

MANAGEMENT OF THE CALIFORNIA STATE WATER PROJECT

BULLETIN 132-02

JANUARY 2004

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Chapter 9

Water Contracts and Deliveries



South Bay Pumping Plant

Significant Events in 2001

- On October 1, 2000, SWP long-term contractors submitted initial requests for 2001 approved Table A deliveries totaling 4.12 million acre-feet. The Department approved deliveries of 1.65 million acre-feet on December 1, 2000, resulting in initial approved Table A amounts of 40 percent for most SWP contractor requests. Unusually dry conditions caused the Department to decrease the 2001 approved Table A amounts to 824,000 acre-feet (20 percent) on January 31, 2001. As a result of improvements in water conditions, approved Table A amounts were increased to 1.03 million acre-feet (25 percent) on March 6, 2001; 1.24 million acre-feet (30 percent) on March 15, 2001; 1.38 million acre-feet (33 percent) on May 4, 2001; 1.44 million acre-feet (35 percent) on May 17, 2001; and finally to 1.61 million acre-feet (39 percent) on August 16, 2001.
- In 2001, 3,206,922 acre-feet of water were conveyed to 26 long-term contractors and 18 other agencies. That amount includes 1,546,742 acre-feet of approved Table A water; 43,182 acre-feet of Article 21 water and 253 acre-feet of unscheduled water; 2,929 acre-feet of SWP water for recreation, fish and wildlife; and 1,613,816 acre-feet of water delivered to satisfy water rights settlement agreements and agreements with SWP contractors and other agencies, including the Bureau of Reclamation.
- The Department executed five amendments to long-term water supply contracts.
- The Department executed 7 water conveyance/exchange agreements, 4 turnout agreements, 24 Turnback Water Pool Program agreements, 3 storage agreements, 9 Article 21 Water Program agreements, and one unscheduled water program agreement with SWP contractors.
- The Department conveyed 248,086 acre-feet of Central Valley Project water through SWP facilities.
- Ten Feather River water right settlement agencies received a total of 1,078,656 acre-feet.

The long-term water supply contracts for water service from the State Water Project between the Department and 29 local agencies are basic to the project's construction and operation. In return for State financing, constructing, operating, and maintaining facilities needed to provide water service, the agencies contractually agreed to repay all associated SWP capital and operating costs.

The Department delivers water to SWP contractors according to their long-term water supply contracts.

These contracts set forth Table A amounts, which determine how much water a contractor may request each year from the Department.

Annual Table A represents the total amount of project water that an SWP contractor may

request each year, according to that contractor's long-term water supply contract.

Approved Table A represents the amount of annual Table A requested by the contractors and approved for delivery by the Department, based on hydrologic conditions, current reservoir storage, and total requests by the SWP water

Long-Term SWP Water Supply Contracts

The first water supply contract was signed with the Metropolitan Water District of Southern California on November 4, 1960. The contract was negotiated by the Department and Metropolitan according to terms of the contracting principles for water service contracts announced by Governor Edmund G. Brown on January 20, 1960.

The Metropolitan contract became the prototype for all water contracts; by the end of 1967, 31 agencies had contracted for water. In addition, a water supply contract was executed with the City of West Covina in December 1963, but was terminated in August 1965; the city's Table A amount was transferred to Metropolitan through an amendment to the district's long-term contract with the Department. Long-term contracts with Hacienda Water District and Devil's Den Water District were also terminated when those districts transferred their Table A amounts, through contract amendments, to Tulare Lake Basin Water Storage District (1981) and Castaic Lake Water Agency (1992), respectively. Today the SWP has long-term water supply contracts with 29 agencies. Those contracts have been amended periodically to incorporate mutually desired modifications.

All water contracts signed in the 1960s included an estimate of the date water would first be delivered and a schedule of the amount of water the agency could expect to be delivered annually (annual Table A amounts). That amount was designed to increase gradually until the maximum amount of annual Table A was reached. The total combined maximum annual Table A amount for all water contracting agencies was initially 4,230,000 acre-feet, assuming full development of the SWP.

The contracts were initially designed to be valid for 75 years or until all bonds sold as part of the California Water Resources Development Bond Act were repaid, whichever period was longer. As a result of amendments to contracts in the 1990s, the current combined maximum annual Table A amount totals 4,172,786 acre-feet, and the contracts are in effect for the longest of the following periods: (1) the project repayment period, which extends to the year 2035; (2) 75 years from the date of the contract; or (3) the period ending with the latest maturity date of any bond used to finance the construction costs of project facilities.

contractors. The Department is not always able to deliver the quantity of water requested by the contractors; under certain conditions, a lesser amount, allocated according to the long-term water supply contracts and the process noted above, is made available for delivery.

Approved Table A amounts may also be referred to in this chapter as *approved amounts* or *approved water*.

The long-term water supply contracts are amended as needed. During 2001, the Department executed five amendments to these contracts.

The Department also enters into miscellaneous agreements with SWP contractors and other agencies—which may be amended periodically—to convey SWP and non-SWP water through the California Aqueduct and approve the construction, operation, and maintenance of turnouts along SWP facilities. During 2001, the Department executed 7 water conveyance/exchange agreements, 4 turnout agreements, 24 Turnback Water Pool Program agreements, 3 storage agreements, 9 Article 21 Water Program agreements, and one unscheduled water program agreement with SWP contractors. Pending execution are one water conveyance/exchange agreement, four turn-in agreements, and two storage agreements.

The State Water Project Analysis Office has developed a numbering system for contracts, amendments, and agreements executed by the Department. These numbers, designated as SWPAO #XXXXX, are located in parentheses after each contract, amendment, or agreement.

Detailed information about amendments and agreements follows.

Amendments to Long-Term SWP Water Supply Contracts

All the original contracts signed by the Department and local agencies have been previously amended to incorporate mutually desired

changes. Most amendments fall under the following five general categories:

- (1) revision of Table A amounts in the water supply contracts;
- (2) allocation of costs and benefits for the enlargement or extension of the East Branch and extension of the Coastal Branch of the California Aqueduct;
- (3) purchase of excess capacity in the California Aqueduct;
- (4) provisions to allow contractors, during certain conditions, to carry over undelivered SWP approved Table A water from one year for delivery in the next year; and
- (5) implementation of Monterey Agreement principles.

The following long-term SWP Water Supply Contracts were amended during 2001.

Antelope Valley-East Kern Water Agency.

The Department executed Amendment No. 20 to the Water Supply Contract between AVEK and the Department on December 31, 2001. The Amendment provided for the permanent transfer of 3,000 acre-feet of SWP Table A amounts from Tulare Lake Basin Water Storage District to AVEK, and set forth conditions for the transfer. The transfer is effective January 1, 2002. (SWPAO #02004)

County of Butte. The Department executed Amendment No. 16 to the Water Supply Contract between Butte and the Department on December 26, 2001. The Amendment provided for reduction of Butte's Table A amounts from 27,500 acre-feet to 3,500 acre-feet for 2002, 2003, and 2004. In 2005, Butte's Table A amounts will revert to the maximum of 27,500 acre-feet. (SWPAO #01030)

Dudley Ridge Water District. The Department executed Amendment No. 24 to the Water Supply Contract between Dudley Ridge and the Department on December 31, 2001. The Amendment provided for the permanent transfer of 3,973 acre-feet of SWP Table A amounts from Tulare to Dudley Ridge, and set forth conditions

for the transfer. The transfer is effective January 1, 2002. (SWPAO #02002)

Tulare Lake Basin Water Storage District.

The Department executed Amendment No. 26 to the Water Supply Contract between Tulare and the Department on December 31, 2001. The Amendment provided for the permanent transfer of 3,973 acre-feet of SWP Table A amounts from Tulare to Dudley Ridge, and set forth conditions for the transfer. The transfer is effective January 1, 2002. (SWPAO #02001)

Tulare Lake Basin Water Storage District.

The Department executed Amendment No. 27 to the Water Supply Contract between Tulare and the Department on December 31, 2001. The Amendment provided for the permanent transfer of 3,000 acre-feet of SWP Table A amounts from Tulare to AVEK, and set forth conditions for the transfer. The transfer is effective January 1, 2002. (SWPAO #02003)

Monterey Amendments

The Monterey Amendments restructure and clarify procedures for SWP water allocation during times of shortage; increase the use of water management practices that improve the reliability of water supplies; adjust the financial rate structure of the SWP to more closely match revenue needs; and provide accurate information on SWP capabilities. The Monterey Amendments are discussed in detail in Chapter 1, *Summary of Significant Events*, of Bulletin 132-95.

No Monterey Amendments were executed during 2001. Plumas County Flood Control and Water Conservation District and Empire West Side Irrigation District remain the only long-term SWP contractors who have not signed the Monterey Amendment.

The Planning and Conservation League filed a lawsuit on December 27, 1995, challenging the California Environmental Quality Act compliance for the Monterey Amendment. A Sacramento County Superior Court judge later dismissed the lawsuit. PCL appealed the decision and on September 15, 2000, the Third District Court of Appeal reversed the Superior

Court ruling. On December 13, 2000, the California Supreme Court denied review. The parties commenced mediation, and proceedings in Superior Court are stayed pending completion of mediation. Proposals and counterproposals have been exchanged without success, and mediation is continuing. The stay of litigation in Superior Court has been extended to June 2002. Additional information can be found in Chapter 6, *Legislation and Litigation*.

Monterey Settlement Agreement Guidelines

Although the Monterey Settlement Agreement, dated May 5, 2003, falls outside the reporting period for Bulletin 132-02, the transfer guidelines prepared in connection with the agreement are reported here in order to meet the requirement of Item 5 of the guidelines, which specifies that they be published in the next edition of Bulletin 132.

The Settlement Agreement was reached in *Planning and Conservation League et al. v. Department of Water Resources*. In accordance with this Settlement Agreement, the *Guidelines for Review of Proposed Permanent Transfers of State Water Project Annual Table A Amounts* are given below.

The guidelines are also available online at www.swpao.water.ca.gov/pdfs/03-09.pdf.

- (1) *Purpose*: The purpose of these guidelines is to describe the process for DWR's review of proposed permanent transfers of State Water Project Annual Table A Amounts and, by so doing, provide disclosure to SWP contractors and to the public of DWR's process and policy for approving permanent transfer of SWP Annual Table A Amounts. Such disclosure should assist contractors in developing their transfer proposals and obtaining DWR review expeditiously, and assist the public in participating in that review.
- (2) *Coverage*: These guidelines will apply to DWR's approval of proposed permanent transfers of water among existing SWP contractors and, if and when appropriate, to proposed permanent transfers of water

- from an existing SWP contractor to a new SWP contractor.
- (3) *Interpretation:* These guidelines are in furtherance of the State policy in favor of voluntary water transfers and shall be interpreted consistent with the law, including but not limited to Water Code Section 109, the Burns-Porter Act, the Central Valley Project Act, the California Environmental Quality Act, area of origin laws, the public trust doctrine, and with existing contracts and bond covenants. These guidelines are not intended to change or augment existing law.
- (4) *Revisions:* Revisions may be made to these guidelines as necessary to meet changed circumstances, changes in the law or long-term water supply contracts, or to address conditions unanticipated when the guidelines are adopted. Revisions shall be in accordance with the Settlement Agreement.
- (5) *Distribution:* The transfer guidelines shall be published by DWR in the next available edition of Bulletin 132, and also as part of the biennial disclosure of SWP reliability as described in the Settlement Agreement.
- (6) *Contract Amendment:* Permanent transfers of SWP water are accomplished by amendment of each participating contractor's long-term water supply contract. The amendment consists of amending the Table A upwards for a buying contractor and downwards for a selling contractor. The amendment shall be in conformity with all provisions of the long-term water supply contracts, applicable laws, and bond covenants. Other issues to be addressed in the contract amendment will be subject to negotiation among DWR and the two participating contractors. The negotiations will be conducted in public, pursuant to the Settlement Agreement and Notice to State Water Project Contractors Number 03-10.
- (7) *Financial Issues:* The purchasing contractor must demonstrate to DWR's satisfaction that it has the financial ability to assume payments associated with the transferred water. If the purchasing entity was not a SWP contractor as of 2001, special financial requirements pertain as described below, as well as additional qualifications.
- (8) *Compliance with CEQA:* Consistent with CEQA, the State's policy to preserve and enhance environmental quality will guide DWR's consideration of transfer proposals (Public Resources Code Section 21000). Identification of the appropriate lead agency will be based on CEQA, the CEQA Guidelines, and applicable case law, including *PCL v. DWR*. CEQA requires the lead agency at a minimum to address the feasible alternatives to the proposed transfer and its potentially significant environmental impacts (1) in the selling contractor's service area; (2) in the buying contractor's service area; (3) on SWP facilities and operations; and (4) on the Delta and areas of origin and other regions as appropriate. Impacts that may occur outside of the transferring SWP contractors' service areas and on fish and wildlife shall be included in the environmental analysis. DWR will not approve a transfer proposal until CEQA compliance is completed. The lead agency shall consult with responsible and trustee agencies and affected cities and counties and, when DWR is not the lead agency, shall provide an administrative draft of the draft EIR or Initial Study/Negative Declaration to DWR prior to the public review period. A descriptive narrative must accompany a checklist, if a checklist is used. The lead agency shall conduct a public hearing on the EIR during the public comment period and notify DWR's State Water Project Analysis Office of the time and place of such hearing in addition to other notice required by law.
- (9) *Place of Use:* The purchasing contractor must identify the place and purpose of use of the purchased water, including the reasonable and beneficial use of the water. Typically, this information would be included in the environmental documentation. If a specific transfer proposal does not fit precisely into any of the alternatives listed below, DWR will use the principles described in these Guidelines to define the

process to be followed. The information to be provided under this paragraph is in addition to the CEQA information described in Paragraph 8 of these guidelines.

