03995560	.04339444		42.76438*	.03995560	.04339444	Q AF	San Gabriel Valley Municipal Water District
.04390143			3189.0	.04390143		C AF	
.02400111	.02843498		25.68833*	.02400111	.02843498	Q AF	San Geronio Pass Water Agency
.02908866			2113.0	.02908866		C AF	
.00804662	.01251569		8.61228*	.00804662	.01251569	Q AF	Crestline-Lake Arrowhead Water Agency
.01317456			957.0	.01317456		C AF	
0			0*	0		Q AF	Desert Water Agency
.01939703	.01690478		1409.0	.01939703	.01690478	Q AF	Coachella Valley County Water District
0			0*	0		C AF	
.01175461	.01024605		854.0	.01175461	.01024605	Q AF	
						C AF	
1.00000000	1.00000000		1070.29752*	1.00000000	1.00000000	Q AF	Totals
1.00000000			72640.0	1.00000000		C AF	
SILVERWOOD LAKE TO SOUTH PORTAL, SAN BERNARDINO TUNNEL - REACH 25							
.79202797	.78534346	787.00000	566309.0	.79202797	.82458181	Q AF	The Metropolitan Water District of Southern California
.77865336			1723.99378	.77865336		C CFS	
.14349650	.14947726	0	102600.0	.14349650	.11825184	Q AF	San Bernardino Valley Municipal Water District
.15545802			187.06932	.15545802		C CFS	
.04027972	.03997502	21.00000	28800.0	.04027972	.03722720	Q AF	San Gabriel Valley Municipal Water District
.03967031			68.73679	.03967031		C CFS	
.02419581	.02520426	0	17300.0	.02419581	.01993915	Q AF	San Geronio Pass Water Agency
.02621271			31.54288	.02621271		C CFS	
1.00000000	1.00000000	808.00000	715000.0	1.00000000	1.00000000	Q AF	Totals
1.00000000			2011.34227	1.00000000		C CFS	

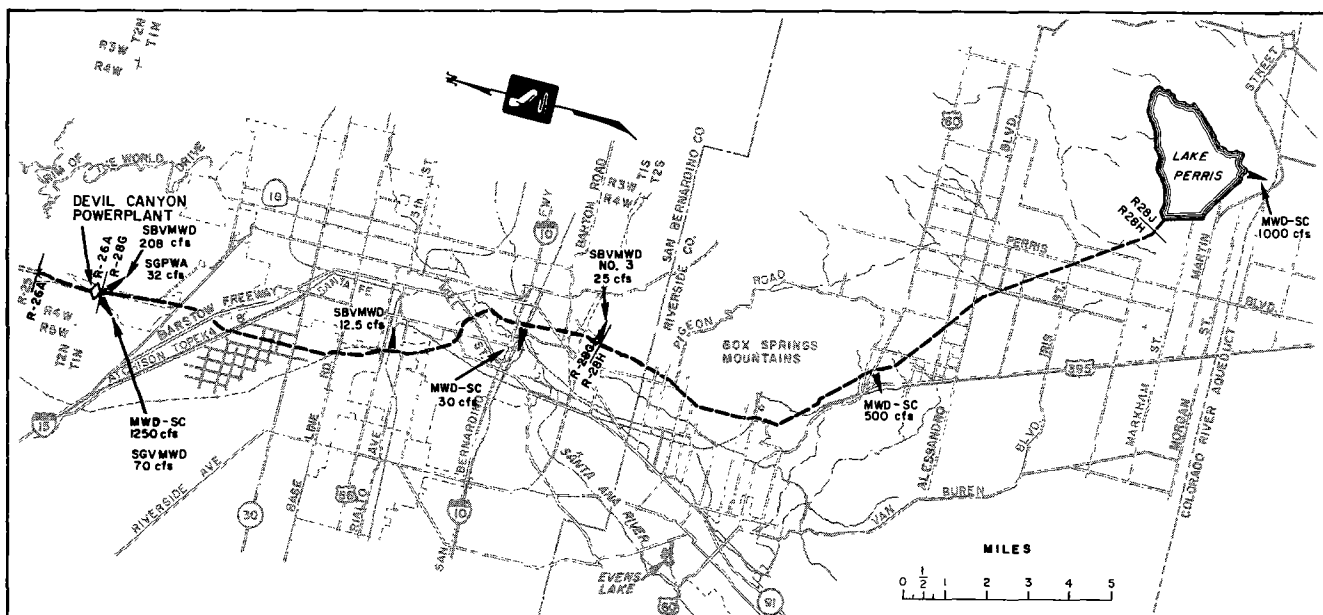
* CFS CAPACITY FOR CONVEYANCE OF ANNUAL QUANTITIES DELIVERED FROM OR THROUGH THE RESERVOIR, EXCLUDING RESERVOIR LOSSES.
 2. 54% OF ANNUAL QUANTITY RATIO WEIGHTED BY .12948629 AND CAPACITY RATIO WEIGHTED BY .87151372.

TABLE B-2 (Continued)
PROPORTIONATE USE OF EACH AQUEDUCT REACH
(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				
				FOR DELIVERY OF ENTITLEMENTS	FOR COMPENSATION OF OPERATIONAL LOSSES	SCHEDULED OUTAGES	DOWNSTREAM REGULATION	SUBTOTAL
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
REACH 26A - SOUTH PORTAL, SAN BERNARDINO TUNNEL THRU DEVIL CANYON POWERPLANT								
The Metropolitan Water District of Southern California	Q AF	284000.0	0	556500.0	9800.0	0	0	566300.0
	C CFS	517.81372	0	894.21213	13.53653	29.24512	0	936.99378
San Bernardino Valley Municipal Water District	Q AF	88900.0	0	102600.0	0	0	0	102600.0
	C CFS	162.09028	0	187.06932	0	0	0	187.06932
San Gabriel Valley Municipal Water District	Q AF	28800.0	0	28800.0	0	0	0	28800.0
	C CFS	47.73699	0	47.73699	0	0	0	47.73699
San Geronimo Pass Water Agency	Q AF	17300.0	0	17300.0	0	0	0	17300.0
	C CFS	31.54288	0	31.54288	0	0	0	31.54288
Totals	Q AF	419000.0	0	705200.0	9800.0	0	0	715000.0
	C CFS	759.18387	0	1160.56132	13.53653	29.24512	0	1203.34297
REACH 28G - DEVIL CANYON POWERPLANT THRU BARTON ROAD								
The Metropolitan Water District of Southern California	Q AF	0	0	272500.0	9800.0	0	0	282300.0
	C CFS	0	0	376.39841	13.53653	29.24512	0	419.18006
San Bernardino Valley Municipal Water District	Q AF	13700.0	0	13700.0	0	0	0	13700.0
	C CFS	24.97904	0	24.97904	0	0	0	24.97904
Totals	Q AF	13700.0	0	286200.0	9800.0	0	0	296000.0
	C CFS	24.97904	0	401.37745	13.53653	29.24512	0	444.15910
REACH 28H - BARTON ROAD TO LAKE PERRIS								
The Metropolitan Water District of Southern California	Q AF	0	0	272500.0	9800.0	0	0	282300.0
	C CFS	0	0	376.39841	13.53653	29.24512	0	419.18006
Totals	Q AF	0	0	272500.0	9800.0	0	0	282300.0
	C CFS	0	0	376.39841	13.53653	29.24512	0	419.18006
REACH 28J - PERRIS DAM AND LAKE PERRIS								
The Metropolitan Water District of Southern California	Q AF	272500.0	9800.0	272500.0	9800.0	0		404.62829*
	C AF	95999.0	3001.0	95999.0	3001.0	0		99000.0
Totals	Q AF	272500.0	9800.0	272500.0	9800.0	0		404.62829*
	C AF	95999.0	3001.0	95999.0	3001.0	0		99000.0

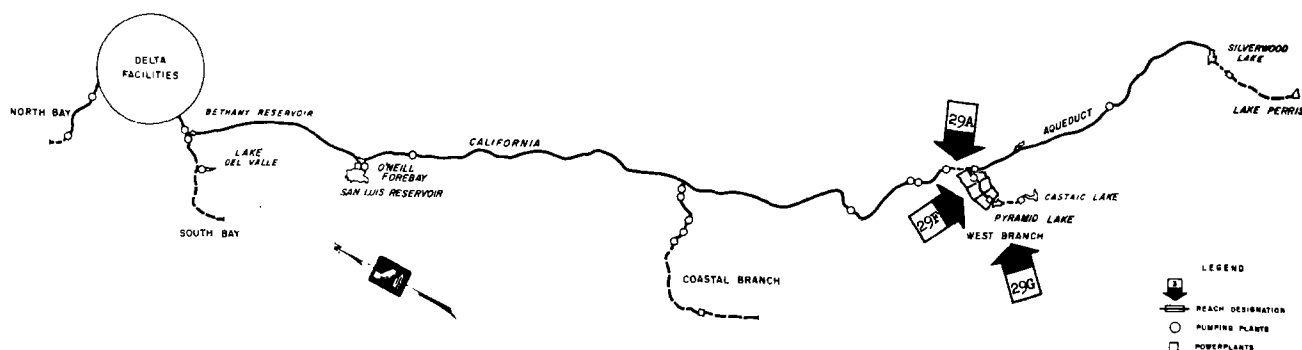
*CFS CAPACITY FOR CONVEYANCE OF ANNUAL QUANTITIES DELIVERED FROM OR THROUGH THE RESERVOIR, EXCLUDING RESERVOIR LOSSES.



PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS		CAPACITY PROVIDED IN REACH		PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS		MEASURE OF USE	WATER SUPPLY CONTRACTOR
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		
(9)	(10)	(11)	(12)	(13)	(14)	(15)	
SOUTH PORTAL, SAN BERNARDINO TUNNEL THRU DEVIL CANYON POWERPLANT - REACH 26A							
.79202797			566300.0	.79202797		Q AF	The Metropolitan Water District of Southern California
.77865896	.78534346	0	935.99378	.77865896	.78534346	C CFS	
.14349650			102600.0	.14349650		Q AF	San Bernardino Valley Municipal Water District
.15545802	.14947726	0	187.06932	.15545802	.14947726	C CFS	
.04027972			28800.0	.04027972		Q AF	San Gabriel Valley Municipal Water District
.03967031	.03997502	0	47.73699	.03967031	.03997502	C CFS	
.02419581			17300.0	.02419581		Q AF	San Geronimo Pass Water Agency
.02621271	.02520426	0	31.54288	.02621271	.02520426	C CFS	
1.00000000	1.00000000	0	715000.0	1.00000000	1.00000000	Q AF	Totals
1.00000000	1.00000000		1203.34297	1.00000000	1.00000000	C CFS	
DEVIL CANYON POWERPLANT THRU BARTON ROAD - REACH 28G							
.95371622			282300.0	.95371622		Q AF	The Metropolitan Water District of Southern California
.94376105	.94873863	0	419.18036	.94376105	.94873863	C CFS	
.04628378			13700.0	.04628378		Q AF	San Bernardino Valley Municipal Water District
.05623895	.05126137	0	24.97904	.05623895	.05126137	C CFS	
1.00000000	1.00000000	0	296000.0	1.00000000	1.00000000	Q AF	Totals
1.00000000	1.00000000		444.15913	1.00000000	1.00000000	C CFS	
BARTON ROAD TO LAKE PERRIS - REACH 28H							
1.00000000			282300.0	1.00000000		Q AF	The Metropolitan Water District of Southern California
1.00000000	1.00000000	0	419.18036	1.00000000	1.00000000	C CFS	
1.00000000	1.00000000	0	282300.0	1.00000000	1.00000000	Q AF	Totals
1.00000000	1.00000000		419.18036	1.00000000	1.00000000	C CFS	
PERRIS DAM AND LAKE PERRIS - REACH 28J							
1.00000000			404.62329*	1.00000000		Q AF	The Metropolitan Water District of Southern California
1.00000000	1.00000000		99000.0	1.00000000	1.00000000	Q AF	
1.00000000	1.00000000		404.62329*	1.00000000	1.00000000	Q AF	Totals
1.00000000	1.00000000		99000.0	1.00000000	1.00000000	Q AF	

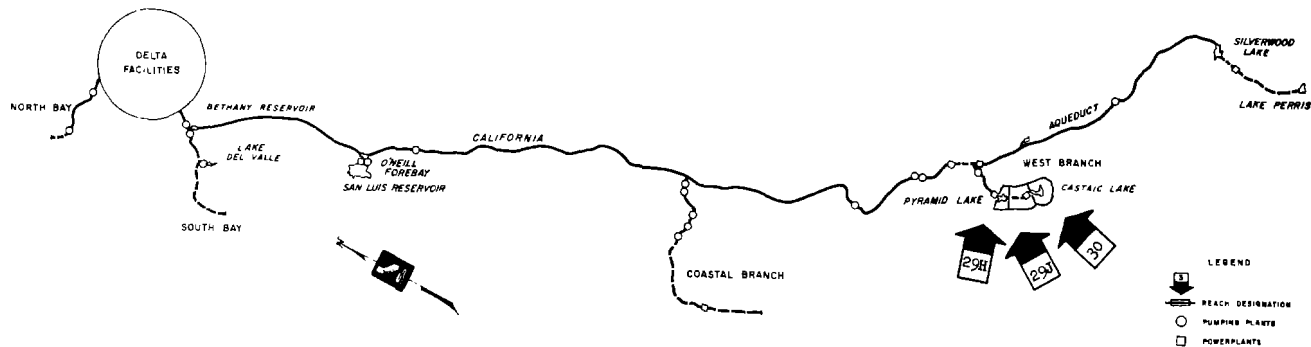
* CFS CAPACITY FOR CONVEYANCE OF ANNUAL QUANTITIES DELIVERED FROM OR THROUGH THE RESERVOIR, EXCLUDING RESERVOIR LOSSES.
 @ SUMMATION OF QUANTITY RATIO WEIGHTED BY 0 AND CAPACITY RATIO WEIGHTED BY 1.00000000.

TABLE B-2 (Continued)
PROPORTIONATE USE OF EACH AQUEDUCT REACH
(in units as shown)



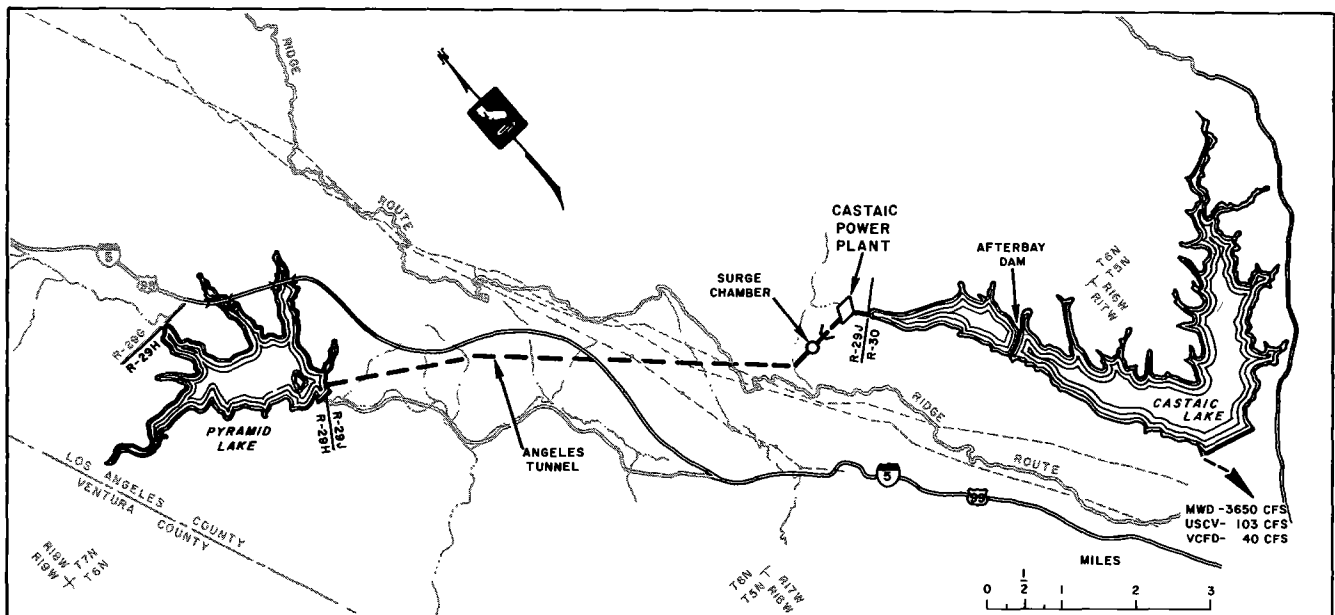
WATER SUPPLY CONTRACTOR	MEASURE OF USE	MAXIMUM ANNUAL ENTITLEMENTS DELIVERED FROM REACH	ESTIMATED OPERATIONAL LOSSES WITHIN REACH	CAPACITY PROVIDED IN REACH				
				FOR DELIVERY OF ENTITLEMENTS	FOR COMPENSATION OF			SUBTOTAL
					OPERATIONAL LOSSES	SCHEDULED OUTAGES	DOWNSTREAM REGULATION	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
REACH 29A - JUNCTION, WEST BRANCH CALIFORNIA AQUEDUCT THRU OSO PUMPING PLANT								
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	479.7 .78956	1455000.0 2785.95222	26768.5 38.06661	0 153.07773	0 0	1481768.5 2977.09656
Antelope Valley-East Kern Water Agency	Q AF C CFS	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Ventura County Flood Control District	Q AF C CFS	0 0	6.6 .01086	20000.0 38.29488	368.0 .52332	0 2.10417	0 0	20368.0 40.92237
Upper Santa Clara Valley Water Agency	Q AF C CFS	0 0	13.7 .02255	41500.0 79.46187	763.5 1.08575	0 4.36613	0 0	42263.5 84.91375
Totals	Q AF C CFS	0 0	500.0 .82297	1516500.0 2903.70897	27900.0 39.67568	0 159.54803	0 0	1544400.0 3102.93268
REACH 29F - OSO PUMPING PLANT THRU QUAIL EMBANKMENT								
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	2398.6 3.94793	1455000.0 2785.95222	26288.8 37.27705	0 153.07773	0 0	1481288.8 2976.30700
Antelope Valley-East Kern Water Agency	Q AF C CFS	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Ventura County Flood Control District	Q AF C CFS	0 0	33.0 .05432	20000.0 38.29488	361.4 .51246	0 2.10417	0 0	20361.4 40.91151
Upper Santa Clara Valley Water Agency	Q AF C CFS	0 0	68.4 .11258	41500.0 79.46187	749.8 1.06320	0 4.36613	0 0	42249.8 84.89120
Totals	Q AF C CFS	0 0	2500.0 4.11483	1516500.0 2903.70897	27400.0 38.85271	0 159.54803	0 0	1543900.0 3102.10971
REACH 29G - QUAIL EMBANKMENT THRU PYRAMID POWERPLANT								
The Metropolitan Water District of Southern California	Q AF C CFS	0 0	1247.3 2.05297	1455000.0 2785.95222	23890.2 33.32912	0 153.07773	0 0	1478890.2 2972.35907
Ventura County Flood Control District	Q AF C CFS	0 0	17.1 .02815	20000.0 38.29488	328.4 .45814	0 2.10417	0 0	20328.4 40.85719
Upper Santa Clara Valley Water Agency	Q AF C CFS	0 0	35.6 .05859	41500.0 79.46187	581.4 .95062	0 4.36613	0 0	42191.4 84.77862
Totals	Q AF C CFS	0 0	1300.0 2.13971	1516500.0 2903.70897	24900.0 34.73788	0 159.54803	0 0	1541400.0 3097.99488

TABLE B-2 (Continued)
PROPORTIONATE USE OF EACH AQUEDUCT REACH
(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				SUBTOTAL
				FOR DELIVERY OF ENTITLEMENTS	FOR COMPENSATION OF OPERATIONAL LOSSES	SCHEDULED OUTAGES	DOWNSTREAM REGULATION	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
REACH 29H - PYRAMID DAM AND LAKE								
The Metropolitan Water District of Southern California	Q AF C AF	148565.0	7099.9 2189.0	1455000.0 148565.0	22642.9 2189.0	0	0	2183.57176* 150754.0
Ventura County Flood Control District	Q AF C AF	1225.0	97.6 18.0	20000.0 1225.0	311.3 18.0	0	0	30.01481* 1243.0
Upper Santa Clara Valley Water Agency	Q AF C AF	4034.0	202.5 59.0	41500.0 4034.0	645.8 59.0	0	0	62.28053* 4093.0
Totals	Q AF C AF	153824.0	7400.0 2266.0	1516500.0 153824.0	23600.0 2266.0	0	0	2275.86710* 156090.0
* CFS CAPACITY FOR CONVEYANCE OF ANNUAL QUANTITIES DELIVERED FROM OR THROUGH THE RESERVOIR, EXCLUDING RESERVOIR LOSSES.								
REACH 29J - PYRAMID LAKE THRU CASTAIC POWERPLANT								
The Metropolitan Water District of Southern California	Q AF C CFS	776.19188	0	1455000.0 2785.95222	15543.0 21.45921	152.34271	0	1470543.0 2959.76364
Ventura County Flood Control District	Q AF C CFS	10.66931	0	20000.0 38.29488	213.7 .29518	2.09406	0	20213.7 40.68412
Upper Santa Clara Valley Water Agency	Q AF C CFS	22.13881	0	41500.0 79.46187	443.3 .61232	4.34515	0	41943.3 84.41934
Totals	Q AF C CFS	809.00000	0	1516500.0 2903.70897	16200.0 22.37671	158.78142	0	1532700.0 3084.86710
REACH 30 - CASTAIC DAM AND LAKE								
The Metropolitan Water District of Southern California	Q AF C AF	1455000.0 315859.0	15543.0 4790.0	1455000.0 315859.0	15543.0 4790.0	0	0	2160.49236* 320649.0
Ventura County Flood Control District	Q AF C AF	20000.0 2604.0	213.7 40.0	20000.0 2604.0	213.7 40.0	0	0	29.69749* 2644.0
Upper Santa Clara Valley Water Agency	Q AF C AF	41500.0 8577.0	443.3 130.0	41500.0 8577.0	443.3 130.0	0	0	61.62229* 8707.0
Totals	Q AF C AF	1516500.0 327040.0	16200.0 4960.0	1516500.0 327040.0	16200.0 4960.0	0	0	2251.81214* 332000.0

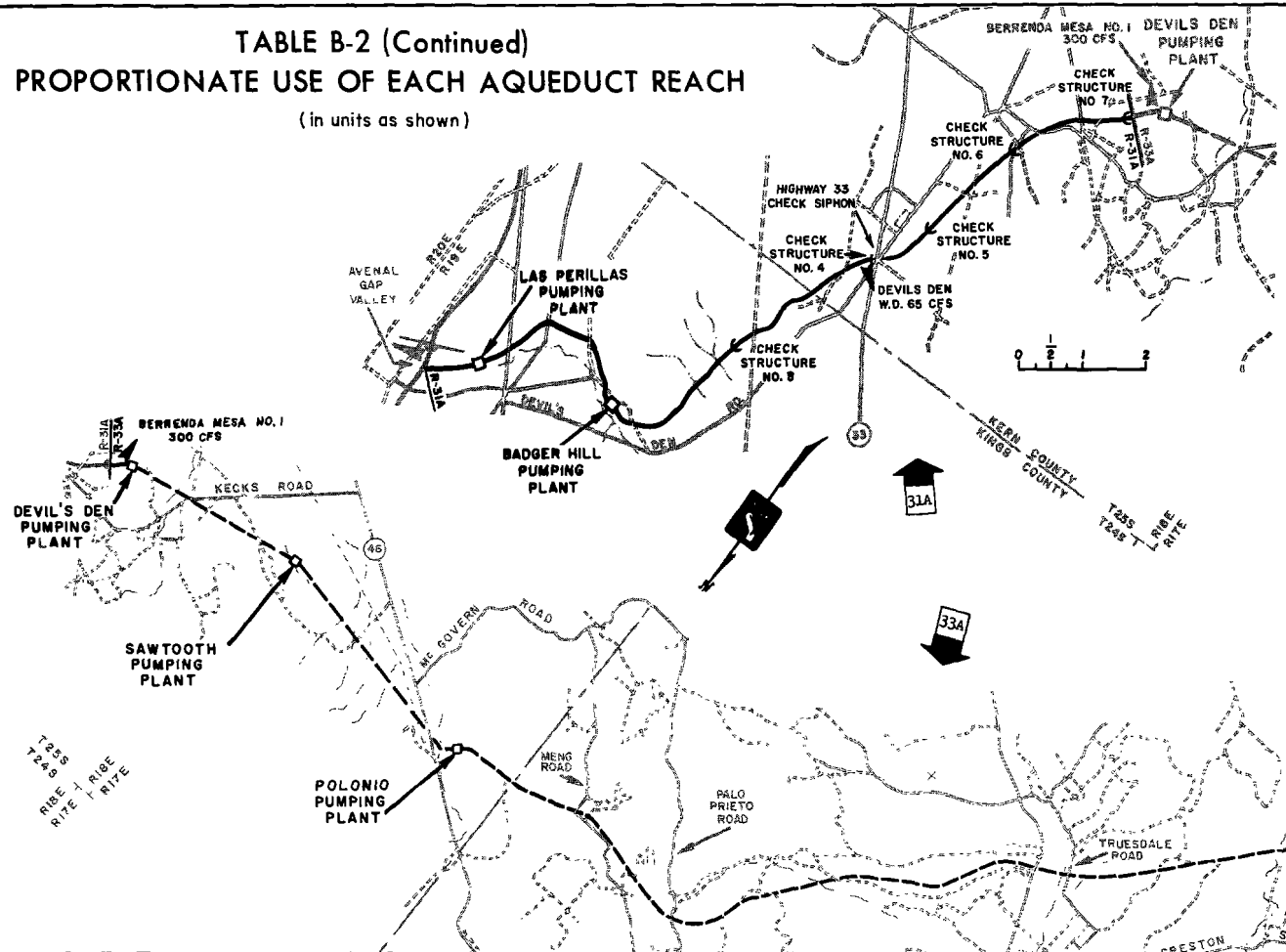
* CFS CAPACITY FOR CONVEYANCE OF ANNUAL QUANTITIES DELIVERED FROM OR THROUGH THE RESERVOIR, EXCLUDING RESERVOIR LOSSES.



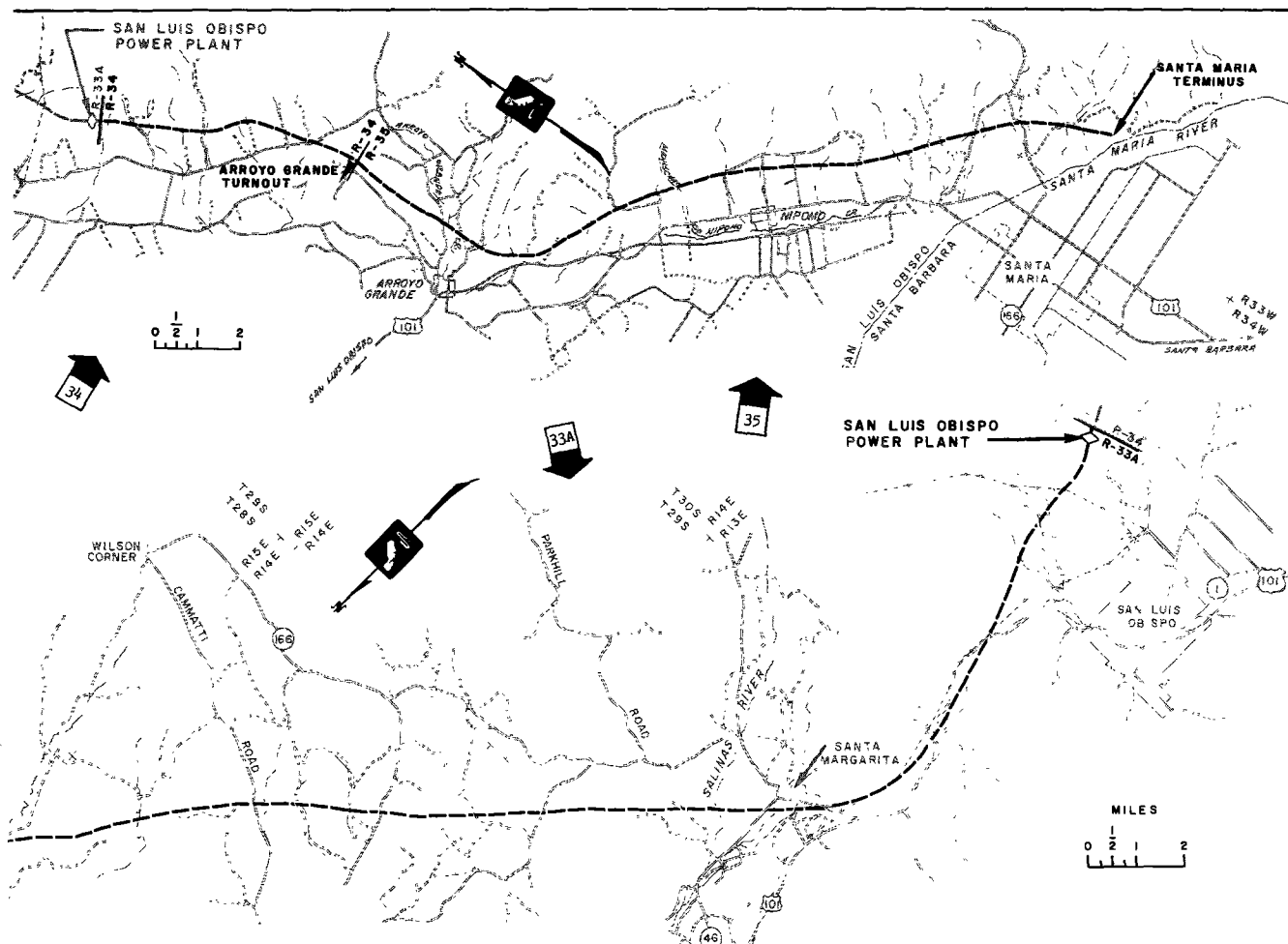
PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS		CAPACITY PROVIDED IN REACH		PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS		MEASURE OF USE	WATER SUPPLY CONTRACTOR
RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS	FOR REQUESTED EXCESS PEAKING	TOTAL FOR WATER SUPPLY CONTRACTORS	RATIOS OF TOTAL REACH USE	AVERAGE OF RATIOS		
(9)	(10)	(11)	(12)	(13)	(14)	(15)	
PYRAMID DAM AND LAKE - REACH 29H							
.95944608			2183.57176*	.95944608		Q AF	The Metropolitan Water District of Southern California
.96581459	.96446829a		150754.0	.96581459	.96446829a	C AF	
.01318829			30.01481*	.01318829		C AF	Ventura County Flood Control District
.00796336	.00906791a		1243.0	.00796336	.00906791a	C AF	
.02736563			62.28053*	.02736563		Q AF	Upper Santa Clara Valley Water Agency
.02622205	.02646380a		4093.0	.02622205	.02646380a	C AF	
1.00000000			2275.86710*	1.00000000		Q AF	Totals
1.00000000	1.00000000a		156090.0	1.00000000	1.00000000a	C AF	
* CFS CAPACITY FOR CONVEYANCE OF ANNUAL QUANTITIES DELIVERED FROM OR THROUGH THE RESERVOIR, EXCLUDING RESERVOIR LOSSES. a SUMMATION OF QUANTITY RATIO WEIGHTED BY .21139995 AND CAPACITY RATIO WEIGHTED BY .78860005.							
PYRAMID LAKE THRU CASTAIC POWERPLANT - REACH 29J							
.95944608			1470543.0	.95944608		Q AF	The Metropolitan Water District of Southern California
.95944608	.95944608	0	2959.76364	.95944608	.95944608	C CFS	
.01318829			20213.7	.01318829		Q AF	Ventura County Flood Control District
.01318829	.01318829	0	40.68412	.01318829	.01318829	C CFS	
.02736563			41943.3	.02736563		Q AF	Upper Santa Clara Valley Water Agency
.02736563	.02736563	0	84.41934	.02736563	.02736563	C CFS	
1.00000000			1532700.0	1.00000000		Q AF	Totals
1.00000000	1.00000000	0	3084.56710	1.00000000	1.00000000	C CFS	
CASTAIC DAM AND LAKE - REACH 30							
.95944609			2160.49236*	.95944609		Q AF	The Metropolitan Water District of Southern California
.96581024	.96499830a		320649.0	.96581024	.96499830a	C AF	
.01318826			29.69749*	.01318826		Q AF	Ventura County Flood Control District
.00796386	.00863039a		2644.0	.00796386	.00863039a	C AF	
.02736565			61.62229*	.02736565		Q AF	Upper Santa Clara Valley Water Agency
.02622590	.02637131a		8707.0	.02622590	.02637131a	C AF	
1.00000000			2251.41214*	1.00000000		Q AF	Totals
1.00000000	1.00000000a		332000.0	1.00000000	1.00000000a	C AF	

* CFS CAPACITY FOR CONVEYANCE OF ANNUAL QUANTITIES DELIVERED FROM OR THROUGH THE RESERVOIR, EXCLUDING RESERVOIR LOSSES.
a SUMMATION OF QUANTITY RATIO WEIGHTED BY .12758072 AND CAPACITY RATIO WEIGHTED BY .87241928.

TABLE B-2 (Continued)
PROPORTIONATE USE OF EACH AQUEDUCT REACH
(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				SUBTOTAL
				FOR DELIVERY OF ENTITLEMENTS	FOR COMPENSATION OF OPERATIONAL LOSSES	SCHEDULED OUTAGES	DOWNSTREAM REGULATION	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
REACH 31A - AVENAL GAP TO DEVIL'S DEN PUMPING PLANT								
Kern County Water Agency (Agriculture)	Q AF CFS	105100.0 283.00000	725.9 1.19478	105100.0 283.00000	725.9 1.19478	0 0	0 0	105825.9 284.19478
Santa Barbara County Flood Control and Water Conservation District	Q AF CFS	0 0	410.5 .67565	57700.0 79.69977	2150.1 3.20822	0 6.10693	0 0	59850.1 89.01492
San Luis Obispo County Flood Control and Water Conservation District	Q AF CFS	0 0	175.9 .28952	25000.0 34.53197	636.3 .98102	0 2.61585	0 0	25636.3 38.12884
Devil's Den Water District	Q AF CFS	12700.0 37.89123	87.7 .14435	12700.0 37.89123	87.7 .14435	0 0	0 0	12787.7 38.03558
Totals	Q AF CFS	117800.0 320.89123	1400.0 2.30430	200500.0 435.12297	3600.0 5.52837	0 8.72278	0 0	204100.0 449.37412
REACH 33A - DEVIL'S DEN PUMPING PLANT THRU SAN LUIS OBISPO POWERPLANT								
Santa Barbara County Flood Control and Water Conservation District	Q AF CFS	0 0	490.1 .80667	57700.0 79.69977	1739.6 2.53257	0 6.10693	0 0	59439.6 88.33927
San Luis Obispo County Flood Control and Water Conservation District	Q AF CFS	10000.0 13.81279	209.9 .34348	25000.0 34.53197	460.4 .69150	0 2.61585	0 0	25460.4 37.83932
Totals	Q AF CFS	10000.0 13.81279	700.0 1.15215	82700.0 114.23174	2200.0 3.22407	0 8.72278	0 0	84900.0 126.17859
REACH 34 - SAN LUIS OBISPO POWERPLANT TO ARROYO GRANDE								
Santa Barbara County Flood Control and Water Conservation District	Q AF CFS	0 0	397.2 .54864	57700.0 79.69977	1249.5 1.72590	0 6.10693	0 0	58949.5 87.53260
San Luis Obispo County Flood Control and Water Conservation District	Q AF CFS	5000.0 6.90639	102.8 .14200	15000.0 20.71918	250.5 .34602	0 1.57989	0 0	15250.5 22.64509
Totals	Q AF CFS	5000.0 6.90639	500.0 .69064	72700.0 100.41895	1500.0 2.07192	0 7.68682	0 0	74200.0 110.17769
REACH 35 - ARROYO GRANDE THRU SANTA MARIA TERMINUS								
Santa Barbara County Flood Control and Water Conservation District	Q AF CFS	57700.0 79.69977	852.3 1.17726	57700.0 79.69977	852.3 1.17726	0 6.06578	0 0	58552.3 86.94281
San Luis Obispo County Flood Control and Water Conservation District	Q AF CFS	10000.0 13.81279	147.7 .20402	10000.0 13.81279	147.7 .20402	0 1.05126	0 0	10147.7 15.06807
Totals	Q AF CFS	67700.0 93.51256	1000.0 1.38128	67700.0 93.51256	1000.0 1.38128	0 7.11704	0 0	68700.0 102.01088



PROPORTIONATE USE FOR ALLOCATION OF CAPITAL COSTS		CAPACITY PROVIDED IN REACH		PROPORTIONATE USE FOR ALLOCATION OF MINIMUM OMP&R COSTS		MEASURE OF USE	WATER SUPPLY CONTRACTOR
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		
(9)	(10)	(11)	(12)	(13)	(14)	(15)	
AVENAL GAP TO DEVIL'S DEN PUMPING PLANT - REACH 31A							
.51850024	.57546190	0	105825.9	.51850024	.57546190	Q AF	Kern County Water Agency (Agriculture)
.63242356			284.19478	.63242356		C CFS	
.29323910	.24566277	0	59850.1	.29323910	.24566277	Q AF	Santa Barbara County Flood Control and Water Conservation District
.19808644			89.01492	.19808644		C CFS	
.12560657	.10522767	0	25636.3	.12560657	.10522767	Q AF	San Luis Obispo County Flood Control and Water Conservation District
.08484877			38.12884	.08484877		C CFS	
.06265409	.07364766	0	12787.7	.06265409	.07364766	Q AF	Devil's Den Water District
.08464123			38.03558	.08464123		C CFS	
1.00000000	1.00000000	0	204100.0	1.00000000		Q AF	Totals
1.00000000			449.37412	1.00000000	1.00000000	C CFS	
DEVIL'S DEN PUMPING PLANT THRU SAN LUIS OBISPO POWERPLANT - REACH 33A							
.70011307	.70011303	0	59439.6	.70011307	.70011303	Q AF	Santa Barbara County Flood Control and Water Conservation District
.70011299			84.33927	.70011299		C CFS	
.29988693	.29988697	0	25460.4	.29988693	.29988697	Q AF	San Luis Obispo County Flood Control and Water Conservation District
.29988701			37.83932	.29988701		C CFS	
1.00000000	1.00000000	0	84900.0	1.00000000		Q AF	Totals
1.00000000			126.17859	1.00000000	1.00000000	C CFS	
SAN LUIS OBISPO POWERPLANT TO ARROYO GRANDE - REACH 34							
.79446765	.79446761	0	58949.5	.79446765	.79446761	Q AF	Santa Barbara County Flood Control and Water Conservation District
.79446756			87.53260	.79446756		C CFS	
.20553235	.20553239	0	15250.5	.20553235	.20553239	Q AF	San Luis Obispo County Flood Control and Water Conservation District
.20553244			22.64509	.20553244		C CFS	
1.00000000	1.00000000	0	74200.0	1.00000000		Q AF	Totals
1.00000000			110.17769	1.00000000	1.00000000	C CFS	
ARROYO GRANDE THRU SANTA MARIA TERMINUS - REACH 35							
.85228967	.85228962	0	58552.3	.85228967	.85228962	Q AF	Santa Barbara County Flood Control and Water Conservation District
.85228958			86.94281	.85228958		C CFS	
.14771033	.14771038	0	10147.7	.14771033	.14771038	Q AF	San Luis Obispo County Flood Control and Water Conservation District
.14771042			15.06807	.14771042		C CFS	
1.00000000	1.00000000	0	68700.0	1.00000000		Q AF	Totals
1.00000000			102.01088	1.00000000	1.00000000	C CFS	

TABLE B-3

TOTAL VARIABLE OMP&R COSTS OF PUMPING AND POWER RECOVERY PLANTS
OF PROJECT TRANSPORTATION FACILITIES(a)

(in dollars)

Sheet 1 of 2

Calendar Year	NORTH BAY AQUEDUCT		SOUTH BAY AQUEDUCT	CALIFORNIA AQUEDUCT				
	Reach 1	Reach 3	Reach 1	Reach 1	Reach 4	Reach 14A	Reach 15A	Reach 16A
	Calhoun and Travis Pumping Plants	Cordelia Pumping Plant	South Bay Pumping Plant (b)	Delta Pumping Plant	Dos Amigos Pumping Plant	Buena Vista Pumping Plant	Wheeler Ridge Pumping Plant	Wind Gap Pumping Plant
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1961	0	0	0	0	0	0	0	0
1962	0	0	38,930	0	0	0	0	0
1963	0	0	60,471	0	0	0	0	0
1964	0	0	75,639	0	0	0	0	0
1965	0	0	147,280	0	0	0	0	0
1966	0	0	200,943	0	0	0	0	0
1967	0	0	225,621	34,282	0	0	0	0
1968	0	7,039	334,337	1,303,610	247,334	0	0	0
1969	0	5,221	166,971	916,837	106,012	0	0	0
1970	0	14,000	515,400	509,000	259,100	39,000	27,000	41,000
1971	0	15,000	511,400	673,000	291,100	202,200	196,100	386,000
1972	0	27,000	843,400	1,069,000	677,100	648,800	518,300	1,021,400
1973	0	24,000	701,400	1,300,000	780,100	755,800	692,300	1,414,400
1974	0	26,000	772,400	1,203,000	772,100	672,800	583,300	1,177,400
1975	0	23,000	650,400	1,318,000	766,100	686,800	622,300	1,264,400
1976	0	30,000	640,400	1,438,200	1,099,100	926,800	888,300	1,844,400
1977	0	31,000	653,400	1,839,200	1,254,100	1,052,800	1,130,300	2,372,400
1978	0	30,000	610,400	2,853,200	1,330,100	1,296,800	1,318,300	2,785,400
1979	0	28,000	495,400	2,953,200	1,319,100	1,172,800	1,278,300	2,577,400
1980	10,200	36,200	474,400	3,566,200	1,439,100	1,363,800	1,411,300	3,075,400
1981	12,200	43,200	458,400	3,410,200	1,461,100	1,361,800	1,409,300	3,073,400
1982	13,200	45,200	453,400	4,350,200	1,523,100	1,446,800	1,508,300	3,294,400
1983	12,200	47,200	438,400	4,242,400	1,601,100	1,562,800	1,641,300	3,592,400
1984	12,200	49,200	420,400	4,986,400	1,543,100	1,466,800	1,538,300	3,361,400
1985	15,200	51,200	421,400	5,214,400	1,641,100	1,573,800	1,753,300	3,833,400
1986	19,200	58,200	427,400	4,233,400	1,751,100	1,696,800	1,798,300	3,930,400
1987	19,200	59,200	424,400	4,266,400	1,811,100	1,809,800	1,928,300	4,217,400
1988	21,200	60,200	428,400	4,513,400	1,983,100	2,048,800	2,101,300	4,597,400
1989	21,200	59,200	422,400	5,354,400	1,983,100	2,073,800	2,142,300	4,678,400
1990	23,200	61,200	429,400	5,488,400	2,054,100	2,110,800	2,178,300	4,985,400
1991	23,200	61,200	435,400	5,555,400	2,071,100	2,219,800	2,303,300	5,043,400
1992	23,200	61,200	435,400	5,555,400	2,071,100	2,219,800	2,303,300	5,043,400
1993	23,200	61,200	435,400	5,555,400	2,071,100	2,219,800	2,303,300	5,043,400
1994	23,200	61,200	435,400	5,555,400	2,071,100	2,219,800	2,303,300	5,043,400
1995	23,200	61,200	435,400	5,555,400	2,071,100	2,219,800	2,303,300	5,043,400
1996	23,200	61,200	435,400	5,555,400	2,071,100	2,219,800	2,303,300	5,043,400
1997	23,200	61,200	435,400	5,555,400	2,071,100	2,219,800	2,303,300	5,043,400
1998	23,200	61,200	435,400	5,555,400	2,071,100	2,219,800	2,303,300	5,043,400
1999	23,200	61,200	435,400	5,555,400	2,071,100	2,219,800	2,303,300	5,043,400
2000 (c)	23,200	61,200	435,400	5,555,400	2,071,100	2,219,800	2,303,300	5,043,400

a) Includes the costs of electric capacity and energy used by pumping plants, exclusive of associated power transmission charges; the value of electric capacity and energy produced by power recovery plants (treated as negative costs); and the payments to sinking fund reserves that will finance periodic replacement of electro-mechanical equipment.

b) The estimated costs of Del Valle Pumping Plant are combined with those of South Bay Pumping Plant to simplify the cost allocations.

c) And each year thereafter for the remainder of the project repayment period.