- a. If the place of use is within the contractor's service area, the contractor should disclose the purpose of the transferred water, such as whether the water is being acquired for a specific development project, to enhance overall water supply reliability in the contractor's service area, or some other purpose. If the transferred water is for a municipal purpose, the contractor should state whether the transfer is consistent with its own Urban Water Management Plan or that of its member unit(s) receiving the water.
- b. If the place of use is outside the contractor's service area, but within the SWP authorized place of use, and service is to be provided by an existing SWP contractor, then, in addition to *Paragraph 9(a)* above, the contractor should provide DWR with copies of LAFCO approval and consent of the water agency with authority to serve that area, if any. In some instances, DWR's separate consent is required for annexations in addition to the approval for the transfer.
- c. If the place of use is outside the SWP authorized place of use and service is to be provided by an existing SWP contractor, the contractor should provide information in *Paragraph 9(a)* and *9(b)*. Prior to approving the transfer, DWR will consider project delivery capability, demands for water supply from the SWP, and the impact, if any, of the proposed transfer on such demand. If DWR approves the transfer, DWR will petition State Water Resources Control Board for approval of expansion of authorized place of use. Water will not be delivered until the place of use has been approved by the SWRCB and will be delivered in compliance with any terms imposed by the SWRCB.
- d. If the place of use is outside the SWP authorized place of use and service is not

to be provided by an existing SWP contractor, DWR will consider the transfer proposal as a proposal to become a new SWP contractor. Prior to adding a new SWP contractor, DWR will consider project delivery capability, demands for water supply from the SWP, and the impact, if any, of the proposed transfer on such demand. DWR will consult with existing SWP contractors regarding their water supply needs and the proposed transfer. In addition to the information in Paragraph 9(a), 9(b), and 9(c), the new contractor should provide information similar to that provided by the original SWP contractors in the 1960's Bulletin 119 feasibility report addressing hydrology, demand for water supply, population growth, financial feasibility, etc.

DWR will evaluate these issues independently and ordinarily will act as lead agency for CEQA purposes. In addition, issues such as area of origin claims, priorities, environmental impacts and use of water will be addressed. The selling contractor may not be released from financial obligations. The contract will be subject to a CCP 860 validation action initiated by the new contractor. If DWR approves the transfer, DWR will petition the SWRCB for approval of expansion of authorized place of use. Water will not be delivered until the place of use has been approved by the SWRCB and will be delivered in compliance with any terms imposed by the SWRCB.

- (10) *DWR Discretion*: Consistent with the long-term water supply contract provisions, CEQA, and other provisions of law, DWR has discretion to approve or deny transfers. DWR's exercise of discretion will incorporate the following principles:
 - a. As required by CEQA, DWR as an agency with statewide authority will implement feasible mitigation measures for any significant environmental impacts resulting from a transfer if such impacts and their mitigation are not addressed by other public agencies and are within DWR's jurisdiction.

- b. DWR will invoke “overriding considerations” in approving a transfer only as authorized by law, including but not limited to CEQA, and, to the extent applicable, the public trust doctrine and area of origin laws.

Miscellaneous Agreements with Long-Term SWP Contractors

Water Conveyance/Exchange Agreements

During 2001, water conveyance/exchange agreements were executed with long-term SWP contractors as described below.

Dudley Ridge Water District. An agreement executed on December 26, 2001, between the Department, Dudley Ridge, and Tulare, provided for the delivery of up to 3,000 acre-feet of Dudley Ridge’s 2001 approved Table A amounts to Tulare’s turnout at Reach 8D of the California Aqueduct. Dudley Ridge requested the delivery to Tulare’s turnout in addition to Dudley Ridge’s turnout due to the rapid filling of San Luis Reservoir, the need to deliver 2000 SWP carryover Table A prior to spilling, and the availability of 2001 Article 21 water. A total of 674 acre-feet of Dudley Ridge’s Article 56 carryover water was delivered to Tulare’s turnout at Reach 8D during 2001. (SWPAO #01025)

Empire West Side Irrigation District. An agreement executed October 18, 2001, between the Department and Empire, approved the delivery of unscheduled water to Empire in 2001 at times when project water was not needed for fulfilling approved Table A deliveries or for meeting project operational commitments. A total of 253 acre-feet of unscheduled water was delivered to Empire in 2001. (SWPAO #01026)

Kern County Water Agency. A letter agreement, pending execution between the Department and Kern, will provide for the delivery of up to 20,000 acre-feet of 2001 water year CVP water supply from the Bureau on behalf of four

Central Valley Project contractors. In exchange, Kern would return a like amount of its approved Table A amounts to the CVP contractors by December 31, 2001. The Department petitioned the State Water Resources Control Board in May 2001 for approval for delivery of the return water. A total of 11,487 acre-feet was delivered to CVP contractors at O’Neill Forebay and 11,487 acre-feet of water was returned from O’Neill Forebay to Kern in 2001. (SWPAO #01010)

Kern County Water Agency. A letter agreement dated September 21, 2001, and executed October 5, 2001, between the Department, Kern, and Dudley Ridge, approved the transfer of up to 1,500 acre-feet of Kern’s 2001 Table A amounts to Dudley Ridge. The agreement facilitated the water transfer from Kern to Dudley Ridge on behalf of two landowners, C. J. Richie Farms and Westfarmers, who farm in both Kern and Dudley Ridge service areas. During 2001, a total of 1,500 acre-feet was delivered to Dudley Ridge. (SWPAO #01032)

Tulare Lake Basin Water Storage District. A letter agreement dated May 24, 2001, and executed June 6, 2001, between the Department, Tulare, and Empire approved the transfer of up to 500 acre-feet of Tulare’s 2001 Table A amounts to Empire, on behalf of the landowner Westlake Farms, Inc., who farms in both Tulare and Empire service areas. During 2001, a total of 500 acre-feet of Tulare’s Article 56 carryover water was delivered to Empire. (SWPAO #01020)

Tulare Lake Basin Water Storage District. A letter agreement dated June 27, 2001, and executed July 6, 2001, between the Department and Tulare, approved the transfer of up to 1,000 acre-feet of Tulare’s 2001 Table A amounts to Westlands, on behalf of landowner Newton Brothers, who farms in both the Tulare and Westlands (Venture Farms Trust) service areas. The Department petitioned SWRCB on June 26, 2001, for approval of a temporary change of place of use. During 2001, a total of 82 acre-feet was delivered to Westlands. (SWPAO #01021)

Tulare Lake Basin Water Storage District. A letter agreement, dated June 15, 2001, and executed July 26, 2001, between the Department, Tulare, and Westlands, provides for the delivery of up to 50,000 acre-feet of non-project water from Westlands to Tulare between December 2000 and April 15, 2001, in exchange for a like amount of Tulare's Table A amounts during the period 2001 through 2003. The delivery of SWP exchange water to Westlands will be from the Delta to Reach 7 of the California Aqueduct for use within the Kings County portion of Westlands' service area. During December 2000, a total of 2,981 acre-feet was delivered to Tulare. During January, March, and April, a total of 25,164 acre-feet was delivered to Tulare. A combined total of 28,145 acre-feet was delivered to Tulare during 2000 and 2001. During 2001, 1,975 acre-feet were returned to Westlands, leaving a balance of 26,170 acre-feet to be returned to Westlands. (SWPAO #01009)

Tulare Lake Basin Water Storage District. A letter agreement dated June 29, 2001, and executed July 6, 2001, between the Department and Tulare, approved the transfer of up to 3,000 acre-feet of Tulare's 2001 Table A amounts to Westlands. The agreement facilitated the water transfer from Tulare to Westlands, on behalf of landowner Hansen Ranches, who farms in both the Tulare and Westlands (Vista Verde Farms, Inc.) service areas. The Department petitioned SWRCB on June 26, 2001, for approval of a temporary change of place of use. The Department has approved similar transfers annually since 1996. During 2001, a total of 1,000 acre-feet was delivered to Westlands. (SWPAO #01022)

During 2001, water was delivered pursuant to agreements with SWP contractors executed prior to 2001, as described below.

Alameda County Flood Control and Water Conservation District-Zone 7. A conveyance agreement dated July 28, 1995, between Alameda-Zone 7 and the Department provides for the transfer of up to 5,000 acre-feet of Byron-Bethany Irrigation District's local water annually to Alameda-Zone 7 through SWP facilities.

An amendment to extend the agreement to December 31, 2001, was executed January 17, 2001. Byron-Bethany may only transfer water that has been made available by conservation and crop idling. In 2001, 3,997 acre-feet of Byron-Bethany's local water was pumped at Banks Pumping Plant and delivered to Alameda-Zone 7's turnouts in the South Bay Aqueduct. (SWPAO #00321)

Dudley Ridge Water District. An agreement executed May 22, 1998, among the Department, Dudley Ridge, and Tulare, provided for the change in point of delivery, through 2035, of up to 1,000 acre-feet annually of Dudley Ridge's approved Table A amounts through Tulare's turnout located at Milepost 172.66 of the California Aqueduct. Dudley Ridge's approved Table A amounts will be delivered to Westlake Farms, which is located within Dudley Ridge's service area but not near its conveyance facilities. Tulare has conveyance capability and has agreed to provide service to Westlake Farms. During 2001, the Department delivered 14 acre-feet of Dudley Ridge's 2000 approved Table A amounts through Tulare's turnout at Reach 8C. (SWPAO #98001)

Kern County Water Agency. An agreement executed on June 8, 2000, between the Department, Kern, and Western Hills Water District, approved the delivery of 8,000 acre-feet of pre-1914 Lower River Water banked in Kern's share of the Pioneer Groundwater Banking Project. A portion of Kern's annual Table A amounts will be delivered annually to Western Hills from Reach 2A of the California Aqueduct; in exchange, Kern will take a like amount of banked local water from the Pioneer Groundwater Bank. The Department petitioned SWRCB and by SWRCB Order dated April 21, 2000, Western Hills' service area was included within the authorized SWP place of use. A total of 638 acre-feet of Kern's Table A amounts was delivered to Western Hills at Reach 2A during 2001. (SWPAO #01001)

Mojave Water Agency. An agreement executed November 13, 1997, among AVEK, Mojave, and

the Department, approved a change in point of delivery through 2019 of up to 2,250 acre-feet annually of Mojave's approved Table A amount to AVEK's Fairmont Turnout in Reach 19 of the California Aqueduct. Mojave does not have conveyance facilities to provide service to a solar energy generating station located within its service area. AVEK has conveyance capability and has agreed to provide service. During 2001, the Department delivered 1,385 acre-feet of Mojave's 2001 approved Table A amounts through AVEK's turnout at Reach 19. (SWPAO #97003)

Turn-in Agreements

Antelope Valley-East Kern Water Agency. A turn-in agreement pending execution between the Department and AVEK will approve the introduction of local water into the California Aqueduct during 2001. The local water will be introduced from a temporary turn-in located at Reach 22B, and AVEK will take delivery of local water by exchange with project water delivered upstream in Reach 22A. During 2001, a total of 152 acre-feet of local water was introduced at Reach 22B and 152 acre-feet of SWP water were delivered to AVEK at Reach 22A. (SWPAO #01029)

Kern County Water Agency. A turn-in agreement is pending execution between the Department and Kern. In 2000, Kern, at the request of the Kern Water Bank Authority, constructed a turn-in facility at Milepost 238.19 at Reach 13B of the California Aqueduct. This agreement will approve the introduction of Kern's local water from Kern Water Bank into the California Aqueduct and remains in effect through December 31, 2001. During 2001, a total of 129,062 acre-feet of local water was introduced into the California Aqueduct under this agreement. (SWPAO #01023)

Kern County Water Agency. A turn-in agreement pending execution between the Department and Kern will approve the introduction of Kern's local water from Buena Vista Water Storage District into the California Aqueduct at Reach 13B (Buena Vista 7) at Milepost 242.65.

This agreement remains in effect through December 31, 2001. During 2001, a total of 1,695 acre-feet of local water was introduced under this agreement. (SWPAO #01027)

Kern County Water Agency. A turn-in agreement pending execution between the Department and Kern approves the introduction of Kern's local water into the California Aqueduct at Reaches 14B, 14C, and 15. During 2001, a total of 396 acre-feet of local water was introduced into Reach 14B, and a total of 242 acre-feet was introduced into Reach 14C of the California Aqueduct. (SWPAO #01028)

During 2001, water was introduced into the Aqueduct pursuant to agreements with SWP contractors executed prior to 2001, as described below.

Kern County Water Agency. A turn-in agreement executed May 2, 1995, among Kern, Semitropic Water Storage District, and the Department, approved the introduction of Kern's local water into the California Aqueduct at Reach 10A (Semitropic No. 2 Turnout) at Milepost 209.80. During 2001, a total of 1,813 acre-feet of local water was introduced under this agreement.

Turnout Agreements

Antelope Valley-East Kern Water Agency. An agreement dated March 28, 2000, between the Department and AVEK, allowed the construction, operation, and maintenance of the Rancho Vista Turnout at Milepost 339.68, Reach 20B of the California Aqueduct. The turnout has a design capacity of 5 cfs. Construction was completed in March 2000, but was not formally accepted in 2001.

Kern County Water Agency and Belridge Water Storage District. An agreement dated October 29, 2001, among the Department, Kern, and Belridge Water Storage District, allowed the modification, operation, and maintenance of the existing Belridge Turnout No. 1A at Milepost 209.71, Reach 10A of the California Aqueduct. The turnout has a design capacity of

100 cfs. Modification work consists of removing the existing parshall flume measuring system and installing a new 54-inch diameter piped system with a venturi meter.

Kern County Water Agency and West Kern Water District. An agreement dated March 6, 2000, among the Department, Kern, and West Kern, allowed the construction, operation, and maintenance of the West Kern Turnout No. 3 at Milepost 224.07, Reach 12D of the California Aqueduct. The turnout has a design capacity of 15 cfs. Construction of the turnout was completed in April 2001.

Kern County Water Agency and Western Hills Water District. An agreement dated June 8, 2000, among the Department, Kern, and Western Hills, allowed the construction, operation, and maintenance of the Western Hills Turnout at Milepost 42.90, Reach 2A, on the west side of the California Aqueduct. The turn-out has a design capacity of 30 cfs. Construction of the turnout was completed in September 2001.

Agreements and Activities Related to the Monterey Amendments

Turnback Water Pool Program. Under Article 56(d) of the Monterey Amendments, the sixth year of the Turnback Water Pool Program was initiated through Notice to State Water Project Contractors No. 01-04, dated February 9, 2001. All SWP contractors who signed Monterey Amendments were permitted to participate in the program. The program allowed SWP contractors to offer a portion of their approved 2001 Table A water for sale in a turnback pool for use by interested SWP contractors. Based on Table A supply and demand, the turnback water was allocated among the selling and purchasing contractors. In 2001, 18,240 acre-feet of water were purchased under the Turnback Water Pool Program.

Transactions for Pool A and Pool B of the turnback Water Pool Program occurred in February and March 2001, respectively. Turnback water sold for \$11.98 per acre-foot—50 percent of the

Delta Water Rate—through Pool A, and for \$5.99 per acre-foot—25 percent of the Delta Water Rate—through Pool B. All money collected through the Turnback Water Pool Program was paid to the selling contractors. The 2001 Turnback Water Pool Program closed April 1, 2001.

Table 9-1 lists contractors who participated in Pool A and Pool B of the Turnback Water Pool Program.

Table 9-1. 2001 Turnback Water Pool Program (Acre-feet)

Contractor	Sold	Purchased
Pool A		
San Geronio	800	
Ventura	3,000	
Alameda County		107
Dudley Ridge		136
Kern		2,546
Tulare		301
Santa Barbara		116
AVEK		352
Castaic Lake		242
Pool B		
Mojave	14,240	
San Geronio	200	
Napa		82
Alameda-Zone 7		308
Oak Flat		22
Dudley Ridge		211
Kern		3,956
Tulare		468
San Luis Obispo		99
Santa Barbara		180
AVEK		547
Castaic Lake		376
Coachella Valley		91
Desert		151
Metropolitan		7,949

Storage of Water Outside Service Area. Pursuant to Article 56 of the Monterey Amendments, five SWP contractors have agreements with the Department to deliver and store SWP water outside their service area for later use within their service area. The following agreements include provisions concerning the points of delivery and method for transporting such water.

Alameda County Flood Control and Water Conservation District, Zone 7. An agreement dated December 10, 1998, among the Department,

Alameda-Zone 7, and Kern, provided for the delivery of a portion of Alameda-Zone 7's 1998 approved Table A amounts, Article 21 water, and other water supplies for storage and later recovery from Semitropic Water Storage District in accordance with the Alameda-Zone 7 and Semitropic Water Storage District Banking Program Agreement. All return water is to be delivered to Alameda-Zone 7 by December 31, 2035. During 2001, a total of 1,807 acre-feet of water was recovered and delivered to Alameda-Zone 7's service area. (SWPAO #98020)

Alameda County Flood Control and Water Conservation District, Zone 7. An agreement pending execution among the Department, Alameda-Zone 7, and Kern, will provide for the delivery of a portion of Alameda-Zone 7's 2001 approved Table A amounts, Article 21 water, and other water supplies for storage and later recovery from Semitropic, in accordance with the Alameda-Zone 7 and Semitropic Water Storage District Banking Program Agreement. Alameda-Zone 7 signed similar delivery agreements for 1998, 1999, and 2000. All return water is to be delivered to Alameda-Zone 7 by December 31, 2011. During 2001, the Department delivered 5,000 acre-feet of Alameda-Zone 7's 2000 extended carryover water to Reach 10A for storage by Semitropic. (SWPAO #01035)

Alameda County Water District. A change of point of delivery agreement executed on October 22, 2001, among the Department, Alameda County, and Kern, approved the delivery of a portion of Alameda County's 2001 approved Table A amounts, Article 21 water, and other water supplies for storage and later recovery from the Semitropic Water Storage District Banking Program, in accordance with the Alameda County and Semitropic Banking Program Agreement. Alameda County has signed similar delivery agreements since 1996. All return water is to be delivered to Alameda County by December 31, 2035. No water was delivered in 2001 to Reach 10A for storage by Semitropic. (SWPAO #01018)

Dudley Ridge Water District. A change in point of delivery agreement executed on October 1, 2001, among the Department, Dudley Ridge, and Kern, approved the delivery of a portion of Dudley Ridge's 2001 approved Table A amounts, Article 21 water, and other water supplies for storage and later recovery from KWB. Dudley Ridge signed similar delivery agreements since 1996. All return water is to be delivered to Dudley Ridge by December 31, 2011. During 2001, the Department delivered 800 acre-feet of Dudley Ridge's 2000 extended carryover Table A amounts and 933 acre-feet of Article 21 water to Reach 13B for storage by Kern. (SWPAO #01024)

Dudley Ridge Water District. A letter agreement dated January 14, 2000, and executed February 2, 2000, among the Department, Dudley Ridge, and San Gabriel Valley Municipal Water District, provides for the delivery of a portion of Dudley Ridge's 1999 carryover Table A amounts for storage and later recovery from groundwater basins within San Gabriel. All return water is to be delivered to Dudley Ridge by December 31, 2010. A combined total of 4,394 acre-feet was delivered to San Gabriel during 1999 and 2000. According to the agreement, 95 percent of the water stored (4,174 acre-feet with 5 percent loss) will be returned to Dudley Ridge. During 2001, 4,174 acre-feet were returned to Dudley Ridge at Reach 8D, completing this agreement. (SWPAO #99002)

Dudley Ridge Water District. A letter agreement, executed November 19, 1996, among the Department, Dudley Ridge, and Kern, approved the delivery of up to 5,000 acre-feet of Dudley Ridge's 1996 Article 21 water and up to 1,000 acre-feet of Dudley Ridge's Table A amounts to KWB for storage and later recovery. The transfer was part of an exchange with Kern that allowed three landowners in Dudley Ridge to receive a like amount of water from Kern in future years when they could utilize the water more beneficially. During 1996, a total of 4,131 acre-feet was delivered to Kern. During 2001, a total of 3,215 acre-feet was recovered and delivered to Dudley Ridge at Reach 8D.

Dudley Ridge Water District. A letter agreement, executed in 1993, between Dudley Ridge and Kern, allowed the storage of 3,000 acre-feet of pre-1914 Kaweah River water to Rosedale-Rio Water Storage District, a member unit of Kern, for the benefit of Dudley Ridge. In exchange, Rosedale-Rio is to return 2,000 acre-feet of its portion of Kern's Table A water to Dudley Ridge within 10 years. During 1993, a total of 3,000 acre-feet was delivered to Rosedale-Rio for storage. During 1994, a total of 626 acre-feet was returned to Dudley Ridge. During 2001, a total of 1,374 acre-feet was returned to Dudley Ridge at Reach 8D, completing this agreement.

Metropolitan Water District of Southern California. A long-term agreement, pending execution among the Department, Metropolitan, and Kern, approved the delivery of a portion of Metropolitan's annual Table A and other water supplies for storage and later recovery from groundwater basins within Arvin-Edison Water Storage District, in accordance with the Metropolitan and Arvin-Edison water management program agreement. The return water is to be delivered to Metropolitan from Arvin-Edison and/or by exchange of Metropolitan's water for a like amount of Kern's SWP approved Table A amounts or other water deliverable from the California Aqueduct. The water is to be returned to Metropolitan by December 31, 2035.

Before this long-term agreement was prepared, three interim agreements dated December 29, 1997, September 17, 1998 (first amendment to December 29, 1997), and April 13, 1999 (second amendment to December 29, 1997), among the Department, Metropolitan, and Kern provided temporary authorization for Metropolitan to store water in Arvin-Edison. Water was delivered to Arvin-Edison for storage each year from 1997 to 2000 under these agreements. During 2001, no water was delivered for storage in Arvin-Edison, and 20,800 acre-feet were recovered and delivered to Metropolitan at Reach 30. (SWPAO #01013)

Metropolitan Water District of Southern California. A letter agreement executed April 21, 1993, among the Department, Metropolitan, and

Kern, approved the delivery of Metropolitan's 1992 carryover water for storage in and later recovery from Semitropic. Water is to be returned by December 31, 2010. A subsequent long-term agreement, executed August 21, 1995, among the Department, Metropolitan, and Kern, approved the annual delivery of a portion of Metropolitan's annual Table A and other water supplies for storage in and later recovery from Semitropic, in accordance with the Metropolitan and Semitropic's Water Banking Program Agreement. This Agreement remains in effect until November 4, 2035. Water was delivered to Semitropic for storage in 1993, and each year from 1995 to 1999. During 2001, 31,500 acre-feet were recovered and delivered to Metropolitan at Reach 30.

Santa Clara Valley Water District. A 1996 agreement among the Department, Santa Clara, and Kern, approved for the delivery of a portion of Santa Clara's approved Table A amounts, Article 21 water, and other water supplies, for storage and later recovery from the Semitropic Water Storage District Banking Program, in accordance with the Santa Clara and Semitropic Banking Program Agreement. All return water is to be delivered to Santa Clara by December 31, 2035. During 1996, 45,000 acre-feet of Santa Clara's approved Table A amounts were delivered to Semitropic for storage. According to the Agreement, 90 percent of the water stored (40,500 acre-feet with 10 percent loss) will be returned to Santa Clara. During 2001, 30,000 acre-feet were returned to Santa Clara and subsequently sold to the Environmental Water Account, leaving a balance of 10,500 acre-feet of water stored in 1996 in Semitropic.

Santa Clara Valley Water District. An agreement, executed on December 27, 2001, among the Department, Santa Clara, and Kern, approved the delivery of a portion of Santa Clara's 2001 approved Table A amounts, Article 21 water, and other water supplies, for storage and later recovery from the Semitropic Water Storage District Banking Program, in accordance with the Santa Clara and Semitropic Banking Program Agreement. Santa Clara has signed similar

delivery agreements since 1996. All return water is to be delivered to Santa Clara by December 31, 2035. During 2001, the Department did not deliver any of Santa Clara's 2001 approved Table A amounts or Article 21 water to Semitropic. (SWPAO #01019)

Article 21 Water Program

Pursuant to Article 21 of the Monterey Amendments, Article 21 water replaces surplus, wet weather, and Article 12(d) water. The Article 21 water program allows a contractor to take delivery of water over the approved and scheduled Table A amounts for the current year. Article 21 water is available for delivery on a short-term basis as determined by the Department when water is still available after operational requirements for project water deliveries, water quality, and other requirements are being met.