TOTAL VARIABLE OMP&R COSTS OF PUMPING AND POWER RECOVERY PLANTS
OF PROJECT TRANSPORTATION FACILITIES

(in dollars)

Sheet 2 of 2

Calendar Year	CALIFORNIA AQUEDUCT (Continued)							Grand Total
	Reach 17E	Reach 22B	Reach 26A	Reach 29A	Reach 29J	Reach 31A	Reach 33A	
	A.D. Edmonston Pumping Plant	Pear-blossom Pumping Plant	Devil Canyon Powerplant	Oso Pumping Plant	Castaic Powerplant	Las Perillas and Badger Hill Pumping Plants	Devil's Den, Sawtooth and Polonio PP's and San Luis Obispo Pwp	
	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1961	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	38,930
1963	0	0	0	0	0	0	0	60,471
1964	0	0	0	0	0	0	0	75,639
1965	0	0	0	0	0	0	0	147,280
1966	0	0	0	0	0	0	0	200,943
1967	0	0	0	0	0	0	0	259,903
1968	0	0	0	0	0	120,737	0	2,013,057
1969	0	0	0	0	0	56,005	0	1,251,046
1970	0	0	0	0	0	150,700	0	1,555,200
1971	1,254,800	119,000	1,000	139,000	-310,000	65,700	0	3,544,300
1972	3,548,600	346,100	-776,500	385,800	-934,000	110,700	0	7,485,700
1973	5,080,600	688,100	-1,320,500	448,800	-1,621,000	128,700	0	9,072,700
1974	4,197,600	375,100	-1,021,500	351,800	-1,854,000	168,700	0	7,424,700
1975	4,538,600	598,100	-1,239,500	342,800	-2,271,000	133,700	0	7,433,700
1976	6,703,600	1,119,900	-2,405,100	479,800	-2,874,000	153,700	0	10,045,100
1977	7,852,400	1,183,900	-2,432,100	574,800	-3,492,000	154,700	0	12,174,900
1978	9,517,400	1,746,900	-3,365,100	590,800	-3,929,000	145,700	0	14,930,900
1979	10,106,400	1,138,900	-1,695,100	731,800	-3,969,000	95,700	0	16,232,900
1980	11,130,400	1,120,900	-2,160,100	806,800	-4,705,000	99,500	76,300	17,745,400
1981	11,941,400	1,126,900	-1,714,100	891,800	-4,303,000	94,500	75,300	19,342,400
1982	11,996,400	1,244,900	-1,767,100	892,800	-4,218,000	103,500	82,300	20,969,400
1983	13,884,400	1,531,900	-1,964,100	1,074,800	-4,259,000	91,500	89,300	23,586,600
1984	13,002,400	1,402,900	-1,918,100	937,800	-3,946,000	95,500	130,300	23,082,600
1985	14,021,400	1,783,900	-2,052,100	1,037,800	-3,997,000	101,500	165,300	25,564,600
1986	15,151,400	1,804,900	-2,797,100	1,114,800	-4,906,000	121,500	209,300	24,613,600
1987	16,228,400	1,680,900	-2,707,100	1,245,800	-4,723,000	124,500	258,300	26,643,600
1988	17,658,400	1,728,900	-2,672,100	1,344,800	-5,009,000	144,500	291,300	29,240,600
1989	17,995,400	1,768,900	-2,601,100	1,357,800	-4,916,000	140,500	392,300	30,872,600
1990	18,281,400	1,798,900	-2,517,100	1,426,800	-4,773,000	163,500	419,300	32,130,600
1991	18,495,400	2,000,900	-2,644,100	1,370,800	-4,845,000	164,500	420,300	32,675,600
1992	18,495,400	2,000,900	-2,644,100	1,370,800	-4,783,000	164,500	420,300	32,737,600
1993	18,495,400	2,000,900	-2,644,100	1,370,800	-4,783,000	164,500	420,300	32,737,600
1994	18,495,400	2,000,900	-2,644,100	1,370,800	-4,783,000	164,500	420,300	32,737,600
1995	18,495,400	2,000,900	-2,644,100	1,370,800	-4,783,000	164,500	420,300	32,737,600
1996	18,495,400	2,000,900	-2,644,100	1,370,800	-4,783,000	164,500	420,300	32,737,600
1997	18,495,400	2,000,900	-2,644,100	1,370,800	-4,743,000	164,500	420,300	32,777,600
1998	18,495,400	2,000,900	-2,644,100	1,370,800	-4,743,000	164,500	420,300	32,777,600
1999	18,495,400	2,000,900	-2,644,100	1,370,800	-4,743,000	164,500	420,300	32,777,600
2000 (c)	18,495,400	2,000,900	-2,644,100	1,370,800	-4,743,000	164,500	420,300	32,777,600

TABLE B-4

ANNUAL ENTITLEMENTS TO PROJECT WATER^(a)

(in acre-feet)

Sheet 1 of 3

Calendar Year	Feather River Area				North Bay Area			South Bay Area (b)			
	City of Yuba City	County of Butte	Plumas County Flood Control and Water Conservation District	Total	Napa County Flood Control and Water Conservation District (c)	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)
1967	0	0	0	0	0	0	0	507	5,248	5,783	11,538
68	0	300	250	550	0	0	0	6,900	15,000	88,000	109,900
69	0	350	270	620	0	0	0	8,200	15,500	75,000	98,700
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 (d)	9,600	27,500	2,700	39,800	25,000	42,000	67,000	46,000	42,000	100,000	188,000

a) From Tables A and Articles 6(a) of water supply contracts as of December 31, 1969.

b) Entitlements for the South Bay Area have been supplied by nonproject water for the period June 1962 through November 1967. Actual delivery quantities of project water are shown for 1967.

c) District's Table A quantities exclude those during the period 1968 through 1979 which are assumed to be supplied by nonproject water.

d) And each year thereafter for the remainder of the project repayment period.

ANNUAL ENTITLEMENTS TO PROJECT WATER^(a)

(in acre-feet)

Sheet 2 of 3

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	County of Kings	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)
1967	0	0	0	0	0	0	0	0	0	0	0	0
68	3,700	14,300	1,000	0	46,600	900	2,300	12,250	81,050	0	0	0
69	5,000	14,325	3,000	2,400	95,700	1,200	2,500	43,950	168,075	0	0	0
1970	5,700	15,700	3,000	2,500	145,100	1,300	2,600	31,800	207,700	0	0	0
71	6,700	17,900	3,000	2,300	190,300	1,300	2,800	34,200	258,500	0	0	0
72	7,700	20,000	3,000	2,600	270,700	1,400	2,900	36,700	345,000	0	0	0
73	8,700	22,000	3,000	2,900	310,500	1,500	3,100	39,100	390,800	0	0	0
74	9,700	24,100	3,000	3,300	347,000	1,500	3,200	43,000	434,800	0	0	0
75	10,700	26,200	3,000	3,600	385,500	1,600	3,400	46,900	480,900	0	0	0
76	11,700	28,300	3,000	3,900	432,800	1,600	3,500	50,800	535,600	0	0	0
77	12,700	30,400	3,000	4,200	483,600	1,700	3,700	54,800	594,100	0	0	0
78	12,700	32,500	3,000	4,600	534,300	1,900	3,900	58,700	651,600	0	0	0
79	12,700	34,600	3,000	4,900	583,900	2,000	4,000	62,600	707,700	0	0	0
1980	12,700	36,700	3,000	5,200	634,500	2,200	4,200	66,500	765,000	1,000	1,200	2,200
81	12,700	38,800	3,000	5,600	691,400	2,300	4,300	70,400	828,500	1,000	2,300	3,300
82	12,700	41,000	3,000	5,900	745,300	2,500	4,500	74,300	889,200	2,000	4,600	6,600
83	12,700	42,900	3,000	6,200	805,100	2,800	4,600	78,200	955,500	3,000	6,900	9,900
84	12,700	45,100	3,000	6,500	860,600	3,100	4,800	82,100	1,017,900	4,500	10,400	14,900
85	12,700	47,200	3,000	6,900	915,500	3,400	4,900	86,000	1,079,100	7,500	17,300	24,800
86	12,700	49,300	3,000	7,200	968,200	3,700	5,100	90,000	1,139,200	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 (d)	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

TABLE B-4

ANNUAL ENTITLEMENTS TO PROJECT WATER(a)

(in acre-feet)

Sheet 3 of 3

Calendar Year	Southern California Area														Total State Water Project
	Antelope Valley-East Kern Water Agency	Coachella Valley County Water District	Crestline-Lake Arrowhead Water Agency	Desert Water Agency	Little-rock Creek Irrigation District	Mojave Water Agency	Palmdale Irrigation District	San Bernardino Valley Municipal Water District	San Gabriel Valley Municipal Water District	San Geronimo 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)
1967	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,538
68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	191,500
69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	267,395
1970	0	0	0	0	0	0	0	0	0	0	0	0	0	0	322,600
71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	375,590
72	20,000	5,200	580	8,000	170	8,400	1,620	46,000	10,600	0	254,200	1,600	0	356,370	820,640
73	25,000	5,800	870	9,000	290	10,700	2,940	48,000	11,500	0	354,600	3,700	0	472,400	984,700
74	30,000	6,400	1,160	10,000	400	13,100	4,260	50,000	12,300	0	454,900	5,700	0	588,220	1,146,650
75	35,000	7,000	1,450	11,000	520	15,400	5,580	52,500	13,100	0	555,200	7,500	0	704,250	1,311,260
76	44,000	7,600	1,740	12,000	640	17,800	6,900	55,000	14,000	0	655,600	9,500	0	824,780	1,488,870
77	50,000	8,421	2,030	13,000	730	20,200	8,220	57,500	14,800	0	755,900	11,400	0	942,201	1,667,321
78	57,000	9,242	2,320	14,000	920	22,500	9,340	60,000	15,700	0	856,300	13,400	0	1,060,722	1,845,872
79	63,000	10,063	2,610	15,000	1,040	24,900	10,260	62,500	16,600	0	956,600	15,300	0	1,177,873	2,021,553
1980	69,200	10,884	2,900	17,000	1,150	27,200	11,180	65,500	17,400	6,800	1,057,000	17,700	1,000	1,304,914	2,230,874
81	75,000	12,105	3,190	19,000	1,270	29,600	11,700	68,500	18,300	7,800	1,157,300	20,100	2,000	1,425,865	2,426,805
82	81,300	13,326	3,480	21,000	1,380	31,900	12,320	71,500	19,100	8,800	1,257,600	22,100	3,000	1,546,806	2,618,476
83	87,700	14,547	3,770	23,000	1,500	34,300	12,940	74,500	19,900	9,800	1,358,000	24,600	4,000	1,668,557	2,816,607
84	94,000	15,768	4,060	25,000	1,610	36,700	13,560	78,000	20,700	10,800	1,458,300	26,900	5,000	1,790,398	3,012,528
85	100,400	16,989	4,350	27,000	1,730	39,000	14,180	81,500	21,800	11,800	1,558,700	29,100	6,000	1,912,549	3,214,059
86	106,700	18,210	4,640	29,000	1,840	41,400	14,800	85,000	23,200	12,900	1,659,300	30,900	8,000	2,035,890	3,414,980
87	113,000	19,431	4,930	31,500	1,960	43,700	15,420	89,000	24,600	14,000	1,759,800	32,900	10,000	2,160,241	3,619,661
88	119,400	20,652	5,220	34,000	2,070	46,000	16,040	93,000	26,000	15,100	1,860,400	35,300	13,000	2,286,182	3,827,842
89	125,700	21,873	5,510	36,500	2,190	48,500	16,660	97,000	27,400	16,200	1,961,000	37,400	16,000	2,411,933	4,029,933
1990	132,100	23,100	5,800	38,100	2,300	50,800	17,300	101,500	28,800	17,300	2,011,500	39,300	20,000	2,487,900	4,191,640
91	138,400	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800	17,300	2,011,500	41,500	20,000	2,497,500	4,206,780
92	138,400	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800	17,300	2,011,500	41,500	20,000	2,497,500	4,212,320
93	138,400	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800	17,300	2,011,500	41,500	20,000	2,497,500	4,217,860
94	138,400	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800	17,300	2,011,500	41,500	20,000	2,497,500	4,222,500
95	138,400	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800	17,300	2,011,500	41,500	20,000	2,497,500	4,224,550
96	138,400	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800	17,300	2,011,500	41,500	20,000	2,497,500	4,226,600
97	138,400	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800	17,300	2,011,500	41,500	20,000	2,497,500	4,228,650
98	138,400	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800	17,300	2,011,500	41,500	20,000	2,497,500	4,228,700
99	138,400	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800	17,300	2,011,500	41,500	20,000	2,497,500	4,228,750
2000	138,400	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800	17,300	2,011,500	41,500	20,000	2,497,500	4,228,810
01	138,400	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800	17,300	2,011,500	41,500	20,000	2,497,500	4,228,870
02	138,400	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800	17,300	2,011,500	41,500	20,000	2,497,500	4,228,930
03	138,400	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800	17,300	2,011,500	41,500	20,000	2,497,500	4,228,990
04	138,400	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800	17,300	2,011,500	41,500	20,000	2,497,500	4,229,050
05	138,400	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800	17,300	2,011,500	41,500	20,000	2,497,500	4,229,110
06	138,400	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800	17,300	2,011,500	41,500	20,000	2,497,500	4,229,180
07	138,400	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800	17,300	2,011,500	41,500	20,000	2,497,500	4,229,250
08	138,400	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800	17,300	2,011,500	41,500	20,000	2,497,500	4,229,320
09	138,400	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800	17,300	2,011,500	41,500	20,000	2,497,500	4,229,390
2010	138,400	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800	17,300	2,011,500	41,500	20,000	2,497,500	4,229,460
11	138,400	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800	17,300	2,011,500	41,500	20,000	2,497,500	4,229,540
12	138,400	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800	17,300	2,011,500	41,500	20,000	2,497,500	4,229,620
13	138,400	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800	17,300	2,011,500	41,500	20,000	2,497,500	4,229,710
14	138,400	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800	17,300	2,011,500	41,500	20,000	2,497,500	4,229,710
15	138,400	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800	17,300	2,011,500	41,500	20,000	2,497,500	4,229,900
2016 (a)	138,400	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800	17,300	2,011,500	41,500	20,000	2,497,500	4,230,000

ANNUAL QUANTITIES DELIVERED FROM EACH AQUEDUCT REACH
TO EACH CONTRACTOR

(in acre-feet)

Sheet 1 of 3

Cal- en- dar Year	NORTH BAY AQUEDUCT		TOTAL NORTH BAY AQUEDUCT (a)	SOUTH BAY AQUEDUCT									TOTAL SOUTH BAY AQUEDUCT
	Reach 2	Reach 3		Reach 1		Reach 2	Reach 4	Reach 5	Reach 6	Reach 7	Reach 8	Reach 9	
	SC FC&WCD	NC FC&WCD (a)		AC FC&WCD	ACWD	AC FC&WCD	AC FC&WCD	AC FC&WCD	AC FC&WCD	ACWD	ACWD	SCC FC&WCD	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1962	0	0	0	141	8,412	353	0	0	0	0	0	0	8,906
1963	0	0	0	314	10,914	917	0	0	0	0	0	0	12,645
1964	0	0	0	248	19,238	1,425	0	0	0	0	0	0	20,911
1965	0	0	0	637	15,280	1,830	138	0	0	1,127	0	15,014	34,026
1966	0	0	0	2,475	0	2,537	499	0	0	14,864	0	34,538	54,913
1967	0	0	0	1,527	0	2,391	862	0	0	12,882	0	39,101	56,763
1968	0	1,214	1,214	1,608	0	3,799	721	5	0	24,817	0	70,105	101,055
1969	0	2,687	2,687	1,165	0	3,459	1,851	160	0	813	0	62,264	69,712
1970	0	4,073	4,073	1,705	0	4,517	3,118	160	0	25,400	0	75,000	109,900
1971	0	4,416	4,416	1,705	0	5,689	3,446	160	0	17,000	0	88,000	116,000
1972	0	4,675	4,675	1,705	0	5,604	1,776	160	3,155	14,967	2,933	88,000	119,300
1973	0	5,005	5,005	1,705	0	4,719	967	160	6,049	13,800	5,000	88,000	120,400
1974	0	5,450	5,450	1,705	0	5,053	1,396	160	6,486	14,600	5,000	88,000	122,400
1975	0	5,940	5,940	1,705	0	5,137	2,130	160	6,868	15,500	5,000	88,000	124,500
1976	0	8,157	8,157	0	0	5,600	2,100	200	9,300	16,300	5,000	88,000	126,500
1977	0	9,600	9,600	0	0	6,000	2,100	200	10,100	17,200	5,000	88,000	128,600
1978	0	10,500	10,500	0	0	6,500	2,100	200	10,800	18,100	5,000	88,000	130,700
1979	0	11,500	11,500	0	0	6,900	2,100	200	11,600	18,900	5,000	88,000	132,700
1980	6,750	12,500	19,250	0	0	7,400	2,100	200	12,300	19,800	5,000	88,000	134,800
1981	8,000	13,750	21,750	0	0	7,800	2,100	200	12,900	21,000	5,000	88,000	137,000
1982	9,400	15,000	24,400	0	0	8,100	2,100	200	13,600	22,200	5,000	88,000	139,200
1983	10,330	16,250	26,580	0	0	8,500	2,100	200	14,200	23,400	5,000	88,000	141,400
1984	11,160	17,500	28,660	0	0	8,900	2,100	200	14,800	24,600	5,000	88,000	143,600
1985	12,370	18,750	31,620	0	0	9,300	2,100	200	15,400	25,800	5,000	88,000	145,800
1986	15,240	20,000	35,240	0	0	9,600	2,100	200	16,100	27,100	5,000	88,000	148,100
1987	18,320	21,250	39,570	0	0	10,000	2,100	200	16,700	28,300	5,000	88,000	150,300
1988	24,900	22,500	47,400	0	0	10,400	2,100	200	17,300	29,500	5,000	88,000	152,500
1989	31,350	23,750	55,100	0	0	10,800	2,100	200	17,900	30,700	5,000	90,000	156,700
1990	37,800 (b)	25,000	62,800	0	0	11,100	2,100	200	18,600	31,900	5,000	92,000	160,900
1991	37,800	25,000	62,800	0	0	12,800	0	0	21,200	33,400	5,000	94,000	166,400
1992	37,800	25,000	62,800	0	0	13,500	0	0	22,500	34,900	5,000	96,000	171,900
1993	37,800	25,000	62,800	0	0	14,200	0	0	23,800	36,400	5,000	98,000	177,400
1994	37,800	25,000	62,800	0	0	15,000	0	0	25,000	37,000	5,000	100,000	182,800
1995	37,800	25,000	62,800	0	0	15,800	0	0	26,200	37,000	5,000	100,000	184,000
1996	37,800	25,000	62,800	0	0	16,500	0	0	27,500	37,000	5,000	100,000	186,000
1997	37,800	25,000	62,800	0	0	17,000	0	0	29,000	37,000	5,000	100,000	188,000
1998	37,800	25,000	62,800	0	0	17,000	0	0	29,000	37,000	5,000	100,000	188,000
1999	37,800	25,000	62,800	0	0	17,000	0	0	29,000	37,000	5,000	100,000	188,000
2000 (c)	37,800	25,000	62,800	0	0	17,000	0	0	29,000	37,000	5,000	100,000	188,000

a) Between 1968 and 1979, inclusive, annual quantities delivered are nonproject water pumped thru an interim facility.

b) Solano County Flood Control and Water Conservation District (SCFC & WCD) has contracted for 42,000 acre-feet maximum annually, of which 4,200 acre-feet will be diverted directly from the Delta thru the District's facilities.

c) And thereafter for the remainder of the project repayment period.

TABLE B-5

ANNUAL QUANTITIES DELIVERED FROM EACH AQUEDUCT REACH
TO EACH CONTRACTOR

(in acre-feet)

Sheet 2 of 3

CALIFORNIA AQUEDUCT																
Cal- en- dar- Year	NORTH SAN JOAQUIN DIVISION	SOUTH SAN JOAQUIN DIVISION														
		Reach 2A	Reach 8C			Reach 8D			Reach 9	Reach 10A			Reach 11B	Reach 12D	Reach 12E	
		OFWD	EWSID	KC	TLBWS	TLBWS	HWD	DRWD	KCWA (Ag.)	KCWA (Ag.)	HWD	KCWA (Ag.)	KCWA (Ag.)	KCWA (M&I)	KCWA (Ag.)	
		(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	
1968	3,084	1,978	900	25,100	0	0	26,360	30,451	0	0	24,776	0	0	0		
1969	3,016	56	100	7,081	0	0	31,375	24,489	0	2,842	64,682	0	0	0		
1970	5,100	6,000	0	0	1,500	0	31,400	40,900	0	10,000	70,700	0	0	0		
1971	2,800	3,000	1,500	8,000	7,000	2,300	17,900	41,700	9,100	0	48,500	0	24,600	1,000		
1972	2,900	3,000	3,000	25,000	30,000	2,600	20,000	42,500	23,500	0	49,500	0	30,400	3,600		
1973	3,100	3,000	1,500	25,000	30,000	2,900	22,000	50,100	41,800	0	58,100	0	28,000	9,600		
1974	3,200	3,000	1,500	25,000	30,000	3,300	24,100	70,200	26,400	0	81,500	0	31,400	6,700		
1975	3,400	3,000	1,600	25,000	30,000	3,600	26,200	76,100	35,200	0	83,200	2,400	35,000	7,800		
1976	3,500	3,000	1,600	35,600	15,200	3,900	28,300	82,700	43,900	0	90,700	2,400	37,300	9,700		
1977	3,700	3,000	1,700	38,400	16,400	4,200	30,400	82,700	60,200	0	97,300	2,400	40,800	12,300		
1978	3,900	3,000	1,900	41,000	17,700	4,600	32,500	82,700	76,700	0	104,600	2,400	43,100	14,600		
1979	4,000	3,000	2,000	43,800	18,800	4,900	34,600	82,700	92,600	0	111,600	2,400	45,400	17,000		
1980	4,200	3,000	2,200	46,600	19,900	5,200	36,700	82,700	109,100	0	118,000	2,400	47,700	19,500		
1981	4,300	3,000	2,300	49,300	21,100	5,600	38,800	82,700	128,200	0	124,700	2,400	50,200	22,500		
1982	4,500	3,000	2,500	52,000	22,300	5,900	41,000	82,700	145,700	0	130,800	2,400	53,600	25,400		
1983	4,600	3,000	2,800	54,700	23,500	6,200	42,900	82,700	166,100	0	135,600	2,400	56,000	29,100		
1984	4,800	3,000	3,100	57,500	24,600	6,500	45,100	84,100	183,000	0	141,300	2,400	59,400	32,100		
1985	4,900	3,000	3,400	60,200	25,800	6,900	47,200	86,500	199,000	0	145,400	2,400	62,900	35,500		
1986	5,100	3,000	3,700	63,000	27,000	7,200	49,300	89,100	214,000	0	150,000	2,400	65,300	38,600		
1987	5,200	3,000	4,000	65,700	28,200	7,500	51,400	91,100	230,900	0	153,300	2,400	68,800	42,200		
1988	5,400	3,000	4,000	68,500	29,300	7,800	53,500	92,500	247,000	0	155,800	2,400	71,200	45,800		
1989	5,600	3,000	4,000	71,200	30,500	8,200	55,600	93,200	259,000	0	157,200	2,400	73,500	48,300		
1990(c)	5,700	3,000	4,000	77,000	33,000	8,500	57,700	93,500	274,600	0	157,800	2,400	77,000	51,200		

Cal- en- dar Year	CALIFORNIA AQUEDUCT (continued)														
	SOUTH SAN JOAQUIN DIVISION (continued)										TEHACHAPI DIVISION		MOJAVE DIVISION		
	Reach 13B		Reach 14A		Reach 14B	Reach 14C	Reach 15A	Reach 16A		Reach 17E	Reach 18A	Reach 19	Reach 20A	Reach 20B	
	KCWA (Ag.)	KCWA (M&I)	KCWA (Ag.)	KCWA (M&I)	KCWA (Ag.)	KCWA (Ag.)	KCWA (Ag.)	KCWA (Ag.)	KCWA (M&I)	KCWA (M&I)	AVEKWA	AVEKWA	AVEKWA	AVEKWA	PID
	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)
1971	3,900	10,800	3,612	0	7,752	3,850	1,486	30	2,500	70	0	0	0	0	0
1972	13,800	11,500	9,217	0	20,114	9,665	20,637	1,567	2,700	200	0	0	17,700	200	0
1973	14,700	12,200	8,570	0	18,042	8,670	18,512	1,506	2,900	300	0	0	21,350	400	0
1974	10,600	13,000	11,156	0	15,540	7,371	15,738	1,395	3,000	400	0	0	25,000	600	0
1975	14,400	13,600	11,300	10,200	18,100	9,800	17,400	100	3,200	700	0	0	28,700	600	100
1976	18,000	3,600	15,600	10,900	20,700	10,700	20,300	200	3,500	800	0	0	36,400	600	6,900
1977	22,300	3,600	20,100	11,600	25,200	11,800	22,500	200	3,800	800	0	0	41,100	600	8,200
1978	26,300	3,600	22,900	12,400	28,500	12,800	24,200	3,700	4,100	900	0	6,700	40,000	600	9,300
1979	30,400	3,600	24,800	13,200	31,200	13,600	25,700	9,000	4,400	1,000	0	10,900	40,500	600	10,200
1980	35,000	3,600	26,700	13,900	34,300	14,400	27,400	14,500	4,800	1,100	0	15,300	41,000	600	11,180
1981	39,900	3,600	29,000	14,600	40,400	15,400	29,100	18,100	5,200	1,200	0	19,400	41,500	600	11,700
1982	44,800	3,600	30,900	15,400	45,200	17,500	30,800	22,000	5,700	1,300	0	23,900	42,000	600	12,320
1983	51,000	3,600	34,300	16,200	49,400	21,500	33,200	25,100	6,300	1,400	0	28,500	42,500	600	12,940
1984	56,000	3,600	36,500	16,900	52,200	24,700	35,100	30,100	7,200	1,500	0	32,900	43,000	600	13,560
1985	61,800	3,600	39,100	17,600	57,000	26,600	38,100	32,600	8,200	1,600	5,000	32,300	43,500	600	14,180
1986	67,400	3,600	41,200	18,400	61,500	28,800	41,200	35,500	9,400	1,700	7,000	34,600	44,000	600	14,800
1987	72,900	3,600	43,800	19,200	66,300	31,100	44,500	38,700	10,700	1,800	8,000	37,400	44,500	600	15,420
1988	78,600	3,600	46,300	19,900	70,800	33,500	47,600	41,800	12,300	1,900	10,000	38,300	45,000	600	16,040
1989	83,100	3,600	48,300	20,600	73,700	34,900	50,000	44,100	13,600	1,900	11,000	40,900	45,000	600	16,660
1990	87,500	3,600	50,300	21,400	76,700	36,400	52,100	46,700	15,000	2,000	13,000	41,500	47,000	600	17,300
1991	87,500	3,600	50,300	21,400	76,700	36,400	52,100	46,700	15,000	2,000	15,000	45,800	47,100	600	17,300
1992(c)											0	69,600	47,100	0	

ANNUAL QUANTITIES DELIVERED FROM EACH AQUEDUCT REACH
TO EACH CONTRACTOR

(in acre-feet)

Sheet 3 of 3

Cal-en- dar Year	CALIFORNIA AQUEDUCT (continued)															
	MOJAVE DIVISION (continued)							SANTA ANA DIVISION								
	Reach 21		Reach 22A	Reach 22B				Reach 24	Reach 26A				Reach 26G		Reach 28H	Reach 28J
	AVEKWA	LCID	AVEKWA	MWD-SC(d)	MWA	CVCWD(d)	DWA(d)	CLAWA	SGPWA	SGVMWD	MWD-SC	SBVMWD	SBVMWD	MWD-SC	MWD-SC	MWD-SC
	(43)	(44)	(45)	(46)	(47)	(48)	(49)	(50)	(51)	(52)	(53)	(54)	(55)	(56)	(57)	(58)
1972	400	170	1,000	0	1,320	0	0	580	0	10,600	0	43,525	2,475	0	0	0
1973	650	290	1,500	-14,800	1,560	5,800	9,000	870	0	11,500	0	45,405	2,595	4,000	0	55,800
1974	900	400	2,000	-16,400	1,800	6,400	10,000	1,160	0	12,300	0	47,300	2,700	10,000	15,000	31,400
1975	1,200	520	2,500	-18,000	2,040	7,000	11,000	1,450	0	13,100	0	49,668	2,832	10,000	26,000	62,000
1976	1,500	640	3,000	-19,600	17,800	7,600	12,000	1,740	0	14,000	0	52,000	3,000	10,000	75,000	165,200
1977	1,800	730	3,500	-21,421	20,200	8,421	13,000	2,030	0	14,800	0	54,300	3,200	10,000	75,000	187,521
1978	2,200	920	4,000	-23,242	22,500	9,242	14,000	2,320	0	15,700	150,000	56,700	3,300	10,000	100,000	162,542
1979	2,500	1,040	4,500	-25,063	24,900	10,063	15,000	2,610	0	16,600	259,200	59,000	3,500	10,000	100,000	163,463
1980	2,800	1,150	5,000	-27,884	27,200	10,884	17,000	2,900	6,800	17,400	282,400	61,900	3,600	10,000	100,000	162,484
1981	3,000	1,270	5,500	-31,105	29,600	12,105	19,000	3,190	7,800	18,300	280,900	61,800	6,700	10,000	100,000	162,505
1982	3,300	1,380	6,000	-34,326	31,900	13,326	21,000	3,480	8,800	19,100	279,500	64,200	7,300	10,000	100,000	162,426
1983	3,600	1,500	6,500	-37,547	34,300	14,547	23,000	3,770	9,800	19,900	238,000	66,600	7,900	10,000	100,000	162,547
1984	4,000	1,610	7,000	-40,768	36,700	15,768	25,000	4,060	10,800	20,700	236,600	69,500	8,500	10,000	100,000	162,468
1985	4,500	1,730	7,500	-43,989	39,000	16,989	27,000	4,350	11,800	21,800	255,200	72,500	9,000	10,000	100,000	162,489
1986	5,000	1,840	8,000	0	41,400	18,210	29,000	4,640	12,900	23,200	226,800	75,400	9,600	10,000	0	262,500
1987	6,000	1,960	8,500	0	43,700	19,431	31,500	4,930	14,000	24,600	237,300	78,800	10,200	10,000	0	262,500
1988	8,000	2,070	9,000	0	46,000	20,652	34,000	5,220	15,100	26,000	252,900	82,200	10,800	10,000	0	262,500
1989	10,000	2,190	9,500	0	48,500	21,873	36,500	5,510	16,200	27,400	263,500	85,500	11,500	10,000	0	262,500
1990	10,000	2,300	10,000	0	50,800	23,100	38,100	5,800	17,300	28,800	284,000	89,000	12,500	10,000	0	262,500
1991	10,000	2,300	10,000	0	50,800	23,100	38,100	5,800	17,300	28,800	284,000	88,900	13,700	10,000	0	262,500
1992(c)	10,000	2,300	10,000	0	50,800	23,100	38,100	5,800	17,300	28,800	284,000	88,900	13,700	10,000	0	262,500

Cal- en- dar Year	CALIFORNIA AQUEDUCT (continued)										TOTAL CALIFORNIA AQUEDUCT
	WEST BRANCH, CALIFORNIA AQUEDUCT				COASTAL BRANCH, CALIFORNIA AQUEDUCT						
	Reach 29F	Reach 30			Reach 31A		Reach 33A	Reach 34	Reach 35		
	AVEKWA	USCVWA	VCPCD	MWD-SC	DDWD	KCWA (Ag.)	SLOC FC&WCD	SLOC FC&WCD	SLOC FC&WCD	SBC FC&WCD	
	(59)	(60)	(61)	(62)	(63)	(64)	(65)	(66)	(67)	(68)	(69)
1968	0	0	0	0	7,382	71,657	0	0	0	0	192,188
1969	0	0	0	0	9,970	52,094	0	0	0	0	195,705
1970	0	0	0	0	11,400	65,000	0	0	0	0	242,000
1971	0	0	0	0	6,700	31,200	0	0	0	0	239,500
1972	700	0	0	165,000	7,700	31,800	0	0	0	0	609,170
1973	1,100	0	0	255,000	8,700	37,500	0	0	0	0	808,720
1974	1,500	0	0	270,000	9,700	52,600	0	0	0	0	868,860
1975	2,000	9,500	0	285,000	10,700	57,000	0	0	0	0	986,210
1976	2,500	11,400	0	425,000	11,700	61,800	0	0	0	0	1,362,280
1977	3,000	13,400	0	504,800	12,700	66,000	0	0	0	0	1,538,301
1978	3,500	15,300	0	457,000	12,700	70,800	0	0	0	0	1,714,222
1979	4,000	17,700	0	450,000	12,700	75,300	0	0	0	0	1,887,973
1980	4,500	20,100	1,000	530,000	12,700	79,400	400	200	400	1,200	2,074,514
1981	5,000	22,100	2,000	635,000	12,700	83,800	400	200	400	2,300	2,259,665
1982	5,500	24,600	3,000	740,000	12,700	87,700	800	400	800	4,600	2,445,106
1983	6,000	26,900	4,000	885,000	12,700	90,800	1,200	600	1,200	6,900	2,636,257
1984	6,500	29,100	5,000	990,000	12,700	94,500	1,800	900	1,800	10,400	2,825,398
1985	7,000	30,900	6,000	1,075,000	12,700	97,100	3,000	1,500	3,000	17,300	3,018,249
1986	7,500	32,900	8,000	1,160,000	12,700	100,100	4,000	2,000	4,000	23,100	3,210,190
1987	8,000	35,300	10,000	1,250,000	12,700	102,200	5,000	2,500	5,000	28,800	3,405,141
1988	8,500	37,400	13,000	1,335,000	12,700	103,800	6,200	3,100	6,200	35,800	3,598,382
1989	9,000	39,300	16,000	1,425,000	12,700	104,700	8,000	4,000	8,000	46,100	3,783,033
1990	10,000	41,500	20,000	1,455,000	12,700	105,100	10,000	5,000	10,000	57,700	3,927,800
1991	10,000	41,500	20,000	1,455,000	12,700	105,100	10,000	5,000	10,000	57,700	3,935,200
1992(c)	0	41,500	20,000	1,455,000	12,700	105,100	10,000	5,000	10,000	57,700	3,935,200

d) In accordance with the Exchange Agreement between the noted agencies, Metropolitan Water District assumed responsibility for repayment of variable OMP&R costs on the exchange water in reaches beyond Reach 22B, and Desert Water Agency and Coachella Valley County Water District for such costs from the Delta through Reach 22B. The adjustment in deliveries shown in Column 46 provides for compliance with the repayment provisions of the Agreement.

TABLE B-6

ANNUAL QUANTITIES CONVEYED THRU EACH PUMPING AND POWER
RECOVERY PLANT OF PROJECT TRANSPORTATION FACILITIES

(in acre-feet)

Sheet 1 of 7

Calendar Year	NORTH BAY AQUEDUCT							SOUTH BAY AQUEDUCT				
	CALHOUN AND TRAVIS PUMPING PLANTS			CORDELIA PUMPING PLANT				SOUTH BAY PUMPING PLANT				
	Opera- tional Losses	Water Supply Delivery	Total	Initial Fill Water	Opera- tional Losses	Water Supply Delivery (a)	Total	Initial Fill Water	Opera- tional Losses	Reservoir Storage Changes	Water Supply Delivery	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1962	0	0	0	0	0	0	0	9	272	0	8,906	9,187
1963	0	0	0	0	0	0	0	71	185	0	12,645	12,901
1964	0	0	0	0	0	0	0	171	152	0	20,911	21,234
1965	0	0	0	0	0	0	0	93	729	0	34,026	34,848
1966	0	0	0	0	0	0	0	0	1,746	0	54,913	56,659
1967	0	0	0	0	0	0	0	0	1,677	0	56,763	58,440
1968	0	0	0	24	- 10 (b)	1,214	1,228	0	1,847	0	101,055	102,902
1969	0	0	0	0	2	2,687	2,689	5,087	1,440	- 16,363 (c)	69,712	59,876
1970	0	0	0	0	0	4,073	4,073	0	2,730	9,472	109,900	122,102
1971	0	0	0	0	0	4,416	4,416	0	2,730	0	116,000	118,730
1972	0	0	0	0	0	4,675	4,675	0	2,730	0	118,300	121,030
1973	0	0	0	0	0	5,005	5,005	0	2,730	0	120,400	123,130
1974	0	0	0	0	0	5,450	5,450	0	2,730	0	122,400	125,130
1975	0	0	0	0	0	5,940	5,940	0	2,730	0	124,500	127,230
1976	0	0	0	0	0	8,157	8,157	0	4,730	0	126,500	131,230
1977	0	0	0	0	0	9,600	9,600	0	4,730	0	128,600	133,330
1978	0	0	0	0	0	10,500	10,500	0	4,730	0	130,700	135,430
1979	0	0	0	0	0	11,500	11,500	0	4,730	0	132,700	137,430
1980	1,400	19,250	20,770	0	0	12,500	12,500	0	4,730	0	134,800	139,530
1981	1,400	21,750	23,150	0	0	13,750	13,750	0	4,730	0	137,000	141,730
1982	1,400	24,400	25,800	0	0	15,000	15,000	0	4,730	0	139,200	143,930
1983	1,400	26,580	27,980	0	0	16,250	16,250	0	4,730	0	141,400	146,130
1984	1,400	28,660	30,060	0	0	17,500	17,500	0	4,730	0	143,600	148,330
1985	1,400	31,620	33,020	0	0	18,750	18,750	0	4,730	0	145,800	150,530
1986	1,400	35,240	36,640	0	0	20,000	20,000	0	4,730	0	148,100	152,830
1987	1,400	39,570	40,970	0	0	21,250	21,250	0	4,730	0	150,300	155,030
1988	1,400	47,400	48,800	0	0	22,500	22,500	0	4,730	0	152,500	157,230
1989	1,400	55,100	56,500	0	0	23,750	23,750	0	4,730	0	156,700	161,430
1990	1,400	62,800	64,200	0	0	25,000	25,000	0	4,730	0	160,900	165,630
1991	1,400	62,800	64,200	0	0	25,000	25,000	0	4,730	0	166,400	171,130
1992	1,400	62,800	64,200	0	0	25,000	25,000	0	4,730	0	171,900	176,630
1993	1,400	62,800	64,200	0	0	25,000	25,000	0	4,730	0	177,400	182,130
1994	1,400	62,800	64,200	0	0	25,000	25,000	0	4,730	0	182,000	186,730
1995	1,400	62,800	64,200	0	0	25,000	25,000	0	4,730	0	184,000	188,730
1996	1,400	62,800	64,200	0	0	25,000	25,000	0	4,730	0	186,000	190,730
1997	1,400	62,800	64,200	0	0	25,000	25,000	0	4,730	0	188,000	192,730
1998	1,400	62,800	64,200	0	0	25,000	25,000	0	4,730	0	188,000	192,730
1999	1,400	62,800	64,200	0	0	25,000	25,000	0	4,730	0	188,000	192,730
2000 (d)	1,400	62,800	64,200	0	0	25,000	25,000	0	4,730	0	188,000	192,730

Note: "Reservoir Storage Changes" include projected net annual storage accretions (positive values) and withdrawals (negative values) for all down-aqueduct reservoirs of the project transportation facilities. Those variable OMP&R costs (Table B-12) that are allocable to storage accretions are assigned to the minimum OMP&R costs of the respective reservoirs.

"Water Supply Delivery" or "Deliveries, Water Supply", include certain hypothetical quantities to facilitate cost allocations for those years when deliveries are made from net annual storage withdrawals. The net annual amounts of storage withdrawals are hypothetically added to the actual amounts conveyed from the Delta to the reservoirs -- since deliveries made from storage withdrawals bear the same variable OMP&R costs per acre-foot as if the deliveries were actually conveyed, that year, from the Delta. The hypothetical increases in the amounts conveyed are compensated for by proportionate hypothetical increases in the actual variable OMP&R costs (Table B-3) of the up-aqueduct plants. The hypothetical increases in variable OMP&R costs for deliveries made from reservoir storage withdrawals are offset by equal credits to the minimum OMP&R costs of the respective reservoirs. Thus, the variable OMP&R components per acre-foot (Table B-17) may be applied to the total annual quantities delivered either from aqueduct reservoir storage or from the Delta.

"Conservation Water" includes initial fill water, operational losses, and net annual storage changes associated with San Luis Reservoir (and the portion of the aqueduct that is allocated to conservation). The same allocation procedure outlined above for transportation facilities applies also to conservation facilities -- except that the hypothetical cost increases are added to the variable OMP&R costs to be reimbursed through the Transportation Charge, and deducted from the minimum OMP&R costs to be reimbursed through the Delta Water Charge.

ANNUAL QUANTITIES CONVEYED THRU EACH PUMPING AND POWER RECOVERY PLANT OF PROJECT TRANSPORTATION FACILITIES

(in acre-feet)

Sheet 2 of 7

Calendar Year	CALIFORNIA AQUEDUCT														
	NORTH SAN JOAQUIN DIVISION								SAN LUIS DIVISION						
	DELTA PUMPING PLANT								DOS AMIGOS PUMPING PLANT						
	Transportation Water						Conser- vation Water	Total	Initial Fill Water	Opera- tional Losses	Reservoir Storage Changes	Deliveries		Total	
	Initial Fill Water	Opera- tional Losses	Reservoir Storage Changes	Deliveries		Total									
				Water Supply	Recre- ation										
(13)	(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		
1963	0	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	0		
1965	0	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	0		
1967	5,746	1,183	0	11,538	0	18,467	2,957	21,424	0	0	0	0	0		
1968	11,079	74,464	0	293,243	0	378,786	531,275	910,061	11,079	25,126	0	189,104	0 225,309		
1969	8,974	43,058	-114,080(a)	265,417	0	203,369	470,556	673,925	3,887	9,922	- 97,717(e)	192,689	0 108,781		
1970	6,793	117,103	9,472	351,900	0	485,268	65,477	550,745	6,793	80,664	0	236,900	0 324,357		
1971	159,007	141,456	0	355,500	9,500	665,463	58,761	724,224	159,007	105,017	0	236,700	9,500 510,224		
1972	219,529	175,761	- 31,586	727,470	23,500	1,114,674	54,616	1,169,290	219,529	139,322	- 31,586	606,270	23,500 957,035		
1973	205,930	191,078	20,738	929,120	29,500	1,376,366	54,553	1,430,919	205,930	154,639	20,738	805,620	29,500 1,216,427		
1974	74,135	197,989	- 9,719	991,260	29,500	1,283,165	20,506	1,303,671	74,135	161,550	- 9,719	865,660	29,500 1,121,126		
1975	30,591	199,548	7,666	1,110,710	29,500	1,378,015	57,492	1,435,507	30,591	163,109	7,666	982,810	29,500 1,213,676		
1976	9,476	200,231	- 99,308	1,488,780	29,500	1,628,679	- 56,469	1,572,210	9,476	161,792	- 99,308	1,358,780	29,500 1,460,240		
1977	0	199,357	- 39,391	1,666,901	29,500	1,856,367	24,082	1,880,449	0	160,918	- 39,391	1,534,601	29,500 1,685,628		
1978	0	199,579	633	1,844,922	29,500	2,074,634	-276,527	1,798,107	0	161,140	633	1,710,322	29,500 1,901,595		
1979	0	197,784	769	2,020,673	29,500	2,248,726	493,885	2,742,611	0	159,345	769	1,883,973	29,500 2,073,587		
1980	0	199,637	- 66,984	2,209,314	45,500	2,387,467	-160,855	2,226,612	0	161,198	- 66,984	2,070,314	45,500 2,210,028		
1981	0	199,057	18,541	2,396,665	45,500	2,659,763	- 25,667	2,634,096	0	160,618	18,541	2,255,365	45,500 2,480,024		
1982	0	199,033	- 14,975	2,584,306	45,500	2,813,864	-253,564	2,560,300	0	160,594	- 14,975	2,440,606	45,500 2,631,725		
1983	0	197,722	- 13,725	2,777,657	45,500	3,007,154	- 27,558	2,979,596	0	159,283	- 13,725	2,631,657	45,500 2,822,715		
1984	0	197,270	- 30,212	2,968,998	45,500	3,181,586	- 9,675	3,171,881	0	158,831	- 30,212	2,820,598	45,500 2,994,717		
1985	0	197,572	19,542	3,164,049	45,500	3,426,663	99,030	3,525,693	0	159,133	19,542	3,013,349	45,500 3,237,524		
1986	0	199,479	28,897	3,358,290	45,500	3,632,166	159,142	3,791,308	0	161,040	28,897	3,205,090	45,500 3,440,527		
1987	0	200,110	- 6,613	3,555,441	45,500	3,794,438	182,855	3,977,293	0	161,671	- 6,613	3,399,941	45,500 3,600,499		
1988	0	200,202	2,061	3,750,882	45,500	3,998,645	27,268	4,025,913	0	161,763	2,061	3,592,982	45,500 3,802,306		
1989	0	199,367	- 66,440	3,939,733	45,500	4,118,160	41,730	4,159,890	0	160,928	- 66,440	3,777,433	45,500 3,917,421		
1990	0	197,848	3,206	4,088,700	45,500	4,335,254	- 25,863	4,309,391	0	159,409	3,206	3,922,100	45,500 4,130,215		
1991	0	198,020	5,533	4,101,600	45,500	4,350,653	181,738	4,532,391	0	159,581	5,533	3,929,500	45,500 4,140,114		
1992	0	198,020	0	4,107,100	45,500	4,350,620	49,699	4,400,319	0	159,581	0	3,929,500	45,500 4,134,581		
1993	0	198,020	0	4,112,600	45,500	4,356,120	49,699	4,405,819	0	159,581	0	3,929,500	45,500 4,134,581		
1994	0	198,020	0	4,117,200	45,500	4,360,720	49,699	4,410,419	0	159,581	0	3,929,500	45,500 4,134,581		
1995	0	198,020	0	4,119,200	45,500	4,362,720	49,699	4,412,419	0	159,581	0	3,929,500	45,500 4,134,581		
1996	0	198,020	0	4,121,200	45,500	4,364,720	49,699	4,414,419	0	159,581	0	3,929,500	45,500 4,134,581		
1997	0	198,020	0	4,123,200	45,500	4,366,720	49,699	4,416,419	0	159,581	0	3,929,500	45,500 4,134,581		
1998	0	198,020	0	4,123,200	45,500	4,366,720	49,699	4,416,419	0	159,581	0	3,929,500	45,500 4,134,581		
1999	0	198,020	0	4,123,200	45,500	4,366,720	49,699	4,416,419	0	159,581	0	3,929,500	45,500 4,134,581		
2000 (a)	0	198,020	0	4,123,200	45,500	4,366,720	49,699	4,416,419	0	159,581	0	3,929,500	45,500 4,134,581		

a) Between 1968 and 1979, inclusive, annual quantities delivered on nonproject water pumped through an interim facility.

b) Net result of operational losses and decrease in storage in the terminal facilities.

c) Result of decrease in storage of 410 AF in Lake Del Valle and the acquiring of local inflow into the Lake, subsequently delivered to project water contractors, of 15,953 AF.

d) And each year thereafter for the remainder of the project repayment period.

e) Conservation and subsequent delivery of 97,717 AF of flood water to project water contractors in the San Joaquin Valley.