The conditions for the Article 21 Water Program for 2001 were described in the February 20, 2001, Notice to State Water Project Contractors No. 01-05. Participants were required to sign the notice, which indicated acceptance of the criteria, procedures, and charges for the program. Nine SWP contractors participated and collectively received a total of 43,182 acre-feet of Article 21 water.

Since Empire has not signed the Monterey Amendment, it may still receive unscheduled water for agricultural purposes. Empire received 253 acre-feet of unscheduled water in 2001.

Flexible Storage Program

Pursuant to Article 54 of the Monterey Amendments, the flexible storage program provides SWP contractors participating in the repayment of the capital costs of Castaic Lake and Lake Perris the option to withdraw water in excess of approved deliveries. The objective of this program is to provide additional flexibility and water management benefits to local participating agencies.

Available "flexible storage" is approximately 50 percent of active storage, providing for

160,000 acre-feet at Castaic Lake and 65,000 acre-feet at Lake Perris. Participating contractors of the Castaic Lake flexible storage program include Metropolitan, Ventura, and Castaic Lake. Respectively, each can withdraw a maximum amount of 153,940 acre-feet, 1,377 acre-feet, and 4,683 acre-feet. At Lake Perris, Metropolitan can withdraw a maximum amount of 65,000 acre-feet. Any participating contractor is given 5 years to replace the water with Table A amounts, purchased water, exchange water, or local water.

Two SWP contractors participated in the Flexible Storage Program in 2001. Metropolitan withdrew 10,692 acre-feet from Lake Perris in the spring and replaced 4,710 acre-feet in the summer, leaving a balance of 10,692 acre-feet at the end of 2001. Metropolitan withdrew 64,300 acre-feet from Castaic Lake, leaving a balance of 64,300 acre-feet at the end of 2001. Castaic Lake Water Agency withdrew 2,589 acre-feet from Castaic Lake during the winter in 2000 and replaced 2,589 acre-feet in 2001, resulting in a zero water balance at the end of 2001.

Extended Carryover Program

Pursuant to Article 56 of the Monterey Amendments, contractors can elect to store project water outside of their service area for later use within their service area. Qualified contractors can request carryover Table A amounts for delivery in the following year to the extent that such deliveries do not adversely affect current or future project operations. Factors that influence how much extended carryover water can be delivered include operational constraints of project facilities, filling of SWP conservation storage facilities, flood control releases, and water quality restrictions. If storage requests exceed the available storage capacity, the amount available is allocated among the contractors requesting storage in proportion to their annual Table A amounts for that year. Eleven SWP contractors took delivery of 289,737 acre-feet of 2000 approved Table A amounts carried over into 2001 as extended carryover. Two SWP contractors had 5,800 acre-feet of their extended

carryover delivered to storage outside their service areas.

Dry Year Water Purchase Program

In 2001, significant areas of California experienced water deficiencies. To reduce the possibility of adverse economic impacts and hardship associated with water shortages, the Department created the Dry Year Water Purchase Program. Eight SWP contractors and Westlands participated in the program by signing a Memorandum of Understanding with the Department. Westlands later withdrew from the program. The remaining participating agencies (i.e., the eight SWP contractors) requested 138,806 acre-feet of dry year water. The Department obtained the water from Yuba County Water Agency and its member agencies, Browns Valley Irrigation District and Western Canal Water District, who made it available through land fallowing, groundwater substitution, and reservoir releases.

The eight SWP contractors that participated in the dry year program and the amount of water they purchased are as follows:

- Metropolitan—80,000 acre-feet
- AVEK—20,298 acre-feet
- Kern—14,125 acre-feet
- Dudley Ridge—13,113 acre-feet
- Santa Barbara—4,814 acre-feet
- Napa—3,200 acre-feet
- Oak Flat—1,656 acre-feet
- Tulare Lake—1,600 acre-feet

The participating agencies also entered into conveyance agreements with the Department to convey the dry year water across the Delta and through SWP facilities. Actual dry year water received by these agencies was less than the amount purchased at the source due to deductions for Delta carriage water losses (15 percent) and conveyance losses (2-3 percent). The total amount of dry year water delivered to the participating agencies was 114,073 acre-feet after deducting those losses.

Environmental Water Account

EWA is a cooperatively managed program intended to provide protection to the fish of the Bay-Delta Estuary through environmentally beneficial changes and increased flexibility in the operations of the SWP and CVP, at no uncompensated water cost to the projects' water users. Responsibility for implementing EWA rests with the National Marine Fisheries Service, U.S. Fish and Wildlife Service, and the Department of Fish and Game (management agencies), as well as with the Bureau of Reclamation and the Department (project agencies).

Under EWA, fish protection is achieved by periodically curtailing project water delivery from the Bay-Delta to project water users south of the Delta and replacing it at a later date within the same calendar year. This necessitates the acquisition of alternative sources of project water, called *EWA assets*, which are used to replace the project water supply (i.e., the undelivered water). EWA assets consist of *variable assets*, which are acquired through changes in operations; *fixed assets*, which are acquired through purchases from willing water sellers; and *source shifting*, which involves deferral of scheduled delivery of water allocations by willing participants. EWA is considered operational for any year when these assets are in place and Endangered Species Act commitments are provided by the management agencies.

EWA's first operational year was 2001. The first fish actions occurred in January and continued into June. Management agencies required 290,395 acre-feet of curtailments for fish protection, which was achieved by reduction in pumping at Banks and Tracy Pumping Plants in the Delta. A source shift of 50,000 acre-feet was undertaken to reduce the risk of low-point problems at San Luis Reservoir. Also, EWA was responsible for stream augmentation by returning water on a fish-friendly schedule and paying for a facility bypass on the American River to improve water temperature during fish migration. All fixed asset acquisitions in 2001 were made by the Department as single-year transactions and studies were carried out to

ensure that the transactions complied with CEQA.

The Department was able to compensate the SWP for its pumping reductions by acquiring 54,572 acre-feet in variable assets and 247,253 acre-feet of fixed assets through contract agreements. In addition, 72,280 acre-feet of water were acquired through an agreement with the Bureau. The initial year of EWA operation ended with an 83,710 acre-foot credit of water for use during 2002 EWA actions.

The following SWP contractors and non-SWP contractors participated in the Environmental Water Account Program.

Fixed Assets

The fixed asset water amounts below represent the total amounts of water acquired for EWA from various sources. These amounts have not been adjusted to reflect conveyance losses. Table 9-3 provides the relevant conveyance losses and the actual amounts of water delivered.

Arvin-Edison Water Storage District and Kern County Water Agency. An agreement executed on May 3, 2001, between the Department, Arvin-Edison, and Kern approved the purchase of up to 10,000 acre-feet of water for support of EWA under the CALFED Program. Arvin-Edison and Kern made approved carry-over of 2000 Table A water available through a local 3-way exchange with Improvement District No. 4, Kern-Tulare Water District, and Rag Gulch Water District. A total of 10,000 acre-feet of the agencies' water was purchased. (SWPAO #01701)

Buena Vista Water Storage District, West Kern Water District, Rosedale-Rio Bravo Water District, and Kern County Water Agency. An agreement executed on May 3, 2001, between the Department and the participating agencies approved the purchase of up to 25,000 acre-feet of stored groundwater through the exchange of approved Table A water for support of EWA under the CALFED

Program. Approved SWP water was stored by Kern for the participating agencies within Buena Vista's boundaries in 1995. A total of 23,719 acre-feet of the participants' water was purchased. (SWPAO #01706, #01707, #01708)

Cawelo Water District and Kern County Water Agency. An agreement executed on November 30, 2001, between the Department, Cawelo, and Kern approved the purchase of 5,000 acre-feet of groundwater through the exchange for approved Table A water and storage of up to 10,000 acre-feet of water for support of EWA under the CALFED Program. A total of 5,000 acre-feet of Cawelo's water was purchased. (SWPAO #01711)

Kern County Water Agency. An agreement executed on May 3, 2001, between the Department and Kern approved the purchase of up to 20,000 acre-feet of water stored in KWB through the exchange of approved Table A water for support of EWA under the CALFED Program. A total of 20,000 acre-feet of Kern's water was purchased. (SWPAO #01704)

Metropolitan Water District of Southern California. An agreement executed on February 14, 2001, between the Department and Metropolitan approved the exchange of up to 100,000 acre-feet of Metropolitan's approved Table A water to provide environmental enhancement and fisheries benefits to EWA under the CALFED Program. In exchange, the Department would return an equal amount of water at a later date. A total of 50,000 acre-feet of Metropolitan's approved Table A water was exchanged. (SWPAO #01720)

Merced Irrigation District. An agreement executed on August 15, 2001, between the Department and Merced approved the release of up to 25,000 acre-feet of stored water for support of EWA under the CALFED Program. Merced will pump additional groundwater to compensate for the release of the transfer water in addition to the amounts otherwise scheduled to be released to the Merced River. A total of 25,000 acre-feet of Merced's water was transferred. (SWPAO #01715)

Oroville-Wyandote Irrigation District. An agreement executed on December 8, 2001, between the Department and Oroville-Wyandote approved the transfer of up to 10,000 acre-feet of South Fork Project water that would otherwise remain in storage for support of EWA under the CALFED Program. A total of 10,000 acre-feet of Oroville-Wyandote's water was transferred. (SWPAO #01713)

Placer County Water Agency. An agreement executed on August 3, 2001, between the Department and Placer County approved the purchase of up to 20,000 acre-feet of water stored in the Middle Fork Project reservoirs for support of EWA under the CALFED Program. A total of 20,000 acre-feet of Placer County's water was purchased. (SWPAO #01716)

Rosedale Rio-Bravo Water Storage District and Kern County Water Agency. An agreement executed on May 3, 2001, between the Department, Rosedale Rio-Bravo, and Kern approved the purchase of up to 19,036 acre-feet of water for support of EWA under the CALFED Program. Rosedale Rio-Bravo made approved Table A water available through local use of a like amount of Section 215 Friant-Kern water banked in 2000. Rosedale Rio-Bravo acquired Section 215 water through an exchange with Arvin-Edison in 2000. A total of 19,036 acre-feet of the agencies' water was purchased. (SWPAO #01702)

Santa Clara Valley Water District and Kern County Water Agency. An agreement executed on August 10, 2001, between the Department, Santa Clara, and Kern approved the purchase and recharge of up to 30,000 acre-feet of water stored in the Semitropic Groundwater Basin for support of EWA under the CALFED Program. A total of 30,000 acre-feet of the agencies' water was purchased. (SWPAO #01714)

Semitropic Water Storage District, Kern County Water Agency, and Tulare Irrigation District. An agreement executed on September 12, 2001, between the Department and the participating agencies approved the

purchase of up to 25,000 acre-feet of water stored in KWB. Semitropic stored 20,000 acre-feet of Table A water in KWB in 1995 and 1996, and 5,000 acre-feet of Semitropic's 2001 portion of Kern's approved Table A water was made available as a result of receiving Tulare's Section 215 water. The water was made available for support of EWA under the CALFED Program. A total of 10,767 acre-feet of Semitropic's water was purchased and 4,233 acre-feet of Tulare's water was exchanged. (SWPAO #01709)

Westside Mutual Water Company and Kern County Water Agency. An agreement executed on May 3, 2001, between the Department, Westside, and Kern approved the purchase of up to 21,000 acre-feet of water stored in KWB through exchange of approved Table A water for support of EWA under the CALFED Program. A total of 21,000 acre-feet of the agencies' water was purchased. (SWPAO #01710)

Westside Mutual Water Company, Tejon-Castac Water District, and Kern County Water Agency. An agreement executed on August 15, 2001, between the Department and participating agencies approved the purchase of up to 15,000 acre-feet of water stored in KWB through exchange of approved Table A water for support of EWA under the CALFED Program. A total of 15,000 acre-feet of the agencies' water was purchased. (SWPAO #01703)

Yuba County Water Agency. An agreement executed on February 8, 2001, between the Department and Yuba approved the transfer of up to 50,000 acre-feet of water from storage in New Bullards Bar Reservoir, in addition to amounts otherwise scheduled to be released for diversions from the Yuba River, for support of EWA under the CALFED Program. A total of 50,000 acre-feet of Yuba's water was transferred. (SWPAO #01712)

Variable Assets

EWA Share of State Gain. The Department has the opportunity to pump half the CVPIA (b)(2) releases that reach the Delta on behalf of EWA. A total of 11,472 acre-feet of water was

pumped at Banks Pumping Plant in 2000 and 37,916 acre-feet in 2001. (SWPAO #00740, SWPAO #01740)

Relaxation of the Export/Import Ratio. The Department has the opportunity to gain water credits if the EWA managing agencies decide that the E/I ratio can be relaxed, thus allowing the SWP to pump any extra water that the fisheries do not need. A total of 1,829 acre-feet of water was credited to EWA in 2000 and 3,354 acre-feet in 2001. (SWPAO #00730, SWPAO #01730)

CVP/SWP Exchange. The Bureau transferred 72,280 acre-feet of CVP water in San Luis Reservoir to the SWP for support of EWA under the CALFED Program (SWPAO #01750).