TABLE B-6

ANNUAL QUANTITIES CONVEYED THRU EACH PUMPING AND POWER
RECOVERY PLANT OF PROJECT TRANSPORTATION FACILITIES

(in acre-feet)

Sheet 3 of 7

Calendar Year	CALIFORNIA AQUEDUCT (Continued)											
	SOUTH SAN JOAQUIN DIVISION											
	BUENA VISTA PUMPING PLANT						WHEELER RIDGE PUMPING PLANT					
	Initial Fill Water	Opera- tional Losses	Reservoir Storage Changes	Deliveries		Total	Initial Fill Water	Opera- tional Losses	Reservoir Storage Changes	Deliveries		Total
				Water Supply	Recre- ation					Water Supply	Recre- ation	
	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)
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	6,513	9,237	0	0	0	15,750	2,275	1,418	0	0	0	3,693
1971	159,007	30,290	0	19,500	0	208,797	159,007	17,490	0	4,086	0	180,583
1972	219,529	64,595	- 31,586	307,770	14,000	574,308	219,529	51,795	- 31,586	268,774	14,000	522,512
1973	205,930	79,912	20,738	460,520	20,000	787,100	205,930	67,112	20,738	425,238	20,000	739,018
1974	74,135	86,823	- 9,719	476,660	20,000	647,899	74,135	74,023	- 9,719	442,593	20,000	601,032
1975	30,591	88,382	7,666	568,010	20,000	714,649	30,591	75,582	7,666	518,610	20,000	652,449
1976	9,476	87,065	- 99,308	909,380	20,000	926,613	9,476	74,265	- 99,308	851,480	20,000	855,913
1977	0	86,191	- 39,391	1,040,201	20,000	1,107,001	0	73,391	- 39,391	971,501	20,000	1,025,501
1978	0	86,413	633	1,172,122	20,000	1,279,168	0	73,613	633	1,095,522	20,000	1,189,768
1979	0	84,618	769	1,303,173	20,000	1,408,560	0	71,818	769	1,220,373	20,000	1,312,960
1980	0	84,271	- 66,984	1,444,414	20,000	1,481,701	0	71,471	- 66,984	1,355,114	20,000	1,379,601
1981	0	83,691	18,541	1,581,265	20,000	1,703,497	0	70,891	18,541	1,481,465	20,000	1,590,897
1982	0	83,667	- 14,975	1,718,106	20,000	1,806,798	0	70,867	- 14,975	1,609,106	20,000	1,684,998
1983	0	82,356	- 13,725	1,858,657	20,000	1,947,288	0	69,556	- 13,725	1,736,857	20,000	1,812,688
1984	0	81,904	- 30,212	1,996,798	20,000	2,068,490	0	69,104	- 30,212	1,866,498	20,000	1,925,390
1985	0	82,206	19,542	2,135,149	20,000	2,256,897	0	69,406	19,542	1,994,849	20,000	2,103,797
1986	0	84,113	28,897	2,275,590	20,000	2,408,600	0	71,313	28,897	2,125,690	20,000	2,245,900
1987	0	84,744	- 6,613	2,418,741	20,000	2,516,872	0	71,944	- 6,613	2,258,341	20,000	2,343,672
1988	0	84,836	2,061	2,562,182	20,000	2,669,079	0	72,036	2,061	2,391,882	20,000	2,485,979
1989	0	84,001	- 66,440	2,701,133	20,000	2,738,694	0	71,201	- 66,440	2,523,433	20,000	2,548,194
1990	0	82,482	3,206	2,790,700	20,000	2,896,388	0	69,682	3,206	2,605,900	20,000	2,698,788
1991	0	82,654	5,533	2,798,100	20,000	2,906,287	0	69,854	5,533	2,613,300	20,000	2,708,687
1992	0	82,654	0	2,798,100	20,000	2,900,754	0	69,854	0	2,613,300	20,000	2,703,154
1993	0	82,654	0	2,798,100	20,000	2,900,754	0	69,854	0	2,613,300	20,000	2,703,154
1994	0	82,654	0	2,798,100	20,000	2,900,754	0	69,854	0	2,613,300	20,000	2,703,154
1995	0	82,654	0	2,798,100	20,000	2,900,754	0	69,854	0	2,613,300	20,000	2,703,154
1996	0	82,654	0	2,798,100	20,000	2,900,754	0	69,854	0	2,613,300	20,000	2,703,154
1997	0	82,654	0	2,798,100	20,000	2,900,754	0	69,854	0	2,613,300	20,000	2,703,154
1998	0	82,654	0	2,798,100	20,000	2,900,754	0	69,854	0	2,613,300	20,000	2,703,154
1999	0	82,654	0	2,798,100	20,000	2,900,754	0	69,854	0	2,613,300	20,000	2,703,154
2000 (a)	0	82,654	0	2,798,100	20,000	2,900,754	0	69,854	0	2,613,300	20,000	2,703,154

Note: "Reservoir Storage Changes" include projected net annual storage accretions (positive values) and withdrawals (negative values) for all down-aqueduct reservoirs of the project transportation facilities. Those variable OMP&R costs (Table B-12) that are allocable to storage accretions are assigned to the minimum OMP&R costs of the respective reservoirs.

"Water Supply Delivery" or "Deliveries, Water Supply", include certain hypothetical quantities to facilitate cost allocations for those years when deliveries are made from net annual storage withdrawals. The net annual amounts of storage withdrawals are hypothetically added to the actual amounts conveyed from the Delta to the reservoirs -- since deliveries made from storage withdrawals bear the same variable OMP&R costs per acre-foot as if the deliveries were actually conveyed, that year, from the Delta. The hypothetical increases in the amounts conveyed are compensated for by proportionate hypothetical increases in the actual variable OMP&R costs (Table B-3) of the up-aqueduct plants. The hypothetical increases in variable OMP&R costs for deliveries made from reservoir storage withdrawals are offset by equal credits to the minimum OMP&R costs of the respective reservoirs. Thus, the variable OMP&R components per acre-foot (Table B-17) may be applied to the total annual quantities delivered either from aqueduct reservoir storage or from the Delta.

"Conservation Water" includes initial fill water, operational losses, and net annual storage changes associated with San Luis Reservoir (and the portion of the aqueduct that is allocated to conservation). The same allocation procedure outlined above for transportation facilities applies also to conservation facilities -- except that the hypothetical cost increases are added to the variable OMP&R costs to be reimbursed through the Transportation Charge, and deducted from the minimum OMP&R costs to be reimbursed through the Delta Water Charge.

ANNUAL QUANTITIES CONVEYED THRU EACH PUMPING AND POWER
RECOVERY PLANT OF PROJECT TRANSPORTATION FACILITIES

(in acre-feet)

Sheet 4 of 7

Calendar Year	CALIFORNIA AQUEDUCT (Continued)											
	SOUTH SAN JOAQUIN DIVISION (Continued)						TEHACHAPI DIVISION					
	WIND GAP PUMPING PLANT						A. D. EDMONSTON PUMPING PLANT					
	Initial Fill Water	Opera- tional Losses	Reservoir Storage Changes	Deliveries		Total	Initial Fill Water	Opera- tional Losses	Reservoir Storage Changes	Deliveries		Total
				Water Supply	Recre- ation					Water Supply	Recre- ation	
	(39)	(40)	(41)	(42)	(43)	(44)	(45)	(46)	(47)	(48)	(49)	(50)
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	1,963	1,232	0	0	0	3,195	0	0	0	0	0	0
1971	159,007	16,690	0	2,600	0	178,297	159,007	11,390	0	70	0	170,467
1972	219,529	50,995	- 31,586	248,137	14,000	501,075	219,529	45,695	- 31,586	243,870	14,000	491,508
1973	205,930	66,312	20,738	406,726	20,000	719,706	205,930	61,012	20,738	402,320	20,000	710,000
1974	74,135	73,223	- 9,111	426,855	20,000	584,494	74,135	67,923	- 9,719	422,460	20,000	574,799
1975	30,591	74,782	7,666	501,210	20,000	634,249	30,591	69,482	7,666	497,910	20,000	625,649
1976	9,476	73,465	- 99,308	831,180	20,000	834,813	9,476	68,165	- 99,308	827,480	20,000	825,813
1977	0	72,591	- 39,391	949,001	20,000	1,002,201	0	67,291	- 39,391	945,001	20,000	992,901
1978	0	72,813	633	1,071,322	20,000	1,164,768	0	67,513	633	1,063,522	20,000	1,151,668
1979	0	71,018	769	1,194,673	20,000	1,286,460	0	65,718	769	1,181,273	20,000	1,267,760
1980	0	70,671	- 66,984	1,327,714	20,000	1,351,401	0	65,371	- 66,984	1,308,414	20,000	1,326,801
1981	0	70,091	18,541	1,452,365	20,000	1,560,997	0	64,791	18,541	1,429,065	20,000	1,532,397
1982	0	70,067	- 14,975	1,578,306	20,000	1,653,398	0	64,767	- 14,975	1,550,606	20,000	1,620,398
1983	0	68,756	- 13,725	1,703,657	20,000	1,778,688	0	63,456	- 13,725	1,672,257	20,000	1,741,998
1984	0	68,304	- 30,212	1,831,398	20,000	1,889,490	0	63,004	- 30,212	1,794,098	20,000	1,846,890
1985	0	68,606	19,542	1,956,749	20,000	2,064,897	0	63,306	19,542	1,915,949	20,000	2,018,797
1986	0	70,513	28,897	2,084,490	20,000	2,203,900	0	65,213	28,897	2,039,590	20,000	2,153,700
1987	0	71,144	- 6,613	2,213,841	20,000	2,298,372	0	65,844	- 6,613	2,164,441	20,000	2,243,672
1988	0	71,236	2,061	2,344,282	20,000	2,437,579	0	65,936	2,061	2,290,182	20,000	2,378,179
1989	0	70,401	- 66,440	2,473,433	20,000	2,497,394	0	65,101	- 66,440	2,415,733	20,000	2,434,394
1990	0	68,882	3,206	2,553,800	20,000	2,645,888	0	63,582	3,206	2,492,100	20,000	2,578,888
1991	0	69,054	5,533	2,561,200	20,000	2,655,787	0	63,754	5,533	2,499,500	20,000	2,588,787
1992	0	69,054	0	2,561,200	20,000	2,650,254	0	63,754	0	2,499,500	20,000	2,583,254
1993	0	69,054	0	2,561,200	20,000	2,650,254	0	63,754	0	2,499,500	20,000	2,583,254
1994	0	69,054	0	2,561,200	20,000	2,650,254	0	63,754	0	2,499,500	20,000	2,583,254
1995	0	69,054	0	2,561,200	20,000	2,650,254	0	63,754	0	2,499,500	20,000	2,583,254
1996	0	69,054	0	2,561,200	20,000	2,650,254	0	63,754	0	2,499,500	20,000	2,583,254
1997	0	69,054	0	2,561,200	20,000	2,650,254	0	63,754	0	2,499,500	20,000	2,583,254
1998	0	69,054	0	2,561,200	20,000	2,650,254	0	63,754	0	2,499,500	20,000	2,583,254
1999	0	69,054	0	2,561,200	20,000	2,650,254	0	63,754	0	2,499,500	20,000	2,583,254
2000 (a)	0	69,054	0	2,561,200	20,000	2,650,254	0	63,754	0	2,499,500	20,000	2,583,254

TABLE B-6

ANNUAL QUANTITIES CONVEYED THRU EACH PUMPING AND POWER
RECOVERY PLANT OF PROJECT TRANSPORTATION FACILITIES

(in acre-feet)

Sheet 5 of 7

Calendar Year	CALIFORNIA AQUEDUCT (Continued)											
	MOJAVE DIVISION						SANTA ANA DIVISION					
	PEARLBLOSSOM PUMPING PLANT						DEVIL CANYON POWERPLANT					
	Initial Fill Water	Opera- tional Losses	Reservoir Storage Changes	Deliveries		Total	Initial Fill Water	Opera- tional Losses	Reservoir Storage Changes	Deliveries		Total
				Water Supply	Recre- ation					Water Supply	Recre- ation	
	(51)	(52)	(53)	(54)	(55)	(56)	(57)	(58)	(59)	(60)	(61)	(62)
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	14,027	1,573	0	0	0	15,600	0	0	0	0	0	0
1972	66,542	13,881	0	58,500	5,000	143,923	272	0	0	56,600	0	56,872
1973	93,094	25,747	- 5,661	121,730	11,000	245,910	93,094	9,606	0	119,300	6,000	228,000
1974	6,906	28,385	- 9,696	121,660	11,000	158,255	6,906	12,263	- 15,267	118,700	6,000	128,602
1975	0	28,510	6,001	167,090	11,000	212,601	0	12,377	10,629	163,600	6,000	192,606
1976	0	27,236	- 30,652	338,740	11,000	346,324	0	11,264	- 19,311	319,200	6,000	317,153
1977	0	26,362	- 21,520	367,051	11,000	382,893	0	10,710	- 25,739	344,821	6,000	335,792
1978	0	26,030	- 15,569	523,062	11,000	544,523	0	10,408	- 7,779	498,242	6,000	506,871
1979	0	25,081	- 8,129	638,273	11,000	666,225	0	9,311	5,150	611,763	6,000	632,224
1980	0	25,426	- 6,709	674,684	11,000	704,401	0	9,652	- 5,125	644,584	6,000	655,111
1981	0	25,105	2,899	680,795	11,000	719,799	0	9,531	810	648,005	6,000	664,346
1982	0	25,443	32,645	686,706	11,000	755,794	0	9,882	2,827	651,326	6,000	670,035
1983	0	25,554	- 10,995	652,817	11,000	678,376	0	9,991	- 3,098	614,747	6,000	627,640
1984	0	24,925	- 26,288	659,328	11,000	668,965	0	9,484	- 1,626	618,568	6,000	632,426
1985	0	25,362	2,895	686,139	11,000	725,396	0	9,774	- 3,168	642,789	6,000	655,395
1986	0	26,115	54,168	713,650	11,000	804,933	0	10,210	31,669	620,400	6,000	668,279
1987	0	26,783	- 15,545	736,961	11,000	759,199	0	10,919	- 1,601	637,400	6,000	652,718
1988	0	26,761	4,908	765,372	11,000	808,041	0	11,280	7,428	659,500	6,000	684,208
1989	0	26,318	- 36,455	788,983	11,000	789,846	0	10,826	- 32,083	676,600	6,000	661,343
1990	0	25,050	4,100	821,900	11,000	862,050	0	9,463	- 1,185	704,100	6,000	718,378
1991	0	25,246	- 5,848	823,000	11,000	853,398	0	9,564	- 2,312	705,200	6,000	718,452
1992	0	25,246	0	823,000	11,000	859,246	0	9,564	0	705,200	6,000	720,764
1993	0	25,246	0	823,000	11,000	859,246	0	9,564	0	705,200	6,000	720,764
1994	0	25,246	0	823,000	11,000	859,246	0	9,564	0	705,200	6,000	720,764
1995	0	25,246	0	823,000	11,000	859,246	0	9,564	0	705,200	6,000	720,764
1996	0	25,246	0	823,000	11,000	859,246	0	9,564	0	705,200	6,000	720,764
1997	0	25,246	0	823,000	11,000	859,246	0	9,564	0	705,200	6,000	720,764
1998	0	25,246	0	823,000	11,000	859,246	0	9,564	0	705,200	6,000	720,764
1999	0	25,246	0	823,000	11,000	859,246	0	9,564	0	705,200	6,000	720,764
2000 (a)	0	25,246	0	823,000	11,000	859,246	0	9,564	0	705,200	6,000	720,764

Note: "Reservoir Storage Changes" include projected net annual storage accretions (positive values) and withdrawals (negative values) for all down-aqueduct reservoirs of the project transportation facilities. Those variable OMP&R costs (Table B-12) that are allocable to storage accretions are assigned to the minimum OMP&R costs of the respective reservoirs.

"Water Supply Delivery" or "Deliveries, Water Supply", include certain hypothetical quantities to facilitate cost allocations for those years when deliveries are made from net annual storage withdrawals. The net annual amounts of storage withdrawals are hypothetically added to the actual amounts conveyed from the Delta to the reservoirs -- since deliveries made from storage withdrawals bear the same variable OMP&R costs per acre-foot as if the deliveries were actually conveyed, that year, from the Delta. The hypothetical increases in the amounts conveyed are compensated for by proportionate hypothetical increases in the actual variable OMP&R costs (Table B-3) of the up-aqueduct plants. The hypothetical increases in variable OMP&R costs for deliveries made from reservoir storage withdrawals are offset by equal credits to the minimum OMP&R costs of the respective reservoirs. Thus, the variable OMP&R components per acre-foot (Table B-17) may be applied to the total annual quantities delivered either from aqueduct reservoir storage or from the Delta.

"Conservation Water" includes initial fill water, operational losses, and net annual storage changes associated with San Luis Reservoir (and the portion of the aqueduct that is allocated to conservation). The same allocation procedure outlined above for transportation facilities applies also to conservation facilities -- except that the hypothetical cost increases are added to the variable OMP&R costs to be reimbursed through the Transportation Charge, and deducted from the minimum OMP&R costs to be reimbursed through the Delta Water Charge.

ANNUAL QUANTITIES CONVEYED THRU EACH PUMPING AND POWER RECOVERY PLANT OF PROJECT TRANSPORTATION FACILITIES

(in acre-feet)

Sheet 6 of 7

Calendar Year	CALIFORNIA AQUEDUCT (Continued)											
	WEST BRANCH, CALIFORNIA AQUEDUCT											
	OSO PUMPING PLANT						CASTAIC POWERPLANT					
	Initial Fill Water	Opera- tional Losses	Reservoir Storage Changes	Deliveries		Total	Initial Fill Water	Opera- tional Losses	Reservoir Storage Changes	Deliveries		Total
				Water Supply	Recre- ation					Water Supply	Recre- ation	
(63)	(64)	(65)	(66)	(67)	(68)	(69)	(70)	(71)	(72)	(73)	(74)	
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	0	0	0	0	0	0	0	0	0	0	
1969	0	0	0	0	0	0	0	0	0	0	0	
1970	0	0	0	0	0	0	0	0	0	0	0	
1971	141,721	4,029	0	0	0	145,750	140,292	1,258	0	0	141,550	
1972	152,987	17,814	- 31,586	165,700	5,000	309,915	151,887	12,569	- 31,586	165,000	5,000	
1973	112,836	21,265	26,399	256,100	5,000	421,600	19,712	14,346	26,399	255,000	5,000	
1974	67,229	25,538	- 23	271,500	5,000	369,244	0	14,422	- 23	270,000	5,000	
1975	30,591	26,972	1,665	296,500	5,000	360,728	29,244	15,079	1,665	294,500	5,000	
1976	9,476	26,929	- 68,656	438,900	5,000	411,649	9,476	15,036	- 68,656	436,400	5,000	
1977	0	26,929	- 17,871	521,200	5,000	535,258	0	15,036	- 17,871	518,200	5,000	
1978	0	27,483	16,202	475,800	5,000	524,485	0	15,590	16,202	472,300	5,000	
1979	0	26,637	8,898	471,700	5,000	512,235	0	14,744	8,898	467,700	5,000	
1980	0	25,945	- 60,275	555,600	5,000	526,270	0	14,052	- 60,275	551,100	5,000	
1981	0	25,686	15,642	664,100	5,000	710,428	0	13,793	15,642	659,100	5,000	
1982	0	25,324	- 47,620	773,100	5,000	755,804	0	13,431	- 47,620	767,600	5,000	
1983	0	23,902	- 2,730	921,900	5,000	948,072	0	12,009	- 2,730	915,900	5,000	
1984	0	24,079	- 3,924	1,030,600	5,000	1,055,755	0	12,186	- 3,924	1,024,100	5,000	
1985	0	23,944	16,647	1,118,900	5,000	1,164,491	0	12,051	16,647	1,111,900	5,000	
1986	0	25,098	- 25,271	1,208,400	5,000	1,213,227	0	13,205	- 25,271	1,200,900	5,000	
1987	0	25,061	8,932	1,303,300	5,000	1,342,293	0	13,168	8,932	1,295,300	5,000	
1988	0	25,175	- 2,847	1,393,900	5,000	1,421,228	0	13,282	- 2,847	1,385,400	5,000	
1989	0	24,783	- 29,985	1,489,300	5,000	1,489,098	0	12,890	- 29,985	1,480,300	5,000	
1990	0	24,532	- 894	1,526,500	5,000	1,555,138	0	12,639	- 894	1,516,500	5,000	
1991	0	24,508	11,381	1,526,500	5,000	1,567,389	0	12,615	11,381	1,516,500	5,000	
1992	0	24,508	0	1,516,500	5,000	1,546,008	0	12,615	0	1,516,500	5,000	
1993	0	24,508	0	1,516,500	5,000	1,546,008	0	12,615	0	1,516,500	5,000	
1994	0	24,508	0	1,516,500	5,000	1,546,008	0	12,615	0	1,516,500	5,000	
1995	0	24,508	0	1,516,500	5,000	1,546,008	0	12,615	0	1,516,500	5,000	
1996	0	24,508	0	1,516,500	5,000	1,546,008	0	12,615	0	1,516,500	5,000	
1997	0	24,508	0	1,516,500	5,000	1,546,008	0	12,615	0	1,516,500	5,000	
1998	0	24,508	0	1,516,500	5,000	1,546,008	0	12,615	0	1,516,500	5,000	
1999	0	24,508	0	1,516,500	5,000	1,546,008	0	12,615	0	1,516,500	5,000	
2000 (d)	0	24,508	0	1,516,500	5,000	1,546,008	0	12,615	0	1,516,500	5,000	

ANNUAL QUANTITIES CONVEYED THRU EACH PUMPING AND POWER RECOVERY PLANT OF PROJECT TRANSPORTATION FACILITIES

(in acre-feet)

Sheet 7 of 7

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		
	Initial Fill Water	Operational Losses	Water Supply Delivery	Total	Operational Losses	Water Supply Delivery	Total	Operational Losses	Water Supply Delivery	Total
	(75)	(76)	(77)	(78)	(79)	(80)	(81)	(82)	(83)	(84)
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	210	873	79,039	80,122	0	0	0	0	0	0
1969	0	1,042	62,064	63,106	0	0	0	0	0	0
1970	0	2,027	76,400	78,427	0	0	0	0	0	0
1971	0	2,027	37,900	39,927	0	0	0	0	0	0
1972	0	2,027	39,500	41,527	0	0	0	0	0	0
1973	0	2,027	46,200	48,227	0	0	0	0	0	0
1974	0	2,027	62,300	64,327	0	0	0	0	0	0
1975	0	2,027	67,700	69,727	0	0	0	0	0	0
1976	0	2,027	73,500	75,527	0	0	0	0	0	0
1977	0	2,027	78,700	80,727	0	0	0	0	0	0
1978	0	2,027	83,500	85,527	0	0	0	0	0	0
1979	0	2,027	88,000	90,027	0	0	0	0	0	0
1980	0	4,227	94,300	98,527	2,200	2,200	4,400	1,500	2,200	3,700
1981	0	4,227	99,800	104,027	2,200	3,300	5,500	1,500	3,300	4,800
1982	0	4,227	107,000	111,227	2,200	6,600	8,800	1,500	6,600	8,100
1983	0	4,227	113,400	117,627	2,200	9,900	12,100	1,500	9,900	11,400
1984	0	4,227	122,100	126,327	2,200	14,900	17,100	1,500	14,900	16,400
1985	0	4,227	134,600	138,827	2,200	24,800	27,000	1,500	24,800	26,300
1986	0	4,227	145,900	150,127	2,200	33,100	35,300	1,500	33,100	34,600
1987	0	4,227	156,200	160,427	2,200	41,300	43,500	1,500	41,300	42,800
1988	0	4,227	167,800	172,027	2,200	51,300	53,500	1,500	51,300	52,800
1989	0	4,227	183,500	187,727	2,200	66,100	68,300	1,500	66,100	67,600
1990	0	4,227	200,500	204,727	2,200	82,700	84,900	1,500	82,700	84,200
1991	0	4,227	200,500	204,727	2,200	82,700	84,900	1,500	82,700	84,200
1992	0	4,227	200,500	204,727	2,200	82,700	84,900	1,500	82,700	84,200
1993	0	4,227	200,500	204,727	2,200	82,700	84,900	1,500	82,700	84,200
1994	0	4,227	200,500	204,727	2,200	82,700	84,900	1,500	82,700	84,200
1995	0	4,227	200,500	204,727	2,200	82,700	84,900	1,500	82,700	84,200
1996	0	4,227	200,500	204,727	2,200	82,700	84,900	1,500	82,700	84,200
1997	0	4,227	200,500	204,727	2,200	82,700	84,900	1,500	82,700	84,200
1998	0	4,227	200,500	204,727	2,200	82,700	84,900	1,500	82,700	84,200
1999	0	4,227	200,500	204,727	2,200	82,700	84,900	1,500	82,700	84,200
2000 (a)	0	4,227	200,500	204,727	2,200	82,700	84,900	1,500	82,700	84,200

Note: "Reservoir Storage Changes" include projected net annual storage accretions (positive values) and withdrawals (negative values) for all down-aqueduct reservoirs of the project transportation facilities. Those variable OMP&R costs (Table B-12) that are allocable to storage accretions are assigned to the minimum OMP&R costs of the respective reservoirs.

"Water Supply Delivery" or "Deliveries, Water Supply", include certain hypothetical quantities to facilitate cost allocations for those years when deliveries are made from net annual storage withdrawals. The net annual amounts of storage withdrawals are hypothetically added to the actual amounts conveyed from the Delta to the reservoirs -- since deliveries made from storage withdrawals bear the same variable OMP&R costs per acre-foot as if the deliveries were actually conveyed, that year, from the Delta. The hypothetical increases in the amounts conveyed are compensated for by proportionate hypothetical increases in the actual variable OMP&R costs (Table B-3) of the up-aqueduct plants. The hypothetical increases in variable OMP&R costs for deliveries made from reservoir storage withdrawals are offset by equal credits to the minimum OMP&R costs of the respective reservoirs. Thus, the variable OMP&R components per acre-foot (Table B-17) may be applied to the total annual quantities delivered either from aqueduct reservoir storage or from the Delta.

"Conservation Water" includes initial fill water, operational losses, and net annual storage changes associated with San Luis Reservoir (and the portion of the aqueduct that is allocated to conservation). The same allocation procedure outlined above for transportation facilities applies also to conservation facilities -- except that the hypothetical cost increases are added to the variable OMP&R costs to be reimbursed through the Transportation Charge, and deducted from the minimum OMP&R costs to be reimbursed through the Delta Water Charge.

RECONCILIATION OF CAPITAL COSTS ALLOCATED TO WATER SUPPLY AND POWER GENERATION FOR THE PROJECT CONSTRUCTION PERIOD 1952-1985

(in thousands of dollars)

Project Facility	Project Costs Allocated to Water Supply and Power Generation							Project Costs Allocated to Other Purposes	Total, State Water Project
	Misc. Income Credited to Construction (a)	Allowances for Future Price Escalation (b)	Costs of Construction of Water Delivery Structures (c)	Additional Costs of Requested Excess Capacity and Future Enlargement (d)	Capital Cost Component of Delta Water Charge (e)	Capital Cost Component of Transportation Water Charge (f)	Total (g)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
CONSERVATION FACILITIES									
Upper Feather Division									
Frenchman Dam and Lake	1	0	0	0	747	0	748	2,503	3,251
Grizzly Valley Dam and Lake Davis	2	0	0	0	244	0	246	4,708	4,954
Antelope Dam and Lake	0	0	0	0	0	0	0	4,946	4,946
Abbey Bridge Dam and Res.	0	0	0	0	0	0	0	7,986	7,986
Dixie Refuge Dam and Res.	0	0	0	0	0	0	0	5,928	5,928
Total, Upper Feather Div.	3	0	0	0	991	0	994	26,071	27,065
Oroville Division									
Multipurpose Facilities	3,129	86	165	0	307,005	0	310,385	79,498	389,883
Specific Power Facilities	5	68	0	0	113,725	0	113,798	0	113,798
Total, Oroville Division	3,134	154	165	0	420,730	0	424,183	79,498	503,681
California Aqueduct									
North San Joaquin Div.	158	958	0	0	49,423	0	50,539	1,970	52,509
San Luis Division	251	26	0	0	84,918	0	85,195	3,597	88,792
Total, California Aqueduct	409	984	0	0	134,341	0	135,734	5,567	141,301
Delta Facilities	0	21,060	0	0	79,987	0	101,047	49,432	150,479
Upper Eel River Development	0	21,036	0	0	141,020	0	162,056	77	162,133
TOTAL, CONSERVATION FAC.	3,546	43,234	165	0	777,069	0	824,014	160,645	984,659
TRANSPORTATION FACILITIES									
Upper Feather Division, Grizzly Valley Pipeline	0	0	0	0	0	317	317	0	317
North Bay Aqueduct	17	3,106	29	0	0	16,091	19,243	2	19,245
South Bay Aqueduct	1,554	264	343	0	0	47,530	49,691	19,400	69,091
California Aqueduct									
North San Joaquin Div.	352	2,146	23	0	0	110,563	113,084	3,781	116,865
San Luis Division	1	2,792	0	0	0	96,033	98,826	3,494	102,320
South San Joaquin Div.	283	2,923	2,307	3,344	0	242,753	251,610	8,092	259,702
Tehachapi Division	21	8,483	70	7,207	0	258,397	274,178	8,472	282,650
Mojave Division	471	9,186	842	0	0	215,615	226,114	7,146	233,260
Santa Ana Division	227	9,733	5,247	21,322	0	161,405	197,934	5,786	203,720
West Branch	40,417	8,876	3,898	109	0	271,975	325,275	11,215	336,490
Coastal Branch	9	15,693	62	0	0	67,630	83,394	104	83,498
Total, California Aqueduct	41,781	59,832	12,449	31,982	0	1,424,371	1,570,415	48,090	1,618,505
TOTAL, TRANSPORTATION FAC.	43,352	63,202	12,821	31,982	0	1,488,309	1,639,666	67,492	1,707,158
SAN JOAQUIN DRAINAGE FACILITIES	0	0	0	0	0	0	0	5,971	5,971
UNASSIGNED & DAVIS-GRUNSKY	0	0	0	0	0	0	0	139,228	139,228
TOTAL, 1952 - 1985	46,898	106,436	12,986	31,982	777,069	1,488,309	2,463,680	373,336	2,837,016

a) Miscellaneous project receipts, including those from sale of Airpoint Reservoir land, that are applied for accounting purposes to reduce the capital costs of the particular facilities from which such income was realized.

b) These allowances are included for planning the future financial program, but not for determining current water charges. The costs shown on this appendix are based on prices prevailing on December 31, 1969.

c) See Table B-8.

d) See Table B-9.

e) See Table B-13. A portion of these costs will be offset by power generation sales and credits.

f) See Table B-10.

g) Total as shown in Table 10.

TABLE B-8

CAPITAL COSTS OF REQUESTED
TO BE BUILT BY

(in

Project Area and Water Supply Contractor	Calendar Year											
	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
FEATHER RIVER AREA												
County of Butte	0	0	0	0	0	0	3,746	5,326	45,705	64,348	584	198
Thermalito Irrigation District (b)	0	0	0	0	0	0	2,720	2,502	14,686	24,807	252	0
Subtotals	0	0	0	0	0	0	6,466	7,828	60,391	89,155	836	198
NORTH BAY AREA												
Napa County Flood Control and Water Conservation District	0	0	0	0	0	0	0	0	23	2,249	- 345	287
Solano County Flood Control and Water Conservation District	0	0	0	0	0	0	0	0	0	0	0	0
Subtotals	0	0	0	0	0	0	0	0	23	2,249	- 345	287
SOUTH BAY AREA												
Alameda County Flood Control and Water Conservation District, Zone 7	4,011	5,698	1,916	57,969	72,479	11,950	5,015	-3,611	1,007	0	0	0
Alameda County Water District	150	213	55	2,393	35,960	9,903	79,042	875	11,782	561	12,827	14,070
Santa Clara County Flood Control and Water District	0	0	0	0	175	66	255	4,808	7,298	- 19	105	0
Subtotals	4,161	5,911	1,971	60,362	108,614	21,919	84,312	2,072	20,087	542	12,932	14,070
SAN JOAQUIN VALLEY												
Devil's Den Water District	0	0	0	0	0	0	0	880	4,772	25,647	27,899	- 640
Dudley Ridge Water District	0	0	0	0	0	0	0	164	5,069	141,432	4,674	- 201
Empire West Side Irrigation District	0	0	0	0	0	0	0	1,200	60,013	117,073	63,197	- 866
Hacienda Water District	0	0	0	0	0	0	0	1,099	71,243	8,288	97,071	- 2,548
Kern County Water Agency	0	0	0	0	0	7	1	26,649	223,102	262,807	300,218	501,492
Oak Flat Water District	0	0	0	0	0	0	0	-1,962	336	22,569	2,081	0
Tulare Lake Basin Water Storage District	0	0	0	0	0	0	0	4	1,408	2,267	1,592	- 32
Subtotals	0	0	0	0	0	7	1	28,034	365,943	580,083	496,732	497,205
SOUTHERN CALIFORNIA AREA												
Antelope Valley-East Kern Water Agency	0	0	0	0	0	0	440	34	3,876	18,055	29,890	39,271
Coachella Valley County Water District	0	0	0	0	0	0	0	4	0	35	129	2,651
Crestline-Lake Arrowhead Water Agency	0	0	0	0	0	0	916	189	- 14	99	6,995	43
Desert Water Agency	0	0	0	0	0	0	0	0	0	58	214	4,375
Littlerock Creek Irrigation District	0	0	0	0	0	0	0	0	0	165	484	9,490
Mojave Water Agency	0	0	0	0	0	0	0	1	366	302	557	8,538
Palmdale Irrigation District	0	0	0	0	0	0	0	61	- 7	1,526	974	10,287
San Bernardino Valley Municipal Water District	0	0	0	0	0	0	0	845	786	3,687	25,106	13,576
San Gabriel Valley Municipal Water District	0	0	0	0	0	0	0	0	0	557	1,734	10,524
San Geronio Pass Water Agency	0	0	0	0	0	0	0	0	0	0	0	0
The Metropolitan Water District of Southern California	0	0	0	0	0	0	0	- 4	35,554	217,158	347,210	142,166
Upper Santa Clara Valley Water Agency	0	0	0	0	372	288	1,037	2,200	2,656	16,511	24,396	12,498
Ventura County Flood Control District	0	0	0	0	0	147	532	1,268	1,402	8,456	12,496	5,547
Subtotals	0	0	0	0	372	435	2,925	4,598	44,619	266,609	450,185	258,966
TOTALS	4,161	5,911	1,971	60,362	108,986	22,361	93,704	42,532	491,063	938,638	960,340	770,726

a) Approximate only; not to be construed as invoice amounts.

b) Not a project water supply contractor. A delivery structure was constructed on the Thermalito Power Canal at the District's expense as a part of a relocation agreement.

TABLE B-8

DELIVERY STRUCTURES THE STATE (a)

ollars)

Calendar Year											Total	Project Area and Water Supply Contractor
1970	1971	1972	1973	1974	1975-77	1978	1979	1980-83	1984	1985		
(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	
												FEATHER RIVER AREA
0	0	0	0	0	0	0	0	0	0	0	119,907	County of Butte
0	0	0	0	0	0	0	0	0	0	0	44,967	Thermalito Irrigation District (b)
0	0	0	0	0	0	0	0	0	0	0	164,874	Subtotals
												NORTH BAY AREA
0	0	0	0	0	0	0	0	0	0	0	2,214	Napa County Flood Control and Water Conservation District
0	0	0	0	0	0	25,000	0	0	1,000	1,000	27,000	Solano County Flood Control and Water Conservation District
0	0	0	0	0	0	25,000	0	0	1,000	1,000	29,214	Subtotals
												SOUTH BAY AREA
1,800	1,000	1,000	0	0	0	0	0	0	0	0	160,234	Alameda County Flood Control and Water Conservation District, Zone 7
1,000	1,000	0	0	0	0	0	0	0	0	0	169,831	Alameda County Water District
0	0	0	0	0	0	0	0	0	0	0	12,688	Santa Clara County Flood Control and Water District
2,800	2,000	1,000	0	0	0	0	0	0	0	0	342,753	Subtotals
												SAN JOAQUIN VALLEY
0	0	0	0	0	0	0	0	0	0	0	58,558	Devil's Den Water District
0	0	0	0	0	0	0	0	0	0	0	151,138	Dudley Ridge Water District
0	0	0	0	0	0	0	0	0	0	0	240,617	Empire West Side Irrigation District
0	0	0	0	0	0	0	0	0	0	0	175,153	Hacienda Water District
458,400	36,000	0	0	0	0	0	0	0	0	0	1,808,676	Kern County Water Agency
0	0	0	0	0	0	0	0	0	0	0	23,024	Oak Flat Water District
0	0	0	0	0	0	0	0	0	0	0	5,239	Tulare Lake Basin Water Storage District
458,400	36,000	0	0	0	0	0	0	0	0	0	2,462,405	Subtotals
												SOUTHERN CALIFORNIA AREA
104,900	0	0	0	59,000	0	0	177,000	0	0	0	432,466	Antelope Valley-East Kern Water Agency
10,200	0	0	0	0	0	0	0	0	20,000	0	33,019	Coachella Valley County Water District
0	0	0	0	0	0	0	0	0	0	0	8,228	Crestline-Lake Arrowhead Water Agency
16,900	0	0	0	0	0	0	0	0	40,000	0	61,547	Desert Water Agency
40,300	0	0	0	0	0	0	0	0	0	0	50,439	Littlerock Creek Irrigation District
132,700	0	0	0	86,800	0	0	0	0	55,000	0	284,264	Mojave Water Agency
32,800	0	0	0	0	0	0	0	0	0	0	45,641	Palmdale Irrigation District
297,500	0	0	0	0	0	0	51,000	0	0	0	392,500	San Bernardino Valley Municipal Water District
113,400	0	0	0	0	0	0	0	0	0	0	126,215	San Gabriel Valley Municipal Water District
41,500	0	0	0	0	0	0	0	0	0	0	41,500	San Geronio Pass Water Agency
645,600	3,241,000	0	0	962,500	0	0	1,544,700	0	0	0	8,135,884	The Metropolitan Water District of Southern California
145,800	75,000	0	0	0	0	0	0	0	0	0	280,758	Upper Santa Clara Valley Water Agency
34,800	18,000	0	0	0	0	12,000	0	0	0	0	94,648	Ventura County Flood Control District
616,400	3,334,000	0	0	1,108,300	0	12,000	1,772,700	0	115,000	0	9,987,109	Subtotals
1,077,600	3,372,000	1,000	0	1,108,300	0	37,000	1,772,700	0	116,000	1,000	12,986,355	TOTALS

TABLE B-9

CAPITAL COSTS OF REQUESTED EXCESS PEAKING CAPACITY

(in dollars unless otherwise indicated)

Sheet 1 of 2

TOTAL REQUIRED ADVANCE OF FUNDS										
Reach Number	Year Reach Becomes Operational	Excess Capacity (cfs)	Total Reach Capacity (cfs)	Ratio of Excess Capacity to Total Capacity (cfs/cfs) (a)	Total Reach Cost (b)	Total Advance Payments for Excess Capacity (c)	Total Incremental Costs for Excess Capacity (d)	Reconciliation of Advance Payments (e)	Interest Credit (f)	Reconciliation of Advance Payments and Interest Credit
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA										
8C	1968	188.00000	8,257.54768	0.02276705	570,839	12,996	2,000	10,996	1,730	12,726
8D	1968	188.00000	8,058.99281	0.02332798	14,306,451	333,741	113,000	220,741	34,295	255,036
9	1968	188.00000	7,268.54004	0.02586489	3,975,063	102,815	71,000	31,815	6,869	38,684
10A	1968	188.00000	7,117.74784	0.02641285	8,581,751	226,669	92,000	134,669	28,853	163,522
11B	1968	188.00000	6,313.19561	0.02977890	12,981,619	386,578	108,000	278,578	61,700	340,278
12D	1969	188.00000	5,929.95263	0.03170346	18,618,511	590,271	156,000	434,271	101,483	535,754
12E	1969	188.00000	5,907.22734	0.03182542	7,643,960	243,272	118,000	125,272	28,592	153,864
13B	1969	188.00000	5,341.25081	0.03519775	16,795,039	591,148	139,000	452,148	85,618	537,766
14A	1970	188.00000	5,008.96939	0.03753267	55,453,645	2,081,323	559,000	1,522,323	416,851	1,939,174
14B	1970	188.00000	4,888.19779	0.03845998	11,347,126	436,410	175,000	261,410	74,961	336,371
14C	1970	188.00000	4,700.84105	0.03999284	9,707,032	388,212	223,000	165,212	47,366	212,578
15A	1970	188.00000	4,597.94994	0.04088779	36,635,505	1,497,945	593,000	904,945	201,903	1,106,848
16A	1970	188.00000	4,387.78387	0.04284623	61,191,098	2,621,808	995,000	1,626,808	362,433	1,989,241
17E	1971	188.00000	4,136.09906	0.04545346	217,444,745	9,883,616	5,811,000	4,072,616	1,296,637	5,369,253
17F	1971	188.00000	4,126.98262	0.04555386	57,434,885	2,616,381	1,396,000	1,220,381	470,877	1,691,258
25	1972	787.00000	2,019.63064	0.38967521	32,725,964	12,752,497	6,823,844	5,928,653	1,700,155	7,628,808
28J	1973	-	-	-	-	14,463,014	14,463,014	0	0	0
SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT										
25	1972	21.00000	2,019.63064	0.01039794	32,777,252	340,816	182,156	158,660	45,498	204,158
ANTELOPE VALLEY-EAST KERN WATER AGENCY										
29A	1971	19.00000	3,128.83908	0.00607254	30,146,506	183,066	85,000	98,066	24,498	122,564
29F	1971	19.00000	3,128.01611	0.00607414	15,042,257	91,369	24,000	67,369	19,056	86,425

a) Column 1 divided by Column 2.

b) Reach costs are compounded at the project interest rate of 4.021 percent per annum as follows:

Reaches	Period	Year costs compounded to
8C thru 17F	1952 - 1965	1965
25 and 28J (for MWD)	1952 - 1966	1966
25 (for SGVWMD)	1952 - 1967	1967
29A and 29F	1952 - 1967	1967

c) Column 3 multiplied by Column 4.

d) As shown in Table B-7, except, prior Incremental Costs for Reach 28J have been brought forward with interest to 1966 for purposes of repayment.

e) Column 5 less Column 6.

f) Interest on Advance Payments in excess of Incremental Costs is at 6.0 percent per annum, approximate average rate of interest earnings during the period.

g) Advance payments in excess of incremental costs under the provisions of the contract reduce the capital cost component of the Transportation Charge.

h) Actual payments are shown for 1966, 1967, 1968, and 1969, with 1970 and 1971 adjusted to reflect overpayments and underpayments for prior years without interest.

i) Interest for overpayments and underpayments under the provisions of Amendment 2 of the contract.

j) Interest for overpayments and underpayments under the provisions of Amendment 5 of the contract.

k) Reach totals for advance payments include Reconciliation of Advance Payments and Interest Credit (Column 9).