For additional information on EWA, see Chapter 7, *Water Supply Development and Reliability*.

Miscellaneous Agreements with Other Agencies

In addition to negotiating agreements with SWP contractors to provide for specified water deliveries, the Department also entered into several agreements with other agencies for water conveyance, or exchange, between January 1, 2001, and December 31, 2001.

Water Conveyance Agreements—CVP Water

The Department regularly enters into agreements to convey CVP water, such as agreements with contractors receiving water from the Bureau through the Cross Valley Canal, a water conveyance facility that connects with the Aqueduct near Tupman in Kern County. Other agencies or corporations receive CVP water through agreements between the Department and the Bureau, including the U.S. Department of Veterans Affairs, USFWS, and Musco Olive Products, Inc. Occasionally the Department also enters into agreements with the Bureau to convey CVP or SWP water from the Delta to O'Neill Forebay through CVP or SWP facilities. Some of these agreements allow the Bureau to make up

for curtailed water exports from Tracy Pumping Plant associated with improving conditions for fish in the Delta. Other agreements allow replacing water exports foregone during maintenance and repair of Tracy and Banks Pumping Plants and CVP and SWP conveyance facilities between the Delta and O'Neill Forebay.

Cross Valley Canal. Eight CVP water contractors use CVC to obtain water from the California Aqueduct either by exchange with other agencies or by direct delivery. The eight water contractors are: County of Fresno, County of Tulare, Hills Valley Irrigation District, Kern-Tulare Water District, Lower Tule River Irrigation District, Pixley Irrigation District, Rag Gulch Water District, and Tri-Valley Water District. These agencies have had water conveyance service by the Department since 1976 through

- long-term 3-party contracts with the Department and the Bureau, executed in 1976, and amendments extending the contracts through February 29, 1996; and
- interim renewal contracts: the first from March 1, 1996, through February 28, 1998; the second from March 1, 1998, through February 28, 2000; the third from March 1, 2000, through November 30, 2000; the fourth from December 1, 2000, through February 28, 2001; and the fifth from March 1, 2001, through February 28, 2002.

Between January 1, 2001, and December 31, 2001, the Department delivered CVP water to the CVC contractors as follows:

- On June 7, 2001, Pixley requested the Department to convey up to 13,950 acre-feet of its CVP water to Westlands during the 2001 contract year. From June through August 2001, the Department delivered a total of 13,520 acre-feet of the District's CVP water to Westlands' turnouts in Reaches 4 through 7 of the California Aqueduct. An agreement is expected to be signed in February 2003.
- On June 7, 2001, Lower Tule River requested the Department to convey up to

9,450 acre-feet of its CVP water to Westlands and up to 10,000 acre-feet to J.G. Boswell during the 2001 contract year. From June through August 2001, the Department delivered a total of 9,450 acre-feet of the District's CVP water to Westlands' turnouts in Reaches 4 through 7 of the California Aqueduct. The Department also delivered 4,500 acre-feet of the District's CVP water to J. G. Boswell, which is within Tulare, at turnouts in Reaches 8C and 8D of the California Aqueduct in June and July of 2001. The two agreements are expected to be signed in February 2003.

- On June 26, 2001, Kern-Tulare Water District requested the Department change the point of delivery for up to 24,000 acre-feet of the District's 2001 CVP water from the CVC turnout in Reach 12E to turnouts in Reaches 9 through 13B of the California Aqueduct for delivery to Kern. Under the agreement executed on August 21, 2001, the Department delivered 18,595 acre-feet of water from June through August 2001.
- On June 26, 2001, Rag-Gulch Water District requested the Department change the point of delivery for up to 7,980 acre-feet of their 2001 CVP water from the CVC turnouts in Reach 12E to turnouts in Reaches 9 through 13B of the California Aqueduct for delivery to Kern. Under the agreement executed on August 21, 2001, the Department conveyed 7,004 acre-feet of water from June through August 2001.

Westlands Water District. Westlands Water District requested that the Department convey 132,627 acre-feet of forbearance water to Westlands. Forbearance water is water that Westlands purchased from the Sacramento Valley CVP settlement contractors to augment its water supply. Due to an aqueduct leak, the Department was unable to pump water in June 2001; instead, 6,545 acre-feet was pumped by the Bureau in June and conveyed through State facilities to Westlands. During the rest of 2001, the Department pumped and conveyed an additional 126,082 acre-feet to Westlands. A convey-

ance agreement is expected to be signed in January 2003.

Musco Olive Products, Incorporated. Annual agreements dated December 15, 2000, and October 22, 2001, among Musco Olive Products, Inc., the Department, and the Bureau, provided for the conveyance of up to a combined 1,600 acre-feet of CVP water to Reach 2A of the California Aqueduct for use by Musco Olive Products, Inc. A portion of this water was delivered from January 1, 2001, through December 31, 2001. A total of 577 acre-feet was delivered in 2001.

Tracy Golf and Country Club. An agreement dated August 25, 2000, among the Department, the Bureau, and Tracy Golf and Country Club, provided for the conveyance of up to 300 acre-feet of CVP water through SWP facilities to the Tracy Golf and Country Club. This water was to be conveyed from May 11, 2000, through May 11, 2001. A total of 21 acre-feet was delivered to the Tracy Golf and Country Club turnout in Reach 2A of the California Aqueduct in 2001.

U.S. Department of Veterans Affairs. Letter agreements dated October 5, 2000, and December 12, 2001, among the U.S. Department of Veterans Affairs, the Department, and the Bureau, provided for the conveyance of up to 900 acre-feet of CVP approved water to Reach 2B of the California Aqueduct to the U.S. Department of Veterans Affairs' San Joaquin Valley National Cemetery. A total of 46 acre-feet was delivered to the National Cemetery in Reach 2B of the California Aqueduct in 2001.

U.S. Fish and Wildlife Service Cooperative Agreement. The Bureau initiated a cooperative agreement with the Department to deliver CVP water to the Kern National Wildlife Refuge for USFWS. Under the terms of this cooperative agreement, dated September 9, 1994, up to 26,530 acre-feet of CVP water would be delivered from Check 21 to the Buena Vista Water Storage District Turnout BV-1B, on Reach 10A of the California Aqueduct, from October 1,

1993, through April 10, 1995. Since the cooperative agreement was signed, eight modifications to the agreement have been executed. Under Modification No. 001, dated October 31, 1994, additional funding was provided. Similar funding adjustments through modifications were made each year to the agreement. Modification No. 010, executed March 13, 2001, extended the agreement through April 10, 2002, and defined the water delivery rates for 2001 and 2002. The Department conveyed 18,763 acre-feet of CVP water to Kern National Wildlife Refuge in 2001.

Other Turnout Agreements. In 2001, there were no new turnout agreements with non-SWP contractor agencies.

Water Deliveries

Approved Table A Deliveries

Each year, by October 1, the SWP long-term water contractors submit initial requests for approved Table A deliveries allocated to contractors for use in the subsequent calendar year. Initial approved Table A amounts for the coming year are made by the Department in December and are based on operations studies that assume 90 percent exceedence of historic water supply (where exceedence refers to the possibility that water supply in the coming year will be exceeded by the historic water supply), current reservoir storage, and total requests by the SWP water contractors. Forecasts for the year are updated as hydrological conditions change. Approved Table A amounts are increased or decreased depending on both actual and projected hydrologic conditions.

On October 1, 2000, SWP long-term contractors submitted initial requests for 2001 approved Table A deliveries totaling 4.12 million acre-feet. The Department approved deliveries of 1.65 million acre-feet on December 1, 2000 (Notice to SWP Contractors 00-17), resulting in initial approved Table A amounts of 40 percent for most SWP contractor requests. Unusually dry conditions caused the Department to decrease the 2001 approved Table A amounts to 824,000 acre-feet (20 percent)

on January 31, 2001 (Notice to SWP Contractors 01-03). As a result of improvements in water conditions, approved Table A amounts were further increased to 1.03 million acre-feet (25 percent) on March 6 (Notice to SWP Contractors 01-07); 1.24 million acre-feet (30 percent) on March 15 (Notice to SWP Contractors 01-10); 1.38 million acre-feet (33 percent) on May 4 (Notice to SWP Contractors 01-12); 1.44 million acre-feet (35 percent) on May 17 (Notice to SWP Contractors 01-13); and finally to 1.61 million acre-feet (39 percent) on August 16 (Notice to SWP Contractors 01-15).

SWP Deliveries

The SWP delivers water for a variety of beneficial uses. In addition to delivering approved Table A water to long-term water supply contractors, the SWP

- conveys water to, and stores water for, other public agencies through special contracts and agreements;
- provides water for wildlife and recreational uses; and
- stores, releases, and delivers local runoff water from SWP facilities to agencies that hold local water rights.

In 2001, 3,206,922 acre-feet of water were conveyed to 26 long-term contractors and 18 other agencies. That amount includes

- 1,546,742 acre-feet of approved Table A water;¹
- 43,182 acre-feet of Article 21 water and 253 acre-feet of unscheduled water;
- 2,929 acre-feet of SWP water for recreation, fish and wildlife; and
- 1,613,816 acre-feet of water delivered to satisfy water rights settlement agreements and

¹ Annual Table A water is the amount of SWP water long-term contractors may request each year in accordance with Article 12(a), "Procedure for Determining Water Delivery Schedule," of their water supply contract.

agreements with SWP contractors and other agencies, including the Bureau.

Figure 9-1 shows amounts of water delivered to various locations during 2001.

Specific information about water deliveries made to long-term contractors and other agencies during 2001 and historical deliveries from 1962 through 2001 are presented in the following three sections, each with a corresponding table:

- Water Delivered to Long-term Water Supply Contractors in 2001, by Service Area (Table 9-2);
- Water Delivered in 2001, by Month (Table 9-3); and
- Total Amounts of Annual Table A Water and Water Conveyed, by Type, 1962-01 (Table 9-4).

Water Deliveries and Credits to Long-Term SWP Contractors

Table 9-2 shows amounts of water delivered in 2001. The following information about specific columns in Table 9-2 is arranged by column number.

2001 Approved Table A Water Delivered. Columns 1 through 5 show a detailed breakdown of approved Table A water delivered to long-term water supply contractors in 2001.

Turnback Pool Water. Column 4 shows 18,240 acre-feet of turnback pool water was delivered to long-term water supply contractors in 2001.

2000 Carryover Approved Table A Water Delivered During 2001. For several years, the Department has offered contractors the opportunity to carry over a portion of their approved Table A water for delivery in the current year to be delivered during the next year.

The carryover program was designed to encourage the most effective and beneficial use of water and to avoid obligating the contractors to use or lose the water by December 31 of each year. The SWP contractors' long-term contracts and

amendments state the criteria for carrying over approved Table A water from one year to the next. Column 6 shows 291,344 acre-feet of water was carried over from 2000 for delivery in 2001.

Total Table A Water Delivered. Column 7 shows all approved Table A water delivered in 2001—a total of 1,546,742 acre-feet.

2001 Water Bank Recoveries. Column 8 shows 57,322 acre-feet of Water Bank recoveries in 2001.

2001 Article 21 Water. Column 9 shows 43,435 acre-feet of 2001 Article 21 water delivered to long-term water supply contractors in 2001 (includes 253 acre-feet of unscheduled water). Long-term water supply contractors who have not signed the Monterey Amendment receive unscheduled water.

Dry Year Purchase Program. Column 10 shows 114,073 acre-feet of Dry Year Water Program water delivered in 2001.

2001 Article 54 Flexible Storage Withdrawal Recoveries. Column 11 shows 74,992 acre-feet of Article 54, Flexible Storage Withdrawal in 2001.

Total SWP Water Delivered. Column 12 shows 1,836,564 acre-feet of total SWP water delivered in 2001. This includes total approved Table A water, water bank recoveries, Dry Year Purchase Program, Flexible Storage Withdrawal, and Article 21 and unscheduled water.

Non-SWP Water Deliveries. Column 13 includes deliveries of nonproject water to long-term water contractors. Nonproject water is generally local and permit water that a SWP contractor has a water right to, or water purchased from, exchanged with, or transferred from non-SWP agencies. In 2001, nonproject water deliveries totaled 113,196 acre-feet.

Total Deliveries. Column 14 shows total amounts of water delivered to long-term contractors. In 2001, the SWP delivered 1,949,760 acre-feet to 26 long-term contractors.