CAPITAL COSTS OF REQUESTED EXCESS PEAKING CAPACITY

(in dollars)

Sheet 2 of 2

ANNUAL REQUIRED ADVANCE OF FUNDS											
Reach Number	Item	Estimated Costs and Advance Payments by Calendar Year									Reach Totals (k)
		1965	1966	1967	1968	1969	1970	1971	1972	1973	
		(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA											
8C	1. Incremental Costs		1,000	1,000							2,000
	2. Advance Payments		6,498	6,498		(-)	12,726				270
8D	1. Incremental Costs	4,000	45,000	64,000							113,000
	2. Advance Payments	11,814	132,906	189,021		(-)	255,036				78,705
9	1. Incremental Costs	4,000	24,000	35,000	8,000						71,000
	2. Advance Payments	5,792	34,754	20,683	11,586		(-)	38,684			62,131
10A	1. Incremental Costs	5,000	30,000	46,000	11,000						92,000
	2. Advance Payments	12,319	73,914	113,335	27,101		(-)	163,522			63,147
11B	1. Incremental Costs	7,000	42,000	43,000	11,000						103,000
	2. Advance Payments	25,056	150,336	171,812	39,374		(-)	340,278			46,300
12D	1. Incremental Costs	16,000	20,000	18,000	84,000	18,000					156,000
	2. Advance Payments	60,541	75,676	68,108	317,838	68,108		(-)	535,754		54,517
12E	1. Incremental Costs	10,000	14,000	14,000	66,000	14,000					118,000
	2. Advance Payments	20,616	28,863	28,863	136,067	28,863		(-)	153,864		89,408
13B	1. Incremental Costs	1,000	2,000	14,000	96,000	26,000					139,000
	2. Advance Payments	4,253	8,506	59,540	408,275	110,574		(-)	537,766		53,382
14A	1. Incremental Costs	51,000	65,000	39,000	194,000	150,000	60,000				559,000
	2. Advance Payments	189,888	242,014	145,209	722,320	558,495	223,397		(-)	1,939,174	142,149
14B	1. Incremental Costs	31,000	24,000	10,000	45,000	63,000	12,000				175,000
	2. Advance Payments	77,307	34,913	24,938	112,220	157,108	28,924		(-)	336,371	100,039
14C	1. Incremental Costs	39,000	18,000	13,000	58,000	80,000	19,000				223,000
	2. Advance Payments	67,894	31,335	22,631	100,970	139,269	26,113		(-)	212,578	175,634
15A	1. Incremental Costs	4,000	10,000	46,000	243,000	162,000	128,000				593,000
	2. Advance Payments	10,104	25,260	116,198	613,829	409,219	323,335		(-)	1,106,848	391,997
16A	1. Incremental Costs	14,000	12,000	56,000	387,000	357,000	169,000				995,000
	2. Advance Payments	36,890	31,620	147,559	1,019,738	940,689	445,312		(-)	1,989,241	632,567
17E	1. Incremental Costs	30,000	259,000	1,159,000	1,971,000	1,565,000	551,000	276,000			5,611,000
	2. Advance Payments	51,025	440,519	1,971,280	3,352,367	2,661,824	937,166	469,435			4,514,363
17F	1. Incremental Costs	78,000	203,000	468,000	349,000	276,000	15,000	7,000			1,396,000
	2. Advance Payments	146,187	380,462	877,125	654,095	517,279	28,113	13,120			925,123
25	1. Incremental Costs			932,118	2,289,874	1,910,988	1,211,656	479,208			6,823,844
	2. Advance Payments			1,741,955	4,272,349	3,571,282	2,264,360	892,551			5,123,689
28J	1. Incremental Costs	1,127,017	108,229	4,641,381		236,387	581,000	2,942,000	4,026,000		14,463,014
	2. Advance Payments	1,127,017	108,229	4,641,381		236,387	581,000	2,942,000	4,026,000	801,000	14,463,014
Totals	1. Incremental Costs	294,000	1,886,017	3,071,347	10,454,255	4,858,372	2,742,656	3,704,208	4,026,000	801,000	31,837,858
	2. Advance Payments	719,686	2,824,593	5,842,984	16,436,510	9,131,335	4,316,236	3,092,722	(-)	1,558,212	26,917,535
	3. Reapplied Credits (g)								5,984,212	14,689,319	20,273,531
	4. Required Advance of Funds	719,686	2,824,593	5,842,984	16,436,510	9,131,335	4,316,236	3,092,722	4,026,000	801,000	47,191,066
Current Adjustments	1. Advance Payments and Adjustments - Amendment 2 (h)		0	8,056,000	9,094,963	1,523,252	8,310,651	3,426,736	2,316,450		32,728,052
	2. Interest Credits - Amendment 2 (i)							(-)	1,230,405		(-) 1,230,405
	3. Advance Payments and Adjustments - Amendment 5		0	1,240,000	1,483,180	2,469,325	(-) 927,035	1,729,160	3,641,384	4,026,000	14,463,014
	4. Interest Credits - Amendment 5 (j)							(-)	426,126		(-) 426,126
	5. Net Required Advance of Funds		0	9,296,000	10,578,143	3,992,577	7,383,616	5,155,896	4,301,303	4,026,000	45,534,535
SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT											
25	1. Incremental Costs	0	0	24,882	61,126	51,012	32,344	12,792			182,156
	2. Advance Payments	0	0	46,555	114,367	95,444	60,516	23,934	(-)	204,158	136,658
Totals	1. Incremental Costs	0	0	24,882	61,126	51,012	32,344	12,792			182,156
	2. Advance Payments	0	0	46,555	114,367	95,444	60,516	23,934	(-)	204,158	136,658
	3. Reapplied Credit (g)									204,158	204,158
	4. Required Advance of Funds	0	0	46,555	114,367	95,444	60,516	23,934			340,816
Current Adjustments	1. Advance Payments and Adjustments (h)	0	0	0	184,422	49,052	44,911	62,431			340,816
	2. Interest Credit							(-) 843			(-) 843
	3. Net Required Advance of Funds	0	0	0	184,422	49,052	44,911	61,588			339,973
ANTELOPE VALLEY-EAST KERN WATER AGENCY											
29A	1. Incremental Costs	0	0	8,000	14,000	26,000	26,000	11,000			85,000
	2. Advance Payments	0	0	17,230	30,152	55,997	55,997	23,690	(-)	122,564	60,502
29F	1. Incremental Costs	0	0	3,000	4,000	14,000	2,000	1,000			24,000
	2. Advance Payments	0	0	11,421	15,228	53,299	7,614	3,807	(-)	86,425	4,944
Totals	1. Incremental Costs	0	0	11,000	18,000	40,000	28,000	12,000			109,000
	2. Advance Payments	0	0	28,651	45,380	109,296	63,611	27,497	(-)	208,989	65,446
	3. Reapplied Credit (g)									208,989	208,989
	4. Required Advance of Funds	0	0	28,651	45,380	109,296	63,611	27,497			274,435
Current Adjustments	1. Advance Payments and Adjustments (h)				85,495	52,625	101,648	34,667			274,435
	2. Interest Credit	0	0	0				(-) 605			(-) 605
	3. Net Required Advance of Funds	0	0	0	85,495	52,625	101,648	34,062			273,830

TABLE B-10

CAPITAL COSTS OF EACH AQUEDUCT REACH TO BE REIMBURSED THRU CAPITAL COST COMPONENT OF TRANSPORTATION CHARGE

Projected Costs Based on Prices
Prevailing on December 31, 1969

(in dollars) Sheet 1 of 4

Calendar Year	UPPER FEATHER DIVISION	NORTH BAY AQUEDUCT				SOUTH BAY AQUEDUCT			
		Reach 1	Reach 2	Reach 3	Total	Reach 1	Reach 2	Reach 4	Reach 5
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1952	0	0	0	0	0	97	34	30	50
1953	0	0	0	0	0	477	166	144	115
1954	0	0	0	0	0	1,466	508	437	1,013
1955	0	0	0	0	0	1,944	674	560	1,336
1956	0	0	0	0	0	18,789	6,515	5,090	13,248
1957	0	13,290	3,391	9,953	26,634	45,090	15,639	12,285	35,218
1958	0	19,197	5,009	25,889	50,095	195,960	80,973	7,704	23,274
1959	0	7,457	2,040	18,423	27,920	496,102	148,741	25,080	18,421
1960	0	12,680	3,617	7,689	23,986	1,121,207	42,111	71,596	72,494
1961	4	9,912	2,491	3,585	15,988	3,160,700	306,877	306,946	83,172
1962	273	293	844	1,133	582	1,466,882	141,259	689,877	49,208
1963	132	7,204	529	5,736	13,469	475,789	67,413	2,285,653	225,246
1964	8,370	32,760	15,943	24,974	73,677	2,502,114	11,703	175,153	279,055
1965	3,107	55,809	21,652	178,702	256,163	694,980	137,061	65,753	475,715
1966	46-	69,631	20,808	464,729	555,168	729,400	138,586	115,066	1,432,479
1967	2,641	56,054	22,538	1,564,881	1,643,473	276,636	8,563	240,267	3,726,474
1968	51,560	74,042	28,615	947,039	949,696	795,367	6,075-	60,962	3,020,827
1969	234,380	75,438	33,099	54,580	163,117	413,055	4,217	3,100-	943,031
1970	17,000	281,000	24,000	29,000	334,000	83,000	2,000	6,000	349,000
1971	0	167,000	9,000	6,000	182,000	26,000	1,000	3,000	200,000
1972	0	82,000	6,000	3,000	91,000	11,000	0	1,000	245,000
1973	0	79,000	4,000	0	83,000	60,000	9,000	13,000	142,000
1974	0	128,000	6,000	3,000	137,000	8,000	1,000	3,000	34,000
1975	0	90,000	4,000	1,000	95,000	0	0	0	231,000
1976	0	337,000	85,000	8,000	430,000	4,000	1,000	4,000	1,000
1977	0	756,000	96,000	78,000	930,000	30,000	10,000	39,000	1,000
1978	0	1,901,000	439,000	398,000	2,738,000	4,000	1,000	5,000	0
1979	0	4,146,000	799,000	1,257,000	6,202,000	0	0	0	0
1980	0	681,000	153,000	232,000	1,066,000	0	0	0	0
1981	0	15,000	16,000	0	31,000	0	0	0	0
1982	0	1,000	1,000	0	2,000	0	0	0	0
1983	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0
TOTAL	317,401	9,097,767	1,770,888	5,222,313	16,090,968	12,622,455	1,211,965	4,149,503	12,024,146

Calendar Year	SOUTH BAY AQUEDUCT (continued)					CALIFORNIA AQUEDUCT			
	Reach 6	Reach 7	Reach 8	Reach 9	Total	Reach 1	Reach 2A	Reach 2B	Subtotal
	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
1952	8	67	72	132	500	3,973	3,303	1,505	8,741
1953	38	327	336	641	2,444	10,459	8,653	3,979	23,091
1954	123	1,005	1,003	1,954	7,509	13,690	11,243	5,199	30,132
1955	160	1,293	1,149	2,454	9,570	7,326	5,990	2,771	16,047
1956	1,559	11,959	11,043	28,371	96,574	9,242	5,177	2,403	16,822
1957	3,659	28,675	27,395	563,114	731,065	11,212	5,637	2,615	19,464
1958	2,244	17,888	17,400	560,921	906,324	18,515	15,694	7,283	41,494
1959	363	3,414	3,777	150,248	346,146	121,949	99,130	44,810	265,889
1960	437	4,107	4,548	360,499	1,716,999	187,094	103,126	245,873	536,098
1961	2,691	21,115	22,198	173-	3,903,526	164,148	218,153	45,290	427,591
1962	4,845	148,534	195,872	203,845	2,939,322	629,607	481,042	169,222	1,279,871
1963	234,864	1,273,123	954,459	138,996	5,656,243	2,143,542	1,066,302	347,782	3,557,626
1964	29,425	1,787,266	2,317,632	2,931,225	10,033,573	5,116,277	1,762,991	881,422	7,760,690
1965	14,428	390,837	573,089	1,904,880	4,258,743	6,145,686	6,606,579	3,108,828	15,861,093
1966	18,983	33,711	133,674	817,168	3,819,967	8,526,590	13,659,143	6,002,732	28,188,465
1967	45,755-	135,166	140,396	338,354	4,820,501	9,656,459	10,661,015	6,752,163	27,069,647
1968	83,490	2,937-	60,304	235,303	4,247,241	6,376,384	839,313	1,283,151	8,498,848
1969	3,923	9,058	163,450	26,027	1,559,561	3,679,950	761,739	352,643	4,794,332
1970	0	1,000	100,000	1,000-	540,000	2,256,000	549,000	95,000	2,900,000
1971	0	0	32,000	35,000	297,000	366,000	114,000	118,000	598,000
1972	0	0	11,000	13,000	301,000	355,000	30,000	44,000	429,000
1973	3,000	16,000	22,000	44,000	315,000	702,000	4,000	2,000	708,000
1974	0	2,000	4,000	8,000	60,000	1,484,000	9,000	3,000	1,496,000
1975	0	0	0	0	231,000	1,841,000	1,000	1,000	1,843,000
1976	0	2,000	3,000	7,000	22,000	384,000	3,000	1,000	388,000
1977	2,000	14,000	28,000	59,000	183,000	2,000	3,000	1,000	6,000
1978	1,000	2,000	4,000	8,000	25,000	2,000	0	0	2,000
1979	0	0	0	0	0	118,000	0	0	118,000
1980	0	0	0	0	0	538,000	0	0	538,000
1981	0	0	0	0	0	1,392,000	0	0	1,392,000
1982	0	0	0	0	0	1,420,000	0	0	1,420,000
1983	0	0	0	0	0	329,000	0	0	329,000
1984	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0
TOTAL	361,485	3,901,608	4,831,787	8,436,959	47,529,908	54,011,118	37,027,232	19,524,671	110,563,021

CAPITAL COSTS OF EACH AQUEDUCT REACH TO BE REIMBURSED THRU CAPITAL COST COMPONENT OF TRANSPORTATION CHARGE

Projected Costs Based on Prices
Prevailing on December 31, 1969

(in dollars)

Sheet 2 of 4

Calendar Year	CALIFORNIA AQUEDUCT (continued)						SOUTH SAN JOAQUIN DIVISION		
	SAN LUIS DIVISION								
	Reach 3	Reach 4	Reach 5	Reach 6	Reach 7	Subtotal	Reach 8C	Reach 8D	Reach 9
	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)
1952	2,543	3,623	4,111	1,045	1,289	12,611	14	717	1,165
1953	7,128	10,355	11,322	2,929	3,612	35,346	51	2,666	4,370
1954	4,448	12,808	14,102	3,637	4,445	43,880	52	2,708	4,215
1955	4,339	6,183	7,013	1,784	2,199	21,518	18	876	1,166
1956	3,939	5,612	6,367	1,619	1,996	19,532	70	3,628	4,809
1957	4,294	6,117	6,941	1,764	2,177	21,293	204	10,524	13,947
1958	14,955	24,820	27,685	6,932	8,890	83,282	349	17,843	23,652
1959	34,409	56,972	61,585	15,437	19,822	188,225	371	18,835	24,648
1960	40,111	64,861	67,699	21,506	38,363	232,540	898	46,166	37,662
1961	174,484	296,665	180,334	43,042	74,210	768,735	1,718	79,751	43,767
1962	425,527	610,741	285,268	29,720	35,257	1,386,513	4,146	168,032	66,401
1963	2,315,797	2,310,600	2,852,290	75,598	29,182	7,583,467	4,228	174,343	79,859
1964	4,559,788	4,982,179	1,083,662	175,835	339,746	11,141,210	2,268	98,492	102,690
1965	3,571,244	5,808,715	2,938,187	1,097,559	650,032	14,065,737	10,753	529,338	562,858
1966	2,197,466	8,799,252	6,018,793	4,409,047	8,028,347	29,452,905	114,846	5,619,254	1,784,824
1967	626,970	3,359,749	4,463,359	1,363,637	4,860,546	14,654,271	110,973	5,222,121	319,460
1968	93,714	406,787	860,453	179,211	419,794	1,959,949	48,127	648,649	181,881
1969	11,581	122,377	125,744	44,396	294,867	508,173	58,876	133,533	81,925
1970	63,000	199,000	544,000	115,000	75,000	996,000	70,000	185,000	164,000
1971	28,000	210,000	1,222,000	197,000	30,000	1,687,000	1,000	46,000	32,000
1972	9,000	140,000	973,000	150,000	9,000	1,281,000	1,000	10,000	10,000
1973	4,000	220,000	1,834,000	279,000	4,000	2,341,000	0	4,000	4,000
1974	5,000	8,000	12,000	4,000	6,000	35,000	0	4,000	4,000
1975	1,000	1,000	1,000	0	1,000	4,000	0	0	0
1976	1,000	2,000	3,000	1,000	2,000	9,000	0	1,000	1,000
1977	1,000	2,000	3,000	1,000	2,000	9,000	0	1,000	1,000
1978	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0
1983	0	113,000	177,000	62,000	85,000	437,000	0	0	0
1984	0	1,090,000	1,714,000	611,000	827,000	4,242,000	0	0	0
1985	0	723,000	1,137,000	405,000	548,000	2,813,000	0	0	0
TOTAL	14,209,136	29,596,416	26,634,925	9,188,906	16,403,804	96,033,187	429,962	13,028,476	3,555,299

Calendar Year	CALIFORNIA AQUEDUCT (continued)									
	SOUTH SAN JOAQUIN DIVISION (continued)									
	Reach 10A	Reach 11B	Reach 12D	Reach 12E	Reach 13B	Reach 14A	Reach 14B	Reach 14C	Reach 15A	
	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	
1952	735	1,350	2,148	1,065	1,761	514	174	183	1,872	
1953	2,696	5,019	7,983	3,962	6,548	1,885	640	671	6,972	
1954	2,962	5,098	8,108	4,025	6,650	2,071	702	737	6,998	
1955	1,158	1,650	2,624	1,303	2,151	808	273	288	2,191	
1956	4,809	6,831	10,867	5,393	8,914	3,492	1,138	1,197	9,068	
1957	13,947	19,811	31,512	15,641	25,845	11,743	3,305	3,471	26,291	
1958	23,652	44,982	71,548	35,510	58,682	34,089	10,912	11,456	55,611	
1959	24,545	64,945	103,305	51,271	84,728	60,057	20,003	21,006	75,933	
1960	59,215	52,975	84,265	42,034	69,194	68,180	18,847	19,672	66,921	
1961	81,541	55,991	98,022	53,188	69,097	193,010	67,515	57,854	134,851	
1962	60,168	58,400	74,330	42,526	48,110	177,764	67,566	53,334	138,958	
1963	48,918	92,221	198,022	84,665	62,933	326,988	119,430	93,518	187,589	
1964	95,516	348,853	468,934	246,595	167,539	1,108,728	826,387	632,077	676,837	
1965	547,702	1,400,383	1,552,376	985,980	306,951	3,319,714	1,754,840	1,505,620	500,132	
1966	2,471,034	3,868,696	1,678,739	431,645	442,800	4,839,693	1,024,646	789,060	1,808,365	
1967	3,185,450	4,453,984	6,166,148	1,199,595	1,316,780	2,717,554	576,092	455,856	1,535,240	
1968	986,637	1,217,032	6,134,330	3,019,479	8,545,620	9,789,406	1,680,323	1,642,918	7,582,105	
1969	157,544	254,531	811,486	545,287	3,830,757	14,435,156	1,736,508	1,594,473	9,404,760	
1970	168,000	134,000	163,000	205,000	485,000	9,603,000	2,465,000	1,984,000	6,773,000	
1971	35,000	21,000	31,000	73,000	130,000	5,676,000	192,000	129,000	5,152,000	
1972	11,000	7,000	10,000	7,000	81,000	460,000	32,000	23,000	463,000	
1973	5,000	3,000	4,000	3,000	5,000	25,000	5,000	4,000	17,000	
1974	4,000	2,000	4,000	3,000	4,000	8,000	5,000	3,000	11,000	
1975	0	0	0	0	0	4,000	1,000	0	6,000	
1976	1,000	1,000	1,000	1,000	1,000	3,000	1,000	1,000	1,000	
1977	1,000	1,000	1,000	1,000	1,000	3,000	2,000	1,000	1,000	
1978	0	0	0	0	0	1,000	0	0	1,000	
1979	0	0	0	0	0	1,000	0	0	1,000	
1980	0	0	0	0	0	1,000	0	0	1,000	
1981	0	0	0	0	0	1,000	0	0	1,000	
1982	0	0	0	0	0	0	0	0	0	
1983	0	0	0	0	0	0	0	0	0	
1984	0	0	0	0	0	0	0	0	0	
1985	0	0	0	0	0	0	0	0	0	
TOTAL	7,993,329	12,121,752	17,718,747	7,062,164	15,762,060	52,876,852	10,612,301	9,028,391	34,648,904	

TABLE B-10

CAPITAL COSTS OF EACH AQUEDUCT REACH TO BE REIMBURSED THRU CAPITAL COST COMPONENT OF TRANSPORTATION CHARGE

Projected Costs Based on Prices
Prevailing on December 31, 1969

(in dollars)

Sheet 3 of 4

Calendar Year	CALIFORNIA AQUEDUCT (continued)								
	SOUTH SAN JOAQUIN DIVISION (continued)		TEHACHAPI DIVISION			MOJAVE DIVISION			
	Reach 16A	Subtotal	Reach 17E	Reach 17F	Subtotal	Reach 18A	Reach 19	Reach 19C	Reach 20A
	(37)	(38)	(39)	(40)	(41)	(42)	(43)	(44)	(45)
1952	4,547	16,245	9,352	4,202	13,554	4,208	1,563	0	2,634
1953	16,933	60,396	30,601	13,702	44,303	12,971	4,819	0	7,453
1954	17,016	61,342	45,716	20,623	66,339	17,118	6,360	0	9,779
1955	5,346	19,952	25,776	11,706	37,482	5,773	2,144	0	2,602
1956	22,125	82,341	41,107	18,284	59,391	6,210	2,307	0	2,511
1957	64,157	240,398	114,077	50,736	164,808	72,988	8,542	0	9,293
1958	150,629	538,915	167,035	74,292	241,327	39,299	14,604	0	15,890
1959	225,458	775,205	143,373	60,013	203,386	42,059	24,209	0	24,570
1960	213,691	779,720	162,585	54,104	216,689	32,493	28,483	0	41,802
1961	237,108	1,173,413	358,642	112,161	470,803	41,171	39,381	0	63,686
1962	155,904	1,115,639	362,383	101,868	464,251	69,474	275,428	368	65,055
1963	454,904	1,927,618	1,209,900	1,108,772	2,318,672	14,518	424,775	1,173	24,294
1964	1,168,753	5,943,669	2,596,125	244,488	2,840,613	119,096	724,711	2,272	51,071
1965	821,246	13,798,103	3,384,313	1,596,878	4,981,191	133,446	751,694	2,521	159,004
1966	2,926,785	27,800,387	5,449,329	9,657,997	15,107,326	413,839	2,046,352	1,795	659,383
1967	3,518,508	30,777,761	26,244,379	12,520,727	38,765,106	1,354,548	935,028	3,758	1,155,631
1968	7,347,195	48,823,702	32,777,421	7,527,666	40,305,087	155,393	7,379,807	59,975	1,832,661
1969	13,438,059	46,482,895	40,815,762	7,095,220	47,910,982	212,836	2,534,246	2,010	4,771,357
1970	16,082,000	38,481,000	38,318,000	10,284,000	48,602,000	2,466,000	1,519,000	8,000	4,192,000
1971	7,078,000	18,596,000	23,752,000	3,482,000	27,234,000	1,447,000	771,000	9,000	1,149,000
1972	2,873,000	3,988,000	10,546,000	16,000	10,562,000	29,000	246,000	10,000	208,000
1973	31,000	110,000	1,232,000	2,000	1,234,000	7,000	210,000	10,000	197,000
1974	51,000	103,000	2,293,000	9,000	2,302,000	31,000	118,000	9,000	146,000
1975	334,000	345,000	4,077,000	0	4,077,000	2,000	4,000	9,000	4,000
1976	639,000	652,000	4,651,000	1,000	4,652,000	0	2,000	109,000	2,000
1977	34,000	48,000	1,970,000	1,000	1,971,000	1,000	2,000	785,000	2,000
1978	1,000	3,000	333,000	0	333,000	0	0	320,000	0
1979	1,000	3,000	1,180,000	0	1,180,000	0	0	111,000	0
1980	1,000	3,000	1,924,000	0	1,924,000	0	0	4,620,000	0
1981	1,000	3,000	115,000	0	115,000	0	0	4,106,000	0
1982	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0
TOTAL	57,914,364	242,752,601	204,328,871	54,068,439	258,397,310	6,684,440	18,076,453	10,179,872	14,798,676

Calendar Year	CALIFORNIA AQUEDUCT (continued)								
	MOJAVE DIVISION (continued)							SANTA ANA DIVISION	
	Reach 20B	Reach 21	Reach 22A	Reach 22B	Reach 23	Reach 24	Subtotal	Reach 25	Reach 26A
	(46)	(47)	(48)	(49)	(50)	(51)	(52)	(53)	(54)
1952	917	5,954	36	2,071	2,133	2,481	21,997	3,429	5,759
1953	3,498	18,356	73	5,917	7,083	7,651	67,821	10,570	17,758
1954	4,678	24,232	380	8,805	8,073	10,100	89,525	13,953	23,442
1955	2,275	8,174	185	2,833	2,803	3,408	30,197	4,708	7,908
1956	2,731	8,785	221	2,989	3,047	3,662	32,463	5,059	8,500
1957	10,109	32,521	822	11,064	11,274	13,556	120,169	18,726	31,460
1958	17,293	55,601	1,405	18,915	19,276	23,173	205,446	32,017	53,789
1959	19,347	62,239	1,574	22,572	22,244	53,348	272,162	41,184	61,651
1960	35,554	111,519	3,487	60,212	23,175	89,945	426,672	67,785	99,221
1961	64,052	102,928	18,537	175,622	15,442	78,888	599,707	49,448	89,532
1962	61,863	37,625	25,790	174,214	19,858	107,952	837,627	12,848	40,422
1963	25,075	34,422	8,859	136,596	41,253	359,969	1,074,934	34,881	120,248
1964	52,232	47,595	21,944	251,847	16,444	259,988	1,547,200	75,879	235,371
1965	256,129	122,784	69,814	829,065	23,438	618,096	2,965,991	304,689	235,943
1966	698,899	213,336	139,339	2,050,712	67,236	1,287,781	7,578,672	451,217	386,749
1967	1,443,393	521,638	394,023	3,164,058	91,242	2,521,201	11,584,520	3,166,431	671,488
1968	2,738,389	1,195,894	1,202,973	4,452,557	120,601	2,861,162	21,999,412	7,776,866	1,756,203
1969	7,818,834	2,143,312	1,388,793	7,838,771	237,759	11,296,119	38,244,037	6,487,584	2,038,349
1970	4,918,000	3,876,000	2,931,000	21,557,000	1,058,000	16,840,000	59,365,000	4,181,000	7,525,000
1971	1,764,000	1,148,000	1,116,000	20,260,000	3,116,000	10,351,000	41,131,000	1,737,000	12,489,000
1972	91,000	157,000	131,000	5,980,000	455,000	1,269,000	8,676,000	127,000	4,561,000
1973	188,000	102,000	86,000	1,329,000	22,000	88,000	2,239,000	19,000	3,097,000
1974	91,000	67,000	136,000	1,967,000	13,000	127,000	2,705,000	3,000	1,970,000
1975	3,000	2,000	6,000	3,476,000	0	62,000	3,568,000	0	1,718,000
1976	2,000	1,000	1,000	158,000	0	0	275,000	1,000	29,000
1977	2,000	1,000	1,000	6,000	0	0	800,000	1,000	0
1978	0	0	0	0	0	0	320,000	0	0
1979	0	0	0	0	0	0	111,000	0	0
1980	0	0	0	0	0	0	4,620,000	0	0
1981	0	0	0	0	0	0	4,106,000	0	0
1982	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0
TOTAL	20,414,260	10,100,915	7,686,255	73,941,820	5,396,381	48,335,480	215,614,552	24,626,274	37,270,793

CAPITAL COSTS OF EACH AQUEDUCT REACH TO BE REIMBURSED THRU CAPITAL COST COMPONENT OF TRANSPORTATION CHARGE

Projected Costs Based on Prices
Prevailing on December 31, 1969

(in dollars)

Sheet 4 of 4

Calendar Year	CALIFORNIA AQUEDUCT (continued)								
	SANTA ANA DIVISION (continued)				WEST BRANCH				
	Reach 28G(a)	Reach 28H	Reach 28J	Subtotal	Reach 29A	Reach 29F	Reach 29G	Reach 29H	Reach 29J
	(55)	(56)	(57)	(58)	(59)	(60)	(61)	(62)	(63)
1952	4,922	4,170	3,106	21,386	3,007	139	180	472	569
1953	16,026	11,842	9,748	65,944	9,352	353	244	1,803	1,730
1954	18,531	18,618	12,507	87,051	7,601	1,234	2,293	2,413	4,252
1955	6,226	6,255	4,269	29,366	1,047	601	1,117	1,174	2,086
1956	6,683	6,713	4,609	31,564	502	718	1,332	1,405	2,487
1957	24,732	24,848	17,062	116,828	1,860	2,656	4,931	5,202	9,209
1958	42,283	42,483	29,167	199,739	3,181	4,542	8,430	8,893	15,745
1959	48,945	49,176	42,395	243,351	6,553	8,396	15,582	15,435	31,103
1960	83,660	83,786	54,590	389,042	17,571	17,015	31,327	33,271	56,419
1961	65,234	65,281	736,494	1,005,989	23,857	18,465	30,791	17,521	56,023
1962	26,990	27,281	43,334	150,875	62,629	36,124	28,946	46,399	176,992
1963	48,250	47,300	1,853,835	2,104,514	115,636	64,807	50,306	157,683	359,737
1964	100,833	48,961	95,116	556,160	183,766	76,383	93,045	191,006	441,118
1965	125,032	79,525	183,935	929,124	392,839	120,499	418,591	234,855	816,102
1966	188,627	305,837	576,054	1,908,484	440,617	490,310	964,467	342,038	4,533,144
1967	214,817	343,407	1,073,550	5,469,693	1,482,562	990,753	1,077,994	457,627	31,555,306
1968	397,241	327,742	721,073	10,979,125	3,970,262	425,562	338,572	1,106,653	30,602,747
1969	999,030	1,635,429	865,949	12,026,341	6,715,880	584,268	459,457	1,190,656	7,601,000
1970	6,009,000	2,368,000	2,632,000	22,715,000	7,285,000	6,766,000	1,165,000	4,129,000	9,913,000
1971	17,128,000	7,874,000	10,385,000	49,613,000	7,070,000	4,308,000	1,624,000	5,710,000	4,956,000
1972	3,358,000	9,793,000	18,487,000	36,326,000	1,032,000	273,000	127,000	7,613,000	16,324,000
1973	156,000	4,417,000	4,688,000	12,377,000	132,000	161,000	49,000	17,209,000	3,430,000
1974	71,000	125,000	84,000	2,253,000	60,000	82,000	669,000	2,000,000	132,000
1975	19,000	20,000	13,000	1,768,000	0	0	1,000	61,000	20,000
1976	2,000	2,000	0	34,000	0	1,000	1,000	1,000	20,000
1977	2,000	2,000	0	5,000	1,000	0	1,000	1,000	20,000
1978	0	0	0	0	0	0	0	0	19,000
1979	0	0	0	0	0	0	0	0	19,000
1980	0	0	0	0	0	0	0	0	10,000
1981	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0
TOTAL	29,163,062	27,729,654	42,615,793	161,405,576	29,018,722	14,433,825	7,164,645	37,389,516	48,979,479

Calendar Year	CALIFORNIA AQUEDUCT (continued)								GRAND TOTAL
	WEST BRANCH (continued)		COASTAL BRANCH					TOTAL	
	Reach 30	Subtotal	Reach 31A	Reach 33A	Reach 34	Reach 35	Subtotal		
	(64)	(65)	(66)	(67)	(68)	(69)	(70)	(71)	(72)
1952	1,448	5,815	0	0	0	0	0	100,389	160,889
1953	4,470	17,952	0	0	0	0	0	314,853	317,217
1954	5,909	23,737	0	0	0	0	0	402,006	409,515
1955	1,999	8,028	0	0	0	0	0	162,530	172,100
1956	2,136	8,580	0	0	0	0	0	250,693	347,267
1957	7,907	31,765	0	0	0	0	0	714,725	1,472,424
1958	13,517	54,308	0	0	0	0	0	1,364,511	2,320,930
1959	38,425	116,495	28,105	46,896	7,381	7,380	89,762	2,154,475	3,028,541
1960	65,052	230,655	37,173	59,498	8,233	11,356	116,260	2,927,676	4,668,661
1961	116,527	293,184	14,157	16,407	1,616	4,087	36,267	4,775,689	8,695,207
1962	255,226	666,356	7,307	8,319	683	1,735	18,044	5,919,176	8,859,353
1963	251,986	1,010,155	16,812	16,591	1,249	3,163	37,815	19,614,801	25,284,645
1964	1,221,077	2,205,395	311,182	24,316	1,746	4,413	341,657	32,337,594	42,453,214
1965	3,318,159	5,291,645	738,419	41,662	3,117	7,743	790,941	58,683,825	63,201,838
1966	8,522,805	15,293,381	2,240,497	55,650	3,964	10,796	2,310,407	127,640,027	132,015,096
1967	18,411,910	54,396,146	6,281,134	55,716	3,888	10,250	6,350,988	189,068,132	195,534,747
1968	17,006,362	59,450,158	2,625,343	61,111	4,402	11,488	2,702,344	194,718,625	199,967,122
1969	17,844,836	35,576,183	398,993	43,820	2,692	6,943	452,448	185,995,391	187,952,549
1970	25,811,000	55,059,000	330,000	67,000	5,000	14,000	416,000	228,534,000	229,425,000
1971	15,380,000	29,186,000	52,000	41,000	2,000	6,000	101,000	168,146,000	168,625,000
1972	3,079,000	4,200,000	11,000	35,000	2,000	5,000	53,000	57,115,000	57,507,000
1973	285,000	10,105,000	6,000	29,000	1,000	3,000	39,000	29,153,000	29,551,000
1974	57,000	3,680,000	9,000	40,000	3,000	6,000	58,000	12,632,000	12,829,000
1975	230,000	312,000	5,000	904,000	114,000	278,000	1,301,000	13,218,000	13,544,000
1976	103,000	126,000	39,000	1,316,000	134,000	360,000	1,849,000	7,985,000	8,437,000
1977	59,000	82,000	891,000	3,162,000	193,000	540,000	4,786,000	7,707,000	8,820,000
1978	49,000	68,000	173,000	14,855,000	1,276,000	3,221,000	19,525,000	20,251,000	22,984,000
1979	1,125,000	1,144,000	455,000	17,414,000	1,475,000	3,651,000	22,995,000	25,551,000	31,753,000
1980	1,722,000	1,732,000	89,000	1,692,000	142,000	375,000	2,298,000	11,115,000	12,181,000
1981	0	0	520,000	178,000	16,000	41,000	755,000	6,371,000	6,402,000
1982	0	0	110,000	73,000	8,000	16,000	207,000	1,627,000	1,629,000
1983	0	0	0	0	0	0	0	766,000	766,000
1984	0	0	0	0	0	0	0	4,242,000	4,242,000
1985	0	0	0	0	0	0	0	2,813,000	2,813,000
TOTAL	114,989,751	271,974,938	15,389,122	40,235,986	3,409,971	8,594,854	67,629,933	1,424,371,118	1,488,309,395

a) Includes excess capacity costs in the following years allocated to The Metropolitan Water District and repaid under Article 24(c) of their contract: 1970, \$1,907,000; 1971, \$4,516,000; 1972, \$276,000.

TABLE B-11

MINIMUM OMP&R COSTS OF EACH AQUEDUCT REACH TO BE REIMBURSED
THRU MINIMUM OMP&R COMPONENT OF TRANSPORTATION CHARGE

(in dollars) Sheet 1 of 4

Calendar Year	FEATHER RIVER DIVISION	NORTH BAY AQUEDUCT				SOUTH BAY AQUEDUCT			
		Reach 1	Reach 2	Reach 3	Total	Reach 1	Reach 2	Reach 4	Reach 5
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1962	0	0	0	0	0	76,632	9,154	0	0
1963	0	0	0	0	0	147,883	19,523	0	0
1964	0	0	0	0	0	148,143	15,300	19,715	0
1965	0	0	0	0	0	257,615	45,309	46,863	0
1966	0	0	0	0	0	264,984	22,779	64,668	0
1967	0	0	0	0	0	418,579	28,932	107,270	0
1968	0	0	0	0	0	350,884	35,612	62,590	0
1969	0	0	0	92,104	92,104	443,194	41,165	67,212	0
1970	0	0	0	96,000	96,000	333,000	31,000	53,000	148,000
1971	200	0	0	98,000	98,000	320,000	22,000	59,000	119,000
1972	200	0	0	107,000	107,000	349,000	20,000	64,000	130,000
1973	200	0	0	111,000	111,000	365,000	20,000	66,000	132,000
1974	200	0	0	112,000	112,000	369,000	21,000	68,000	135,000
1975	200	0	0	112,000	112,000	366,000	20,000	66,000	125,000
1976	200	0	0	112,000	112,000	366,000	20,000	66,000	129,000
1977	200	0	0	116,000	116,000	366,000	19,000	65,000	128,000
1978	200	0	0	120,000	120,000	365,000	20,000	66,000	129,000
1979	200	0	0	120,000	120,000	365,000	20,000	66,000	128,000
1980	200	122,000	26,000	67,000	215,000	366,000	20,000	66,000	128,000
1981	200	113,000	25,000	64,000	202,000	368,000	19,000	66,000	130,000
1982	200	114,000	25,000	64,000	203,000	369,000	20,000	66,000	130,000
1983	200	114,000	25,000	64,000	203,000	368,000	20,000	68,000	133,000
1984	200	114,000	25,000	64,000	203,000	369,000	20,000	69,000	133,000
1985	200	114,000	24,000	64,000	202,000	369,000	20,000	69,000	134,000
1986	200	114,000	25,000	64,000	203,000	370,000	21,000	69,000	133,000
1987	200	114,000	25,000	64,000	203,000	370,000	21,000	69,000	133,000
1988	200	114,000	25,000	64,000	203,000	370,000	21,000	69,000	133,000
1989	200	115,000	25,000	64,000	204,000	370,000	21,000	69,000	133,000
1990	200	114,000	25,000	64,000	203,000	370,000	21,000	69,000	133,000
1991	200	114,000	25,000	64,000	203,000	370,000	21,000	69,000	133,000
1992	200	114,000	25,000	64,000	203,000	370,000	21,000	68,000	132,000
1993	200	114,000	25,000	64,000	203,000	370,000	21,000	68,000	132,000
1994	200	114,000	25,000	64,000	203,000	370,000	20,000	68,000	132,000
1995 (a)	200	114,000	25,000	64,000	203,000	370,000	20,000	68,000	132,000

Calendar Year	SOUTH BAY AQUEDUCT (continued)					CALIFORNIA AQUEDUCT			
						NORTH SAN JOAQUIN DIVISION			
	Reach 6	Reach 7	Reach 8	Reach 9	Total	Reach 1	Reach 2A	Reach 2B	Subtotal
	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
1962	0	0	0	0	85,786	0	0	0	0
1963	0	0	0	0	167,406	0	0	0	0
1964	0	0	0	0	183,158	0	0	0	0
1965	2,701	9,889	9,486	24,998	396,861	0	0	0	0
1966	4,086	12,670	11,379	26,878	407,444	0	0	0	0
1967	1,920	11,169	15,549	34,560	617,979	0	0	0	0
1968	1,411	10,465	14,734	34,084	599,780	994,477	289,026	121,871	1,405,374
1969	1,678	7,463	11,545	33,373	605,630	937,869	348,765	194,276	1,480,910
1970	4,000	7,000	11,000	23,000	610,000	1,237,000	376,000	134,000	1,747,000
1971	5,000	6,000	10,000	24,000	565,000	1,240,000	342,000	121,000	1,703,000
1972	5,000	7,000	12,000	24,000	611,000	1,347,000	362,000	129,000	1,838,000
1973	5,000	8,000	11,000	25,000	632,000	1,419,000	376,000	133,000	1,928,000
1974	5,000	8,000	11,000	25,000	642,000	1,433,000	380,000	134,000	1,947,000
1975	6,000	7,000	11,000	25,000	626,000	1,438,000	380,000	133,000	1,951,000
1976	6,000	7,000	11,000	25,000	630,000	1,424,000	380,000	133,000	1,937,000
1977	6,000	7,000	11,000	25,000	627,000	1,420,000	380,000	134,000	1,934,000
1978	6,000	7,000	11,000	24,000	628,000	1,418,000	389,000	137,000	1,944,000
1979	6,000	7,000	11,000	24,000	627,000	1,425,000	387,000	136,000	1,948,000
1980	6,000	7,000	11,000	25,000	629,000	1,392,000	389,000	136,000	1,917,000
1981	6,000	7,000	11,000	25,000	632,000	1,396,000	393,000	137,000	1,926,000
1982	6,000	7,000	11,000	25,000	634,000	1,397,000	395,000	138,000	1,930,000
1983	6,000	7,000	11,000	25,000	638,000	1,383,000	404,000	141,000	1,928,000
1984	6,000	7,000	11,000	25,000	640,000	1,380,000	404,000	141,000	1,925,000
1985	6,000	7,000	11,000	24,000	640,000	1,382,000	408,000	142,000	1,932,000
1986	6,000	8,000	12,000	25,000	644,000	1,386,000	407,000	142,000	1,935,000
1987	6,000	8,000	12,000	25,000	644,000	1,386,000	404,000	141,000	1,931,000
1988	6,000	8,000	12,000	25,000	644,000	1,386,000	404,000	141,000	1,931,000
1989	6,000	8,000	12,000	25,000	644,000	1,386,000	402,000	140,000	1,928,000
1990	6,000	8,000	12,000	25,000	644,000	1,386,000	407,000	142,000	1,935,000
1991	6,000	8,000	12,000	25,000	644,000	1,386,000	406,000	142,000	1,934,000
1992	6,000	8,000	12,000	25,000	642,000	1,386,000	406,000	142,000	1,934,000
1993	6,000	8,000	12,000	25,000	642,000	1,386,000	406,000	142,000	1,934,000
1994	6,000	8,000	12,000	24,000	640,000	1,384,000	406,000	142,000	1,932,000
1995 (a)	6,000	8,000	12,000	24,000	640,000	1,384,000	406,000	142,000	1,932,000

a) And each year thereafter for the remainder of the project repayment period.