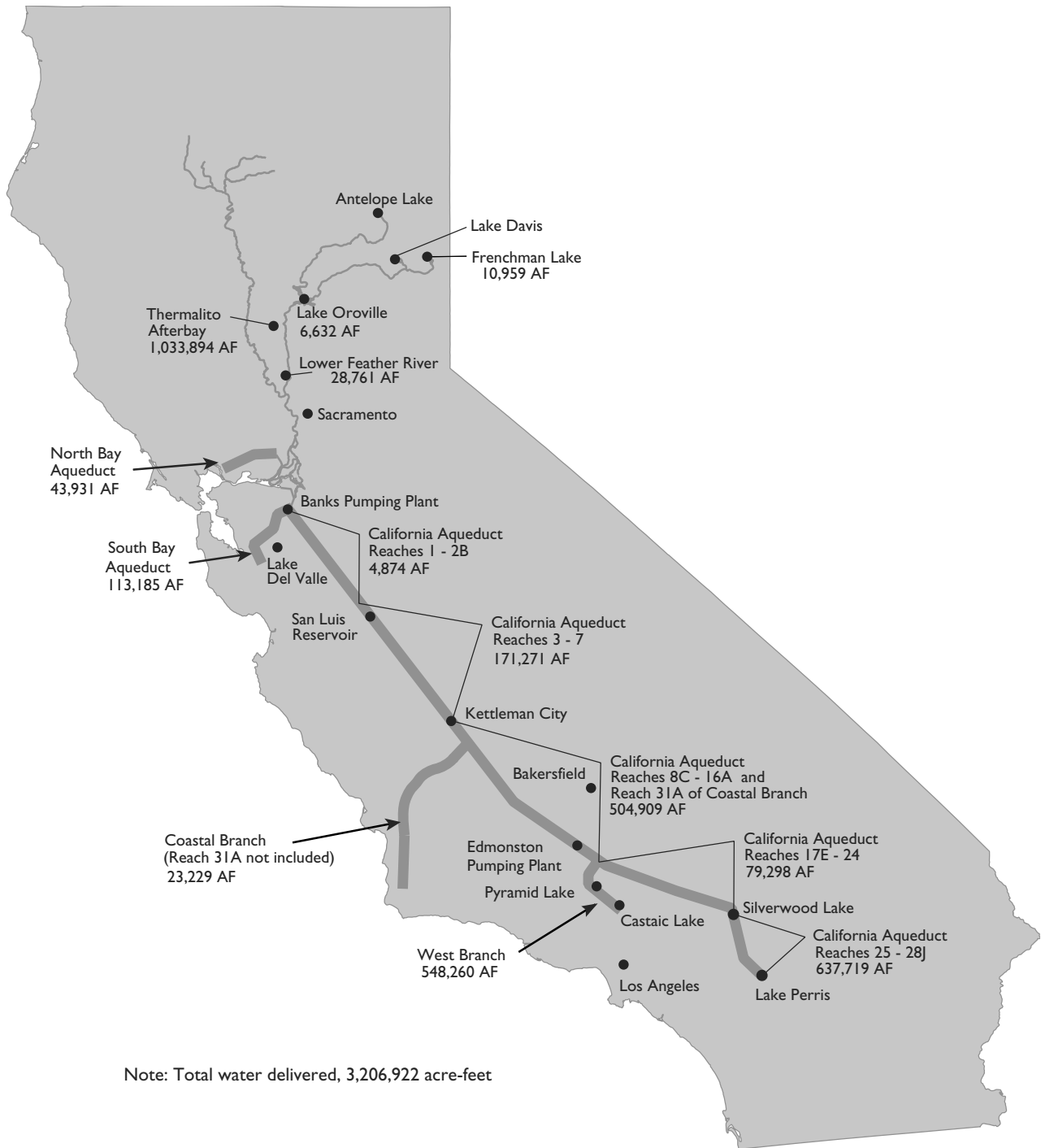


Figure 9-1. Water Delivered in 2001 and Delivery Locations of Long-Term Water Supply Contractors and Feather River Area Districts with Water Right Agreements with the Department

Table 9-2. Water Delivered to Long-Term Contractors through 2001, by Service Area (Acre-Feet)

Water Deliveries in 2001														
Annual Table A Water Deliveries														
Water Contractor or Agency	2001 Table A without Transfers, Exchanges, and Storage (1)	2001 Table A Delivered through Transfers and Exchanges (2)	2001 Table A Delivered to Storage (3)	Pool Water (4)	Total 2001 Table A Delivered (5)	2000 Carryover Table A Delivered during 2001 (6)	Total Table A Deliveries (7)	Water Bank Recoveries (8)	2001 Article 21 Water (9)	2001 Dry Year Purchase (10)	2001 Article 54 Flexible Withdrawal (11)	Total SWP Water Delivered (12)	Non-SWP Water Deliveries (13)	Total Deliveries (14)
Feather River Area														
County of Butte	513	0	0	0	513	0	513	0	0	0	0	513	0	513
Plumas County Flood Control and Water Conservation District	0	0	0	0	0	0	0	0	0	0	0	0	0	0
City of Yuba City	1,065	0	0	0	1,065	0	1,065	0	0	0	0	1,065	0	1,065
North Bay Area														
Napa County Flood Control and Water Conservation District	4,293	0	0	82	4,375	1,723	6,098	0	996	2,251	0	9,345	0	9,345
Solano County Water Agency	17,756	0	0	0	17,756	1,021	18,777	0	2,304	0	0	21,081	13,505 ^a	34,586
South Bay Area														
Alameda County Flood Control and Water Conservation District-Zone 7	22,307	0	0	308	22,615	5,990	28,605	1,807	0	0	0	30,412	13,741 ^b	44,153
Alameda County Water District	13,695	0	0	107	13,802	4,192	17,994	0	10	0	0	18,004	7,910 ^c	25,914
Santa Clara Valley Water District	35,689	0	0	0	35,689	12,233	47,922	0	0	0	0	47,922	0	47,922
San Joaquin Valley Area														
Castaic Lake Water Agency	1,238	0	0	0	1,238	0	1,238	0	0	0	0	1,238	0	1,238
County of Kings	1,560	0	0	0	1,560	0	1,560	0	0	0	0	1,560	0	1,560
Dudley Ridge Water District	18,821	7,048 ^d	0	347	26,216	6,815	33,031	3,215	933	10,812	0	47,991	0	47,991
Empire-West Side Irrigation District	0	0	0	0	0	1,607 ^e	1,607	0	253	0	0	1,860	0	1,860
Kern County Water Agency	211,223	11,487 ^f	0	6,502	229,212	48,016	277,228	0	23,233	11,647	0	312,108	42,845 ^g	354,953
Oak Flat Water District	2,089	0	0	22	2,111	101	2,212	0	0	1,380	0	3,592	0	3,592
Tulare Lake Basin Water Storage District	37,773	3,057 ^h	0	769	41,599	7,389	48,988	0	8,755	1,319	0	59,062	29,664 ⁱ	88,726
Central Coastal Area														
San Luis Obispo County Flood Control and Water Conservation District	4,184	0	0	99	4,283	0	4,283	0	0	0	0	4,283	0	4,283
Santa Barbara County Flood Control and Water Conservation District	14,285	0	0	296	14,581	0	14,581	0	396	3,969	0	18,946	0	18,946
Southern California														
Antelope Valley-East Kern Water Agency	45,071	0	0	899	45,970	0	45,970	0	0	16,735	0	62,705	0	62,705
Castaic Lake Water Agency	29,233	0	0	618	29,851	0	29,851	0	850	0	0	30,701	4,931 ^j	35,632
Coachella Valley Water District	9,009	0	0	91	9,100	0	9,100	0	0	0	0	9,100	0	9,100
Crestline-Lake Arrowhead Water Agency	1,057	0	0	0	1,057	0	1,057	0	0	0	0	1,057	600 ^k	1,657
Desert Water Agency	14,859	0	0	151	15,010	0	15,010	0	0	0	0	15,010	0	15,010
Littlerock Creek Irrigation District	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Metropolitan Water District of Southern California	686,545	0	0	7,949	694,494	200,000	894,494	52,300	5,705	65,960	74,992	1,093,451	0	1,093,451
Mojave Water Agency	4,433	0	0	0	4,433	0	4,433	0	0	0	0	4,433	0	4,433
Palmdale Water District	8,170	0	0	0	8,170	2,257	10,427	0	0	0	0	10,427	0	10,427
San Bernardino Valley Municipal Water District	26,488	0	0	0	26,488	0	26,488	0	0	0	0	26,488	0	26,488
San Gabriel Valley Municipal Water District	2,360	0	0	0	2,360	0	2,360	0	0	0	0	2,360	0	2,360
San Geronio Pass Water Agency	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ventura County Flood Control District	1,850	0	0	0	1,850	0	1,850	0	0	0	0	1,850	0	1,850
Total	1,215,566	21,592	0	18,240	1,255,398	291,344	1,546,742	57,322	43,435	114,073	74,992	1,836,564	113,196	1,949,760

Note: For specific details, see Table 9-2.

^aPermit water

^b3,997 acre-feet of transfer water from Byron-Bethany and 9,744 acre-feet of local water.

^cLocal water.

^d4,174 acre-feet from San Gabriel and 2,874 acre-feet from Kern.

^e1,107 acre-feet of wet weather carryover and 500 acre-feet from Tulare.

^fTo the Bureau.

^g17,246 acre-feet from the Bureau and 25,599 acre-feet from CVC contractors.

^hTo Westlands (1,082 acre-feet through transfer and 1,975 acre-feet through exchange).

ⁱ25,164 acre-feet from Westlands and 4,500 acre-feet from CVC contractors.

^jLocal water.

^kLocal water.

Table 9-3. Water Delivered in 2001, by Month (Acre-feet)

Contracting Agency and Type of Service	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	2001 Total Deliveries	2001 Contract Table A
Article 56(c) extended carryover	1,953	1,412	827	0	0	0	0	0	0	0	0	0	4,192	
Local water	0	0	687	1,863	2,062	242	0	880	631	534	183	828	7,910	
Pool A water	0	0	0	0	0	0	0	107	0	0	0	0	107	
Agency Total	1,953	1,412	1,524	1,863	2,062	2,458	2,723	3,651	3,218	3,376	846	828	25,914	
Santa Clara Valley Water District														
Approved Table A water	0	0	0	4,112	4,341	3,770	4,639	5,154	4,501	6,284	2,888	0	35,689	100,000
Article 56(c) extended carryover	3,079	3,168	5,986	0	0	0	0	0	0	0	0	0	12,233	
Bank water recovery, Semitropic (for EWA)*	0	0	0	0	0	0	0	17,879	0	0	0	12,121	30,000	
Agency Total (*excluded water)	3,079	3,168	5,986	4,112	4,341	3,770	4,639	5,154	4,501	6,284	2,888	0	47,922	
Recreation/Fish and Wildlife														
Recreation/fish and wildlife water, Lake Del Valle	7	4	8	8	18	27	31	56	25	9	1	2	196	
SWP	6,022	4,580	70,921	39,250	37,306	20,624	14,336	29,180	30,710	25,093	14,950	12,121	305,093	
Non-SWP	444	802	2,605	4,353	4,544	488	55	3,155	2,701	534	296	1,674	21,651	
South Bay Area Total	6,466	5,382	73,526	43,603	41,850	21,112	14,391	32,335	33,411	25,627	15,246	13,795	326,744	220,000
San Joaquin Valley Area														
Castaic Lake Water Agency														
Approved Table A water	1,194	0	0	4	10	6	5	0	18	1	0	0	1,238	
County of Kings														
Approved Table A water	0	0	0	0	0	400	300	300	0	0	100	460	1,560	4,000
Dudley Ridge Water District														
Approved Table A water	0	0	0	1,642	3,036	3,307	4,352	453	3,804	1,819	86	308	18,807	53,370
Approved Table A water delivered through Tulare	0	0	0	0	0	0	0	14	0	0	0	0	14	
Article 21 water delivered to storage (Kern Water Bank)	0	0	933	0	0	0	0	0	0	0	0	0	933	
Article 56(c) extended carryover	1,199	533	3,609	0	0	0	0	0	0	0	0	0	5,341	
Article 56(c) extended carryover delivered to storage (Kern Water Bank)	0	0	800	0	0	0	0	0	0	0	0	0	800	
Article 56(c) extended carryover delivered through Tulare	0	0	674	0	0	0	0	0	0	0	0	0	674	
Bank water recovery, Kern Water Bank	0	0	0	0	2,250	965	0	0	0	0	0	0	3,215	
Dry Year Purchase Program	0	0	0	0	0	3,310	3,310	3,880	312	0	0	0	10,812	
Exchange approved Table A water from Kern	0	0	0	0	0	0	0	1,374	0	0	0	0	1,374	
Exchange approved Table A water from San Gabriel	0	0	0	0	0	1,300	1,574	1,300	0	0	0	0	4,174	
Pool A water	0	0	0	0	0	0	136	0	0	0	0	0	136	
Pool B water	0	0	0	0	0	0	211	0	0	0	0	0	211	
Transfer approved Table A water from Kern	0	0	0	0	0	0	0	1,500	0	0	0	0	1,500	
Agency Total	1,199	533	6,016	1,642	5,286	8,882	9,583	8,521	4,116	1,819	86	308	47,991	
Empire West Side Irrigation District														
Transfer Article 56 extended carryover from Tulare	0	0	500	0	0	0	0	0	0	0	0	0	500	3,000
Unscheduled water	0	0	253	0	0	0	0	0	0	0	0	0	253	
Wet weather carryover water	340	459	308	0	0	0	0	0	0	0	0	0	1,107	
Agency Total	340	459	1,061	0	0	0	0	0	0	0	0	0	1,860	
Kern County Water Agency														
Approved Table A water	0	0	1,702	0	23,541	62,788	48,131	28,985	24,186	15,905	4,920	427	210,585	1,000,949
Approved Table A water delivered for Western Hills	0	0	0	0	116	64	102	134	131	79	12	0	638	
Approved Table A water delivered to EWA*	0	0	0	0	31,219	10,000	2,500	0	21,000	9,296	9,233	0	83,248	
Article 21 water	0	0	23,233	0	0	0	0	0	0	0	0	0	23,233	
Article 56(c) extended carryover	25,671	11,982	10,363	0	0	0	0	0	0	0	0	0	48,016	
Article 56(c) extended carryover delivered to EWA*	0	0	44,036	0	0	0	0	0	0	0	0	0	44,036	
Dry Year Purchase Program	0	0	0	0	0	0	6,623	4,700	57	267	0	0	11,647	
Exchange approved Table A water to Dudley Ridge*	0	0	0	0	0	0	0	1,374	0	0	0	0	1,374	
Exchange approved Table A water for Alameda-Zone 7 (Semitropic water)*	0	0	0	0	0	1,300	0	507	0	0	0	0	1,807	
Exchange approved Table A water for Dudley Ridge (Kern Water Bank water)*	0	0	0	0	2,250	965	0	0	0	0	0	0	3,215	
Exchange approved Table A water for Metropolitan (Arvin-Edison water)*	0	0	0	0	0	0	0	0	5,000	5,800	5,000	5,000	20,800	
Exchange approved Table A water for Metropolitan (Semitropic water)*	0	0	1,614	1,300	0	13,179	0	0	0	0	0	0	16,093	
Exchange approved Table A water for Santa Clara (Semitropic water)*	0	0	0	0	0	0	0	17,879	0	0	0	6,065	23,944	
Exchange approved Table A water to the Bureau*	0	0	0	0	0	0	0	11,487	0	0	0	0	11,487	
Exchange water from the Bureau	0	0	0	0	0	0	11,487	0	0	0	0	0	11,487	
Pool A water	0	0	0	0	0	0	1,740	575	231	0	0	0	2,546	
Pool B water	0	0	0	0	0	0	2,619	997	340	0	0	0	3,956	
Turn-in water (from Kern Water Bank) recovered by Kern*	0	0	6,363	22,125	27,161	24,081	21,385	20,917	6,704	844	0	1,815	131,395	
Turn-in water (from Semitropic) recovered by Kern	0	0	0	0	184	0	0	0	0	0	230	1,399	1,813	
Kern Water Bank water turn-in water for EWA*	0	0	0	0	0	0	0	0	0	1,471	0	0	1,471	