MINIMUM OMP&R COSTS OF EACH AQUEDUCT REACH TO BE REIMBURSED
THRU MINIMUM OMP&R COMPONENT OF TRANSPORTATION CHARGE

(in dollars)

Sheet 2 of 4

Calendar Year	CALIFORNIA AQUEDUCT (continued)								
	SAN LUIS DIVISION						SOUTH SAN JOAQUIN DIVISION		
	Reach 3	Reach 4	Reach 5	Reach 6	Reach 7	Subtotal	Reach 8C	Reach 8D	Reach 9
	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)
1968	131,122	399,082	161,163	61,731	113,356	866,454	0	0	0
1969	76,433	376,459	185,339	51,234	263,242	952,707	10,662	135,524	109,667
1970	123,000	652,000	275,000	92,000	131,000	1,273,000	3,000	175,000	172,000
1971	127,000	695,000	283,000	92,000	133,000	1,330,000	3,000	187,000	185,000
1972	135,000	737,000	299,000	99,000	141,000	1,411,000	3,000	190,000	186,000
1973	141,000	771,000	312,000	102,000	148,000	1,474,000	3,000	201,000	199,000
1974	146,000	797,000	322,000	106,000	152,000	1,523,000	3,000	209,000	207,000
1975	146,000	795,000	321,000	106,000	151,000	1,519,000	3,000	208,000	206,000
1976	146,000	796,000	323,000	107,000	152,000	1,524,000	3,000	209,000	207,000
1977	145,000	796,000	324,000	106,000	152,000	1,523,000	3,000	209,000	207,000
1978	151,000	800,000	330,000	109,000	155,000	1,545,000	3,000	213,000	210,000
1979	149,000	799,000	328,000	108,000	154,000	1,538,000	3,000	212,000	209,000
1980	151,000	803,000	331,000	108,000	156,000	1,549,000	3,000	214,000	211,000
1981	152,000	808,000	334,000	110,000	157,000	1,561,000	3,000	215,000	213,000
1982	153,000	810,000	336,000	111,000	158,000	1,568,000	3,000	216,000	214,000
1983	157,000	821,000	354,000	117,000	165,000	1,614,000	3,000	221,000	217,000
1984	158,000	823,000	357,000	117,000	167,000	1,622,000	3,000	221,000	218,000
1985	160,000	826,000	358,000	118,000	167,000	1,629,000	3,000	223,000	220,000
1986	160,000	822,000	349,000	115,000	163,000	1,609,000	3,000	223,000	220,000
1987	158,000	821,000	347,000	114,000	162,000	1,602,000	3,000	222,000	219,000
1988	158,000	822,000	348,000	115,000	163,000	1,606,000	3,000	222,000	219,000
1989	157,000	820,000	346,000	114,000	162,000	1,599,000	3,000	221,000	218,000
1990	160,000	823,000	350,000	115,000	163,000	1,611,000	3,000	223,000	220,000
1991	159,000	822,000	349,000	115,000	163,000	1,608,000	3,000	223,000	220,000
1992	159,000	823,000	350,000	115,000	163,000	1,610,000	3,000	223,000	220,000
1993	159,000	823,000	350,000	115,000	163,000	1,610,000	3,000	223,000	220,000
1994	159,000	821,000	350,000	115,000	163,000	1,608,000	3,000	223,000	220,000
1995 (a)	159,000	821,000	350,000	115,000	163,000	1,608,000	3,000	223,000	220,000

Calendar Year	CALIFORNIA AQUEDUCT (continued)								
	SOUTH SAN JOAQUIN DIVISION (continued)								
	Reach 10A	Reach 11B	Reach 12D	Reach 12E	Reach 13B	Reach 14A	Reach 14B	Reach 14C	Reach 15A
	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)
1968	0	0	0	0	0	0	0	0	0
1969	114,517	72,177	0	0	0	0	0	0	0
1970	186,000	109,000	170,000	118,000	157,000	0	0	0	0
1971	201,000	114,000	183,000	133,000	168,000	686,000	133,000	115,000	449,000
1972	203,000	115,000	185,000	134,000	171,000	665,000	133,000	114,000	439,000
1973	217,000	123,000	197,000	142,000	179,000	689,000	140,000	120,000	450,000
1974	225,000	129,000	205,000	148,000	187,000	721,000	146,000	125,000	470,000
1975	225,000	129,000	204,000	148,000	186,000	720,000	146,000	125,000	470,000
1976	225,000	129,000	205,000	148,000	187,000	720,000	146,000	125,000	470,000
1977	226,000	129,000	204,000	148,000	188,000	720,000	146,000	125,000	470,000
1978	229,000	131,000	207,000	149,000	190,000	722,000	148,000	127,000	470,000
1979	229,000	130,000	207,000	149,000	190,000	721,000	148,000	127,000	470,000
1980	230,000	131,000	209,000	151,000	192,000	726,000	150,000	128,000	473,000
1981	232,000	132,000	211,000	151,000	192,000	729,000	150,000	129,000	474,000
1982	233,000	133,000	212,000	151,000	193,000	731,000	150,000	130,000	474,000
1983	238,000	136,000	216,000	154,000	198,000	735,000	154,000	133,000	475,000
1984	237,000	135,000	217,000	154,000	197,000	735,000	154,000	133,000	475,000
1985	240,000	136,000	219,000	155,000	199,000	739,000	156,000	134,000	476,000
1986	240,000	137,000	219,000	155,000	199,000	740,000	156,000	135,000	477,000
1987	239,000	136,000	218,000	155,000	199,000	739,000	155,000	134,000	477,000
1988	239,000	136,000	218,000	155,000	199,000	740,000	156,000	135,000	477,000
1989	238,000	136,000	217,000	154,000	198,000	739,000	156,000	134,000	477,000
1990	240,000	137,000	219,000	156,000	200,000	741,000	157,000	135,000	477,000
1991	240,000	137,000	219,000	155,000	199,000	741,000	157,000	135,000	477,000
1992	240,000	137,000	219,000	156,000	200,000	741,000	157,000	135,000	477,000
1993	240,000	137,000	219,000	156,000	200,000	741,000	157,000	135,000	477,000
1994	240,000	137,000	219,000	155,000	200,000	740,000	157,000	135,000	477,000
1995 (a)	240,000	137,000	219,000	155,000	200,000	740,000	157,000	135,000	477,000

TABLE B-11

MINIMUM OMP&R COSTS OF EACH AQUEDUCT REACH TO BE REIMBURSED
THRU MINIMUM OMP&R COMPONENT OF TRANSPORTATION CHARGE

(in dollars)

Sheet 3 of 4

Calendar Year	CALIFORNIA AQUEDUCT (continued)								
	SOUTH SAN JOAQUIN DIVISION (continued)		TEHACHAPI DIVISION			MOJAVE DIVISION			
	Reach 16A	Subtotal	Reach 17E	Reach 17F	Subtotal	Reach 18A	Reach 19	Reach 19C	Reach 20A
	(37)	(38)	(39)	(40)	(41)	(42)	(43)	(44)	(45)
1968	0	0	0	0	0	0	0	0	0
1969	0	442,547	0	0	0	0	0	0	0
1970	0	1,090,000	0	0	0	0	0	0	0
1971	835,000	3,392,000	0	0	0	0	0	0	0
1972	806,000	3,344,000	1,442,000	39,000	1,481,000	131,000	316,000	0	313,000
1973	828,000	3,488,000	1,500,000	38,000	1,538,000	136,000	327,000	0	325,000
1974	863,000	3,638,000	1,569,000	37,000	1,606,000	136,000	325,000	0	323,000
1975	863,000	3,633,000	1,571,000	38,000	1,609,000	136,000	324,000	0	320,000
1976	864,000	3,638,000	1,565,000	38,000	1,603,000	137,000	328,000	0	324,000
1977	863,000	3,639,000	1,553,000	38,000	1,591,000	137,000	329,000	0	324,000
1978	865,000	3,664,000	1,537,000	38,000	1,575,000	137,000	331,000	0	327,000
1979	865,000	3,660,000	1,544,000	38,000	1,582,000	137,000	333,000	0	329,000
1980	869,000	3,687,000	1,580,000	38,000	1,618,000	138,000	336,000	0	332,000
1981	873,000	3,704,000	1,529,000	38,000	1,567,000	139,000	307,000	61,000	334,000
1982	875,000	3,715,000	1,528,000	38,000	1,566,000	140,000	310,000	41,000	337,000
1983	882,000	3,762,000	1,527,000	39,000	1,566,000	142,000	322,000	41,000	348,000
1984	883,000	3,762,000	1,527,000	39,000	1,566,000	143,000	324,000	41,000	350,000
1985	886,000	3,786,000	1,529,000	39,000	1,568,000	143,000	328,000	41,000	353,000
1986	890,000	3,794,000	1,532,000	38,000	1,570,000	145,000	333,000	41,000	358,000
1987	891,000	3,787,000	1,532,000	39,000	1,571,000	145,000	336,000	41,000	361,000
1988	894,000	3,793,000	1,532,000	39,000	1,571,000	146,000	340,000	41,000	365,000
1989	892,000	3,783,000	1,532,000	39,000	1,571,000	146,000	341,000	41,000	366,000
1990	894,000	3,802,000	1,532,000	39,000	1,571,000	147,000	341,000	41,000	367,000
1991	894,000	3,800,000	1,532,000	39,000	1,571,000	147,000	341,000	41,000	366,000
1992	895,000	3,803,000	1,532,000	39,000	1,571,000	147,000	341,000	41,000	367,000
1993	895,000	3,803,000	1,532,000	39,000	1,571,000	147,000	341,000	41,000	367,000
1994	894,000	3,800,000	1,531,000	39,000	1,570,000	147,000	341,000	41,000	366,000
1995(a)	894,000	3,800,000	1,531,000	39,000	1,570,000	147,000	341,000	41,000	366,000

Calendar Year	CALIFORNIA AQUEDUCT (continued)								
	MOJAVE DIVISION (continued)							SANTA ANA DIVISION	
	Reach 20B	Reach 21	Reach 22A	Reach 22B	Reach 23	Reach 24	Subtotal	Reach 25	Reach 26A
	(46)	(47)	(48)	(49)	(50)	(51)	(52)	(53)	(54)
1968	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0
1972	264,000	201,000	246,000	1,518,000	24,000	196,000	3,209,000	0	0
1973	274,000	206,000	255,000	1,571,000	25,000	146,000	3,265,000	73,000	897,000
1974	276,000	205,000	251,000	1,563,000	25,000	306,000	3,404,000	73,000	891,000
1975	269,000	204,000	250,000	1,548,000	25,000	158,000	3,234,000	73,000	884,000
1976	273,000	206,000	251,000	1,549,000	25,000	47,000	3,140,000	73,000	876,000
1977	272,000	206,000	251,000	1,543,000	25,000	290,000	3,377,000	74,000	873,000
1978	275,000	207,000	251,000	1,551,000	25,000	95,000	3,199,000	73,000	871,000
1979	277,000	209,000	252,000	1,558,000	25,000	45,100	3,165,100	73,000	872,000
1980	280,000	211,000	253,000	1,570,000	25,000	213,600	3,358,600	74,000	875,000
1981	280,000	211,000	254,000	1,578,000	25,000	264,300	3,453,300	74,000	878,000
1982	283,000	212,000	255,000	1,585,000	25,000	653,900	3,841,900	74,000	879,000
1983	293,000	218,000	256,000	1,628,000	25,000	143,800	3,416,800	74,000	880,000
1984	296,000	219,000	257,000	1,635,000	25,000	71,800	3,218,200	74,000	879,000
1985	298,000	221,000	258,000	1,647,000	25,000	354,100	3,668,100	74,000	880,000
1986	303,000	224,000	260,000	1,664,000	25,000	583,000	3,936,000	74,000	883,000
1987	306,000	226,000	260,000	1,677,000	25,000	105,100	3,482,100	74,000	883,000
1988	309,000	228,000	261,000	1,686,000	25,000	252,100	3,653,100	74,000	883,000
1989	310,000	228,000	261,000	1,684,000	25,000	224,700	3,626,700	74,000	883,000
1990	310,000	228,000	262,000	1,688,000	25,000	360,600	3,769,600	74,000	883,000
1991	310,000	228,000	261,000	1,687,000	25,000	244,400	3,650,400	74,000	883,000
1992	310,000	228,000	262,000	1,688,000	25,000	293,000	3,702,000	74,000	883,000
1993	310,000	228,000	262,000	1,688,000	25,000	293,000	3,702,000	74,000	883,000
1994	310,000	228,000	261,000	1,687,000	25,000	293,000	3,699,000	74,000	882,000
1995(a)	310,000	228,000	261,000	1,687,000	25,000	293,000	3,699,000	74,000	882,000

**MINIMUM OMP&R COSTS OF EACH AQUEDUCT REACH TO BE REIMBURSED
THRU MINIMUM OMP&R COMPONENT OF TRANSPORTATION CHARGE**

(in dollars)

Sheet 4 of 4

Calendar Year	CALIFORNIA AQUEDUCT (continued)								
	SANTA ANA DIVISION (continued)				WEST BRANCH				
	Reach 28G	Reach 28H	Reach 28J	Subtotal	Reach 29A	Reach 29F	Reach 29G	Reach 29H	Reach 29J
	(55)	(56)	(57)	(58)	(59)	(60)	(61)	(62)	(63)
1971	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	738,000	105,000	99,000	189,000	65,000
1973	89,000	0	0	1,059,000	766,000	106,000	99,000	213,000	42,000
1974	86,000	31,000	170,000	1,251,000	770,000	105,000	99,000	236,000	30,000
1975	85,000	28,000	384,000	1,454,000	769,000	104,000	97,000	232,000	34,000
1976	84,000	28,000	116,000	1,177,000	769,000	107,000	99,000	241,000	35,000
1977	84,000	28,000	50,000	1,109,000	769,000	107,000	99,000	240,000	33,000
1978	83,000	28,000	216,000	1,271,000	768,000	109,000	100,000	247,000	32,000
1979	84,000	28,000	355,000	1,412,000	769,000	111,000	101,000	251,000	32,000
1980	84,000	28,000	245,500	1,306,500	772,000	113,000	102,000	255,000	30,000
1981	85,000	28,000	319,100	1,384,100	775,000	113,000	102,000	257,000	35,000
1982	85,000	28,000	353,100	1,419,100	776,000	115,000	104,000	262,000	38,000
1983	85,000	28,000	296,400	1,363,400	778,000	124,000	108,000	288,000	42,000
1984	85,000	28,000	314,900	1,380,900	778,000	125,000	109,000	293,000	46,000
1985	85,000	27,000	314,000	1,380,000	780,000	127,000	110,000	300,000	48,000
1986	85,000	28,000	662,800	1,732,800	782,000	131,000	112,000	310,000	48,000
1987	85,000	28,000	377,400	1,447,400	783,000	133,000	113,000	318,000	52,000
1988	85,000	28,000	490,300	1,560,300	783,000	136,000	115,000	327,000	53,000
1989	85,000	28,000	73,100	1,143,100	783,000	137,000	115,000	328,000	54,000
1990	85,000	28,000	371,100	1,441,100	784,000	137,000	115,000	329,000	55,000
1991	85,000	28,000	358,600	1,428,600	783,000	137,000	115,000	329,000	56,000
1992	85,000	28,000	384,000	1,454,000	784,000	137,000	115,000	330,000	56,000
1993	85,000	28,000	384,000	1,454,000	784,000	137,000	115,000	330,000	56,000
1994	85,000	28,000	383,000	1,452,000	783,000	137,000	115,000	329,000	56,000
1995(a)	85,000	28,000	383,000	1,452,000	783,000	137,000	115,000	329,000	56,000

Calendar Year	CALIFORNIA AQUEDUCT (continued)							GRAND TOTAL	
	WEST BRANCH (continued)		COASTAL BRANCH						TOTAL
	Reach 30	Subtotal	Reach 31A	Reach 33A	Reach 34	Reach 35	Subtotal		
	(64)	(65)	(66)	(67)	(68)	(69)	(70)	(71)	(72)
1962	0	0	0	0	0	0	0	0	85,786
1963	0	0	0	0	0	0	0	0	167,406
1964	0	0	0	0	0	0	0	0	183,158
1965	0	0	0	0	0	0	0	0	396,861
1966	0	0	0	0	0	0	0	0	407,444
1967	0	0	0	0	0	0	0	0	617,979
1968	0	0	0	0	0	0	0	2,271,828	2,781,608
1969	0	0	490,231	0	0	0	490,231	3,366,395	4,064,129
1970	0	0	591,000	0	0	0	591,000	4,701,000	5,407,000
1971	0	0	400,000	0	0	0	400,000	6,825,000	7,488,200
1972	32,000	1,228,000	413,000	0	0	0	413,000	12,924,000	13,642,200
1973	564,000	1,790,000	436,000	0	0	0	436,000	14,978,000	15,721,200
1974	336,000	1,576,000	460,000	0	0	0	460,000	15,405,000	16,159,200
1975	346,000	1,582,000	458,000	0	0	0	458,000	15,440,000	16,178,200
1976	161,000-	1,090,000	461,000	0	0	0	461,000	14,570,000	15,312,200
1977	214,000	1,462,000	465,000	0	0	0	465,000	15,100,000	15,843,200
1978	486,000	1,742,000	462,000	0	0	0	462,000	15,402,000	16,150,200
1979	413,800	1,677,800	461,000	0	0	0	461,000	15,443,900	16,191,100
1980	40,000-	1,232,000	445,000	318,000	26,000	59,000	848,000	15,516,100	16,360,300
1981	483,400	1,765,400	447,000	304,000	23,000	50,000	824,000	16,184,800	17,019,000
1982	14,900-	1,280,100	447,000	299,000	20,000	43,000	809,000	16,129,100	16,966,300
1983	363,100	1,703,100	448,000	300,000	20,000	46,000	814,000	16,167,300	17,008,500
1984	366,900	1,717,900	449,000	301,000	21,000	47,000	818,000	16,010,000	16,853,200
1985	575,100	1,940,100	449,000	298,000	19,000	43,000	809,000	16,712,200	17,554,400
1986	250,700	1,633,700	450,000	300,000	20,000	44,000	814,000	17,024,500	17,871,700
1987	553,600	1,952,600	450,000	300,000	20,000	44,000	814,000	16,587,100	17,434,300
1988	469,300	1,883,300	450,000	299,000	19,000	43,000	811,000	16,808,700	17,655,900
1989	203,200	1,620,200	449,000	300,000	19,000	43,000	811,000	16,082,000	16,930,200
1990	478,300	1,898,300	450,000	299,000	19,000	42,000	810,000	16,838,000	17,685,200
1991	594,300	2,014,300	450,000	298,000	19,000	41,000	808,000	16,814,300	17,661,500
1992	489,000	1,911,000	450,000	298,000	19,000	41,000	808,000	16,793,000	17,638,200
1993	489,000	1,911,000	450,000	298,000	19,000	41,000	808,000	16,793,000	17,638,200
1994	489,000	1,909,000	450,000	298,000	19,000	41,000	808,000	16,778,000	17,621,200
1995(a)	489,000	1,909,000	450,000	298,000	19,000	41,000	808,000	16,778,000	17,621,200

TABLE B-12

VARIABLE OMP&R COSTS TO BE REIMBURSED THRU VARIABLE OMP&R COMPONENT OF TRANSPORTATION CHARGE

(in dollars)

Cal- en- dar Year	NORTH BAY AQUEDUCT			SOUTH BAY AQUEDUCT			CALIFORNIA AQUEDUCT						
	Reach 1	Reach 3	Total	Reach 1	Total	Delta Pumping Plant	Reach 4	Reach 14A	Reach 15A	Reach 16A	Reach 17E	Reach 22B	Pear- blossom Pumping Plant
	Calhoun and Travis Pumping Plants	Cordelia Pumping Plant		South Bay and Del Valle Pumping Plants(a)			Dos Amigos Pumping Plant	Buena Vista Pumping Plant	Wheeler Ridge Pumping Plant	Wind Gap Pumping Plant	A. D. Edmonston Pumping Plant		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
1961	0	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	37,739	37,739	0	0	0	0	0	0	0	0
1963	0	0	0	59,271	59,271	0	0	0	0	0	0	0	0
1964	0	0	0	74,488	74,488	0	0	0	0	0	0	0	0
1965	0	0	0	143,806	143,806	0	0	0	0	0	0	0	0
1966	0	0	0	194,751	194,751	0	0	0	0	0	0	0	0
1967	0	0	0	219,147	219,147	18,463	0	0	0	0	0	0	0
1968	0	6,959	6,959	328,335	328,335	420,054	207,590	0	0	0	0	0	0
1969	0	5,217	5,217	153,502	153,502	308,971	98,923	0	0	0	0	0	0
1970	0	14,000	14,000	463,895	463,895	325,227	189,239	0	0	0	0	0	0
1971	0	15,000	15,000	499,641	499,641	330,355	135,045	18,884	4,437	5,628	516	0	0
1972	0	27,000	27,000	824,376	824,376	636,198	406,588	312,007	235,277	441,421	1,532,452	140,679	0
1973	0	24,000	24,000	685,849	685,849	838,969	513,018	436,771	393,052	788,192	2,838,403	324,781	0
1974	0	26,000	26,000	755,548	755,548	900,605	585,636	479,102	414,696	829,053	2,973,450	252,176	0
1975	0	23,000	23,000	636,444	636,444	1,015,541	617,451	541,427	490,232	989,956	3,578,379	457,046	0
1976	0	30,000	30,000	617,318	617,318	1,271,037	947,986	810,235	790,633	1,616,967	5,910,991	996,258	0
1977	0	31,000	31,000	630,720	630,720	1,587,683	1,109,291	947,796	1,022,715	2,143,232	7,128,689	1,055,332	0
1978	0	30,000	30,000	589,081	589,081	2,902,781	1,185,421	1,172,495	1,196,621	2,524,704	8,660,298	1,628,103	0
1979	0	28,000	28,000	478,350	478,350	2,161,530	1,190,031	1,073,996	1,175,229	2,366,902	9,311,080	1,068,117	0
1980	9,508	36,200	45,708	458,318	458,318	3,431,212	1,304,505	1,267,826	1,317,727	2,869,059	10,414,231	1,062,936	0
1981	11,462	43,200	54,662	443,102	443,102	3,102,813	1,328,743	1,264,086	1,312,359	2,859,518	11,136,172	1,065,837	0
1982	12,484	45,200	57,684	438,500	438,500	4,310,077	1,364,931	1,337,648	1,397,740	3,049,896	11,127,156	1,131,102	0
1983	11,590	47,200	58,790	424,210	424,210	3,935,333	1,484,943	1,480,654	1,560,211	3,413,140	13,219,219	1,449,354	0
1984	11,632	49,200	60,832	406,994	406,994	4,619,960	1,437,814	1,394,539	1,467,110	3,204,307	12,418,039	1,327,561	0
1985	14,556	51,200	65,756	408,159	408,159	4,674,854	1,525,860	1,486,692	1,659,863	3,626,746	13,285,074	1,679,568	0
1986	18,466	58,200	76,666	414,172	414,172	3,721,671	1,618,409	1,585,294	1,681,813	3,672,378	14,170,847	1,600,217	0
1987	18,544	59,200	77,744	411,451	411,451	3,797,209	1,702,397	1,728,060	1,845,303	4,033,765	15,542,889	1,597,247	0
1988	20,592	60,200	80,792	415,512	415,512	4,199,050	1,871,127	1,962,626	2,017,227	4,411,315	16,965,155	1,632,213	0
1989	20,675	59,200	79,875	410,023	410,023	4,985,507	1,878,601	1,995,049	2,065,626	4,509,051	17,366,321	1,685,325	0
1990	22,694	61,200	83,894	417,137	417,137	5,204,682	1,949,563	2,032,253	2,101,648	4,807,970	17,651,434	1,712,644	0
1991	22,694	61,200	83,894	423,366	423,366	5,020,206	1,962,815	2,132,701	2,217,216	4,852,672	17,815,714	1,915,917	0
1992	22,694	61,200	83,894	423,740	423,740	5,185,211	1,968,370	2,141,244	2,226,737	4,873,931	17,895,744	1,916,495	0
1993	22,694	61,200	83,894	424,092	424,092	5,185,673	1,968,370	2,141,244	2,226,737	4,873,931	17,895,744	1,916,495	0
1994	22,694	61,200	83,894	424,371	424,371	5,186,059	1,968,370	2,141,244	2,226,737	4,873,931	17,895,744	1,916,495	0
1995	22,694	61,200	83,894	424,488	424,488	5,186,226	1,968,370	2,141,244	2,226,737	4,873,931	17,895,744	1,916,495	0
1996	22,694	61,200	83,894	424,602	424,602	5,186,393	1,968,370	2,141,244	2,226,737	4,873,931	17,895,744	1,916,495	0
1997 (b)	22,694	61,200	83,894	424,714	424,714	5,186,561	1,968,370	2,141,244	2,226,737	4,873,931	17,895,744	1,916,495	0

Cal- en- dar Year	CALIFORNIA AQUEDUCT (continued)										GRAND TOTAL
	Reach 24	Reach 26A	Reach 28J	Reach 29A	Reach 29H	Reach 29J	Reach 30	Reach 31A	Reach 33A	Total	
	Silver- wood Lake (c)	Devil Canyon Powerplant	Lake Perris (c)	Oso Pumping Plant	Pyramid Lake (c,d)	Castaic Powerplant	Castaic Lake (c)	Las Perillas and Badger Hill Pumping Plants	Devil's Den, Sawtooth and Polonio PP's and San Luis Obispo Pwp		
	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
1961	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	37,739
1963	0	0	0	0	0	0	0	0	0	0	59,271
1964	0	0	0	0	0	0	0	0	0	0	74,488
1965	0	0	0	0	0	0	0	0	0	0	143,806
1966	0	0	0	0	0	0	0	0	0	0	194,751
1967	0	0	0	0	0	0	0	0	0	18,463	237,610
1968	0	0	0	0	0	0	0	119,105	0	746,749	1,082,043
1969	0	0	0	0	0	0	0	55,080	0	462,974	621,693
1970	0	0	0	0	0	0	0	148,805	0	661,271	1,139,166
1971	0	0	0	0	0	0	0	62,365	0	557,230	1,071,871
1972	0	772,786-	0	166,953	0	411,426-	352,582	105,297	0	3,145,442	3,996,818
1973	86,986	690,946-	0	272,622	0	1,289,892-	0	123,290	0	4,635,246	5,346,095
1974	0	821,580-	112,437	258,651	0	1,729,575-	172	153,383	0	4,418,206	5,199,754
1975	71,851	1,052,934-	0	281,763	0	1,935,839-	0	129,813	0	5,184,786	5,844,230
1976	195,613	2,274,181-	186,984	431,540	0	2,660,492-	546,731	149,575	0	8,910,077	9,557,395
1977	0	2,311,072-	254,820	540,513	0	3,357,545-	150,371	150,816	0	10,422,641	11,083,861
1978	142,336	3,256,164-	90,490	535,960	0	3,645,052-	0	142,247	0	13,280,236	13,899,317
1979	291,892	1,640,281-	0	673,890	0	3,739,964-	0	93,545	0	13,936,307	14,442,657
1980	26,060	2,108,490-	67,417	759,360	0	4,529,193-	431,940	95,231	38,150	16,447,971	16,951,997
1981	0	1,671,938-	0	833,645	0	4,089,350-	0	90,659	45,180	17,277,724	17,775,488
1982	0	1,717,758-	0	856,980	0	4,112,718-	420,894	99,566	61,725	19,347,239	19,843,423
1983	125,936	1,914,059-	39,709	1,042,035	0	4,181,122-	27,967	88,212	73,064	21,844,596	22,327,596
1984	357,887	1,871,134-	18,664	911,970	0	3,880,627-	37,276	92,304	113,536	21,649,202	22,117,028
1985	0	2,002,710-	36,896	997,169	0	3,879,427-	0	98,413	151,831	23,340,829	23,814,744
1986	0	2,596,701-	0	1,087,144	0	4,831,188-	221,340	118,078	196,256	22,245,558	22,736,396
1987	200,788	2,636,929-	16,413	1,209,610	0	4,626,211-	0	121,219	245,237	24,776,997	25,266,192
1988	37,059	2,575,606-	0	1,316,248	0	4,943,628-	28,291	140,946	279,321	27,341,346	27,837,650
1989	65,126	2,534,923-	351,734	1,330,643	0	4,856,098-	306,455	137,336	370,664	29,065,417	30,155,315
1990	0	2,462,920-	12,872	1,399,706	0	4,718,090-	9,016	160,123	408,435	30,269,346	30,770,377
1991	52,080	2,586,820-	25,544	1,335,038	0	4,754,100-	0	161,104	409,409	30,559,496	31,066,756
1992	0	2,587,004-	0	1,344,636	0	4,728,080-	0	161,104	409,409	30,807,797	31,315,431
1993	0	2,587,004-	0	1,344,636	0	4,728,080-	0	161,104	409,409	30,808,259	31,316,245
1994	0	2,587,004-	0	1,344,636	0	4,728,080-	0	161,104	409,409	30,808,645	31,316,910
1995	0	2,587,004-	0	1,344,636	0	4,728,080-	0	161,104	409,409	30,808,812	31,317,194
1996	0	2,587,004-	0	1,344,636	0	4,728,080-	0	161,104	409,409	30,808,979	31,317,475
1997 (b)	0	2,587,004-	0	1,344,636	0	4,688,540-	0	161,104	409,409	30,848,687	31,357,295

a) The relatively minor estimated costs of Del Valle Pumping Plant have been combined with those of South Bay Pumping Plant to simplify the allocation procedure.

b) And each year thereafter for the remainder of the project repayment period.

c) These values represent a proportionate allocation of the total variable OMP&R costs of pumping and power recovery plants (Table B-3) associated with net annual withdrawals from reservoir storage for the project transportation facilities. The allocation is determined annually by applying the following ratio, calculated from the data shown in Table B-6: "Reservoir Storage Changes" (withdrawals, as a positive value) conveyed thru each plant, in acre-feet ÷ "Total" annual quantity conveyed thru each plant, in acre-feet. The costs so determined are accumulated for all upstream plants for each year, for each respective reservoir.

d) Under the proposed operation of Pyramid Lake, net annual reservoir storage accretions and withdrawals balance within each calendar year.

CAPITAL AND OPERATING COSTS OF PROJECT CONSERVATION FACILITIES TO BE REIMBURSED THRU DELTA WATER CHARGE

(in dollars)

Calendar Year	INITIAL PROJECT CONSERVATION FACILITIES			ADDITIONAL PROJECT CONSERVATION FACILITIES (UPPER EEL RIVER DEVELOPMENT)										Total (e)
	WATER SUPPLY AND POWER GENERATION			Planning and Pre-operating Costs (a & c)	DOS RIOS-GRINDSTONE TUNNEL		STORY CREEK CONVEYANCE CHANNEL		DOS RIOS DAM AND RESERVOIR					
	Capital Costs (a)	Operating Costs (b)	Project Power Revenues		Capital Costs (a)	Operating Costs (d)	Capital Costs (a)	Operating Costs (d)	Initial Storage		Reserved Storage			
									Capital Costs (a)	Operating Costs (d)	Capital Costs (a)	Operating Costs (d)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
1952	171,623	0	0	0	0	0	0	0	0	0	0	0	171,623	
1953	312,703	0	0	0	0	0	0	0	0	0	0	0	312,703	
1954	309,143	0	0	0	0	0	0	0	0	0	0	0	309,143	
1955	194,959	0	0	0	0	0	0	0	0	0	0	0	194,959	
1956	1,365,619	0	0	0	0	0	0	0	0	0	0	0	1,365,619	
1957	6,237,231	0	0	0	0	0	0	0	0	0	0	0	6,237,231	
1958	9,513,619	0	0	0	0	0	0	0	0	0	0	0	9,513,619	
1959	11,341,206	0	0	0	0	0	0	0	0	0	0	0	11,341,206	
1960	14,563,912	0	0	0	0	0	0	0	0	0	0	0	14,563,912	
1961	18,713,002	0	0	0	0	0	0	0	0	0	0	0	18,713,002	
1962	8,974,669	78	0	1,877	0	0	0	0	0	0	0	0	8,976,624	
1963	72,679,496	176	0	1,720	0	0	0	0	0	0	0	0	72,681,392	
1964	62,132,641	76	0	147,564	0	0	0	0	0	0	0	0	62,280,281	
1965	71,486,651	165	0	768,262	0	0	0	0	0	0	0	0	72,255,078	
1966	131,205,747	211	0	1,460,774	0	0	0	0	0	0	0	0	132,666,732	
1967	96,027,071	3,553	0	1,423,929	0	0	0	0	0	0	0	0	97,454,553	
1968	39,971,861	1,234,225	261,963	1,011,430	0	0	0	0	0	0	0	0	41,955,553	
1969	6,259,058	2,413,257	8,851,757	883,504	0	0	0	0	0	0	0	0	704,062	
1970	7,414,727	6,167,123	16,150,000	619,000	0	0	0	0	0	0	0	0	- 1,949,150	
1971	3,046,934	6,261,700	16,150,000	972,700	0	0	0	0	0	0	0	0	- 5,868,666	
1972	3,824,986	6,530,124	16,150,000	1,326,000	0	0	0	0	0	0	0	0	- 4,468,890	
1973	19,915,506	6,685,934	16,150,000	1,266,000	2,500,000	0	0	0	0	0	0	0	14,217,440	
1974	17,018,421	6,674,173	16,150,000	730,600	2,500,000	0	0	0	0	0	0	0	10,773,194	
1975	16,942,614	6,882,197	16,150,000	279,000	2,500,000	0	0	0	0	0	0	0	10,453,811	
1976	14,544,284	6,668,933	16,150,000	181,700	10,000,000	0	0	0	0	0	0	0	15,244,917	
1977	106,919	6,620,924	16,150,000	152,800	13,000,000	0	0	0	0	0	0	0	3,730,643	
1978	897	5,901,227	16,150,000	120,000	13,000,000	0	0	0	0	0	0	0	2,872,124	
1979	52,950	7,115,682	16,150,000	122,400	13,000,000	0	0	0	0	0	0	0	4,141,032	
1980	240,517	6,366,216	16,153,000	131,800	13,000,000	0	0	0	0	0	0	0	3,585,533	
1981	622,232	6,054,957	16,616,000	140,600	13,000,000	0	0	0	0	0	0	0	3,201,789	
1982	634,796	5,627,912	19,325,000	145,400	13,000,000	0	0	0	0	0	0	0	83,108	
1983	147,182	6,024,302	16,150,000	143,600	14,000,000	0	100,000	0	0	0	0	0	4,265,084	
1984	0	6,550,233	24,762,000	148,300	12,000,000	0	100,000	0	0	0	0	0	- 5,963,467	
1985	0	6,054,933	16,150,000	116,900	3,600,000	0	3,500,000	0	0	0	0	0	- 2,878,167	
Subtotal 1952-1985	635,973,176	105,838,311	279,769,720	12,295,860	125,100,000	0	3,700,000	0	0	0	0	0	603,137,627	
1986	0	7,723,824	16,150,000	0	0	151,900	0	64,300	5,573,000 (f)	233,700	0	21,000	- 2,382,276	
1987	0	7,200,186	16,373,000	0	0	151,900	0	64,300	5,573,000	233,700	0	21,000	- 3,128,914	
1988	0	6,663,811	16,150,000	0	0	151,900	0	64,300	5,573,000	233,700	0	21,000	- 3,442,289	
1989	0	6,439,873	20,662,000	0	0	151,900	0	64,300	5,573,000	233,700	0	21,000	- 8,178,227	
1990	0	6,210,886	22,309,000	0	0	151,900	0	64,300	5,573,000	233,700	0	21,000	-10,054,214	
1991	0	6,859,628	16,150,000	0	0	151,900	0	64,300	5,573,000	233,700	0	21,000	- 3,246,472	
1992	0	6,585,094	16,961,000	0	0	151,900	0	64,300	5,573,000	233,700	0	21,000	- 4,332,006	
1993	0	6,584,970	16,150,000	0	0	151,900	0	64,300	5,573,000	233,700	0	21,000	- 3,521,130	
1994	0	6,578,550	16,150,000	0	0	158,800	0	66,600	5,573,000	244,300	3,563,000 (f)	153,200	187,450	
1995	0	6,578,427	16,150,000	0	0	158,800	0	66,600	5,573,000	244,300	3,563,000	153,200	187,327	
1996	0	6,578,402	18,735,000	0	0	158,800	0	66,600	5,573,000	244,300	3,563,000	153,200	- 2,397,698	
1997(g)	0	6,578,373	16,150,000	0	0	158,800	0	66,600	5,573,000	244,300	3,563,000	153,200	187,273	
Subtotal 1986-2035	0	330,560,198	821,790,000	0	0	7,884,800	0	3,311,600	278,650,000	12,130,200	149,646,000	6,602,400	-33,004,802	
TOTAL 1952-2035	635,973,176	436,398,509	1,101,559,720	12,295,860	125,100,000	7,884,800	3,700,000	3,311,600	278,650,000	12,130,200	149,646,000	6,602,400	570,132,825	

a) Reimbursed thru payments of the capital cost component of the Delta Water Charge, except for a portion of the costs of the Initial Project Conservation Facilities that will be reimbursed thru project power revenues.

b) Reimbursed thru payments of the minimum OMP&R component of the Delta Water Charge, except for \$577,661 in 1969 and \$1,500,000 annually 1970 thru 2035 that will be reimbursed thru project power revenues.

c) Under the proposed long-term amendment of Articles 22(e) and 22(g), those planning and pre-operating costs of Additional Project Conservation Facilities which are incurred thru the current year will be included in current calculations of the Delta Water Charge.

d) Reimbursed thru minimum OMP&R component of Delta Water Charge.

e) Total of all columns, treating the values shown in Column 3 as negative costs.

f) Initial repayments of capital costs at 3-1/4 percent interest under a Federal Water Supply Act of 1958 contract.

g) And each year thereafter thru year 2035.

TABLE B-14

CAPITAL COSTS OF TRANSPORTATION FACILITIES ALLOCATED TO EACH CONTRACTOR

Projected Costs Based on Prices
Prevailing on December 31, 1969

(in dollars)

Sheet 1 of 2

CALENDAR YEAR	NORTH BAY AREA			SOUTH BAY AREA				CENTRAL COASTAL AREA		
	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
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1952	0	0	0	84	100	412	596	121	285	406
1953	0	0	0	325	407	1,823	2,555	338	788	1,126
1954	0	0	0	827	1,096	5,201	7,124	422	989	1,411
1955	0	0	0	987	1,332	6,361	8,680	211	496	707
1956	0	0	0	8,950	12,178	64,397	85,525	220	516	736
1957	16,594	10,040	26,634	21,871	29,607	651,064	702,542	286	664	950
1958	35,525	14,570	50,095	67,963	68,145	734,279	870,387	790	1,849	2,639
1959	22,204	5,716	27,920	154,503	143,250	493,857	791,610	22,229	57,965	80,194
1960	14,177	9,809	23,986	298,228	276,446	1,022,141	1,596,815	29,616	77,493	107,109
1961	8,523	7,465	15,988	857,513	801,855	1,923,741	3,583,109	14,414	36,231	50,645
1962	914	332	582	520,743	550,438	1,637,704	2,708,885	19,296	46,143	65,439
1963	8,815	4,654	13,469	657,578	1,086,577	3,328,336	5,072,491	69,854	165,087	234,936
1964	44,362	29,315	73,677	695,910	1,232,956	7,322,259	9,251,125	145,391	342,217	487,608
1965	209,538	46,625	256,163	330,877	477,061	3,308,167	4,076,105	259,799	611,431	871,230
1966	500,731	54,437	555,168	567,626	534,189	2,190,506	3,294,321	605,371	1,419,756	2,025,127
1967	1,596,167	47,306	1,643,473	734,545	710,839	2,145,215	3,590,599	939,596	2,199,988	3,139,584
1968	887,905	61,791	949,696	700,017	644,472	1,820,033	3,173,522	357,677	842,244	1,199,921
1969	97,787	65,330	163,117	265,572	251,542	733,807	1,250,921	96,347	205,955	292,302
1970	150,417	183,583	334,000	92,303	89,141	276,215	457,659	80,442	196,476	276,918
1971	76,064	105,936	182,000	39,055	34,982	144,463	220,500	31,936	78,229	110,165
1972	38,032	52,968	91,000	44,327	40,520	118,223	203,070	22,281	55,177	77,458
1973	33,041	49,959	83,000	46,962	48,880	175,184	271,026	25,765	64,324	91,089
1974	56,344	80,656	137,000	21,696	20,599	59,794	102,089	22,611	56,779	79,390
1975	38,420	56,580	95,000	50,926	46,037	111,250	208,213	345,932	984,543	1,330,475
1976	175,994	254,006	430,000	5,720	6,053	23,300	35,073	481,592	1,349,157	1,830,749
1977	417,172	532,828	950,000	17,116	22,330	129,718	169,164	1,191,524	3,046,418	4,207,942
1978	1,317,585	1,390,415	2,708,000	2,277	3,075	17,829	23,181	5,211,070	14,201,670	19,412,740
1979	3,225,549	2,976,451	6,202,000	1,127	1,030	2,453	4,610	6,113,189	16,588,557	22,701,746
1980	564,036	501,994	1,066,000	5,137	6,697	11,184	21,018	606,209	1,645,549	2,249,758
1981	12,340	18,660	31,000	13,291	12,152	28,937	54,380	124,837	317,281	442,118
1982	796	1,204	2,000	13,558	12,396	29,519	55,473	45,016	115,732	160,748
1983	0	0	0	3,141	2,872	6,839	12,852	4,174	9,748	13,922
1984	0	0	0	0	0	0	0	23,564	55,010	78,574
1985	0	0	0	0	0	0	0	15,625	36,480	52,105
1986	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0	0	0
TOTAL	9,549,002	6,541,966	16,090,968	6,240,755	7,131,254	28,533,211	41,905,220	16,865,745	44,811,222	61,677,967

CALENDAR YEAR	SAN JOAQUIN VALLEY AREA									
	Devil's Den Water District	Dudley Ridge Water District	Empire West Side Irrigation District	Hacienda Water District	Kern County Water Agency		County of Kings	Oak Flat Water District	Tulare Lake Basin Storage District	Total
	(11)	(12)	(13)	(14)	Municipal and Industrial	Agriculture	(17)	(18)	(19)	(20)
1952	86	392	19	59	957	9,380	19	13	733	11,658
1953	241	1,085	55	160	2,949	28,181	55	32	2,017	34,775
1954	302	1,362	67	201	3,444	33,293	68	43	2,542	41,322
1955	152	681	36	99	1,529	15,122	37	22	1,283	18,961
1956	156	709	34	104	2,784	24,691	34	24	1,282	29,818
1957	202	915	37	135	6,238	51,328	38	29	1,539	60,461
1958	562	2,547	115	374	14,303	121,378	118	58	4,508	143,963
1959	3,920	8,365	416	1,233	27,506	271,699	427	377	15,572	329,515
1960	5,933	14,441	706	2,128	37,007	389,381	722	493	26,619	477,430
1961	6,072	22,730	1,105	3,348	54,658	571,793	1,131	654	41,757	703,208
1962	11,659	50,269	2,452	7,405	96,795	1,046,653	2,508	1,890	92,519	1,312,411
1963	45,165	200,608	10,251	29,553	351,634	3,840,653	10,485	5,442	378,798	4,873,037
1964	97,129	335,456	17,325	49,416	621,763	6,924,908	17,723	11,624	637,166	8,712,512
1965	173,716	539,430	27,506	79,464	1,111,782	12,244,477	28,141	21,788	1,017,415	15,243,720
1966	414,442	1,127,557	53,213	166,104	2,260,282	25,450,773	54,629	38,060	2,039,460	31,604,320
1967	647,292	834,933	38,395	122,996	2,029,045	23,294,625	39,278	34,723	1,489,668	28,532,955
1968	236,385	194,537	9,485	28,658	1,121,372	11,532,855	9,702	12,120	358,070	13,503,184
1969	50,467	95,300	4,824	14,039	631,917	6,533,964	4,933	7,479	178,972	7,521,895
1970	40,330	72,450	3,587	10,674	479,736	4,704,482	3,567	4,728	134,442	5,454,096
1971	12,990	41,408	2,106	6,100	244,707	2,311,617	2,154	811	77,994	2,701,884
1972	7,554	30,485	1,573	4,492	100,399	797,276	1,609	645	57,882	1,001,915
1973	12,393	54,020	2,802	7,958	90,602	985,135	2,865	1,180	102,836	1,259,791
1974	6,472	26,259	1,360	3,870	48,239	484,179	1,392	2,496	49,945	626,212
1975	7,348	31,551	1,639	4,650	61,745	583,386	1,676	3,079	60,105	755,105
1976	4,379	6,809	354	1,004	25,518	179,593	361	647	12,952	224,617
1977	65,684	285	15	43	5,137	521,498	15	8	523	593,208
1978	12,749	34	2	5	786	100,417	2	3	65	114,063
1979	33,956	2,015	105	297	5,776	298,230	107	197	3,839	344,522
1980	8,598	9,189	477	1,354	18,881	214,273	488	499	17,505	273,554
1981	43,555	23,774	1,235	3,502	38,436	725,907	1,263	2,327	45,292	885,292
1982	13,466	24,251	1,259	3,573	38,937	498,296	1,288	2,373	46,203	629,648
1983	2,971	13,432	698	1,978	21,556	240,920	713	550	25,590	308,408
1984	16,778	75,844	3,937	11,173	121,481	1,360,309	4,025	0	144,486	1,738,233
1985	11,126	50,294	2,611	7,408	80,691	902,064	2,669	0	95,814	1,152,677
1986	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0	0	0
TOTAL	1,994,671	3,893,419	189,801	573,557	9,760,732	107,292,017	194,142	154,814	7,165,394	131,218,547

CAPITAL COSTS OF TRANSPORTATION FACILITIES ALLOCATED TO EACH CONTRACTOR

Projected Costs Based on Prices
Prevailing on December 31, 1969

(in dollars)

Sheet 2 of 2

CALENDAR YEAR	SOUTHERN CALIFORNIA AREA									
	Antelope Valley- East Kern Water Agency	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 Geronimo Pass Water Agency
	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)
1952	3,195	866	257	1,429	70	1,724	424	6,214	1,582	982
1953	1,182	2,719	817	4,487	228	5,420	1,349	19,496	4,964	3,079
1954	12,956	3,535	1,055	5,835	294	7,049	1,719	25,190	6,434	3,998
1955	5,495	1,400	410	2,311	120	2,807	727	9,435	2,429	1,505
1956	9,479	2,152	603	3,450	187	4,360	1,227	13,038	3,406	2,107
1957	26,425	6,409	1,839	10,572	547	12,893	3,470	41,299	10,694	6,626
1958	50,604	11,937	3,391	19,484	1,023	24,081	6,614	74,983	19,485	12,065
1959	71,851	16,512	4,871	27,237	1,406	32,917	9,374	104,047	26,830	16,637
1960	93,612	21,873	6,508	36,071	1,767	43,247	11,123	145,972	37,140	23,071
1961	132,760	35,015	9,749	57,747	2,653	70,746	17,954	196,651	51,545	31,876
1962	205,737	47,169	13,154	77,825	3,738	95,416	27,354	242,043	64,144	39,599
1963	612,532	119,908	34,701	197,758	10,385	241,031	77,295	630,869	166,163	102,699
1964	1,120,088	215,087	57,098	354,716	18,979	440,884	141,521	1,051,672	285,424	175,774
1965	1,919,894	388,424	104,537	640,492	33,074	792,988	245,887	1,936,574	518,923	319,833
1966	4,095,676	843,611	226,616	1,391,281	71,228	1,722,692	530,930	4,143,954	1,112,359	685,382
1967	9,029,841	1,995,113	302,643	1,806,063	89,625	2,214,444	662,739	5,939,413	1,579,420	976,696
1968	5,975,409	1,373,122	376,535	2,264,552	109,372	2,778,635	798,088	8,107,175	2,159,135	1,337,540
1969	5,884,900	1,732,954	552,112	2,858,442	125,191	3,341,433	898,747	11,101,617	2,824,294	1,760,722
1970	5,652,347	2,143,391	716,967	3,534,965	117,782	4,065,978	810,070	14,657,403	3,655,083	2,283,158
1971	2,897,679	1,324,026	460,505	2,183,640	55,735	2,496,078	396,425	10,927,887	2,623,771	1,639,641
1972	887,100	356,775	106,169	588,495	15,652	707,353	114,464	2,737,621	680,575	423,438
1973	223,815	88,718	23,474	146,311	4,420	181,594	31,233	888,936	236,990	147,740
1974	217,143	103,754	27,594	171,106	3,972	211,722	28,539	786,675	210,588	130,874
1975	300,502	152,049	39,064	250,749	4,896	312,971	36,682	948,399	257,110	159,178
1976	403,525	58,013	14,669	95,663	4,943	119,846	37,039	264,012	72,380	44,497
1977	893,961	20,066	5,073	33,082	1,837	41,432	89,974	24,655	15,153	5,153
1978	338,038	3,273	827	5,398	302	6,758	2,265	14,638	4,015	2,468
1979	177,808	12,117	3,064	19,984	1,118	25,034	8,391	54,191	14,868	9,137
1980	4,738,998	21,567	5,454	35,568	1,992	44,589	14,945	96,451	26,470	16,262
1981	4,153,223	8,499	2,149	14,017	1,871	17,692	5,931	38,012	10,457	6,409
1982	41,741	7,503	1,898	12,374	698	15,639	5,242	33,557	9,236	5,658
1983	23,105	4,154	1,051	6,850	387	8,657	2,901	18,577	5,113	3,132
1984	130,405	23,445	5,930	38,665	2,182	48,857	16,378	104,857	28,859	17,680
1985	86,475	15,547	3,932	25,640	1,447	32,398	10,860	69,533	19,138	11,724
1986	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0	0	0
TOTAL	46,417,492	10,260,723	3,114,306	16,922,159	688,041	20,169,365	4,971,239	65,530,365	16,753,679	10,416,331

CALENDAR YEAR	SOUTHERN CALIFORNIA AREA (continued)				FEATHER RIVER AREA				FUTURE CONTRACTOR	GRAND TOTAL
	The Metropolitan Water District of Southern California	Upper Santa Clara Valley Water Agency	Ventura County Flood Control District	Total	City of Yuba City	County of Butte	Plumas County FC & WCD	Total		
	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)
1952	790	790	372	88,155	0	0	0	0	74	100,889
1953	222,015	2,550	1,202	278,508	0	0	0	0	333	317,297
1954	285,890	3,218	1,517	358,690	0	0	0	0	968	409,515
1955	113,706	1,435	681	142,551	0	0	0	0	1,201	172,100
1956	175,770	2,624	1,252	219,746	0	0	0	0	11,442	347,267
1957	521,586	7,105	3,372	652,837	0	0	0	0	29,000	1,472,424
1958	972,902	13,792	6,560	1,217,121	0	0	0	0	36,725	2,320,930
1959	1,396,753	21,166	9,982	1,739,583	0	0	0	0	59,719	3,028,541
1960	1,884,791	27,200	12,720	2,335,185	0	0	0	0	128,136	4,668,661
1961	3,346,056	42,322	19,785	4,014,859	0	0	4	4	327,394	8,695,207
1962	3,603,178	64,477	29,711	4,514,565	0	0	273	273	257,198	8,859,353
1963	11,937,299	193,797	91,786	14,415,714	0	0	132	132	674,866	25,284,645
1964	18,517,876	362,076	168,809	22,920,004	0	0	8,370	8,370	999,918	42,453,214
1965	34,412,584	680,693	313,646	42,307,649	0	0	7,107	7,107	443,864	63,201,838
1966	76,591,667	1,531,232	701,924	93,648,152	0	0	-66	-66	888,074	132,015,096
1967	133,176,403	2,861,832	1,300,907	156,985,139	0	0	2,641	2,641	1,640,356	195,534,747
1968	150,948,458	3,029,774	1,386,693	179,744,888	0	0	51,560	51,560	1,344,751	199,967,122
1969	143,384,677	2,454,408	1,105,679	178,024,776	0	0	234,380	234,380	465,158	187,952,549
1970	180,938,245	2,869,369	1,262,336	222,707,094	0	0	17,000	17,000	178,233	229,425,000
1971	138,149,251	1,516,624	647,129	165,318,391	0	0	0	0	92,057	168,625,000
1972	49,261,770	122,709	18,516	56,020,537	0	0	0	0	113,020	57,507,000
1973	25,382,033	314,299	102,727	27,772,281	0	0	0	0	73,813	29,551,000
1974	9,759,113	150,717	62,523	11,863,320	0	0	0	0	20,989	12,829,000
1975	8,451,077	92,213	45,203	11,054,993	0	0	0	0	101,040	13,544,000
1976	4,662,139	35,019	44,131	5,213,312	0	0	0	0	3,249	8,437,000
1977	1,715,150	35,019	16,631	2,905,765	0	0	0	0	13,921	8,320,000
1978	335,542	7,279	3,209	724,112	0	0	0	0	1,904	22,984,000
1979	2,103,852	50,434	19,718	2,499,716	0	0	0	0	406	31,753,000
1980	3,452,301	81,748	32,374	8,568,719	0	0	0	0	1,851	12,181,000
1981	706,035	14,311	6,896	4,984,422	0	0	0	0	4,788	6,402,000
1982	423,953	12,650	6,097	776,746	0	0	0	0	4,885	1,629,000
1983	345,382	7,002	3,375	429,686	0	0	0	0	1,132	766,000
1984	1,949,366	39,522	19,047	2,425,193	0	0	0	0	0	4,242,000
1985	1,292,686	26,207	12,631	1,608,218	0	0	0	0	0	2,813,000
1986	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0	0	0
TOTAL	1,009,739,846	16,737,040	7,459,241	1,229,176,827	0	0	317,401	317,401	7,920,465	1,488,309,395

TABLE B-15

CAPITAL COST COMPONENT OF TRANSPORTATION CHARGE FOR EACH CONTRACTOR^(a)

(in dollars)

Sheet 1 of 4

CALENDAR YEAR	NORTH BAY AREA			SOUTH BAY AREA				CENTRAL COASTAL AREA		
	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
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1960	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	93,898	91,596	328,232	513,726	0	0	0
1964	0	0	0	106,473	141,859	482,192	730,524	7,217	17,889	25,106
1965	0	0	0	134,179	198,892	820,900	1,153,971	12,428	30,182	42,610
1966	18,095	0	18,095	147,353	219,109	973,927	1,340,389	20,852	50,074	70,926
1967	41,258	0	41,258	169,952	243,912	1,075,254	1,489,118	37,949	90,288	128,237
1968	115,092	0	115,092	199,197	276,793	1,174,486	1,650,476	50,838	120,677	171,515
1969	156,164	0	156,164	227,067	306,605	1,259,092	1,792,764	54,604	129,803	184,407
1970	160,688	0	160,688	237,641	318,241	1,293,036	1,848,918	56,656	134,796	191,452
1971	167,644	28,177	195,823	241,316	322,364	1,305,813	1,869,493	58,771	140,134	198,905
1972	171,164	33,077	204,241	296,253	324,075	1,312,495	1,932,823	59,995	143,162	203,157
1973	172,923	35,528	208,451	298,303	325,949	1,317,964	1,942,216	60,972	145,590	206,562
1974	174,452	37,838	212,290	300,475	328,210	1,326,068	1,954,753	62,181	148,497	210,678
1975	177,658	41,569	218,627	301,479	329,163	1,328,833	1,959,475	63,183	151,021	214,204
1976	178,835	44,187	223,022	301,835	331,292	1,333,980	1,969,107	166,499	401,338	568,237
1977	146,976	55,936	242,912	304,099	331,572	1,335,057	1,970,728	189,176	463,746	652,922
1978	206,273	79,658	285,931	304,891	332,605	1,341,058	1,978,554	242,905	604,665	847,570
1979	267,221	143,975	411,196	304,996	332,748	1,341,882	1,979,626	483,955	1,261,596	1,745,551
1980	416,427	281,658	698,085	305,049	332,795	1,341,996	1,979,840	766,735	2,028,939	2,795,674
1981	442,516	304,879	747,395	305,286	333,013	1,342,513	1,980,812	794,684	2,105,057	2,899,741
1982	443,087	305,742	748,829	305,901	333,575	1,343,852	1,983,328	800,458	2,119,734	2,920,192
1983	443,124	305,798	748,922	306,528	334,148	1,345,217	1,985,493	802,541	2,125,087	2,927,628
1984	443,124	305,798	748,922	306,673	334,281	1,345,534	1,986,488	802,734	2,125,538	2,928,272
1985	443,124	305,798	748,922	306,673	334,281	1,345,534	1,986,488	803,824	2,128,083	2,931,907
1986	443,124	305,798	748,922	306,673	334,281	1,345,534	1,986,488	804,547	2,129,770	2,934,317
1987	443,124	305,798	748,922	306,673	334,281	1,345,534	1,986,488	804,547	2,129,770	2,934,317
1988	443,124	305,798	748,922	306,673	334,281	1,345,534	1,986,488	804,547	2,129,770	2,934,317
1989	443,124	305,798	748,922	306,673	334,281	1,345,534	1,986,488	804,547	2,129,770	2,934,317
1990	443,124	305,798	748,922	306,673	334,281	1,345,534	1,986,488	804,547	2,129,770	2,934,317
1991	443,124	305,798	748,922	306,673	334,281	1,345,534	1,986,488	804,547	2,129,770	2,934,317
1992	443,124	305,798	748,922	306,673	334,281	1,345,534	1,986,488	804,547	2,129,770	2,934,317
1993	443,124	305,798	748,922	306,673	334,281	1,345,534	1,986,488	804,547	2,129,770	2,934,317
1994	443,124	305,798	748,922	306,673	334,281	1,345,534	1,986,488	804,547	2,129,770	2,934,317
1995	443,124	305,798	748,922	306,673	334,281	1,345,534	1,986,488	804,547	2,129,770	2,934,317
1996	443,124	305,798	748,922	306,673	334,281	1,345,534	1,986,488	804,547	2,129,770	2,934,317
1997	443,124	305,798	748,922	306,673	334,281	1,345,534	1,986,488	804,547	2,129,770	2,934,317
1998	443,124	305,798	748,922	306,673	334,281	1,345,534	1,986,488	804,547	2,129,770	2,934,317
1999	443,124	305,798	748,922	306,673	334,281	1,345,534	1,986,488	804,547	2,129,770	2,934,317
2000	443,124	305,798	748,922	306,673	334,281	1,345,534	1,986,488	804,547	2,129,770	2,934,317
2001	443,124	305,798	748,922	306,673	334,281	1,345,534	1,986,488	804,547	2,129,770	2,934,317
2002	443,124	305,798	748,922	306,673	334,281	1,345,534	1,986,488	804,547	2,129,770	2,934,317
2003	443,124	305,798	748,922	306,673	334,281	1,345,534	1,986,488	804,547	2,129,770	2,934,317
2004	443,124	305,798	748,922	306,673	334,281	1,345,534	1,986,488	804,547	2,129,770	2,934,317
2005	443,124	305,798	748,922	306,673	334,281	1,345,534	1,986,488	804,547	2,129,770	2,934,317
2006	443,124	305,798	748,922	306,673	334,281	1,345,534	1,986,488	804,547	2,129,770	2,934,317
2007	443,124	305,798	748,922	306,673	334,281	1,345,534	1,986,488	804,547	2,129,770	2,934,317
2008	443,124	305,798	748,922	306,673	334,281	1,345,534	1,986,488	804,547	2,129,770	2,934,317
2009	443,124	305,798	748,922	306,673	334,281	1,345,534	1,986,488	804,547	2,129,770	2,934,317
2010	443,124	305,798	748,922	306,673	334,281	1,345,534	1,986,488	804,547	2,129,770	2,934,317
2011	443,124	305,798	748,922	306,673	334,281	1,345,534	1,986,488	804,547	2,129,770	2,934,317
2012	443,124	305,798	748,922	306,673	334,281	1,345,534	1,986,488	804,547	2,129,770	2,934,317
2013	443,124	305,798	748,922	206,481	242,684	1,017,302	1,466,467	804,547	2,129,770	2,934,317
2014	443,124	305,798	748,922	174,121	192,422	863,342	1,229,885	797,329	2,111,882	2,909,211
2015	443,124	305,798	748,922	140,184	135,389	524,634	800,207	792,118	2,099,588	2,891,706
2016	425,029	305,798	730,827	124,188	115,172	371,607	610,967	783,695	2,079,696	2,863,391
2017	411,866	305,798	717,664	96,972	90,369	270,280	457,621	766,598	2,039,482	2,806,080
2018	378,032	305,798	683,830	62,027	57,488	171,048	290,563	753,709	2,009,094	2,762,803
2019	286,960	305,798	592,758	28,975	27,676	86,442	143,093	749,942	1,999,967	2,749,909
2020	292,436	305,798	598,234	16,525	16,040	52,498	85,063	747,890	1,994,974	2,742,864
2021	275,474	277,621	553,099	12,227	11,917	39,721	63,865	745,776	1,989,636	2,735,412
2022	271,366	272,720	544,086	10,421	10,206	33,038	53,665	744,551	1,986,608	2,731,159
2023	270,270	270,270	540,540	9,370	9,332	27,570	44,272	743,574	1,984,181	2,727,755
2024	268,672	268,959	537,631	6,199	6,071	19,466	31,735	742,365	1,981,274	2,723,639
2025	264,966	264,228	529,194	5,194	5,118	16,700	27,012	741,363	1,978,749	2,720,112
2026	264,289	261,611	525,900	2,839	2,988	11,954	17,381	637,648	1,728,433	2,366,081
2027	256,144	249,861	506,009	2,574	2,708	10,476	15,758	615,371	1,666,025	2,281,396
2028	236,850	226,139	462,989	1,782	1,676	6,447	7,934	561,642	1,525,105	2,086,747
2029	175,802	161,822	337,624	1,677	1,533	3,651	6,861	320,592	868,174	1,188,766
2030	26,697	24,140	50,837	1,625	1,486	3,338	6,449	37,812	100,832	138,644
2031	604	919	1,527	1,387	1,268	3,020	5,675	9,863	24,713	34,576
2032	37	56	93	772	705	1,682	3,160	4,088	10,036	14,124
2033	0	0	0	145	133	0	0	2,006	4,683	6,689
2034	0	0	0	0	0	0	0	1,813	4,232	6,045
2035	0	0	0	0	0	0	0	723	1,687	2,410
TOTAL	22,156,197	37,446,091	14,992,372	15,714,047	67,276,694	98,983,113	40,227,341	106,488,507	146,715,848	

a) Unadjusted for prior overpayments or underpayments of charges.

CAPITAL COST COMPONENT OF TRANSPORTATION CHARGE FOR EACH CONTRACTOR^a

(in dollars)

Sheet 2 of 4

CALENDAR YEAR	SAN JOAQUIN VALLEY									
	Devil's Den District	Dudley Ridge Water District	Empire West Side Irrigation District	Hacienda Water District	Kern County Water Agency		County of Kings	Oak Flat Water District	Tulare Lake Basin Water Storage District	Total
					Municipal and Industrial	Agricultural				
	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1960	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0
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	58,936	0	0	0	0	58,936
1966	0	0	0	0	110,364	0	0	0	0	110,364
1967	0	0	0	0	214,918	0	0	0	0	214,918
1968	27,886	58,942	2,805	0	308,777	320,980	7,540	3,428	49,632	780,090
1969	37,684	59,045	8,416	10,182	360,644	659,180	8,089	3,726	178,067	1,325,037
1970	42,960	64,713	8,416	10,606	389,879	801,762	8,317	3,975	124,441	1,459,369
1971	50,497	73,781	8,416	9,758	412,070	1,064,883	8,487	4,173	138,564	1,770,629
1972	58,034	82,437	8,416	11,031	423,482	1,594,569	8,587	4,322	148,693	2,339,571
1973	65,571	90,680	8,416	12,303	424,127	1,839,093	8,661	4,620	159,417	2,615,888
1974	73,108	99,335	8,416	14,000	432,318	2,059,508	8,794	4,769	174,218	2,874,467
1975	80,645	107,992	8,416	15,273	434,549	2,292,322	8,958	5,067	190,020	3,143,142
1976	88,181	116,648	8,416	16,546	437,405	2,594,705	8,936	5,216	205,821	3,481,874
1977	95,718	125,304	8,416	17,819	438,586	2,913,619	8,952	5,514	222,027	3,835,955
1978	95,718	133,960	8,416	19,516	438,823	3,238,732	8,953	5,813	237,828	4,187,759
1979	95,718	142,615	8,416	20,788	438,960	3,556,268	8,953	5,962	253,630	4,531,210
1980	95,718	151,271	8,416	22,061	439,127	3,880,692	8,958	6,260	269,431	4,881,934
1981	95,718	159,927	8,416	23,758	440,000	4,247,133	8,981	6,409	285,232	5,275,574
1982	95,718	168,995	8,416	25,031	441,778	4,585,333	9,039	6,707	301,033	5,642,050
1983	95,718	176,827	8,416	26,304	443,579	4,970,372	9,099	6,856	316,834	6,054,005
1984	95,718	185,895	8,416	27,576	444,576	5,317,526	9,132	7,154	332,636	6,428,629
1985	95,718	194,550	8,416	29,273	450,205	5,655,727	9,318	7,303	349,437	6,794,947
1986	95,718	203,206	8,416	30,546	453,937	5,991,172	9,441	7,601	364,643	7,164,680
1987	95,718	211,862	8,416	31,819	453,937	6,332,816	9,441	7,750	380,444	7,532,203
1988	95,718	220,518	8,416	33,092	453,937	6,651,730	9,441	8,048	396,246	7,877,146
1989	95,718	229,174	8,416	34,789	453,937	6,881,788	9,441	8,346	412,047	8,133,650
1990	95,718	237,830	8,416	36,061	453,937	7,124,934	9,441	8,495	445,675	8,420,507
1991	95,718	237,830	8,416	36,061	453,937	7,124,934	9,441	8,495	445,675	8,420,507
1992	95,718	237,830	8,416	36,061	453,937	7,124,934	9,441	8,495	445,675	8,420,507
1993	95,718	237,830	8,416	36,061	453,937	7,124,934	9,441	8,495	445,675	8,420,507
1994	95,718	237,830	8,416	36,061	453,937	7,124,934	9,441	8,495	445,675	8,420,507
1995	95,718	237,830	8,416	36,061	453,937	7,124,934	9,441	8,495	445,675	8,420,507
1996	95,718	237,830	8,416	36,061	453,937	7,124,934	9,441	8,495	445,675	8,420,507
1997	95,718	237,830	8,416	36,061	453,937	7,124,934	9,441	8,495	445,675	8,420,507
1998	95,718	237,830	8,416	36,061	453,937	7,124,934	9,441	8,495	445,675	8,420,507
1999	95,718	237,830	8,416	36,061	453,937	7,124,934	9,441	8,495	445,675	8,420,507
2000	95,718	237,830	8,416	36,061	453,937	7,124,934	9,441	8,495	445,675	8,420,507
2001	95,718	237,830	8,416	36,061	453,937	7,124,934	9,441	8,495	445,675	8,420,507
2002	95,718	237,830	8,416	36,061	453,937	7,124,934	9,441	8,495	445,675	8,420,507
2003	95,718	237,830	8,416	36,061	453,937	7,124,934	9,441	8,495	445,675	8,420,507
2004	95,718	237,830	8,416	36,061	453,937	7,124,934	9,441	8,495	445,675	8,420,507
2005	95,718	237,830	8,416	36,061	453,937	7,124,934	9,441	8,495	445,675	8,420,507
2006	95,718	237,830	8,416	36,061	453,937	7,124,934	9,441	8,495	445,675	8,420,507
2007	95,718	237,830	8,416	36,061	453,937	7,124,934	9,441	8,495	445,675	8,420,507
2008	95,718	237,830	8,416	36,061	453,937	7,124,934	9,441	8,495	445,675	8,420,507
2009	95,718	237,830	8,416	36,061	453,937	7,124,934	9,441	8,495	445,675	8,420,507
2010	95,718	237,830	8,416	36,061	453,937	7,124,934	9,441	8,495	445,675	8,420,507
2011	95,718	237,830	8,416	36,061	453,937	7,124,934	9,441	8,495	445,675	8,420,507
2012	95,718	237,830	8,416	36,061	453,937	7,124,934	9,441	8,495	445,675	8,420,507
2013	95,718	237,830	8,416	36,061	453,937	7,124,934	9,441	8,495	445,675	8,420,507
2014	95,718	237,830	8,416	36,061	453,937	7,124,934	9,441	8,495	445,675	8,420,507
2015	95,718	237,830	8,416	36,061	395,002	7,124,934	9,441	8,495	445,675	8,361,572
2016	95,718	237,830	8,416	36,061	343,574	7,124,934	9,441	8,495	445,675	8,311,144
2017	95,718	237,830	8,416	36,061	239,019	7,124,934	9,441	8,495	445,675	8,201,549
2018	95,718	237,830	8,416	36,061	145,161	7,124,934	9,441	8,495	445,675	8,104,091
2019	95,718	237,830	8,416	36,061	71,289	7,124,934	1,352	8,495	445,675	8,051,770
2020	95,718	237,830	8,416	36,061	64,654	7,124,934	1,124	8,495	445,675	8,022,311
2021	95,718	237,830	8,416	36,061	41,867	7,124,934	954	8,495	445,675	7,993,950
2022	95,718	237,830	8,416	36,061	30,455	7,124,934	555	8,495	445,675	7,964,439
2023	95,718	237,830	8,416	36,061	25,811	7,124,934	780	8,495	445,675	7,934,120
2024	95,718	237,830	8,416	36,061	21,620	7,124,934	648	8,495	445,675	7,903,397
2025	95,718	237,830	8,416	36,061	19,388	7,124,934	583	8,495	445,675	7,872,100
2026	95,718	237,830	8,416	36,061	16,532	7,124,934	506	8,495	445,675	7,841,167
2027	95,718	237,830	8,416	36,061	15,352	7,124,934	489	8,495	445,675	7,810,470
2028	95,718	237,830	8,416	36,061	15,114	7,124,934	488	8,495	445,675	7,779,731
2029	95,718	237,830	8,416	36,061	15,074	7,124,934	488	8,495	445,675	7,749,045
2030	95,718	237,830	8,416	36,061	14,811	7,124,934	483	8,495	445,675	7,718,423
2031	95,718	237,830	8,416	36,061	13,937	7,124,934	461	8,495	445,675	7,687,827
2032	95,718	237,830	8,416	36,061	12,159	7,124,934	402	8,495	445,675	7,657,420
2033	95,718	237,830	8,416	36,061	10,358	7,124,934	343	8,495	445,675	7,627,130
2034	95,718	237,830	8,416	36,061	4,361	7,124,934	310	8,495	445,675	7,596,800
2035	95,718	237,830	8,416	36,061	3,733	7,124,934	123	8,495	445,675	7,566,485
TOTAL	6,171,928	13,997,858	566,677	2,100,877	22,696,859	405,196,874	472,056	519,589	25,993,791	4,171,710,609

a) Unadjusted for prior overpayments or underpayments of charges.

TABLE B-15

CAPITAL COST COMPONENT OF TRANSPORTATION CHARGE FOR EACH CONTRACTOR^(a)

(in dollars)

Sheet 3 of 4

CALENDAR YEAR	SOUTHERN CALIFORNIA									
	Antelope Valley-East Kern Water Agency	Coachella Valley County Water District	Crestline-Lake Arrowhead Water Agency	Desert Water Agency	Little Rock Creek Irrigation District	Mojave Water Agency	Palmdale Irrigation District	San Bernardino Valley Municipal Water District	San Gabriel Valley Municipal Water District	San Geronimo Pass Water Agency
	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)
1960	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0
1963	30,709	0	0	0	0	0	0	44,418	0	0
1964	59,043	13,352	3,816	34,399	1,110	26,832	7,810	73,600	31,256	19,343
1965	110,855	23,302	6,457	37,933	1,988	47,226	14,357	122,711	32,442	20,033
1966	199,664	41,269	11,293	67,565	3,518	83,907	25,731	212,291	56,446	34,828
1967	389,119	80,292	21,775	131,922	6,813	163,595	50,271	403,980	107,900	66,532
1968	621,786	130,949	35,775	215,465	10,958	266,029	80,928	678,721	180,960	111,711
1969	898,193	194,466	53,192	320,217	16,018	394,561	117,845	1,053,737	280,836	173,582
1970	1,170,412	274,628	78,731	452,423	21,809	549,127	159,419	1,567,268	411,480	255,029
1971	1,431,875	373,776	111,896	615,941	27,257	737,208	196,891	2,245,281	580,555	360,641
1972	1,569,914	435,022	133,198	716,950	29,835	852,670	215,228	2,750,774	701,923	436,487
1973	1,606,949	451,525	138,109	744,168	30,559	885,390	220,523	2,877,411	733,405	456,074
1974	1,617,302	455,629	139,195	750,936	30,763	893,790	221,968	2,918,530	744,367	462,908
1975	1,627,366	460,428	140,472	758,851	30,947	903,584	223,288	2,954,920	754,109	468,962
1976	1,641,247	467,462	142,279	770,450	31,174	918,061	224,985	2,998,790	766,002	476,325
1977	1,659,913	470,145	142,957	774,875	31,402	923,605	226,698	3,011,003	769,350	473,383
1978	1,701,265	471,073	143,192	776,405	31,497	925,521	227,333	3,015,165	770,490	479,084
1979	1,716,462	471,225	143,230	776,655	31,501	925,824	227,438	3,015,849	770,676	479,198
1980	1,725,126	471,785	143,372	777,579	31,553	926,992	227,826	3,018,349	771,364	479,621
1981	1,944,340	472,783	143,624	779,224	31,645	929,055	228,518	3,022,810	772,588	480,373
1982	2,136,457	473,176	143,723	779,873	31,682	929,873	228,792	3,024,568	773,072	480,670
1983	2,136,388	473,523	143,811	780,445	31,714	930,596	229,034	3,026,121	773,499	480,932
1984	2,139,456	473,715	143,860	780,762	31,732	930,997	229,169	3,026,980	773,736	481,076
1985	2,145,489	474,800	144,134	782,551	31,833	933,257	229,926	3,031,830	775,071	481,894
1986	2,149,489	475,519	144,316	783,737	31,900	934,756	230,429	3,035,047	775,956	482,437
1987	2,149,489	475,519	144,316	783,737	31,900	934,756	230,429	3,035,047	775,956	482,437
1988	2,149,489	475,519	144,316	783,737	31,900	934,756	230,429	3,035,047	775,956	482,437
1989	2,149,489	475,519	144,316	783,737	31,900	934,756	230,429	3,035,047	775,956	482,437
1990	2,149,489	475,519	144,316	783,737	31,900	934,756	230,429	3,035,047	775,956	482,437
1991	2,149,489	475,519	144,316	783,737	31,900	934,756	230,429	3,035,047	775,956	482,437
1992	2,149,489	475,519	144,316	783,737	31,900	934,756	230,429	3,035,047	775,956	482,437
1993	2,149,489	475,519	144,316	783,737	31,900	934,756	230,429	3,035,047	775,956	482,437
1994	2,149,489	475,519	144,316	783,737	31,900	934,756	230,429	3,035,047	775,956	482,437
1995	2,149,489	475,519	144,316	783,737	31,900	934,756	230,429	3,035,047	775,956	482,437
1996	2,149,489	475,519	144,316	783,737	31,900	934,756	230,429	3,035,047	775,956	482,437
1997	2,149,489	475,519	144,316	783,737	31,900	934,756	230,429	3,035,047	775,956	482,437
1998	2,149,489	475,519	144,316	783,737	31,900	934,756	230,429	3,035,047	775,956	482,437
1999	2,149,489	475,519	144,316	783,737	31,900	934,756	230,429	3,035,047	775,956	482,437
2000	2,149,489	475,519	144,316	783,737	31,900	934,756	230,429	3,035,047	775,956	482,437
2001	2,149,489	475,519	144,316	783,737	31,900	934,756	230,429	3,035,047	775,956	482,437
2002	2,149,489	475,519	144,316	783,737	31,900	934,756	230,429	3,035,047	775,956	482,437
2003	2,149,489	475,519	144,316	783,737	31,900	934,756	230,429	3,035,047	775,956	482,437
2004	2,149,489	475,519	144,316	783,737	31,900	934,756	230,429	3,035,047	775,956	482,437
2005	2,149,489	475,519	144,316	783,737	31,900	934,756	230,429	3,035,047	775,956	482,437
2006	2,149,489	475,519	144,316	783,737	31,900	934,756	230,429	3,035,047	775,956	482,437
2007	2,149,489	475,519	144,316	783,737	31,900	934,756	230,429	3,035,047	775,956	482,437
2008	2,149,489	475,519	144,316	783,737	31,900	934,756	230,429	3,035,047	775,956	482,437
2009	2,149,489	475,519	144,316	783,737	31,900	934,756	230,429	3,035,047	775,956	482,437
2010	2,149,489	475,519	144,316	783,737	31,900	934,756	230,429	3,035,047	775,956	482,437
2011	2,149,489	475,519	144,316	783,737	31,900	934,756	230,429	3,035,047	775,956	482,437
2012	2,149,489	475,519	144,316	783,737	31,900	934,756	230,429	3,035,047	775,956	482,437
2013	2,118,780	475,519	144,316	771,360	31,900	934,756	230,429	2,990,629	764,404	475,284
2014	2,099,446	462,167	140,500	762,212	30,790	907,924	222,618	2,961,444	756,717	470,534
2015	2,038,434	462,217	137,859	745,804	29,912	887,530	214,072	2,912,336	743,514	462,403
2016	1,944,425	434,250	133,023	716,172	28,382	850,848	204,698	2,822,755	719,510	447,609
2017	1,760,370	395,227	122,541	651,815	25,087	771,161	180,157	2,631,067	668,056	415,905
2018	1,527,703	344,570	108,541	568,271	20,941	668,727	149,501	2,356,326	594,996	370,725
2019	1,251,296	281,053	91,124	463,514	15,882	540,195	112,583	1,981,310	495,120	304,854
2020	979,476	200,891	65,545	331,314	10,091	389,629	71,009	1,467,778	364,476	227,408
2021	717,614	161,743	32,420	167,796	4,643	197,547	33,538	789,764	195,401	121,795
2022	583,575	40,497	11,118	66,786	2,065	82,086	15,200	284,271	74,033	45,950
2023	542,540	23,934	6,207	39,569	1,341	49,365	9,905	157,636	42,551	26,363
2024	532,187	19,890	5,121	32,801	1,136	40,965	8,461	116,516	31,589	19,529
2025	522,143	15,091	3,844	24,886	953	31,172	7,141	80,127	21,847	13,475
2026	504,242	8,057	2,037	13,287	726	19,694	5,444	36,257	9,954	6,112
2027	449,474	5,374	1,359	8,862	497	11,151	3,730	24,044	4,053	4,053
2028	444,224	4,446	1,124	7,332	412	9,234	3,095	19,889	5,466	3,352
2029	432,587	4,294	1,086	7,082	399	8,921	2,990	19,205	5,280	3,238
2030	424,362	3,734	944	6,157	347	7,763	2,602	16,698	4,592	2,815
2031	205,144	2,736	692	4,512	255	5,701	1,911	12,237	3,368	2,063
2032	13,032	2,343	593	3,864	218	4,883	1,637	10,478	2,884	1,767
2033	11,101	1,996	505	3,291	186	4,159	1,394	8,926	2,457	1,505
2034	10,032	1,804	456	2,975	168	3,759	1,260	8,067	2,220	1,360
2035	9,000	719	182	1,186	67	1,499	502	3,216	865	542
TOTAL	107,474,447	23,775,950	7,215,800	39,187,341	1,594,996	44,737,791	11,521,438	151,752,344	38,798,265	24,122,126

CAPITAL COST COMPONENT OF TRANSPORTATION CHARGE FOR EACH CONTRACTOR ^(a)

(in dollars)

Sheet 4 of 4

CALENDAR YEAR	SOUTHERN CALIFORNIA (Continued)				FEATHER RIVER AREA				FUTURE CONTRACTOR South Bay	GRAND TOTAL
	The Metropolitan Water District of Southern California	Upper Santa Clara Valley	Ventura County Flood Control	Total	City of Yuba City	Butte County	Plumas County FC & WCD	Total		
	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)
1960	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0
1963	631,639	0	0	706,766	0	0	0	0	41,927	1,262,419
1964	1,183,827	18,636	9,764	1,481,789	0	0	0	0	73,145	2,310,563
1965	2,049,414	35,384	16,573	2,509,675	0	0	407	407	119,398	3,884,997
1966	3,632,249	66,971	31,081	4,466,713	0	0	551	551	139,930	6,146,968
1967	7,175,174	137,702	63,551	8,798,626	0	0	548	548	181,010	10,853,715
1968	13,333,246	270,983	121,727	16,061,333	0	0	670	670	256,889	19,035,070
1969	20,274,987	410,232	187,672	24,374,889	0	0	3,055	3,055	319,093	28,155,358
1970	25,366,579	523,766	239,017	32,609,788	0	0	13,897	13,897	340,610	36,624,722
1971	35,276,399	656,496	297,410	42,911,626	0	0	14,683	14,683	348,855	47,310,014
1972	41,666,814	726,651	327,344	50,558,812	0	0	14,683	14,683	353,113	55,606,400
1973	43,945,532	732,327	328,201	53,150,173	0	0	14,683	14,683	358,341	58,496,314
1974	45,113,637	746,865	332,953	56,434,843	0	0	14,683	14,683	361,756	60,063,470
1975	45,571,021	753,837	335,845	56,983,610	0	0	14,683	14,683	362,726	60,896,467
1976	45,961,945	758,287	337,936	55,494,943	0	0	14,683	14,683	367,400	62,119,266
1977	46,177,503	762,564	337,977	55,768,475	0	0	14,683	14,683	367,551	62,853,226
1978	46,256,942	764,184	340,746	55,902,897	0	0	14,683	14,683	368,195	63,585,579
1979	46,272,463	764,521	340,899	55,938,344	0	0	14,683	14,683	368,283	64,086,933
1980	46,369,781	766,554	341,812	56,052,014	0	0	14,683	14,683	368,301	66,790,531
1981	46,529,476	770,635	343,309	56,448,388	0	0	14,683	14,683	368,387	67,734,972
1982	46,562,135	771,297	343,628	56,678,946	0	0	14,683	14,683	368,608	68,356,636
1983	46,593,997	771,882	343,910	56,714,852	0	0	14,683	14,683	368,834	68,814,817
1984	46,606,974	772,206	344,066	56,734,972	0	0	14,683	14,683	368,887	69,210,610
1985	46,697,146	774,034	344,947	56,846,912	0	0	14,683	14,683	368,887	69,696,746
1986	46,756,942	775,247	345,532	56,921,307	0	0	14,683	14,683	368,887	70,139,284
1987	46,756,942	775,247	345,532	56,921,307	0	0	14,683	14,683	368,887	70,506,807
1988	46,756,942	775,247	345,532	56,921,307	0	0	14,683	14,683	368,887	70,851,750
1989	46,756,942	775,247	345,532	56,921,307	0	0	14,683	14,683	368,887	71,108,260
1990	46,756,942	775,247	345,532	56,921,307	0	0	14,683	14,683	368,887	71,395,111
1991	46,756,942	775,247	345,532	56,921,307	0	0	14,683	14,683	368,887	71,395,111
1992	46,756,942	775,247	345,532	56,921,307	0	0	14,683	14,683	368,887	71,395,111
1993	46,756,942	775,247	345,532	56,921,307	0	0	14,683	14,683	368,887	71,395,111
1994	46,756,942	775,247	345,532	56,921,307	0	0	14,683	14,683	368,887	71,395,111
1995	46,756,942	775,247	345,532	56,921,307	0	0	14,683	14,683	368,887	71,395,111
1996	46,756,942	775,247	345,532	56,921,307	0	0	14,683	14,683	368,887	71,395,111
1997	46,756,942	775,247	345,532	56,921,307	0	0	14,683	14,683	368,887	71,395,111
1998	46,756,942	775,247	345,532	56,921,307	0	0	14,683	14,683	368,887	71,395,111
1999	46,756,942	775,247	345,532	56,921,307	0	0	14,683	14,683	368,887	71,395,111
2000	46,756,942	775,247	345,532	56,921,307	0	0	14,683	14,683	368,887	71,395,111
2001	46,756,942	775,247	345,532	56,921,307	0	0	14,683	14,683	368,887	71,395,111
2002	46,756,942	775,247	345,532	56,921,307	0	0	14,683	14,683	368,887	71,395,111
2003	46,756,942	775,247	345,532	56,921,307	0	0	14,683	14,683	368,887	71,395,111
2004	46,756,942	775,247	345,532	56,921,307	0	0	14,683	14,683	368,887	71,395,111
2005	46,756,942	775,247	345,532	56,921,307	0	0	14,683	14,683	368,887	71,395,111
2006	46,756,942	775,247	345,532	56,921,307	0	0	14,683	14,683	368,887	71,395,111
2007	46,756,942	775,247	345,532	56,921,307	0	0	14,683	14,683	368,887	71,395,111
2008	46,756,942	775,247	345,532	56,921,307	0	0	14,683	14,683	368,887	71,395,111
2009	46,756,942	775,247	345,532	56,921,307	0	0	14,683	14,683	368,887	71,395,111
2010	46,756,942	775,247	345,532	56,921,307	0	0	14,683	14,683	368,887	71,395,111
2011	46,756,942	775,247	345,532	56,921,307	0	0	14,683	14,683	368,887	71,395,111
2012	46,756,942	775,247	345,532	56,921,307	0	0	14,683	14,683	368,887	71,395,111
2013	46,125,303	775,247	345,532	56,183,459	0	0	14,683	14,683	326,960	70,095,315
2014	45,573,116	756,611	335,767	55,471,884	0	0	14,683	14,683	295,742	69,090,798
2015	44,716,528	739,862	328,959	54,411,630	0	0	14,276	14,276	249,488	67,477,801
2016	43,124,594	708,375	314,450	52,454,591	0	0	14,132	14,132	228,957	65,213,009
2017	39,591,768	637,545	281,981	48,122,689	0	0	14,135	14,135	187,877	60,501,646
2018	33,423,696	505,164	221,805	40,880,966	0	0	14,013	14,013	111,998	52,774,264
2019	26,482,856	365,015	157,660	32,546,467	0	0	11,628	11,628	49,794	44,145,419
2020	19,850,264	251,480	106,514	24,311,515	0	0	786	786	28,277	35,779,050
2021	11,480,544	118,751	48,122	14,009,689	0	0	0	0	20,032	25,382,038
2022	5,090,129	48,596	18,197	6,362,493	0	0	0	0	15,774	17,696,210
2023	2,811,411	42,920	17,331	3,771,133	0	0	0	0	10,546	15,077,896
2024	1,537,306	28,382	12,579	2,686,462	0	0	0	0	7,131	13,764,995
2025	1,185,921	21,410	9,687	1,937,697	0	0	0	0	6,160	13,198,375
2026	794,997	16,959	7,596	1,426,362	0	0	0	0	1,487	12,311,378
2027	579,339	12,682	5,554	1,152,827	0	0	0	0	1,336	11,930,296
2028	500,001	11,063	4,785	1,018,416	0	0	0	0	692	11,549,509
2029	484,480	10,726	4,632	988,920	0	0	0	0	604	10,491,570
2030	387,161	8,393	3,720	869,288	0	0	0	0	585	9,038,426
2031	227,467	4,611	2,222	472,924	0	0	0	0	500	8,486,729
2032	194,808	3,949	1,903	242,359	0	0	0	0	278	8,229,704
2033	165,945	3,364	1,621	206,450	0	0	0	0	52	8,181,615
2034	149,969	3,040	1,465	186,575	0	0	0	0	0	8,159,420
2035	59,796	1,212	584	74,370	0	0	0	0	0	8,037,785
TOTAL	2,337,847,113	38,762,340	17,276,588	2,846,066,539	0	0	734,150	734,150	18,444,345	3,626,106,695

a) Unadjusted for prior overpayments or underpayments of charges.

TABLE B-16

MINIMUM OMP&R COMPONENT OF TRANSPORTATION CHARGE FOR EACH CONTRACTOR ^(a)

(in dollars)

Sheet 1 of 4

CALENDAR YEAR	NORTH BAY AREA			SOUTH BAY AREA				CENTRAL COASTAL AREA		
	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
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1960	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	19,388	17,725	0	37,113	0	0	0
1963	0	0	0	37,833	34,591	82,369	154,793	0	0	0
1964	0	0	0	40,783	38,001	90,489	169,273	0	0	0
1965	0	0	0	78,014	76,331	212,720	367,065	0	0	0
1966	0	0	0	78,271	74,154	220,133	376,558	0	0	0
1967	0	0	0	122,353	119,635	329,190	571,178	0	0	0
1968	0	0	0	109,265	105,789	295,223	510,277	12,378	28,494	41,276
1969	92,104	0	92,104	131,785	125,611	339,720	597,116	65,697	153,372	213,069
1970	96,000	0	96,000	126,390	119,870	316,372	562,632	79,664	185,980	265,644
1971	98,000	0	98,000	118,583	112,782	299,668	531,033	59,703	139,382	199,085
1972	107,000	0	107,000	128,269	122,159	323,327	573,755	62,262	145,357	207,619
1973	111,000	0	111,000	133,251	126,996	335,235	595,482	65,575	153,092	213,667
1974	112,000	0	112,000	135,337	128,970	339,956	604,263	68,521	159,967	224,488
1975	112,000	0	112,000	132,800	126,417	333,811	593,028	68,302	159,460	227,762
1976	112,000	0	112,000	133,244	126,814	334,783	594,841	68,577	160,102	224,679
1977	116,000	0	116,000	132,641	126,228	333,382	592,251	68,978	161,034	230,012
1978	120,000	0	120,000	132,961	126,555	333,166	592,682	68,863	160,766	229,629
1979	120,000	0	120,000	132,884	126,486	332,996	592,366	68,734	160,465	229,199
1980	125,917	89,083	215,000	132,795	126,405	333,802	593,002	176,381	449,897	626,278
1981	118,936	83,064	202,000	133,347	126,906	335,010	595,263	170,570	430,815	601,385
1982	119,334	83,666	203,000	133,809	127,328	336,014	597,151	167,484	419,120	586,604
1983	119,334	83,666	203,000	134,272	127,817	337,201	599,290	168,511	423,267	591,878
1984	119,334	83,666	203,000	134,664	128,213	338,140	601,017	169,395	425,928	595,323
1985	118,936	83,064	202,000	134,828	128,361	337,497	600,646	167,581	419,036	586,617
1986	119,334	83,666	203,000	135,174	128,991	340,626	604,791	168,546	422,104	590,650
1987	119,334	83,666	203,000	135,174	128,991	340,626	604,791	168,478	421,948	590,426
1988	119,334	83,666	203,000	135,174	128,991	340,626	604,791	167,848	419,653	587,501
1989	119,732	84,268	204,000	135,174	128,991	340,626	604,791	167,981	419,965	587,946
1990	119,334	83,666	203,000	135,174	128,991	340,626	604,791	167,755	419,931	586,686
1991	119,334	83,666	203,000	135,174	128,991	340,626	604,791	167,286	417,327	584,613
1992	119,334	83,666	203,000	134,835	128,646	339,800	603,281	167,296	417,353	584,649
1993	119,334	83,666	203,000	134,835	128,646	339,800	603,281	167,296	417,353	584,649
1994	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
1995	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
1996	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
1997	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
1998	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
1999	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2000	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2001	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2002	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2003	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2004	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2005	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2006	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2007	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2008	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2009	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2010	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2011	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2012	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2013	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2014	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2015	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2016	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2017	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2018	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2019	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2020	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2021	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2022	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2023	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2024	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2025	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2026	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2027	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2028	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2029	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2030	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2031	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2032	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2033	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2034	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
2035	119,334	83,666	203,000	134,589	128,423	338,265	601,277	167,274	417,303	584,577
TOTALS	7,884,993	4,690,111	12,575,104	9,461,219	9,029,148	23,800,690	42,291,057	10,145,270	25,217,298	35,362,568

a) Unadjusted for prior overpayments or underpayments of charges.