Table 9-3. Water Delivered in 2001, by Month (Acre-feet)

Contracting Agency and Type of Service	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	2001 Total Deliveries	2001 Contract Table A
Transfer approved Table A water to Dudley Ridge*	0	0	0	0	0	0	0	1,500	0	0	0	0	1,500	
Transfer CVP water from Kern-Tulare	0	0	0	0	0	750	5,028	12,817	0	0	0	0	18,595	
Transfer CVP water from Rag Gulch	0	0	0	0	0	250	1,672	5,082	0	0	0	0	7,004	
Agency Total (*excluded water)	25,671	11,982	35,298	0	23,657	63,852	77,402	53,290	24,945	16,251	4,932	427	337,707	
Oak Flat Water District														
Approved Table A water	0	0	0	193	622	753	45	0	28	409	37	2	2,089	5,700
Article 56(c) extended carryover water	49	9	43	0	0	0	0	0	0	0	0	0	101	
Dry Year Purchase Program	0	0	0	0	0	0	688	396	296	0	0	0	1,380	
Pool B water	0	0	0	0	22	0	0	0	0	0	0	0	22	
Agency Total	49	9	43	193	644	753	733	396	324	409	37	2	3,592	
Tulare Lake Basin Water Storage District														
Approved Table A water	0	0	0	477	838	7,976	9,507	11,438	412	1,234	237	5,654	37,773	118,500
Article 21 water	0	0	8,755	0	0	0	0	0	0	0	0	0	8,755	
Article 56(c) extended carryover	2,960	384	4,045	0	0	0	0	0	0	0	0	0	7,389	
Dry Year Purchase Program	0	0	0	0	0	0	0	1,319	0	0	0	0	1,319	
Dudley Ridge's approved Table A water delivered through Tulare*	0	0	0	0	0	0	0	14	0	0	0	0	14	
Exchange approved water to Westlands*	0	0	0	0	0	0	600	1,375	0	0	0	0	1,975	
Exchange CVP water from Westlands	10,864	0	5,360	8,940	0	0	0	0	0	0	0	0	25,164	
Pool A water	0	0	0	0	0	0	0	29	0	0	0	272	301	
Pool B water	0	0	0	0	0	0	0	0	0	0	0	468	468	
Transfer CVP water from Lower Tule River Irrigation District	0	0	0	0	0	1,042	3,458	0	0	0	0	0	4,500	
Transfer Article 56(c) extended carryover to Empire*	0	0	500	0	0	0	0	0	0	0	0	0	500	
Transfer approved Table A water to Westlands*	0	0	0	0	0	0	1,082	0	0	0	0	0	1,082	
Agency Total (*excluded water)	13,824	384	18,160	9,417	838	9,018	12,965	12,786	412	1,234	237	6,394	85,669	
Westlands Water District														
Transfer CVP water from Lower Tule River	0	0	0	0	0	1,332	4,210	3,908	0	0	0	0	9,450	
Transfer CVP water from Pixley	0	0	0	0	0	902	6,209	6,409	0	0	0	0	13,520	
Transfer CVP water from the Bureau (Sacramento Valley Contractors)	0	0	0	0	0	6,545	34,861	60,471	30,750	0	0	0	132,627	
Transfer approved Table A water from Tulare	0	0	0	0	0	0	1,082	0	0	0	0	0	1,082	
Exchange approved Table A water from Tulare	0	0	0	0	0	0	600	1,375	0	0	0	0	1,975	
Exchange water to Tulare*	10,864	0	5,360	8,940	0	0	0	0	0	0	0	0	25,164	
Agency Total (*excluded water)	0	0	0	0	0	8,779	46,962	72,163	30,750	0	0	0	158,654	
Recreation/Fish and Wildlife														
Department of Fish and Game, O'Neill Forebay/Lateral 4	27	29	53	54	24	8	3	13	10	131	61	31	444	
Department of Parks and Recreation, O'Neill Forebay/San Luis Reservoir	2	1	2	7	13	16	29	25	24	5	1	1	126	
Total	29	30	55	61	37	24	32	38	34	136	62	32	570	
EWA Program														
Article 56(c) extended carryover from Kern*	0	0	44,036	0	0	0	0	0	0	0	0	0	44,036	
Approved Table A water from Kern*	0	0	0	0	31,219	10,000	2,500	0	21,000	9,296	9,233	0	83,248	
E/I Relaxation*	0	0	0	0	0	0	0	0	0	0	3,354	0	3,354	
EWA share of State gain*	8,158	711	935	1,431	0	0	0	4,036	19,337	3,308	0	0	37,916	
Flexible storage withdrawal (Castaic Lake) from Metropolitan*	0	0	15,062	34,938	0	0	0	0	0	0	0	0	50,000	
Kern Water Bank water from Kern*	0	0	0	0	0	0	0	0	0	1,471	0	0	1,471	
Local water from Merced Irrigation District*	0	0	0	0	0	0	0	0	0	11,753	10,747	0	22,500	
Local water from Oroville-Wyandote Irrigation District*	0	0	0	0	0	0	0	0	8,500	0	0	0	8,500	
Local water from Placer County Water Agency*	0	0	0	0	0	0	0	0	0	2,240	12,759	0	14,999	
Local water from Yuba County Water Agency*	0	0	0	0	0	0	42,500	0	0	0	0	0	42,500	
Semitropic Water Bank water from Santa Clara*	0	0	0	0	0	0	0	17,879	0	0	0	12,121	30,000	
Total EWA Water (*excluded water)	8,158	711	60,033	36,369	31,219	10,000	45,000	21,915	48,837	28,068	36,093	12,121	338,524	
SWP	31,442	13,397	54,599	2,377	28,222	76,618	70,436	48,512	29,184	19,583	5,454	7,623	387,447	
Non-SWP	10,864	0	5,360	8,940	0	14,131	77,546	98,982	31,415	267	0	0	247,505	
San Joaquin Valley Area subtotal	42,306	13,397	59,959	11,317	28,222	90,749	147,982	147,494	60,599	19,850	5,454	7,623	634,952	1,185,519
Other Non-SWP Water Conveyed														
Tracy Golf and Country Club	4	6	11	0	0	0	0	0	0	0	0	0	21	
CVP Water Conveyed--Annual Contracts														
Plain View Water District/ Musco Olive Products, Inc.	38	43	47	39	0	50	41	68	72	78	78	23	577	
U.S. Department of Veteran Affairs, S.J.V. National Cemetery	1	1	1	2	7	6	3	9	4	8	3	1	46	
Subtotal	39	44	48	41	7	56	44	77	76	86	81	24	623	
Cross Valley Canal Contracts														
CVP water to Kern from Kern-Tulare*	0	0	0	0	0	750	5,028	12,817	0	0	0	0	18,595	
CVP water to Kern from Rag Gulch*	0	0	0	0	0	250	1,672	5,082	0	0	0	0	7,004	
CVP water to Tulare from Lower Tule River*	0	0	0	0	0	1,042	3,458	0	0	0	0	0	4,500	

Table 9-3. Water Delivered in 2001, by Month (Acre-feet)