MINIMUM OMP&R COMPONENT OF TRANSPORTATION CHARGE FOR EACH CONTRACTOR ^(a)

(in dollars)

Sheet 2 of 4

CALENDAR YEAR	SAN JOAQUIN VALLEY									
	Devil's Den Water District	Dudley Ridge Water District	Empire West Side Irrigation District	Hacienda Water District	Kern County Water Agency		County of Kings	Oak Flat Water District	Tulare Lake Basin Water Storage District	Total
					Municipal and Industrial	Agriculture				
	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1960	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0
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	8,804	39,798	2,066	5,863	63,901	713,807	2,115	2,166	75,817	914,337
1969	46,140	45,361	2,230	6,683	82,577	1,184,509	2,280	2,176	83,839	1,455,795
1970	55,955	56,179	2,753	8,276	118,569	1,572,285	2,816	2,723	103,693	1,923,249
1971	41,986	56,629	2,766	8,342	135,892	1,668,842	2,830	2,669	104,318	2,024,274
1972	43,791	60,457	2,963	8,906	144,936	1,742,577	3,029	2,882	111,555	2,121,096
1973	46,121	63,332	3,100	9,331	152,128	1,829,427	3,171	3,027	116,822	2,226,459
1974	48,186	64,680	3,162	9,528	156,434	1,886,274	3,236	3,057	119,238	2,293,795
1975	48,034	64,657	3,161	9,524	156,311	1,883,910	3,235	3,065	119,214	2,291,111
1976	48,226	64,526	3,154	9,507	156,179	1,884,004	3,227	3,042	118,945	2,290,810
1977	48,505	64,458	3,151	9,497	156,053	1,885,399	3,223	3,035	118,815	2,292,136
1978	48,428	65,103	3,181	9,590	157,542	1,899,440	3,253	3,048	119,968	2,309,553
1979	48,337	65,026	3,177	9,579	157,361	1,896,783	3,250	3,057	119,840	2,306,410
1980	47,892	64,731	3,161	9,536	157,364	1,885,972	3,233	3,005	119,239	2,293,333
1981	47,327	65,121	3,180	9,593	158,184	1,896,751	3,252	3,018	119,984	2,306,390
1982	47,374	65,335	3,191	9,624	158,707	1,902,258	3,263	3,024	120,351	2,313,127
1983	47,443	66,223	3,234	9,755	160,947	1,925,849	3,306	3,016	121,945	2,341,918
1984	47,738	66,314	3,238	9,769	161,089	1,927,918	3,311	3,011	122,120	2,344,508
1985	47,801	66,599	3,249	9,811	161,956	1,936,816	3,325	3,021	122,624	2,355,202
1986	47,806	66,291	3,233	9,766	161,550	1,932,578	3,308	3,026	122,039	2,349,597
1987	47,758	66,077	3,224	9,734	161,058	1,927,353	3,297	3,021	121,650	2,343,172
1988	47,774	66,148	3,228	9,745	161,211	1,929,087	3,301	3,021	121,786	2,345,361
1989	47,657	65,951	3,218	9,715	160,718	1,923,481	3,291	3,018	121,430	2,338,479
1990	47,814	66,327	3,235	9,772	161,699	1,933,988	3,310	3,026	122,107	2,351,278
1991	47,798	66,256	3,232	9,760	161,532	1,932,340	3,306	3,025	121,971	2,349,220
1992	47,806	66,292	3,234	9,766	161,648	1,933,388	3,308	3,025	122,039	2,350,506
1993	47,806	66,292	3,234	9,766	161,648	1,933,388	3,308	3,025	122,039	2,350,506
1994	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
1995	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
1996	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
1997	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
1998	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
1999	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2000	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2001	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2002	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2003	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2004	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2005	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2006	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2007	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2008	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2009	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2010	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2011	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2012	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2013	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2014	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2015	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2016	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2017	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2018	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2019	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2020	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2021	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2022	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2023	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2024	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2025	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2026	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2027	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2028	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2029	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2030	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2031	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2032	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2033	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2034	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
2035	47,790	66,223	3,230	9,755	161,484	1,931,761	3,304	3,021	121,906	2,348,474
TOTAL	3,206,887	4,415,529	215,615	650,448	10,669,522	128,102,346	220,752	203,111	8,133,420	155,817,470

TABLE B-16

MINIMUM OMP&R COMPONENT OF TRANSPORTATION CHARGE FOR EACH CONTRACTOR^(a)

(in dollars)

Sheet 3 of 4

CALENDAR YEAR	SOUTHERN CALIFORNIA									
	Antelope Valley-East Kern Water Agency	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 Geronimo Pass Water Agency
	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)
1960	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0
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	68,504	12,314	3,113	20,308	1,146	25,666	8,602	55,072	15,159	9,285
1969	88,504	15,911	4,025	25,241	1,478	33,159	11,115	71,161	19,584	11,996
1970	131,383	23,631	5,977	38,975	2,197	49,223	16,501	105,694	29,086	17,821
1971	241,111	43,477	10,998	71,702	4,055	90,335	30,284	194,444	53,459	32,783
1972	419,433	141,592	37,229	233,513	8,305	288,818	58,488	670,970	180,766	111,352
1973	436,544	146,392	38,656	241,446	8,633	299,817	60,870	831,018	223,738	138,023
1974	448,236	149,672	41,073	246,843	8,817	303,217	62,262	872,891	232,455	143,657
1975	447,792	147,539	39,053	243,326	8,802	301,947	62,166	836,120	224,998	138,810
1976	448,510	146,777	37,769	242,066	8,831	302,722	62,351	811,860	220,317	135,732
1977	447,009	148,966	40,736	245,676	8,821	302,098	62,259	864,233	230,408	142,357
1978	449,605	147,629	38,465	243,472	8,860	303,473	62,543	823,355	222,645	137,244
1979	450,236	147,576	37,951	243,363	8,881	304,416	62,666	814,493	221,080	136,192
1980	453,587	150,427	40,347	248,088	8,950	306,744	63,151	857,574	229,930	141,932
1981	509,726	150,341	40,829	247,945	8,873	305,495	62,559	866,640	231,508	142,988
1982	491,317	154,976	45,869	255,590	8,909	306,822	62,826	956,323	249,243	154,576
1983	497,654	152,647	40,217	251,745	9,063	312,814	63,862	855,965	230,704	142,282
1984	498,462	150,925	37,641	248,907	9,091	313,824	64,025	810,044	221,904	136,496
1985	500,844	156,217	43,206	257,630	9,140	315,742	64,372	909,060	241,568	149,328
1986	502,293	159,604	46,334	263,221	9,187	317,896	64,667	965,089	252,896	156,697
1987	502,467	155,262	40,490	256,057	9,202	319,039	64,757	861,270	232,838	143,526
1988	503,952	157,484	42,510	259,721	9,244	320,517	65,020	897,169	240,097	148,244
1989	503,454	157,093	42,141	259,077	9,238	320,288	64,981	890,581	238,771	147,385
1990	503,022	158,919	43,952	262,070	9,266	321,189	65,185	922,751	245,204	151,576
1991	504,732	157,510	42,468	259,929	9,261	320,945	65,142	896,372	240,016	148,182
1992	505,111	158,224	43,105	260,944	9,267	321,184	65,183	907,705	242,268	149,651
1993	505,111	158,224	43,105	260,944	9,267	321,184	65,183	907,705	242,268	149,651
1994	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
1995	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
1996	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
1997	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
1998	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
1999	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2000	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2001	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2002	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2003	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2004	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2005	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2006	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2007	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2008	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2009	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2010	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2011	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2012	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2013	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2014	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2015	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2016	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2017	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2018	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2019	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2020	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2021	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2022	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2023	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2024	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2025	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2026	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2027	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2028	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2029	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2030	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2031	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2032	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2033	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2034	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
2035	504,619	158,087	43,070	260,716	9,258	320,902	65,125	906,942	242,058	149,521
TOTAL	32,255,297	10,089,083	2,736,909	16,638,901	595,600	20,506,458	4,196,270	57,547,123	15,379,346	9,497,648

MINIMUM OMP&R COMPONENT OF TRANSPORTATION CHARGE FOR EACH CONTRACTOR^(a)

(in dollars)

Sheet 4 of 4

CALENDAR YEAR	SOUTHERN CALIFORNIA (Continued)				FEATHER RIVER AREA				FUTURE CONTRACTOR	GRAND TOTAL
	The Metropolitan Water District of Southern California	Upper Santa Clara Valley Water Agency	Ventura County Flood Control District	Total	City of Yuba City	Butte County	Plumas County FC & WCD	Total		
	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	South Bay	
1960	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	37,113
1963	0	0	0	0	0	0	0	0	12,613	167,406
1964	0	0	0	0	0	0	0	0	13,885	183,158
1965	0	0	0	0	0	0	0	0	29,796	396,861
1966	0	0	0	0	0	0	0	0	30,886	407,444
1967	0	0	0	0	0	0	0	0	46,801	617,979
1968	1,024,008	20,761	10,006	1,273,944	0	0	0	0	41,774	2,781,668
1969	1,328,748	26,821	12,924	1,651,667	0	0	0	0	48,378	4,084,129
1970	1,980,030	39,819	19,190	2,459,527	0	0	0	0	99,948	5,407,000
1971	3,664,016	73,073	35,217	4,548,934	0	0	200	200	86,674	7,488,200
1972	8,193,375	131,125	62,364	10,538,030	0	0	200	200	94,500	13,642,200
1973	9,828,104	150,082	69,245	12,472,559	0	0	200	200	96,834	15,721,200
1974	17,095,384	148,145	69,155	12,821,807	0	0	200	200	98,647	16,159,200
1975	10,191,953	148,290	69,198	12,860,004	0	0	200	200	94,095	16,178,200
1976	9,372,909	135,210	64,930	11,989,984	0	0	200	200	95,686	15,312,200
1977	9,811,204	144,400	68,027	12,517,494	0	0	200	200	95,107	15,843,200
1978	10,142,109	152,530	70,615	12,802,545	0	0	200	200	95,591	16,150,200
1979	10,199,874	150,875	70,097	12,847,720	0	0	200	200	95,205	16,191,100
1980	9,830,584	139,873	66,630	12,537,321	0	0	200	200	95,166	16,360,300
1981	10,426,148	153,552	71,083	13,217,687	0	0	200	200	96,075	17,019,000
1982	10,275,512	140,986	67,039	13,169,988	0	0	200	200	96,230	16,966,300
1983	10,393,322	153,170	71,274	13,174,719	0	0	200	200	97,495	17,008,500
1984	10,295,123	153,615	71,455	13,011,512	0	0	200	200	97,640	16,853,200
1985	10,830,957	159,944	73,630	13,711,638	0	0	200	200	98,057	17,554,400
1986	11,064,577	151,859	71,020	14,025,340	0	0	200	200	98,122	17,871,700
1987	10,775,839	160,109	73,733	13,594,589	0	0	200	200	98,122	17,434,300
1988	10,941,388	158,413	73,226	13,810,985	0	0	200	200	98,122	17,655,900
1989	10,241,536	151,259	70,858	13,099,662	0	0	200	200	98,122	16,930,200
1990	10,923,590	159,093	73,466	13,841,123	0	0	200	200	98,122	17,685,200
1991	10,940,459	162,001	74,437	13,821,554	0	0	200	200	98,122	17,661,500
1992	10,903,476	159,336	73,578	13,798,932	0	0	200	200	97,632	17,638,200
1993	10,903,476	159,336	73,578	13,798,932	0	0	200	200	97,632	17,638,200
1994	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
1995	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
1996	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
1997	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
1998	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
1999	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2000	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2001	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2002	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2003	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2004	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2005	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2006	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2007	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2008	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2009	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2010	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2011	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2012	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2013	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2014	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2015	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2016	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2017	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2018	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2019	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2020	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2021	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2022	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2023	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2024	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2025	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2026	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2027	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2028	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2029	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2030	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2031	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2032	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2033	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2034	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
2035	10,893,121	159,191	73,512	13,786,122	0	0	200	200	97,550	17,621,200
TOTAL	697,022,197	10,170,009	4,713,479	476,414,320	0	0	13,000	13,000	6,639,179	1,129,115,698

(a) Unadjusted for prior overpayments or underpayments of charges.

TABLE B-17

UNIT VARIABLE OMP&R COMPONENT OF TRANSPORTATION CHARGE

(in dollars per acre-foot)

Sheet 1 of 3

Calendar Year	NORTH BAY AQUEDUCT				SOUTH BAY AQUEDUCT		CALIFORNIA AQUEDUCT			
	Reach 1		Reach 3		Reach 1		Reach 1		Reach 4	
	Calhoun and Travis Pumping Plants		Cordelia Pumping Plant		South Bay and Del Valle Pumping Plant (b)		Delta Pumping Plant		Dos Amigos Pumping Plant	
	Unit Rate	Cumulative Unit Rate	Unit Rate	Cumulative Unit Rate	Unit Rate	Cumulative Unit Rate	Unit Rate	Cumulative Unit Rate	Unit Rate	Cumulative Unit Rate
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1961	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	4,237,480 ^a	4,237,480 ^a	0	0	0	0
1963	0	0	0	0	4,687,307 ^a	4,687,307 ^a	0	0	0	0
1964	0	0	0	0	3,562,144 ^a	3,562,144 ^a	0	0	0	0
1965	0	0	0	0	4,226,356 ^a	4,226,356 ^a	0	0	0	0
1966	0	0	0	0	3,546,537 ^a	3,546,537 ^a	0	0	0	0
1967	0	0	0	0	3,860,736 ^a	5,460,927 ^a	1,600,190 ^a	1,600,190 ^a	0	0
1968	0	0	5,732,290 ^a	5,732,290 ^a	3,249,072 ^a	4,681,515 ^a	1,432,443 ^a	1,432,443 ^a	1,097,755 ^a	2,530,199 ^a
1969	0	0	1,941,570 ^a	1,941,570 ^a	2,201,945 ^a	3,366,041 ^a	1,164,965 ^a	1,164,965 ^a	513,381 ^a	1,677,478 ^a
1970	0	0	3,437,269 ^a	3,437,269 ^a	4,221,046 ^a	5,145,267 ^a	924,202 ^a	924,202 ^a	798,813 ^a	1,723,016 ^a
1971	0	0	3,396,739 ^a	3,396,739 ^a	4,307,250 ^a	5,236,518 ^a	929,268 ^a	929,268 ^a	570,532 ^a	1,499,800 ^a
1972	0	0	5,775,401 ^a	5,775,401 ^a	6,968,520 ^a	7,882,750 ^a	914,230 ^a	914,230 ^a	707,498 ^a	1,621,728 ^a
1973	0	0	4,795,204 ^a	4,795,204 ^a	5,696,420 ^a	6,604,926 ^a	908,509 ^a	908,509 ^a	641,303 ^a	1,549,805 ^a
1974	0	0	4,770,642 ^a	4,770,642 ^a	6,172,778 ^a	7,095,556 ^a	922,779 ^a	922,779 ^a	688,682 ^a	1,611,461 ^a
1975	0	0	3,872,053 ^a	3,872,053 ^a	5,112,000 ^a	6,030,145 ^a	918,145 ^a	918,145 ^a	631,222 ^a	1,549,364 ^a
1976	0	0	3,677,822 ^a	3,677,822 ^a	4,879,984 ^a	5,794,746 ^a	914,762 ^a	914,762 ^a	752,684 ^a	1,667,447 ^a
1977	0	0	3,229,166 ^a	3,229,166 ^a	4,900,622 ^a	5,878,686 ^a	978,064 ^a	978,064 ^a	743,996 ^a	1,720,601 ^a
1978	0	0	2,857,142 ^a	2,857,142 ^a	4,507,123 ^a	6,093,903 ^a	1,586,780 ^a	1,586,780 ^a	699,465 ^a	2,286,248 ^a
1979	0	0	2,434,782 ^a	2,434,782 ^a	3,604,747 ^a	4,681,531 ^a	1,076,784 ^a	1,076,784 ^a	636,144 ^a	1,712,928 ^a
1980	493,922 ^a	493,922 ^a	2,896,000 ^a	3,389,922 ^a	3,399,985 ^a	5,001,613 ^a	1,601,621 ^a	1,601,621 ^a	651,167 ^a	2,252,790 ^a
1981	526,985 ^a	526,985 ^a	3,141,812 ^a	3,668,067 ^a	3,234,321 ^a	4,528,950 ^a	1,294,637 ^a	1,294,637 ^a	589,177 ^a	1,883,785 ^a
1982	511,639 ^a	511,639 ^a	3,013,333 ^a	3,524,972 ^a	3,150,143 ^a	4,849,241 ^a	1,699,097 ^a	1,699,097 ^a	578,746 ^a	2,277,843 ^a
1983	436,042 ^a	436,042 ^a	2,904,615 ^a	3,406,575 ^a	3,000,070 ^a	4,423,876 ^a	1,423,816 ^a	1,423,816 ^a	567,219 ^a	1,991,036 ^a
1984	405,861 ^a	405,861 ^a	2,811,428 ^a	3,217,290 ^a	2,834,220 ^a	4,406,284 ^a	1,572,064 ^a	1,572,064 ^a	515,274 ^a	2,087,338 ^a
1985	460,341 ^a	460,341 ^a	2,730,667 ^a	3,191,003 ^a	2,799,444 ^a	4,278,416 ^a	1,478,972 ^a	1,478,972 ^a	506,901 ^a	1,985,872 ^a
1986	524,006 ^a	524,006 ^a	2,910,000 ^a	3,434,006 ^a	2,796,569 ^a	3,913,173 ^a	1,116,604 ^a	1,116,604 ^a	508,962 ^a	1,625,563 ^a
1987	468,637 ^a	468,637 ^a	2,785,824 ^a	3,254,520 ^a	2,737,531 ^a	3,810,221 ^a	1,072,689 ^a	1,072,689 ^a	503,013 ^a	1,575,702 ^a
1988	434,430 ^a	434,430 ^a	2,675,556 ^a	3,109,980 ^a	2,724,689 ^a	3,845,756 ^a	1,121,087 ^a	1,121,087 ^a	521,517 ^a	1,642,639 ^a
1989	375,226 ^a	375,226 ^a	2,492,316 ^a	2,867,855 ^a	2,616,611 ^a	3,903,768 ^a	1,287,149 ^a	1,287,149 ^a	506,225 ^a	1,793,375 ^a
1990	361,369 ^a	361,369 ^a	2,448,000 ^a	2,809,369 ^a	2,592,523 ^a	3,866,113 ^a	1,273,596 ^a	1,273,596 ^a	497,334 ^a	1,770,925 ^a
1991	361,369 ^a	361,369 ^a	2,448,000 ^a	2,809,369 ^a	2,544,268 ^a	3,769,973 ^a	1,225,710 ^a	1,225,710 ^a	500,252 ^a	1,725,962 ^a
1992	361,369 ^a	361,369 ^a	2,448,000 ^a	2,809,369 ^a	2,465,037 ^a	3,727,537 ^a	1,262,493 ^a	1,262,493 ^a	500,921 ^a	1,763,420 ^a
1993	361,369 ^a	361,369 ^a	2,448,000 ^a	2,809,369 ^a	2,390,597 ^a	3,651,520 ^a	1,260,923 ^a	1,260,923 ^a	500,921 ^a	1,761,844 ^a
1994	361,369 ^a	361,369 ^a	2,448,000 ^a	2,809,369 ^a	2,331,708 ^a	3,591,317 ^a	1,259,608 ^a	1,259,608 ^a	500,921 ^a	1,760,529 ^a
1995	361,369 ^a	361,369 ^a	2,448,000 ^a	2,809,369 ^a	2,307,000 ^a	3,566,037 ^a	1,259,037 ^a	1,259,037 ^a	500,921 ^a	1,759,958 ^a
1996	361,369 ^a	361,369 ^a	2,448,000 ^a	2,809,369 ^a	2,282,065 ^a	3,541,273 ^a	1,258,467 ^a	1,258,467 ^a	500,921 ^a	1,759,387 ^a
1997	361,369 ^a	361,369 ^a	2,448,000 ^a	2,809,369 ^a	2,259,117 ^a	3,517,014 ^a	1,257,897 ^a	1,257,897 ^a	500,921 ^a	1,758,812 ^a
1998	361,369 ^a	361,369 ^a	2,448,000 ^a	2,809,369 ^a	2,259,117 ^a	3,517,014 ^a	1,257,897 ^a	1,257,897 ^a	500,921 ^a	1,758,812 ^a
1999	361,369 ^a	361,369 ^a	2,448,000 ^a	2,809,369 ^a	2,259,117 ^a	3,517,014 ^a	1,257,897 ^a	1,257,897 ^a	500,921 ^a	1,758,812 ^a
2000 (c)	361,369 ^a	361,369 ^a	2,448,000 ^a	2,809,369 ^a	2,259,117 ^a	3,517,014 ^a	1,257,897 ^a	1,257,897 ^a	500,921 ^a	1,758,812 ^a

a) Unit rates as shown constitute the rate for the indicated pumping plants, powerplants and reservoirs. Cumulative unit rates as shown constitute the total rate, cumulative from the Sacramento-San Joaquin Delta, applicable to deliveries from or down stream of the indicated pumping plants and powerplants.

b) 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.

c) And each year thereafter for the remainder of the project repayment period.

UNIT VARIABLE OMP&R COMPONENT OF TRANSPORTATION CHARGE

(in dollars per acre-foot)

Sheet 2 of 3

Calendar Year	CALIFORNIA AQUEDUCT (Continued)									
	Reach 14A		Reach 15A		Reach 16A		Reach 17E		Reach 22B	
	Buena Vista Pumping Plant		Wheeler Ridge Pumping Plant		Wind Gap Pumping Plant		A. D. Edmonston Pumping Plant		Pearblossom Pumping Plant	
	Unit Rate	Cumulative Unit Rate	Unit Rate	Cumulative Unit Rate	Unit Rate	Cumulative Unit Rate	Unit Rate	Cumulative Unit Rate	Unit Rate	Cumulative Unit Rate
	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1961	0	0	0	0	0	0	0	0	0	0
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	.9684103	2.4682112	1.0359031	3.5541143	2.1646154	5.7187297	7.3714286	13.0901583	0	0
1972	1.1297072	2.7514356	.9219412	3.7433768	2.0384143	5.7817911	7.2198179	13.0016090	2.4047692	15.4063782
1973	.9602341	2.5130436	.9367836	3.4468772	1.9652469	5.4120741	7.1557765	12.5678506	2.7981681	15.3660187
1974	1.0384341	2.6494958	.9704966	3.6203924	2.0143913	5.6347837	7.3027269	12.9375106	2.3702203	15.3077309
1975	.9610306	2.5103948	.9537219	3.4641867	1.9935396	5.4577263	7.2542287	12.7119550	2.8132503	15.5252053
1976	1.0002012	2.6676484	1.0378388	3.7054972	2.2093578	5.9148450	8.1175750	14.0324200	3.2336807	17.2661007
1977	.9511383	2.6730984	1.021924	3.7752908	2.3671893	6.1424401	7.9085430	14.0510231	3.0919872	17.1430103
1978	1.137435	3.4000293	1.1080316	4.4040609	2.3913781	6.7994390	8.2640143	15.0634533	3.2081263	18.2715816
1979	.9324231	2.5455519	.9736015	3.5191534	2.0034821	5.5226355	7.9718558	13.4944913	1.7094817	15.2039730
1980	.9204286	3.1732226	1.0224767	4.1961493	2.2757130	6.4719123	8.3888991	14.8608114	1.5912813	16.4520927
1981	.7924144	2.6831999	.8858515	3.5690514	1.9688701	5.5379215	7.7926280	13.3305495	1.5655770	14.8961265
1982	.9007733	2.6785969	.8951337	3.9737306	1.9925027	5.9662333	7.4033662	13.3695995	1.6471430	15.0167425
1983	.9025521	2.7935888	.9054505	3.6990393	2.0196906	5.7187299	7.9704334	13.6891633	2.2581872	15.9473505
1984	.7091168	2.7964552	.7989550	3.5954102	1.7789989	5.3744091	7.0401595	12.4145686	2.0971201	14.5116887
1985	.9973289	2.6832010	.8333974	3.5165984	1.8564604	5.3730588	6.9454239	12.3184827	2.4592102	14.7776929
1986	.7044753	2.3300446	.8007038	3.1307484	1.7833839	4.9141323	7.0350561	11.9491884	2.2422994	14.1914878
1987	.7190671	2.2947499	.8227690	3.1175389	1.8349511	4.9524900	7.2329645	12.1854545	2.2140452	14.3994997
1988	.7676051	2.4102443	.8452603	3.2555046	1.8860517	5.1415563	7.4251767	12.5667330	2.1396167	14.7063527
1989	.7572226	2.5505978	.8407134	3.3913112	1.8733125	5.2646237	7.3921476	12.6567713	2.2395502	14.8963215
1990	.7287702	2.4949456	.8071400	3.3068356	1.8842067	5.1910423	7.0888692	12.2799115	2.0867697	14.3666812
1991	.7637926	2.4497553	.8503379	3.3400932	1.8990231	5.2391163	7.1444269	12.3835432	2.3446282	14.7281714
1992	.7652493	2.5206698	.8520786	3.3807484	1.9029873	5.2837357	7.1597295	12.4434652	2.3286695	14.7721347
1993	.7652493	2.5270938	.8520786	3.3791724	1.9029873	5.2821597	7.1597295	12.4418892	2.3286695	14.7705587
1994	.7652493	2.5257787	.8520786	3.3778573	1.9029873	5.2808446	7.1597295	12.4405741	2.3286695	14.7692436
1995	.7652493	2.5252077	.8520786	3.3772363	1.9029873	5.2802736	7.1597295	12.4400031	2.3286695	14.7686726
1996	.7652493	2.5246372	.8520786	3.3767154	1.9029873	5.2797031	7.1597295	12.4394326	2.3286695	14.7681021
1997	.7652493	2.5240675	.8520786	3.3761461	1.9029873	5.2791334	7.1597295	12.4388629	2.3286695	14.7675324
1998	.7652493	2.5240675	.8520786	3.3761461	1.9029873	5.2791334	7.1597295	12.4388629	2.3286695	14.7675324
1999	.7652493	2.5240675	.8520786	3.3761461	1.9029873	5.2791334	7.1597295	12.4388629	2.3286695	14.7675324
2000 (c)	.7652493	2.5240675	.8520786	3.3761461	1.9029873	5.2791334	7.1597295	12.4388629	2.3286695	14.7675324

TABLE B-17

UNIT VARIABLE OMP&R COMPONENT OF TRANSPORTATION CHARGE

(in dollars per acre-foot)

Sheet 3 of 3

Calendar Year	CALIFORNIA AQUEDUCT (Continued)									
	Reach 26A		Reach 29A		Reach 29J		Reach 31A		Reach 33	
	Devil Canyon Powerplant		Oso Pumping Plant		Castaic Powerplant		Las Perillas and Badger Hill Pumping Plants		Devil's Den Sawtooth and Polonio Pumping Plants and San Luis Obispo Powerplant	
	Unit Rate	Cumulative Unit Rate	Unit Rate	Cumulative Unit Rate	Unit Rate	Cumulative Unit Rate	Unit Rate	Cumulative Unit Rate	Unit Rate	Cumulative Unit Rate
	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)
1961	0	0	0	0	0	0	0	0	0	0
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	1.5069143	4.0371134	0	0
1969	0	0	0	0	0	0	.8874710	2.5449432	0	0
1970	0	0	0	0	0	0	1.9215314	3.6445481	0	0
1971	0	0	0	0	0	0	1.4455143	3.1453154	0	0
1972	-13.6534629	1.7529153	1.2448582	14.2464672	-3.0838303	11.1626369	2.6657468	4.2474752	0	0
1973	-5.7916681	9.5743506	1.0645139	13.6323645	-5.0584000	8.5739645	2.6686364	4.2184459	0	0
1974	-7.9431987	7.3646222	.9527551	13.8902657	-6.4063778	7.4838879	2.6225361	4.2399978	0	0
1975	-6.4354156	9.0897897	.9502968	13.6622518	-6.5733073	7.0889445	1.9174742	3.4668384	0	0
1976	-7.5834085	9.6826922	1.1555548	15.1979748	-7.2346311	7.9633437	2.0350340	3.7024812	0	0
1977	-7.2428767	9.9001336	1.0738757	15.1248988	-6.7106735	8.4142253	1.9163405	3.6384085	0	0
1978	-6.6389686	11.6326130	1.1264376	16.1898909	-7.176625	8.4722284	1.7035569	3.9898027	0	0
1979	-7.6811706	12.5228024	1.4286411	14.9231324	-7.9965020	6.9266304	1.0630114	2.7759472	0	0
1980	-3.2973734	13.1547893	1.5330544	16.3938658	-9.2277155	7.1661593	1.0098727	3.2626667	17.3499091	20.6035754
1981	-2.5801113	12.3159952	1.2553004	14.5858499	-6.2044455	8.3814144	.9084168	2.7922023	13.6909091	16.4811114
1982	-2.6373245	12.3794180	1.1812599	14.5508594	-5.7122668	8.8385926	.9305327	3.2083763	9.3522727	12.5606490
1983	-3.1293426	12.8180079	1.1336696	14.8228329	-6.5786894	10.2441431	.7778836	2.7689203	7.3802020	10.1431223
1984	-3.0329244	11.4787643	.8882748	13.3028434	-3.8038795	9.4989639	.7559705	2.8433089	7.6198658	10.4631747
1985	-3.1310981	11.6466048	.8912048	13.2096375	-3.4890071	9.7206804	.7311293	2.7170014	6.1222177	8.8392191
1986	-4.1855287	10.0059591	.9188721	12.8680605	-4.1094496	8.7586109	.9093146	2.4348839	5.9291843	4.3640682
1987	-4.1474255	10.2520742	.9281133	13.1135678	-3.5715363	4.5420315	.7760563	2.3517541	5.9379419	4.2847010
1988	-3.9053920	10.8004607	.9462243	13.5129573	-3.5757240	4.9372333	.8399821	2.4876213	5.4448538	7.9274751
1989	-3.9330579	10.9632636	.9118270	13.5685983	-3.3481057	10.2202926	.7484251	2.5414003	5.7437821	8.2855824
1990	-3.5038659	10.8628153	.9174753	13.1973868	-3.1130056	10.0843812	.7986234	2.5695488	4.9387545	7.5083033
1991	-3.6802737	11.0478977	.8745752	13.2581184	-3.1349159	10.1232025	.8035112	2.5294739	4.9505320	7.4800059
1992	-3.6684685	11.1036662	.8866706	13.3301358	-3.1177580	10.2123778	.8035112	2.5469317	4.9505320	7.5174637
1993	-3.6684685	11.1020902	.8866706	13.3285598	-3.1177580	10.2108918	.8035112	2.5453557	4.9505320	7.5158877
1994	-3.6684685	11.1007751	.8866706	13.3272447	-3.1177580	10.2094867	.8035112	2.5464006	4.9505320	7.5145726
1995	-3.6684685	11.1002041	.8866706	13.3266737	-3.1177580	10.2089157	.8035112	2.5463496	4.9505320	7.5140016
1996	-3.6684685	11.0996336	.8866706	13.3261732	-3.1177580	10.2083452	.8035112	2.5462991	4.9505320	7.5134311
1997	-3.6684685	11.0990639	.8866706	13.3255335	-3.0916848	10.2338487	.8035112	2.5462394	4.9505320	7.5128614
1998	-3.6684685	11.0990639	.8866706	13.3255335	-3.0916848	10.2338487	.8035112	2.5462394	4.9505320	7.5128614
1999	-3.6684685	11.0990639	.8866706	13.3255335	-3.0916848	10.2338487	.8035112	2.5462394	4.9505320	7.5128614
2000 (c)	-3.6684685	11.0990639	.8866706	13.3255335	-3.0916848	10.2338487	.8035112	2.5462394	4.9505320	7.5128614

VARIABLE OMP&R COMPONENT OF TRANSPORTATION CHARGE FOR EACH CONTRACTOR^a

(in dollars)

Sheet 1 of 4

CALENDAR YEAR	NORTH BAY AREA			SOUTH BAY AREA				CENTRAL COASTAL AREA		
	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
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1960	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	2,093	35,646	0	37,739	0	0	0
1963	0	0	0	8,114	51,157	0	59,271	0	0	0
1964	0	0	0	5,959	68,529	0	74,488	0	0	0
1965	0	0	0	11,010	69,342	63,454	143,306	0	0	0
1966	0	0	0	19,545	52,716	122,490	194,751	0	0	0
1967	0	0	0	19,265	58,132	160,213	237,610	0	0	0
1968	6,959	0	6,959	28,712	116,181	328,197	473,090	0	0	0
1969	5,217	0	5,217	22,334	2,736	209,583	234,653	0	0	0
1970	14,000	0	14,000	48,880	130,690	385,895	565,465	0	0	0
1971	15,000	0	15,000	57,602	99,021	460,814	607,437	0	0	0
1972	27,000	0	27,000	97,746	141,162	693,681	932,529	0	0	0
1973	24,000	0	24,000	89,827	124,173	581,234	795,234	0	0	0
1974	26,000	0	26,000	105,014	139,072	624,410	868,496	0	0	0
1975	23,000	0	23,000	96,482	123,618	530,652	750,752	0	0	0
1976	30,000	0	30,000	99,670	123,428	509,937	733,035	0	0	0
1977	31,000	0	31,000	108,167	130,507	517,325	755,999	0	0	0
1978	30,000	0	30,000	119,441	140,770	536,263	796,474	0	0	0
1979	28,000	0	28,000	97,375	111,888	621,975	821,239	0	0	0
1980	42,374	3,334	45,708	110,036	124,040	440,141	674,217	20,604	24,724	45,328
1981	50,446	4,216	54,662	104,166	117,753	398,549	620,468	16,483	37,911	54,394
1982	52,875	4,809	57,684	116,381	131,899	426,734	675,014	25,121	57,778	82,899
1983	54,286	4,504	58,790	110,597	125,638	389,302	625,537	30,448	70,028	100,476
1984	56,303	4,529	60,832	114,564	130,426	387,753	632,743	47,984	108,817	156,801
1985	59,831	5,925	65,756	115,517	131,775	376,501	623,793	66,294	152,918	219,212
1986	68,680	7,986	76,666	109,569	125,613	344,359	579,541	83,641	193,210	276,851
1987	69,159	8,585	77,744	110,496	126,881	335,300	572,677	103,622	238,743	342,365
1988	69,975	10,817	80,792	115,373	132,679	338,427	586,479	122,876	283,804	406,680
1989	68,112	11,763	79,875	121,017	139,364	351,338	611,719	165,713	381,965	547,678
1990	70,234	13,660	83,894	123,715	142,659	355,682	622,057	187,708	433,229	620,937
1991	70,234	13,660	83,894	128,179	144,767	354,378	627,324	187,000	431,597	618,597
1992	70,234	13,660	83,894	134,191	148,729	357,844	640,764	187,936	433,758	621,694
1993	70,234	13,660	83,894	138,758	151,173	357,848	647,779	187,897	433,667	621,564
1994	70,234	13,660	83,894	143,652	150,836	359,142	653,520	187,864	433,591	621,455
1995	70,234	13,660	83,894	149,774	149,774	356,604	656,152	187,850	433,558	621,408
1996	70,234	13,660	83,894	155,816	148,734	354,128	658,678	187,836	433,526	621,362
1997	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
1998	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
1999	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2000	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2001	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2002	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2003	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2004	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2005	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2006	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2007	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2008	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2009	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2010	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2011	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2012	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2013	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2014	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2015	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2016	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2017	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2018	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2019	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2020	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2021	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2022	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2023	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2024	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2025	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2026	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2027	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2028	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2029	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2030	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2031	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2032	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2033	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2034	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
2035	70,234	13,660	83,894	161,782	147,715	351,702	661,199	187,821	433,493	621,314
TOTAL	4,747,981	494,824	4,777,409	9,448,537	9,792,333	24,116,521	45,377,191	9,320,996	21,484,051	30,810,047

a) Unadjusted for prior overpayments or underpayments of charges.

TABLE B-18

VARIABLE OMP&R COMPONENT OF TRANSPORTATION CHARGE FOR EACH CONTRACTOR^(a)

(in dollars)

Sheet 2 of 4

CALENDAR YEAR	SAN JOAQUIN VALLEY									
	Devil's Den District	Dudley Ridge Water District	Empire West Side Irrigation District	Hacienda Water District	Kern County Water Agency		County of Kings	Oak Flat Water District	Tulare Lake Basin Water Storage District	Total
					Municipal and Industrial	Agricultural				
	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1960	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0
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	29,802	66,696	5,004	0	0	430,289	2,277	4,418	63,508	601,994
1969	25,572	52,631	94	4,767	0	283,203	167	3,511	11,878	381,823
1970	41,547	54,103	10,338	17,230	0	429,186	0	4,713	2,584	559,701
1971	21,074	26,847	4,500	3,449	64,305	297,910	2,250	2,602	22,497	449,434
1972	33,014	32,435	4,865	4,216	86,162	545,477	5,838	2,651	89,195	803,853
1973	36,700	34,096	4,650	4,495	81,769	588,842	2,325	2,816	85,240	840,933
1974	41,070	38,836	4,434	5,318	93,629	692,701	2,417	2,953	88,631	970,389
1975	37,695	40,593	4,648	5,577	111,775	696,305	2,479	3,122	85,215	986,809
1976	43,319	47,189	5,002	6,503	129,204	843,124	2,668	3,202	84,706	1,164,917
1977	46,208	52,350	5,166	7,233	142,050	956,295	2,928	3,619	94,369	1,310,218
1978	50,670	74,303	6,858	10,517	189,124	1,328,736	4,344	6,188	134,203	1,804,943
1979	35,254	59,268	5,138	8,393	155,329	1,103,088	3,426	4,307	107,230	1,481,433
1980	41,436	82,678	6,759	11,714	207,089	1,533,235	4,957	6,727	144,811	2,044,406
1981	35,461	73,091	5,651	10,549	185,316	1,420,959	4,333	5,567	132,618	1,873,545
1982	40,747	93,392	6,833	13,440	229,691	1,506,296	5,695	7,646	159,244	2,372,344
1983	35,165	85,416	5,973	12,345	219,116	1,742,384	5,575	6,550	155,699	2,268,223
1984	36,110	94,139	6,262	13,567	236,679	1,915,152	6,470	7,546	171,370	2,486,695
1985	34,506	93,733	5,958	13,703	243,053	1,955,898	6,752	7,247	170,785	2,531,635
1986	30,923	80,141	4,877	11,705	221,382	1,766,329	6,014	5,695	146,302	2,273,368
1987	29,467	80,991	4,727	11,818	233,066	1,828,841	6,303	5,578	147,959	2,349,150
1988	31,530	87,881	4,928	12,812	257,951	2,011,962	6,570	6,054	160,650	2,580,338
1989	32,281	99,712	5,380	14,706	286,458	2,222,059	7,174	7,208	182,386	2,857,364
1990	32,634	102,182	5,313	15,033	298,656	2,274,600	7,083	7,259	194,402	2,937,562
1991	32,125	99,588	5,178	14,671	295,748	2,242,747	6,904	6,987	189,856	2,893,804
1992	32,601	101,749	5,290	14,989	300,388	2,282,233	7,054	7,196	193,976	2,945,476
1993	32,581	101,658	5,286	14,976	300,201	2,280,603	7,048	7,187	193,803	2,943,343
1994	32,564	101,582	5,282	14,965	300,044	2,279,243	7,042	7,180	193,658	2,941,560
1995	32,557	101,549	5,280	14,960	299,976	2,278,652	7,040	7,177	193,595	2,940,786
1996	32,550	101,517	5,278	14,955	299,909	2,278,062	7,038	7,173	193,532	2,940,014
1997	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
1998	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
1999	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2000	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2001	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2002	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2003	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2004	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2005	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2006	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2007	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2008	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2009	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2010	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2011	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2012	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2013	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2014	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2015	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2016	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2017	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2018	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2019	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2020	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2021	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2022	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2023	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2024	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2025	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2026	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2027	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2028	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2029	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2030	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2031	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2032	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2033	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2034	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
2035	32,542	101,484	5,277	14,950	299,841	2,277,473	7,036	7,170	193,470	2,939,243
TOTAL	2,286,101	6,118,222	361,155	891,676	17,164,669	131,135,858	414,575	439,709	11,354,632	170,166,597

a) Unadjusted for prior overpayments or underpayments of charges.

VARIABLE OMP&R COMPONENT OF TRANSPORTATION CHARGE FOR EACH CONTRACTOR^a

(in dollars)

Sheet 3 of 4

CALENDAR YEAR	SOUTHERN CALIFORNIA									
	Antelope Valley- East Kern Water Agency	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 Geronimo Pass Water Agency
	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)
1960	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0
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	260,903	0	8,934	0	2,210	20,336	0	80,635	14,541	0
1973	315,364	89,122	13,368	138,295	3,644	23,970	0	459,563	110,105	0
1974	389,854	97,909	17,757	153,077	5,174	27,554	0	368,232	91,536	0
1975	446,820	108,678	22,511	170,774	6,610	31,673	1,270	477,214	119,077	0
1976	620,341	131,223	30,044	207,192	8,980	397,339	94,824	532,549	135,559	0
1977	705,773	144,362	34,799	222,859	10,257	346,289	115,500	567,258	146,519	0
1978	862,861	168,865	42,391	255,802	13,859	411,111	140,693	671,958	182,632	0
1979	855,867	152,999	39,682	228,052	14,036	378,579	139,454	782,676	207,840	0
1980	1,035,268	179,065	47,712	279,636	17,089	447,497	165,143	861,639	228,892	84,453
1981	1,006,068	180,318	47,518	283,027	16,929	440,926	155,967	843,647	225,332	96,064
1982	1,093,445	200,113	52,259	315,333	18,451	479,034	164,713	885,128	236,446	101,940
1983	1,207,342	231,986	60,122	366,789	20,535	546,995	177,138	954,941	255,079	120,615
1984	1,172,744	228,819	58,918	362,793	19,988	532,580	164,342	895,342	237,609	121,770
1985	1,243,015	251,059	64,284	398,997	21,312	575,330	174,677	949,198	253,896	137,429
1986	1,281,470	258,425	65,849	411,554	21,986	587,527	176,848	850,507	232,138	123,678
1987	1,344,382	279,796	70,989	453,584	23,884	629,259	187,899	912,434	242,201	144,530
1988	1,508,511	303,716	76,767	500,017	26,014	676,492	201,570	1,004,489	280,825	163,093
1989	1,599,163	325,828	82,078	543,716	27,719	722,472	210,861	1,063,435	300,395	177,605
1990	1,631,352	331,870	83,326	547,370	28,243	729,829	212,443	1,102,575	312,949	187,427
1991	1,722,629	340,221	85,423	561,144	28,483	748,191	214,236	1,133,515	318,179	191,129
1992	1,722,176	341,236	85,676	562,814	28,620	750,425	215,272	1,139,235	319,746	192,093
1993	1,721,958	341,199	85,667	562,758	28,616	750,345	215,245	1,139,074	319,741	192,066
1994	1,721,776	341,169	85,660	562,708	28,613	750,278	215,222	1,138,939	319,703	192,043
1995	1,721,697	341,156	85,656	562,686	28,612	750,249	215,212	1,138,880	319,696	192,033
1996	1,721,618	341,143	85,653	562,665	28,610	750,220	215,202	1,138,822	319,670	192,023
1997	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
1998	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
1999	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2000	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2001	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2002	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2003	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2004	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2005	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2006	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2007	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2008	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2009	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2010	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2011	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2012	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2013	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2014	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2015	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2016	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2017	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2018	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2019	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2020	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2021	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2022	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2023	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2024	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2025	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2026	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2027	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2028	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2029	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2030	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2031	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2032	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2033	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2034	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
2035	1,721,539	341,129	85,650	562,643	28,609	750,191	215,193	1,138,763	319,653	192,014
TOTAL	96,092,222	19,014,368	4,773,393	31,156,804	1,594,225	41,672,949	12,172,258	65,531,644	18,209,882	10,122,638

a) Unadjusted for prior overpayments or underpayments of charges.

TABLE B-18

VARIABLE OMP&R COMPONENT OF TRANSPORTATION CHARGE FOR EACH CONTRACTOR^(a)

(in dollars)

Sheet 4 of 4

CALENDAR YEAR	SOUTHERN CALIFORNIA (Continued)				FEATHER RIVER AREA				FUTURE CONTRACTOR	GRAND TOTAL
	The Metropolitan Water District of Southern California	Upper Santa Clara Valley Water Agency	Ventura County Flood Control District	Total	City of Yuba City	Butte County	Plumas County FC & WCD	Total		
	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39) South Bay	(40)
1960	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	3,739
1963	0	0	0	0	0	0	0	0	0	59,271
1964	0	0	0	0	0	0	0	0	0	74,488
1965	0	0	0	0	0	0	0	0	0	141,406
1966	0	0	0	0	0	0	0	0	0	194,751
1967	0	0	0	0	0	0	0	0	0	237,610
1968	0	0	0	0	0	0	0	0	0	1,042,043
1969	0	0	0	0	0	0	0	0	0	621,693
1970	0	0	0	0	0	0	0	0	0	1,139,166
1971	0	0	0	0	0	0	0	0	0	1,071,871
1972	1,841,837	0	0	2,233,436	0	0	0	0	0	3,994,418
1973	2,531,487	0	0	3,644,928	0	0	0	0	0	5,345,045
1974	2,184,966	0	0	3,334,869	0	0	0	0	0	5,194,754
1975	2,631,692	67,346	0	4,043,669	0	0	0	0	0	5,844,230
1976	5,468,611	90,781	0	7,629,443	0	0	0	0	0	9,557,395
1977	6,578,278	112,750	0	8,946,644	0	0	0	0	0	11,084,861
1978	8,362,403	129,625	0	11,267,900	0	0	0	0	0	13,472,317
1979	9,391,151	122,602	0	12,311,945	0	0	0	0	0	14,442,657
1980	10,638,688	144,040	7,166	14,142,334	0	0	0	0	0	16,951,997
1981	11,674,582	185,228	16,763	15,172,419	0	0	0	0	0	17,775,488
1982	12,857,615	217,430	26,515	16,655,442	0	0	0	0	0	19,847,423
1983	15,011,482	275,569	40,977	19,274,570	0	0	0	0	0	22,327,594
1984	14,655,837	276,420	47,495	18,780,857	0	0	0	0	0	22,117,028
1985	15,945,458	300,369	58,324	20,374,348	0	0	0	0	0	23,814,744
1986	15,155,962	288,157	70,069	19,529,970	0	0	0	0	0	22,734,396
1987	17,154,042	336,834	95,422	21,924,256	0	0	0	0	0	25,265,192
1988	18,941,030	371,653	129,184	24,183,361	0	0	0	0	0	27,837,650
1989	20,440,224	401,658	163,524	26,059,679	0	0	0	0	0	30,154,315
1990	20,717,934	418,501	201,688	26,505,997	0	0	0	0	0	30,770,377
1991	20,877,411	420,112	202,465	26,843,137	0	0	0	0	0	31,066,756
1992	21,034,204	423,814	204,248	27,023,603	0	0	0	0	0	31,315,431
1993	21,035,032	423,748	204,216	27,019,665	0	0	0	0	0	31,316,245
1994	21,032,386	423,694	204,190	27,016,381	0	0	0	0	0	31,314,910
1995	21,031,238	423,670	204,179	27,014,954	0	0	0	0	0	31,317,144
1996	21,030,388	423,646	204,167	27,013,527	0	0	0	0	0	31,317,475
1997	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
1998	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
1999	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2000	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2001	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2002	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2003	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2004	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2005	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2006	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2007	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2008	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2009	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2010	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2011	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2012	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2013	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2014	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2015	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2016	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2017	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2018	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2019	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2020	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2021	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2022	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2023	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2024	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2025	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2026	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2027	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2028	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2029	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2030	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2031	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2032	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2033	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2034	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
2035	21,066,879	424,705	204,677	27,051,645	0	0	0	0	0	31,357,295
TOTAL	1,159,835,919	22,841,142	10,062,995	1,493,080,443	0	0	0	0	0	1,744,212,287

a) Unadjusted for prior overpayments or underpayments of charges.

TOTAL TRANSPORTATION CHARGE FOR EACH CONTRACTOR^(a)

(in dollars)

Sheet 1 of 4

CALENDAR YEAR	NORTH BAY AREA			SOUTH BAY AREA				CENTRAL COASTAL AREA		
	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
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1960	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	21,441	51,371	0	74,852	0	0	0
1963	0	0	0	139,845	177,344	410,601	727,790	0	0	0
1964	0	0	0	153,215	244,389	572,681	974,285	7,217	17,889	25,106
1965	0	0	0	223,203	344,565	1,097,074	1,664,842	12,428	30,182	42,610
1966	19,095	0	18,095	245,169	349,979	1,316,550	1,911,698	20,852	50,074	70,926
1967	41,258	0	41,258	311,570	421,679	1,564,657	2,297,906	37,949	90,288	128,237
1968	122,051	0	122,051	337,174	498,763	1,977,906	2,633,843	63,216	149,575	212,791
1969	253,484	0	253,484	381,186	434,952	1,688,395	2,624,533	120,301	283,175	403,476
1970	270,688	0	270,688	412,911	568,801	1,995,303	2,977,015	136,320	320,776	457,096
1971	280,646	28,177	308,823	417,501	524,167	2,066,295	3,007,963	118,474	279,516	397,990
1972	305,164	33,077	338,241	522,268	587,336	2,329,503	3,439,107	122,257	284,519	406,776
1973	317,923	35,524	353,447	521,381	577,118	2,234,433	3,332,932	126,547	299,682	426,229
1974	312,452	37,834	350,286	540,826	596,252	2,290,434	3,427,512	130,702	308,464	439,166
1975	312,058	41,569	353,627	530,761	579,198	2,193,296	3,303,255	131,485	310,481	441,966
1976	320,835	44,187	365,022	536,749	581,534	2,178,700	3,296,983	235,476	561,440	796,916
1977	333,976	55,936	389,912	544,907	588,307	2,155,764	3,318,978	258,154	624,780	882,934
1978	456,273	79,658	535,931	557,293	599,930	2,101,487	3,367,710	311,768	765,431	1,077,199
1979	415,221	143,975	559,196	535,256	571,122	2,086,853	3,193,231	552,689	1,422,061	1,974,750
1980	584,718	374,075	958,793	547,880	583,240	2,115,939	3,247,059	963,720	2,503,560	3,467,280
1981	611,498	392,159	1,003,657	542,799	577,672	2,076,072	3,196,543	981,737	2,573,783	3,555,520
1982	615,296	394,217	1,009,513	556,091	592,802	2,106,600	3,255,497	993,063	2,596,632	3,589,695
1983	616,744	393,968	1,010,712	551,397	587,603	2,071,720	3,210,720	1,001,600	2,618,382	3,619,982
1984	618,761	393,993	1,012,754	555,901	592,920	2,071,427	3,220,248	1,019,213	2,660,283	3,679,496
1985	621,891	394,787	1,016,678	557,018	594,417	2,059,532	3,210,967	1,037,699	2,700,037	3,737,736
1986	631,138	397,459	1,028,598	551,416	588,885	2,030,519	3,170,820	1,056,734	2,745,084	3,801,818
1987	631,617	398,049	1,029,666	552,343	590,153	2,021,460	3,163,956	1,076,647	2,790,461	3,867,108
1988	632,433	400,281	1,032,714	557,220	595,951	2,024,587	3,177,758	1,095,271	2,833,227	3,928,498
1989	630,964	401,829	1,032,797	562,864	602,637	2,037,498	3,202,998	1,138,241	2,931,700	4,069,941
1990	632,692	403,124	1,035,816	565,563	605,931	2,041,842	3,213,336	1,160,010	2,981,930	4,141,940
1991	632,692	403,124	1,035,816	570,026	608,039	2,040,538	3,218,603	1,158,833	2,978,694	4,137,527
1992	632,692	403,124	1,035,816	575,699	611,656	2,043,178	3,230,533	1,159,779	2,980,881	4,140,660
1993	632,692	403,124	1,035,816	580,266	614,100	2,043,182	3,237,548	1,159,740	2,980,790	4,140,530
1994	632,692	403,124	1,035,816	584,914	613,540	2,042,931	3,241,385	1,159,685	2,980,664	4,140,349
1995	632,692	403,124	1,035,816	591,036	612,478	2,040,403	3,243,717	1,159,671	2,980,631	4,140,302
1996	632,692	403,124	1,035,816	597,078	611,438	2,037,927	3,246,443	1,159,657	2,980,599	4,140,256
1997	632,692	403,124	1,035,816	603,044	610,419	2,035,501	3,248,964	1,159,642	2,980,566	4,140,208
1998	632,692	403,124	1,035,816	603,044	610,419	2,035,501	3,248,964	1,159,642	2,980,566	4,140,208
1999	632,692	403,124	1,035,816	603,044	610,419	2,035,501	3,248,964	1,159,642	2,980,566	4,140,208
2000	632,692	403,124	1,035,816	603,044	610,419	2,035,501	3,248,964	1,159,642	2,980,566	4,140,208
2001	632,692	403,124	1,035,816	603,044	610,419	2,035,501	3,248,964	1,159,642	2,980,566	4,140,208
2002	632,692	403,124	1,035,816	603,044	610,419	2,035,501	3,248,964	1,159,642	2,980,566	4,140,208
2003	632,692	403,124	1,035,816	603,044	610,419	2,035,501	3,248,964	1,159,642	2,980,566	4,140,208
2004	632,692	403,124	1,035,816	603,044	610,419	2,035,501	3,248,964	1,159,642	2,980,566	4,140,208
2005	632,692	403,124	1,035,816	603,044	610,419	2,035,501	3,248,964	1,159,642	2,980,566	4,140,208
2006	632,692	403,124	1,035,816	603,044	610,419	2,035,501	3,248,964	1,159,642	2,980,566	4,140,208
2007	632,692	403,124	1,035,816	603,044	610,419	2,035,501	3,248,964	1,159,642	2,980,566	4,140,208
2008	632,692	403,124	1,035,816	603,044	610,419	2,035,501	3,248,964	1,159,642	2,980,566	4,140,208
2009	632,692	403,124	1,035,816	603,044	610,419	2,035,501	3,248,964	1,159,642	2,980,566	4,140,208
2010	632,692	403,124	1,035,816	603,044	610,419	2,035,501	3,248,964	1,159,642	2,980,566	4,140,208
2011	632,692	403,124	1,035,816	603,044	610,419	2,035,501	3,248,964	1,159,642	2,980,566	4,140,208
2012	632,692	403,124	1,035,816	603,044	610,419	2,035,501	3,248,964	1,159,642	2,980,566	4,140,208
2013	632,692	403,124	1,035,816	502,852	518,827	1,707,269	2,728,943	1,159,642	2,980,566	4,140,208
2014	632,692	403,124	1,035,816	470,492	468,560	1,553,309	2,492,361	1,152,424	2,962,678	4,115,102
2015	632,692	403,124	1,035,816	436,555	411,527	1,214,601	2,062,683	1,147,213	2,950,384	4,097,597
2016	614,597	403,124	1,017,721	420,559	391,310	1,061,574	1,873,443	1,138,790	2,930,492	4,069,282
2017	591,434	403,124	994,558	393,343	366,507	960,247	1,720,097	1,121,693	2,890,278	4,011,971
2018	517,600	403,124	920,724	358,398	333,626	861,015	1,553,039	1,108,804	2,859,890	3,968,694
2019	476,528	403,124	879,652	325,346	303,814	776,409	1,405,569	1,105,037	2,850,763	3,955,800
2020	472,004	403,124	875,128	312,896	292,178	742,465	1,347,539	1,102,985	2,845,770	3,948,755
2021	465,046	374,947	839,993	308,598	288,055	729,688	1,326,341	1,100,871	2,840,432	3,941,303
2022	461,528	370,046	831,574	306,792	286,344	723,005	1,316,141	1,099,666	2,837,404	3,937,050
2023	459,768	367,596	827,364	304,741	284,470	717,537	1,306,748	1,098,669	2,834,977	3,933,846
2024	458,240	365,285	823,525	302,569	282,209	709,433	1,294,211	1,097,460	2,832,070	3,929,530
2025	455,634	361,554	817,188	301,565	281,256	706,667	1,289,488	1,096,458	2,829,545	3,926,003
2026	453,857	358,937	812,794	299,210	279,126	701,521	1,279,857	992,743	2,579,229	3,571,972
2027	445,716	347,187	792,903	298,945	279,846	700,443	1,278,234	970,466	2,516,821	3,487,287
2028	426,418	323,465	749,883	298,153	277,814	694,443	1,270,410	916,737	2,375,901	3,292,638
2029	365,470	259,148	624,618	298,048	277,671	693,618	1,269,337	675,687	1,718,970	2,394,657
2030	216,265	121,466	337,731	297,996	277,622	693,505	1,269,125	392,907	1,344,628	1,344,535
2031	190,176	98,245	288,421	297,758	277,406	692,987	1,268,151	364,958	875,509	1,240,467
2032	189,605	97,382	286,987	297,143	276,844	691,649	1,265,636	359,183	860,832	1,220,015
2033	189,568	97,326	286,894	296,516	276,271	690,283	1,263,070	357,101	855,479	1,212,580
2034	189,568	97,326	286,894	296,371	276,138	689,967	1,262,476	356,908	855,028	1,211,936
2035	189,568	97,326	286,894	296,371	276,138	689,967	1,262,476	355,818	852,483	1,208,301
TOTAL	34,124,171	20,674,833	54,799,004	33,902,128	35,535,528	117,213,905	186,651,561	59,693,607	153,194,856	212,888,463

^a) Unadjusted for prior overpayments or underpayments of charges.

TABLE B-19

TOTAL TRANSPORTATION CHARGE FOR EACH CONTRACTOR^(a)

(in dollars)

Sheet 2 of 4

CALENDAR YEAR	SAN JOAQUIN VALLEY									
	Devil's Den Water District	Dudley Ridge Water District	Empire West Side Irrigation District	Hacienda Water District	Kern County Water Agency		County of Kings	Oak Flat Water District	Tulare Lake Basin Water Storage District	Total
					Municipal and Industrial	Agricultural				
	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1960	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0
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	58,936	0	0	0	0	58,936
1966	0	0	0	0	110,364	0	0	0	0	110,364
1967	0	0	0	0	214,918	0	0	0	0	214,918
1968	66,492	165,436	9,875	5,863	372,678	1,465,076	12,032	10,012	198,957	2,296,421
1969	109,396	157,037	10,740	21,632	443,225	2,126,892	10,536	9,413	273,784	3,162,655
1970	140,462	174,995	21,507	36,112	508,448	2,803,233	11,133	11,311	235,118	3,942,319
1971	113,557	157,257	15,682	21,549	616,267	3,031,635	13,567	9,444	265,379	4,244,337
1972	134,839	175,329	16,244	24,153	654,580	3,882,623	17,454	9,855	349,443	5,264,520
1973	148,392	188,108	16,166	26,129	662,024	4,257,362	14,157	10,463	360,479	5,683,280
1974	162,364	202,852	16,412	28,846	682,381	4,638,483	14,447	10,779	382,087	6,138,651
1975	165,774	213,242	16,225	30,374	702,635	4,872,537	14,572	11,254	394,449	6,421,062
1976	179,726	228,363	16,572	32,556	722,788	5,321,833	14,831	11,460	409,472	6,937,601
1977	190,431	242,112	16,733	34,549	736,689	5,755,313	15,103	12,168	435,211	7,438,309
1978	194,816	273,366	18,455	39,623	785,489	6,466,908	16,550	15,049	491,999	8,302,255
1979	179,309	266,969	16,731	38,760	751,550	6,556,139	15,629	13,326	480,700	8,319,053
1980	184,246	298,680	18,336	43,311	801,580	7,299,899	17,148	15,992	538,481	9,219,673
1981	178,506	298,139	17,247	43,900	783,500	7,564,843	16,566	14,994	537,814	9,455,509
1982	183,839	327,722	18,440	48,045	829,576	8,293,887	17,997	17,377	590,628	10,327,561
1983	178,526	328,466	17,623	48,404	833,642	8,638,605	17,980	16,422	594,478	10,684,146
1984	179,566	346,348	17,916	50,912	841,744	9,160,596	18,913	17,711	626,126	11,259,832
1985	178,025	354,882	17,623	52,787	855,214	9,548,441	19,395	17,571	641,846	11,685,784
1986	174,447	349,638	16,526	52,017	836,869	9,690,079	18,763	16,322	632,984	11,787,645
1987	173,343	358,930	16,367	53,371	848,061	10,089,010	19,041	16,349	650,053	12,224,525
1988	175,022	374,547	16,572	55,649	873,099	10,592,779	19,312	17,123	678,682	12,802,785
1989	175,656	394,837	17,014	59,210	901,113	11,027,328	19,906	18,572	715,863	13,329,499
1990	176,166	406,339	16,964	60,886	914,292	11,333,522	19,834	18,780	762,584	13,709,367
1991	175,641	403,674	16,826	60,492	911,217	11,300,021	19,651	18,507	757,502	13,663,531
1992	176,125	405,871	16,940	60,816	915,973	11,340,555	19,803	18,716	761,690	13,716,489
1993	176,105	405,780	16,936	60,803	915,786	11,338,925	19,797	18,707	761,517	13,714,356
1994	176,072	405,635	16,928	60,781	915,465	11,335,938	19,787	18,696	761,239	13,710,541
1995	176,065	405,602	16,926	60,776	915,397	11,335,347	19,785	18,693	761,176	13,709,767
1996	176,058	405,570	16,924	60,771	915,330	11,334,757	19,783	18,689	761,113	13,708,995
1997	176,050	405,537	16,923	60,766	915,262	11,334,168	19,781	18,686	761,051	13,708,224
1998	176,050	405,537	16,923	60,766	915,262	11,334,168	19,781	18,686	761,051	13,708,224
1999	176,050	405,537	16,923	60,766	915,262	11,334,168	19,781	18,686	761,051	13,708,224
2000	176,050	405,537	16,923	60,766	915,262	11,334,168	19,781	18,686	761,051	13,708,224
2001	176,050	405,537	16,923	60,766	915,262	11,334,168	19,781	18,686	761,051	13,708,224
2002	176,050	405,537	16,923	60,766	915,262	11,334,168	19,781	18,686	761,051	13,708,224
2003	176,050	405,537	16,923	60,766	915,262	11,334,168	19,781	18,686	761,051	13,708,224
2004	176,050	405,537	16,923	60,766	915,262	11,334,168	19,781	18,686	761,051	13,708,224
2005	176,050	405,537	16,923	60,766	915,262	11,334,168	19,781	18,686	761,051	13,708,224
2006	176,050	405,537	16,923	60,766	915,262	11,334,168	19,781	18,686	761,051	13,708,224
2007	176,050	405,537	16,923	60,766	915,262	11,334,168	19,781	18,686	761,051	13,708,224
2008	176,050	405,537	16,923	60,766	915,262	11,334,168	19,781	18,686	761,051	13,708,224
2009	176,050	405,537	16,923	60,766	915,262	11,334,168	19,781	18,686	761,051	13,708,224
2010	176,050	405,537	16,923	60,766	915,262	11,334,168	19,781	18,686	761,051	13,708,224
2011	176,050	405,537	16,923	60,766	915,262	11,334,168	19,781	18,686	761,051	13,708,224
2012	176,050	405,537	16,923	60,766	915,262	11,334,168	19,781	18,686	761,051	13,708,224
2013	176,050	405,537	16,923	60,766	915,262	11,334,168	19,781	18,686	761,051	13,708,224
2014	176,050	405,537	16,923	60,766	915,262	11,334,168	19,781	18,686	761,051	13,708,224
2015	176,050	405,537	16,923	60,766	856,327	11,334,168	19,781	18,686	761,051	13,649,289
2016	176,050	405,537	16,923	60,766	804,899	11,334,168	19,781	18,686	761,051	13,597,861
2017	176,050	405,537	16,923	60,766	700,344	11,334,168	19,781	18,686	761,051	13,493,306
2018	176,050	405,537	16,923	60,766	606,486	11,334,168	12,141	18,686	761,051	13,391,808
2019	176,050	405,537	16,923	60,766	554,614	11,334,168	11,692	18,686	761,051	13,339,487
2020	176,050	405,537	16,923	60,766	525,383	11,334,168	11,464	18,686	761,051	13,310,028
2021	176,050	405,537	16,923	60,766	503,192	11,334,168	11,294	18,686	761,051	13,287,667
2022	176,050	405,537	16,923	60,766	491,780	11,334,168	11,195	18,686	761,051	13,276,156
2023	176,050	405,537	16,923	60,766	487,135	11,334,168	11,120	18,686	761,051	13,271,437
2024	176,050	405,537	16,923	60,766	482,945	11,334,168	10,988	18,686	761,051	13,267,114
2025	176,050	405,537	16,923	60,766	480,713	11,334,168	10,923	18,686	761,051	13,264,817
2026	176,050	405,537	16,923	60,766	477,857	11,334,168	10,846	18,686	761,051	13,261,884
2027	176,050	405,537	16,923	60,766	476,677	11,334,168	10,829	18,686	761,051	13,260,687
2028	176,050	405,537	16,923	60,766	476,439	11,334,168	10,828	18,686	761,051	13,260,448
2029	176,050	405,537	16,923	60,766	476,403	11,334,168	10,828	18,686	761,051	13,260,412
2030	176,050	405,537	16,923	60,766	476,136	11,334,168	10,823	18,686	761,051	13,260,140
2031	176,050	405,537	16,923	60,766	475,262	11,334,168	10,801	18,686	761,051	13,259,244
2032	176,050	405,537	16,923	60,766	473,484	11,334,168	10,742	18,686	761,051	13,257,407
2033	176,050	405,537	16,923	60,766	471,683	11,334,168	10,683	18,686	761,051	13,255,547
2034	176,050	405,537	16,923	60,766	470,686	11,334,168	10,650	18,686	761,051	13,254,517
2035	176,050	405,537	16,923	60,766	465,058	11,334,168	10,463	18,686	761,051	13,248,702
TOTAL	11,664,916	24,531,609	1,143,447	3,643,001	50,531,053	664,435,118	1,107,183	1,162,509	45,481,843	803,700,676

^a) Unadjusted for prior overpayments or underpayments of charges.

TOTAL TRANSPORTATION CHARGE FOR EACH CONTRACTOR^(a)

(in dollars)

Sheet 3 of 4

CALENDAR YEAR	SOUTHERN CALIFORNIA									
	Antelope Valley-East Kern Water Agency	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 Geronimo Pass Water Agency
	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)
1960	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0
1963	30,709	0	0	0	0	0	0	44,418	0	0
1964	59,043	13,352	3,816	34,399	1,110	26,832	7,810	73,600	31,256	19,343
1965	110,855	23,302	6,457	37,933	1,988	47,226	14,357	122,711	32,442	20,033
1966	199,664	41,269	11,293	67,565	3,518	83,907	25,731	212,291	56,446	34,828
1967	389,119	80,292	21,775	131,922	6,813	163,595	50,271	403,980	107,900	66,532
1968	690,290	143,253	38,888	235,773	12,104	291,695	89,530	733,793	196,119	120,996
1969	986,697	210,377	57,217	346,458	17,496	427,720	128,960	1,124,898	300,420	185,578
1970	1,301,795	298,259	84,708	491,398	24,066	598,350	175,920	1,672,962	440,566	272,850
1971	1,672,986	417,253	122,894	687,643	31,292	827,543	227,175	2,439,725	634,014	393,424
1972	2,246,250	576,614	180,061	950,463	40,350	1,161,824	273,716	3,502,381	901,270	547,839
1973	2,358,461	687,039	198,133	1,123,899	42,836	1,209,177	281,393	4,167,998	1,067,248	594,097
1974	2,455,092	703,270	198,025	1,150,856	44,754	1,224,561	284,230	4,159,653	1,067,408	606,565
1975	2,521,958	716,645	202,046	1,172,955	46,359	1,237,204	286,724	4,268,254	1,098,184	607,772
1976	2,710,098	745,462	210,092	1,219,708	48,985	1,528,122	384,160	4,343,199	1,121,878	612,057
1977	2,813,595	763,473	218,492	1,243,410	50,480	1,571,992	404,457	4,444,494	1,146,217	620,740
1978	3,013,431	787,567	224,048	1,275,679	54,206	1,640,105	430,569	4,536,478	1,175,767	616,328
1979	3,023,005	771,800	220,863	1,248,097	54,418	1,608,829	428,558	4,613,011	1,199,636	615,390
1980	3,213,981	801,277	231,431	1,305,353	57,592	1,681,233	457,120	4,737,567	1,230,186	711,006
1981	3,460,134	803,442	231,971	1,310,196	57,447	1,675,476	447,044	4,733,097	1,229,478	719,425
1982	3,721,219	828,265	241,851	1,350,816	59,047	1,715,729	456,331	4,866,019	1,258,761	744,186
1983	3,843,384	858,156	244,150	1,398,979	61,317	1,790,405	470,034	4,837,027	1,259,282	748,829
1984	3,810,662	853,439	240,419	1,392,462	60,811	1,777,401	461,536	4,732,364	1,233,249	741,542
1985	3,889,348	882,076	251,624	1,439,174	62,285	1,825,329	468,975	4,890,088	1,270,535	764,651
1986	3,933,652	893,548	256,499	1,456,512	63,073	1,840,179	471,944	4,850,643	1,280,990	768,212
1987	4,036,338	910,577	255,795	1,493,376	64,986	1,883,054	483,085	4,808,751	1,260,995	769,493
1988	4,161,952	936,719	263,593	1,543,475	67,158	1,931,765	497,019	4,936,705	1,296,878	793,774
1989	4,252,106	958,440	268,535	1,586,530	68,857	1,977,516	505,271	4,989,063	1,315,122	807,428
1990	4,285,863	966,308	271,594	1,593,197	69,499	1,985,774	504,057	5,060,373	1,334,009	821,940
1991	4,376,850	973,350	272,207	1,604,810	69,644	2,003,892	509,807	5,064,934	1,334,150	823,748
1992	4,376,676	974,979	273,097	1,607,499	69,787	2,006,365	510,884	5,081,987	1,338,010	824,181
1993	4,376,458	974,962	273,088	1,607,439	69,783	2,006,285	510,857	5,081,826	1,337,965	824,154
1994	4,375,884	974,775	273,046	1,607,161	69,771	2,005,936	510,776	5,080,928	1,337,717	824,001
1995	4,375,405	974,762	273,042	1,607,139	69,770	2,005,907	510,766	5,080,869	1,337,700	823,991
1996	4,375,726	974,749	273,039	1,607,116	69,768	2,005,878	510,756	5,080,811	1,337,684	823,981
1997	4,375,667	974,735	273,036	1,607,096	69,767	2,005,849	510,747	5,080,752	1,337,667	823,972
1998	4,375,667	974,735	273,036	1,607,096	69,767	2,005,849	510,747	5,080,752	1,337,667	823,972
1999	4,375,667	974,735	273,036	1,607,096	69,767	2,005,849	510,747	5,080,752	1,337,667	823,972
2000	4,375,667	974,735	273,036	1,607,096	69,767	2,005,849	510,747	5,080,752	1,337,667	823,972
2001	4,375,667	974,735	273,036	1,607,096	69,767	2,005,849	510,747	5,080,752	1,337,667	823,972
2002	4,375,667	974,735	273,036	1,607,096	69,767	2,005,849	510,747	5,080,752	1,337,667	823,972
2003	4,375,667	974,735	273,036	1,607,096	69,767	2,005,849	510,747	5,080,752	1,337,667	823,972
2004	4,375,667	974,735	273,036	1,607,096	69,767	2,005,849	510,747	5,080,752	1,337,667	823,972
2005	4,375,667	974,735	273,036	1,607,096	69,767	2,005,849	510,747	5,080,752	1,337,667	823,972
2006	4,375,667	974,735	273,036	1,607,096	69,767	2,005,849	510,747	5,080,752	1,337,667	823,972
2007	4,375,667	974,735	273,036	1,607,096	69,767	2,005,849	510,747	5,080,752	1,337,667	823,972
2008	4,375,667	974,735	273,036	1,607,096	69,767	2,005,849	510,747	5,080,752	1,337,667	823,972
2009	4,375,667	974,735	273,036	1,607,096	69,767	2,005,849	510,747	5,080,752	1,337,667	823,972
2010	4,375,667	974,735	273,036	1,607,096	69,767	2,005,849	510,747	5,080,752	1,337,667	823,972
2011	4,375,667	974,735	273,036	1,607,096	69,767	2,005,849	510,747	5,080,752	1,337,667	823,972
2012	4,375,667	974,735	273,036	1,607,096	69,767	2,005,849	510,747	5,080,752	1,337,667	823,972
2013	4,344,938	974,735	273,036	1,594,719	69,767	2,005,849	510,747	5,036,334	1,326,115	816,814
2014	4,316,604	961,383	269,220	1,585,571	68,657	1,979,017	502,936	5,007,151	1,318,428	812,069
2015	4,264,792	951,433	266,579	1,569,163	67,779	1,958,623	496,390	4,958,041	1,305,225	803,938
2016	4,175,983	933,466	261,743	1,539,531	66,249	1,921,941	485,016	4,868,660	1,281,221	789,144
2017	3,986,528	894,443	251,261	1,475,174	62,954	1,842,254	466,475	4,676,772	1,229,767	757,440
2018	3,753,861	843,786	237,261	1,391,630	58,808	1,739,820	429,819	4,402,031	1,156,707	712,260
2019	3,477,454	780,269	219,844	1,286,878	53,749	1,611,288	392,901	4,027,015	1,056,831	650,349
2020	3,205,234	700,107	194,305	1,154,673	47,948	1,456,722	351,327	3,513,483	926,187	564,943
2021	2,943,772	600,959	161,140	991,155	42,510	1,268,640	313,856	2,835,471	757,112	463,330
2022	2,804,733	539,713	139,838	890,145	39,932	1,153,179	295,518	2,329,976	635,744	387,485
2023	2,768,698	523,210	134,927	862,928	39,288	1,120,458	290,223	2,203,341	604,262	367,898
2024	2,758,345	519,106	133,841	856,160	39,083	1,112,058	288,779	2,162,221	593,300	361,064
2025	2,748,301	514,307	132,564	848,245	38,820	1,102,265	287,459	2,125,832	583,558	353,010
2026	2,734,400	507,273	130,757	836,646	38,593	1,087,787	285,762	2,081,962	571,665	347,647
2027	2,715,734	504,590	130,079	832,221	38,364	1,082,244	284,048	2,069,749	568,317	345,588
2028	2,674,382	503,662	129,844	830,691	38,279	1,080,327	283,413	2,065,587	567,177	344,898
2029	2,658,745	503,510	129,806	830,441	38,266	1,080,014	283,308	2,064,910	566,991	344,773
2030	2,650,920	502,950	129,664	829,516	38,214	1,078,856	282,920	2,062,403	566,303	344,350
2031	2,431,307	501,952	129,412	827,871	38,122	1,076,794	282,229	2,057,942	565,079	343,598
2032	2,239,190	501,559	129,313	827,223	38,085	1,075,976	281,955	2,056,183	564,595	343,302
2033	2,217,259	501,212	129,225	826,650	38,053	1,075,252	281,712	2,054,631	564,168	343,040
2034	2,236,190	501,020	129,176	826,334	38,035	1,074,852	281,578	2,053,772	563,931	342,895
2035	2,230,158	499,935	128,902	824,545	37,934	1,072,592	280,820	2,048,921	562,596	342,077
TOTAL	235,821,966	52,879,401	14,726,102	86,983,046	3,784,821	108,917,198	27,889,966	274,831,115	72,387,493	43,742,412

a) Unadjusted for prior overpayments or underpayments of charges.

TABLE B-19

TOTAL TRANSPORTATION CHARGE FOR EACH CONTRACTOR^(a)

(in dollars)

Sheet 4 of 4

CALENDAR YEAR	SOUTHERN CALIFORNIA (Continued)				FEATHER RIVER AREA				FUTURE CONTRACTOR	GRAND TOTAL
	The Metropolitan Water District of Southern California	Upper Santa Clara Valley Water Agency	Ventura County Flood Control District	Total	City of Yuba City	Butte County	Plumas County FC & WCD	Total	South Bay	
	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	
1960	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	74,852
1963	631,639	0	0	706,766	0	0	0	0	54,540	1,489,096
1964	1,183,827	18,636	8,764	1,481,788	0	0	0	0	87,030	2,568,209
1965	2,040,414	35,384	16,573	2,509,675	0	0	407	407	149,194	4,425,664
1966	3,632,249	66,871	31,081	4,466,713	0	0	551	551	170,816	6,749,163
1967	7,175,174	137,702	63,551	8,798,626	0	0	548	548	227,811	11,709,304
1968	14,357,254	290,844	133,733	17,334,292	0	0	670	670	298,663	22,894,721
1969	21,602,835	437,053	200,796	25,020,505	0	0	3,055	3,055	367,471	32,841,180
1970	28,886,709	563,585	258,207	35,069,315	0	0	13,897	13,897	440,558	43,170,889
1971	38,944,415	729,569	332,627	47,460,550	0	0	14,883	14,883	435,529	55,870,085
1972	51,702,026	857,776	389,708	63,330,279	0	0	14,883	14,883	447,613	73,245,418
1973	56,305,123	882,409	397,446	69,307,659	0	0	14,883	14,883	455,175	79,562,609
1974	57,399,987	895,010	402,108	70,591,519	0	0	14,883	14,883	460,403	81,422,424
1975	58,394,666	909,473	405,043	71,927,283	0	0	14,883	14,883	466,821	82,918,897
1976	60,803,465	984,278	402,866	75,114,370	0	0	14,883	14,883	463,086	86,988,861
1977	62,567,085	1,020,114	408,004	77,272,613	0	0	14,883	14,883	462,658	89,783,287
1978	64,761,454	1,046,339	411,361	79,973,332	0	0	14,883	14,883	463,786	93,635,096
1979	65,863,488	1,037,998	410,996	81,096,089	0	0	14,883	14,883	463,488	95,620,690
1980	66,838,557	1,050,767	415,608	82,731,673	0	0	14,883	14,883	463,467	100,102,828
1981	68,630,206	1,109,415	431,155	84,838,486	0	0	14,883	14,883	464,462	102,529,460
1982	69,695,262	1,129,713	437,182	85,504,376	0	0	14,883	14,883	464,838	105,166,359
1983	71,995,891	1,200,621	456,161	89,164,141	0	0	14,883	14,883	466,329	108,150,913
1984	71,557,934	1,202,241	463,016	88,527,098	0	0	14,883	14,883	466,527	108,180,838
1985	73,473,561	1,234,347	476,901	90,932,898	0	0	14,883	14,883	466,944	111,065,890
1986	72,977,481	1,215,263	486,621	90,476,617	0	0	14,883	14,883	467,009	110,747,380
1987	74,686,823	1,272,190	514,687	92,440,152	0	0	14,883	14,883	467,009	113,207,299
1988	76,639,360	1,305,313	547,942	94,921,653	0	0	14,883	14,883	467,009	116,345,300
1989	77,438,702	1,328,164	579,914	96,076,689	0	0	14,883	14,883	467,009	118,193,775
1990	78,398,376	1,352,751	620,686	97,269,337	0	0	14,883	14,883	467,009	119,850,688
1991	78,574,812	1,357,360	622,434	97,585,999	0	0	14,883	14,883	467,009	120,123,367
1992	78,698,622	1,358,397	623,358	97,743,842	0	0	14,883	14,883	466,519	120,344,742
1993	78,695,450	1,358,331	623,326	97,739,904	0	0	14,883	14,883	466,519	120,349,556
1994	78,682,449	1,358,132	623,234	97,723,810	0	0	14,883	14,883	466,437	120,333,221
1995	78,681,301	1,358,108	623,223	97,722,383	0	0	14,883	14,883	466,437	120,333,505
1996	78,680,151	1,358,084	623,211	97,720,956	0	0	14,883	14,883	466,437	120,333,786
1997	78,716,942	1,359,143	623,721	97,759,074	0	0	14,883	14,883	466,437	120,373,606
1998	78,716,942	1,359,143	623,721	97,759,074	0	0	14,883	14,883	466,437	120,373,606
1999	78,716,942	1,359,143	623,721	97,759,074	0	0	14,883	14,883	466,437	120,373,606
2000	78,716,942	1,359,143	623,721	97,759,074	0	0	14,883	14,883	466,437	120,373,606
2001	78,716,942	1,359,143	623,721	97,759,074	0	0	14,883	14,883	466,437	120,373,606
2002	78,716,942	1,359,143	623,721	97,759,074	0	0	14,883	14,883	466,437	120,373,606
2003	78,716,942	1,359,143	623,721	97,759,074	0	0	14,883	14,883	466,437	120,373,606
2004	78,716,942	1,359,143	623,721	97,759,074	0	0	14,883	14,883	466,437	120,373,606
2005	78,716,942	1,359,143	623,721	97,759,074	0	0	14,883	14,883	466,437	120,373,606
2006	78,716,942	1,359,143	623,721	97,759,074	0	0	14,883	14,883	466,437	120,373,606
2007	78,716,942	1,359,143	623,721	97,759,074	0	0	14,883	14,883	466,437	120,373,606
2008	78,716,942	1,359,143	623,721	97,759,074	0	0	14,883	14,883	466,437	120,373,606
2009	78,716,942	1,359,143	623,721	97,759,074	0	0	14,883	14,883	466,437	120,373,606
2010	78,716,942	1,359,143	623,721	97,759,074	0	0	14,883	14,883	466,437	120,373,606
2011	78,716,942	1,359,143	623,721	97,759,074	0	0	14,883	14,883	466,437	120,373,606
2012	78,716,942	1,359,143	623,721	97,759,074	0	0	14,883	14,883	466,437	120,373,606
2013	78,085,303	1,359,143	623,721	97,021,226	0	0	14,883	14,883	424,510	119,073,410
2014	77,533,116	1,340,507	614,956	96,303,615	0	0	14,883	14,883	393,292	118,069,293
2015	76,676,528	1,323,758	607,148	95,249,397	0	0	14,476	14,476	347,038	116,465,296
2016	75,084,694	1,292,271	592,639	93,242,358	0	0	14,332	14,332	325,907	114,191,504
2017	71,541,768	1,221,441	560,170	88,960,447	0	0	14,135	14,135	285,427	109,480,141
2018	65,383,696	1,089,060	499,994	81,690,733	0	0	14,213	14,213	209,348	101,756,759
2019	58,442,856	948,911	435,449	73,384,234	0	0	11,828	11,828	147,344	93,123,914
2020	51,810,264	835,376	384,703	65,149,282	0	0	986	986	125,827	84,757,545
2021	43,440,544	702,647	326,311	54,847,447	0	0	200	200	117,582	74,360,533
2022	37,050,129	632,492	296,176	47,200,260	0	0	200	200	113,324	66,674,795
2023	34,771,411	626,816	295,520	44,608,900	0	0	200	200	109,026	64,056,391
2024	33,597,316	612,278	290,768	43,324,299	0	0	200	200	104,681	62,744,490
2025	33,145,921	605,306	287,876	42,775,464	0	0	200	200	103,710	62,176,870
2026	32,754,997	600,855	283,785	42,264,129	0	0	200	200	99,037	61,284,373
2027	32,539,339	596,578	283,743	41,940,594	0	0	200	200	98,846	60,904,791
2028	32,460,001	594,959	282,974	41,856,183	0	0	200	200	98,242	60,524,004
2029	32,444,480	594,622	282,471	41,822,697	0	0	200	200	98,154	59,470,065
2030	32,347,161	592,289	281,909	41,707,055	0	0	200	200	98,135	58,901,921
2031	32,187,467	588,507	280,411	41,310,691	0	0	200	200	98,050	57,465,224
2032	32,154,808	587,845	280,092	41,081,126	0	0	200	200	97,928	57,204,199
2033	32,125,945	587,260	279,810	41,044,217	0	0	200	200	97,602	57,160,110
2034	32,109,969	586,936	279,654	41,024,342	0	0	200	200	97,550	57,137,915
2035	32,019,796	585,108	278,773	40,912,157	0	0	200	200	97,550	57,016,280
TOTAL	4,189,775,229	32,053,062	5,215,565,302	0	0	747,150	25,082,574	747,150	6,499,434,680	

a) Unadjusted for prior overpayments or underpayments of charges.

CALCULATION OF DELTA WATER RATES

(values in millions of dollars (\$) or millions of acre-feet (AF)
discounted to 1970 at 4.021 percent per annum, unless otherwise noted)

Procedure	Capital Cost Component	Minimum Operation, Maintenance, Power, and Replacement Component(a)	Total Delta Water Charge
In accordance with original intent re Articles 22(e) and 22(g)			
Commencing in 1971:			
Total costs of "initial conservation facilities" to be reimbursed, and project water entitlements to be delivered, during the project repayment period	\$748.33(b 68.97 AF	\$160.22 68.97 AF	\$908.55 68.97 AF
less, project power revenues to be realized during the project repayment period(c)	\$373.94	\$ 36.53	\$410.47
less, Delta Water Charges paid, and project water entitlements, prior to 1971(d	\$ 3.39 0.77 AF	\$ 0.65 0.77 AF	\$ 4.04 0.77 AF
Subtotal	\$371.00 ÷ 68.20 AF	\$123.04 ÷ 68.20 AF	\$494.04 ÷ 68.20 AF
Rate applicable for remainder of the project repayment period	\$ 5.44 per acre-foot	\$ 1.80 per acre-foot	\$ 7.24 per acre-foot
Commencing in 1976:			
Additional costs to be reimbursed during the project repayment period for Dos Rios-Grindstone Tunnel	\$ 91.04	\$ 1.86	\$ 92.90
less, Delta Water Charges paid, and project water entitlements delivered, during the period 1971 thru 1975	\$ 22.03 4.05 AF	\$ 7.29 4.05 AF	\$ 29.32 4.05 AF
Cumulative Subtotal	\$440.01 ÷ 64.15 AF	\$117.61 ÷ 64.15 AF	\$557.62 ÷ 64.15 AF
Rate applicable for remainder of the project repayment period	\$ 6.86 per acre-foot	\$ 1.83 per acre-foot	\$ 8.69 per acre-foot
Commencing in 1985:			
Additional costs to be reimbursed during the project repayment period for Stoney Creek Conveyance Channel	\$ 2.06	\$ 0.78	\$ 2.84
less, Delta Water Charges paid, and project water entitlements delivered, during the period 1976 thru 1984	\$ 91.51 13.34 AF	\$ 24.41 13.34 AF	\$115.92 13.34 AF
Cumulative Subtotal	\$350.56 ÷ 50.81 AF	\$ 93.98 ÷ 50.81 AF	\$444.54 ÷ 50.81 AF
Rate applicable for remainder of the project repayment period	\$ 6.90 per acre-foot	\$ 1.85 per acre-foot	\$ 8.75 per acre-foot
Commencing in 1986:			
Additional costs to be reimbursed during the project repayment period for payments to the Corps of Engineers for initial block of Dos Rios Reservoir storage	\$ 66.03	\$ 2.85	\$ 68.88
less, Delta Water Charges paid, and project water entitlements delivered, in 1985	\$ 12.21 1.77 AF	\$ 3.27 1.77 AF	\$ 15.48 1.77 AF
Cumulative Subtotal	\$404.38 ÷ 49.04 AF	\$ 93.56 ÷ 49.04 AF	\$497.94 ÷ 49.04 AF
Rate applicable for remainder of the project repayment period	\$ 8.25 per acre-foot	\$ 1.91 per acre-foot	\$ 10.16 per acre-foot
Commencing in 1994:			
Additional costs to be reimbursed during the project repayment period for payments to the Corps of Engineers for reserved block of Dos Rios Reservoir storage	\$ 28.96	\$ 1.33	\$ 30.29
less, Delta Water Charges paid, and project water entitlements delivered, during the period 1986 thru 1993	\$121.11 14.68 AF	\$ 28.04 14.68 AF	\$149.15 14.68 AF
Cumulative Total	\$312.23 ÷ 34.36 AF	\$ 66.85 ÷ 34.36 AF	\$379.08 ÷ 34.36 AF
Rate applicable for remainder of the project repayment period	\$ 9.09 per acre-foot	\$ 1.95 per acre-foot	\$ 11.04 per acre-foot
Calculation under present provisions of the Contract			
Commencing in 1971:			
Total costs of "initial" and "additional" project conservation facilities to be reimbursed, and project water entitlements to be delivered, during the project repayment period	\$936.42(b 68.97 AF	\$166.44 68.97 AF	\$1,102.86 68.97 AF
less, project power revenues to be realized during the project repayment period(c)	\$373.94	\$ 35.93	\$ 409.87
less, Delta Water Charges paid, and project water entitlements delivered, prior to 1971(d	\$ 3.39 0.77 AF	\$ 0.65 0.77 AF	\$ 4.04 0.77 AF
TOTAL	\$559.09 ÷ 68.20 AF	\$129.86 ÷ 68.20 AF	\$ 688.95 ÷ 68.20 AF
Rate applicable for remainder of the project repayment period	\$ 8.20 per acre-foot	\$ 1.90 per acre-foot	\$ 10.10 per acre-foot

- Considering that all but a very minor portion of operating costs of project conservation facilities will not vary with annual amounts of project water delivered, and therefore are properly classified as "minimum" OMP&R costs.
- Including net credits of \$4,850,000 for settlement as to the magnitude of project capital costs incurred prior to December 31, 1960, pursuant to Settlement Letter No. 1, and net credits of \$3,640,323 for settlement as to the magnitude of project capital costs for the 1961 thru 1966 period.
- Applying all conservation power revenues to reimbursement of capital costs, except that portion equal to specific operating costs of power facilities under the revenue bond resolution (\$1,500,000 annually).
- Applying all Delta Water Charges paid prior to 1970 to reimbursement of capital costs (the Charge is not divided into components until 1970), and applying payments of \$14,000 per year (1963 thru 1970, under a short term water supply contract with Last Chance Creek Water District) to reimbursement of minimum OMP&R costs.

TABLE B-21

EQUIVALENT UNIT CHARGES FOR WATER SUPPLY FOR EACH CONTRACTOR(a)

(in dollars per acre-foot of entitlement)

Project Service Area and Water Supply Contractor	Transportation Charge				Delta Water Charge ^(b)	Total Equivalent Unit Charge
	Capital Cost Component	Minimum OMP&R Component	Variable OMP&R Component	Total		
	(1)	(2)	(3)	(4)	(5)	(6)
FEATHER RIVER AREA						
City of Yuba City	0	0	0	0	10.10	10.10
County of Butte	0	0	0	0	10.10	10.10
Plumas County Flood Control and Water Conservation District	11.90	0.17	0	12.07	10.10	22.17
Feather River Area	0.66	0.01	0	0.67	10.10	10.77
NORTH BAY AREA						
Napa County Flood Control and Water Conservation District	20.13	7.00	3.02	30.15	10.10	40.25
Solano County Flood Control and Water Conservation District	9.85	2.61	0.34	12.80	10.10	22.90
North Bay Area	14.50	4.60	1.55	20.65	10.10	30.75
SOUTH BAY AREA						
Alameda County Flood Control and Water Conservation District, Zone 7	10.68	5.40	4.24	20.32	10.10	30.42
Alameda County Water District	11.30	4.75	4.83	20.88	10.10	30.98
Santa Clara County Flood Control and Water District	14.92	4.08	4.62	23.62	10.10	33.72
South Bay Area	13.41	4.46	4.58	22.45	10.10	32.55
SAN JOAQUIN VALLEY AREA						
Devil's Den Water District	7.54	4.18	3.13	14.85	10.10	24.95
Dudley Ridge Water District	4.12	1.54	1.88	7.54	10.10	17.64
Empire West Side Irrigation District	2.81	1.05	1.82	5.68	10.10	15.78
Hacienda Water District	4.24	1.60	1.87	7.71	10.10	17.81
Kern County Water Agency	6.70	2.63	2.30	11.63	10.10	21.73
County of Kings	3.02	1.13	1.78	5.93	10.10	16.03
Oak Flat Water District	1.49	0.66	1.26	3.41	10.10	13.51
Tulare Lake Basin Water Storage District	4.05	1.52	1.77	7.34	10.10	17.44
San Joaquin Valley Area	6.30	2.48	2.23	11.01	10.10	21.11
CENTRAL COASTAL AREA						
San Luis Obispo County Flood Control and Water Conservation District	46.11	11.41	7.72	65.24	10.10	75.34
Santa Barbara County Flood Control and Water Conservation District	52.64	12.22	7.70	72.56	10.10	82.66
Central Coastal Area	50.67	11.98	7.71	70.36	10.10	80.46
SOUTHERN CALIFORNIA AREA						
Antelope Valley-East Kern Water Agency	21.07	5.18	12.72	38.97	10.10	49.07
Coachella Valley County Water District	29.24	9.51	14.79	53.54	10.10	63.64
Crestline-Lake Arrowhead Water Agency	35.73	10.38	14.98	61.09	10.10	71.19
Desert Water Agency	29.70	9.66	14.79	54.15	10.10	64.25
Littlerock Creek Irrigation District	20.52	5.84	12.68	39.04	10.10	49.14
Mojave Water Agency	25.82	8.69	14.33	48.84	10.10	58.94
Palmdale Irrigation District	18.44	5.14	12.19	35.77	10.10	45.87
San Bernardino Valley Municipal Water District	37.40	10.89	10.80	59.09	10.10	69.19
San Gabriel Valley Municipal Water District	35.14	10.69	10.85	56.68	10.10	66.78
San Geronimo Pass Water Agency	46.12	13.93	11.18	71.23	10.10	81.33
The Metropolitan Water District of Southern California	32.83	7.43	10.07	50.33	10.10	60.43
Upper Santa Clara Valley Water Agency	28.81	5.75	9.97	44.53	10.10	54.63
Ventura County Flood Control District	33.97	7.06	10.12	51.15	10.10	61.25
Southern California Area	32.12	7.58	10.49	50.19	10.10	60.29
TOTAL, ALL AREAS	22.21	5.66	7.16	35.03	10.10	45.13

a) Hypothetical charges which, if received for each acre-foot of contractor entitlement during the project repayment period, would produce a sum at the end of the period equivalent to those total charges required under a water supply contract, with interest accounted for at the project interest rate; 4.021 percent per annum.

b) Approximate only. The unit charge shown is applicable only for the years following 1970.

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			B-15	206	Capital Cost Component of Transportation Charge for Each Contractor	B-15	B-18	B-12	B-12	B-14	C-11	34
			B-16	210	Minimum OMP&R Component of Transportation Charge for Each Contractor	B-16	B-19	B-13	B-13	B-15	C-12	35
			B-17	214	Unit Variable OMP&R Component of Transportation Charge	B-17	B-5	B-14	B-14	B-16	C-13	none
			B-18	217	Variable OMP&R Component of Transportation Charge for Each Contractor	B-18	B-20	B-15	B-15	B-17	C-14	36
			B-19	221	Total Transportation Charge for Each Contractor	B-19	B-21	B-16	B-16	B-18	C-15	37
FUTURE DELTA WATER RATES			B-20	225	Calculation of Delta Water Rates	B-20	none	none	none	none	none	30
EQUIVALENT COSTS OF WATER			B-21	226	Equivalent Unit Charges for Water Supply for Each Contractor	B-23	B-23	none	none	none	none	39