Contracting Agency and Type of Service	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	2001 Total Deliveries	2001 Contract Table A
CVP water to Westlands from Lower Tule River*	0	0	0	0	0	1,332	4,210	3,908	0	0	0	0	9,450	
CVP water to Westlands from Pixley*	0	0	0	0	0	902	6,209	6,409	0	0	0	0	13,520	
County of Fresno	0	0	0	0	0	0	0	1,350	0	0	0	0	1,350	
County of Tulare	0	0	0	0	0	0	0	2,389	0	0	0	0	2,389	
Hills Valley Irrigation District	0	0	0	0	0	0	396	1,110	0	0	0	0	1,506	
Tri-Valley Water District	0	0	0	0	0	0	0	514	0	0	0	0	514	
Subtotal (*excluded water)	0	0	0	0	0	0	396	5,363	0	0	0	0	5,759	
Bureau of Reclamation														
Kern National Wildlife Refuge	649	641	0	0	294	260	59	547	3,875	4,973	4,635	2,830	18,763	
Exchange approved Table A from Kern	0	0	0	0	0	0	0	11,487	0	0	0	0	11,487	
Recreation/fish and wildlife water	23	25	42	54	30	19	24	34	27	110	54	118	560	
Exchange CVP water to Kern*	0	0	0	0	0	0	11,883	5,363	0	0	0	0	17,246	
Subtotal (*excluded water)	672	666	42	54	324	279	83	12,068	3,902	5,083	4,689	2,948	30,810	
SWP	0	0	0	0	0	0	0	11,487	0	0	0	0	11,487	
Non-SWP	715	716	101	95	331	335	523	6,021	3,978	5,169	4,770	2,972	25,726	
San Joaquin Valley Area subtotal	715	716	101	95	331	335	523	17,508	3,978	5,169	4,770	2,972	37,213	
SWP (Total)	31,442	13,397	54,599	2,377	28,222	76,618	70,436	59,999	29,184	19,583	5,454	7,623	398,934	
Non-SWP (Total)	11,579	716	5,461	9,035	331	14,466	78,069	105,003	35,393	5,436	4,770	2,972	273,231	
San Joaquin Valley Area Total	43,021	14,113	60,060	11,412	28,553	91,084	148,505	165,002	64,577	25,019	10,224	10,595	672,165	
Central Coastal Area														
San Luis Obispo County Flood Control and Water Conservation District														
Approved Table A water	299	274	310	336	378	437	450	454	396	170	267	413	4,184	25,000
Pool B water	0	0	0	0	0	0	0	0	0	99	0	0	99	
Agency Total	299	274	310	336	378	437	450	454	396	269	267	413	4,283	
Santa Barbara County Flood Control and Water Conservation District														
Approved Table A water	1,186	888	699	1,315	1,926	2,499	62	2,424	512	987	776	1,011	14,285	45,486
Article 21 water	0	0	396	0	0	0	0	0	0	0	0	0	396	
Dry Year Purchase Program	0	0	0	0	0	0	2,232	0	1,737	0	0	0	3,969	
Pool A water	0	0	0	0	0	0	0	0	0	116	0	0	116	
Pool B water	0	0	0	0	0	0	0	0	0	180	0	0	180	
Agency Total	1,186	888	1,095	1,315	1,926	2,499	2,294	2,424	2,249	1,283	776	1,011	18,946	
SWP	1,485	1,162	1,405	1,651	2,304	2,936	512	2,878	908	1,552	1,043	1,424	19,260	
Non-SWP	0	0	0	0	0	0	2,232	0	1,737	0	0	0	3,969	
Central Coastal Area Total	1,485	1,162	1,405	1,651	2,304	2,936	2,744	2,878	2,645	1,552	1,043	1,424	23,229	70,486
Southern California Area														
Antelope Valley-East Kern Water Agency														
Approved Table A water	2,576	1,695	2,341	3,843	5,904	8,708	5,440	5,002	2,773	811	3,324	2,654	45,071	138,400
Dry Year Purchase Program	0	0	0	0	0	0	3,498	3,687	4,413	5,137	0	0	16,735	
Mojave's approved Table A water delivered through AVEK*	30	24	58	113	129	148	203	164	240	99	101	76	1,385	
Pool A water	0	0	0	0	352	0	0	0	0	0	0	0	352	
Pool B water	0	0	0	0	547	0	0	0	0	0	0	0	547	
Local turn-in water recovered by AVEK*	0	0	0	0	0	62	66	24	0	0	0	0	152	
Agency Total (*excluded water)	2,576	1,695	2,341	3,843	6,803	8,708	8,938	8,689	7,186	5,948	3,324	2,654	62,705	
Castaic Lake Water Agency														
Approved Table A water	1,769	803	1,081	2,995	3,686	3,808	3,669	3,749	3,599	3,576	498	0	29,233	95,200
Article 21 water	0	0	850	0	0	0	0	0	0	0	0	0	850	
Local water	0	0	0	0	0	0	0	0	0	2,337	2,594	0	4,931	
Pool A water	0	0	0	0	0	0	42	100	100	0	0	0	242	
Pool B water	0	0	0	0	0	0	100	100	176	0	0	0	376	
Flexible storage replacement with local water*	0	0	0	0	0	0	0	0	0	0	0	2,589	2,589	
Agency Total (*excluded water)	1,769	803	1,931	2,995	3,686	3,808	3,811	3,949	3,875	3,576	2,835	2,594	35,632	
Coachella Valley Water District														
Approved Table A water	0	0	0	1,155	1,155	1,925	1,925	2,849	0	0	0	0	9,009	23,100
Pool B water	0	0	0	91	0	0	0	0	0	0	0	0	91	
Agency Total	0	0	0	1,246	1,155	1,925	1,925	2,849	0	0	0	0	9,100	

Table 9-3. Water Delivered in 2001, by Month (Acre-feet)

Contracting Agency and Type of Service	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	2001 Total Deliveries	2001 Contract Table A
Crestline-Lake Arrowhead Water Agency														
Approved Table A water	112	0	0	0	0	0	167	209	182	167	118	102	1,057	5,800
Local water	0	100	98	97	132	160	13	0	0	0	0	0	600	
Agency Total	112	100	98	97	132	160	180	209	182	167	118	102	1,657	
Desert Water Agency														
Approved Table A water	0	0	0	1,905	1,905	2,381	2,381	3,142	3,145	0	0	0	14,859	38,100
Pool B water	0	0	0	151	0	0	0	0	0	0	0	0	151	
Agency Total	0	0	0	2,056	1,905	2,381	2,381	3,142	3,145	0	0	0	15,010	
Little Rock Creek Irrigation District														
Approved Table A water	0	0	0	0	0	0	0	0	0	0	0	0	0	2,300
Metropolitan Water District of Southern California														
Approved Table A water	0	0	9,918	59,865	91,335	80,220	60,243	56,098	78,802	116,762	83,689	49,613	686,545	2,011,500
Article 21 water	0	0	5,705	0	0	0	0	0	0	0	0	0	5,705	
Article 56(c) extended carryover	94,266	60,337	45,397	0	0	0	0	0	0	0	0	0	200,000	
Bank water recovery, Arvin-Edison	0	0	0	0	0	0	0	0	5,000	5,800	5,000	5,000	20,800	
Bank water recovery, Semitropic	0	0	1,614	2,573	0	13,179	0	0	0	0	14,134	0	31,500	
Dry Year Purchase Program	0	0	0	0	0	0	35,712	30,248	0	0	0	0	65,960	
Flexible storage replacement with Article 21 water (Lake Perris)*	0	0	4,710	0	0	0	0	0	0	0	0	0	4,710	
Flexible storage replacement with local water (Castaic Lake)*	0	0	0	0	0	0	0	0	0	0	0	2,589	2,589	
Pool B water	0	0	0	7,949	0	0	0	0	0	0	0	0	7,949	
Flexible storage withdrawal (Castaic Lake)	0	0	0	0	0	0	0	0	0	0	0	14,300	14,300	
Flexible storage withdrawal (Castaic Lake) for EWA*	0	0	15,062	34,938	0	0	0	0	0	0	0	0	50,000	
Flexible storage withdrawal (Lake Perris)	0	0	0	0	0	0	0	0	0	0	0	10,692	10,692	
Agency Total (*excluded water)	94,266	60,337	62,634	70,387	91,335	93,399	95,955	86,346	83,802	122,562	102,823	79,605	1,043,451	
Mojave Water Agency														
Approved Table A water	84	20	577	280	655	256	105	250	190	330	234	67	3,048	75,800
Approved Table A water delivered through AVEK	30	24	58	113	129	148	203	164	240	99	101	76	1,385	
Pool B water sale*	0	0	14,240	0	0	0	0	0	0	0	0	0	14,240	
Agency Total (*excluded water)	114	44	635	393	784	404	308	414	430	429	335	143	4,433	
Palmdale Water District														
Article 56(c) extended carryover	1,078	698	481	0	0	0	0	0	0	0	0	0	2,257	21,300
Approved Table A water	0	0	0	0	577	954	1,662	1,972	1,407	1,096	502	0	8,170	
Agency Total	1,078	698	481	0	577	954	1,662	1,972	1,407	1,096	502	0	10,427	
San Bernardino Valley Municipal Water District														
Approved Table A water	1,145	0	165	164	1,062	2,159	2,560	2,690	2,576	2,635	3,278	8,054	26,488	102,600
San Gabriel Valley Municipal Water District														
Approved Table A water	0	0	0	0	0	0	0	0	0	0	0	2,360	2,360	28,800
Exchange approved water to Dudley Ridge*	0	0	0	0	0	1,300	1,574	1,300	0	0	0	0	4,174	
Agency Total (*excluded water)	0	0	0	0	0	0	0	0	0	0	0	2,360	2,360	
San Geronimo Pass Water Agency														
Pool A water sale*	0	800	0	0	0	0	0	0	0	0	0	0	800	4,000
Pool B water sale*	0	0	200	0	0	0	0	0	0	0	0	0	200	
Agency Total (*excluded water)	0	800	200	0	0	0	0	0	0	0	0	0	1,000	
Ventura County Flood Control District														
Approved Table A water	154	154	154	154	154	154	154	154	154	154	154	156	1,850	20,000
Pool A water sale*	0	3,000	0	0	0	0	0	0	0	0	0	0	3,000	
Agency Total (*excluded water)	154	154	154	154	154	154	154	154	154	154	154	156	1,850	
Recreation/Fish and Wildlife														
Castaic Lake	16	8	6	15	28	31	43	56	40	30	6	10	289	
Castaic Lake to Lagoon	52	49	75	61	73	326	192	394	190	0	0	0	1,412	
Silverwood Lake	2	2	1	4	10	10	13	12	11	8	3	0	76	
Lake Perris	26	13	13	21	41	37	47	52	41	36	27	20	374	
Agency Total	96	72	95	101	152	404	295	514	282	74	36	30	2,151	
Recreation/Fish and Wildlife														
USFWS Recreation/fish and wildlife water (Pyramid Lake)	0	0	0	0	2	1	3	2	2	2	1	0	13	
SWP	101,214	63,731	68,341	81,238	107,461	113,892	78,651	76,479	98,344	131,430	111,032	93,074	1,124,887	
Non-SWP	0	100	98	97	132	160	39,223	33,935	4,413	5,137	2,337	2,594	88,226	
Southern California Area Total	101,214	63,831	68,439	81,335	107,593	114,052	117,874	110,414	102,757	136,567	113,369	95,668	1,213,113	2,566,900

Table 9-3. Water Delivered in 2001, by Month (Acre-feet)

Contracting Agency and Type of Service	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	2001 Total Deliveries	2001 Contract Table A
SWP Water														
SWP Approved Table A Water														
Agricultural and M&I approved Table A water	8,630	3,900	17,108	81,899	145,316	191,946	157,270	134,294	133,938	163,785	106,032	71,448	1,215,566	
Agricultural and M&I approved Table A water for EWA*	0	0	0	0	31,219	10,000	2,500	0	21,000	9,296	9,233	0	83,248	
Article 21 water	0	1,324	40,870	0	0	0	0	0	0	0	0	988	43,182	
Article 56(c) extended carryover	133,186	79,326	77,225	0	0	0	0	0	0	0	0	0	289,737	
Article 56(c) extended carryover for EWA*	0	0	44,036	0	0	0	0	0	0	0	0	0	44,036	
Transfer Article 56(c) extended carryover	0	0	500	0	0	0	0	0	0	0	0	0	500	
Flexible storage replacement with Article 21 water (Lake Perris)*	0	0	4,710	0	0	0	0	0	0	0	0	0	4,710	
Flexible storage replacement with local water (Castaic Lake)*	0	0	0	0	0	0	0	0	0	0	0	2,589	2,589	
Flexible storage withdrawal (Castaic Lake)	0	0	0	0	0	0	0	0	0	0	0	14,300	14,300	
Flexible storage withdrawal (Castaic Lake) delivered for EWA	0	0	15,062	34,938	0	0	0	0	0	0	0	0	50,000	
Flexible storage withdrawal (Lake Perris)	0	0	0	0	0	0	0	0	0	0	0	10,692	10,692	
Kern Water Bank turn-in water for EWA*	0	0	0	0	0	0	0	0	0	1,471	0	0	1,471	
Wet weather carryover	340	459	308	0	0	0	0	0	0	0	0	0	1,107	
Unscheduled water	0	0	253	0	0	0	0	0	0	0	0	0	253	
Transfer approved water	0	0	0	0	0	0	1,082	1,500	0	0	0	0	2,582	
Exchange approved water	0	0	0	0	0	1,300	2,174	15,536	0	0	0	0	19,010	
Exchange approved water for banked water*	0	0	1,814	1,300	2,250	15,444	0	18,386	5,000	5,800	5,000	11,065	65,859	
Pool A water	0	0	0	0	352	0	1,918	811	331	116	0	272	3,800	
Pool B water	0	0	0	8,191	569	82	3,030	1,205	616	279	0	468	14,440	
Pool A water sale*	0	3,800	0	0	0	0	0	0	0	0	0	0	3,800	
Pool B water sale*	0	0	14,440	0	0	0	0	0	0	0	0	0	14,440	
Turn-in recoveries*	0	0	6,363	22,125	27,345	24,143	21,451	20,941	6,704	844	230	3,214	133,360	
Semitropic Water Bank turn-in water for EWA*	0	0	0	0	0	0	0	17,879	0	0	0	12,121	30,000	
Water Bank water recoveries	0	0	1,614	2,573	2,250	15,444	0	507	5,000	5,800	19,134	5,000	57,322	
Subtotal (approved Table A water) (*excluded)	142,156	85,009	152,940	127,601	148,487	208,772	165,474	153,853	139,885	169,980	125,186	103,168	1,722,491	
SWP Table A-related water														
Recreation/fish and wildlife water	132	106	158	171	208	456	359	608	341	222	104	64	2,929	
Subtotal (SWP water)	142,288	85,115	153,098	127,772	148,695	209,228	165,833	154,461	140,226	170,202	125,270	103,232	1,725,420	
Non-SWP Water														
Other water														
Local water	39,253	983	2,975	41,468	193,560	173,508	177,907	151,527	67,699	106,476	85,800	60,685	1,101,841	
Dry Year Purchase Program	0	0	0	0	0	3,310	52,821	44,823	7,715	5,404	0	0	114,073	
Vallejo Permit Water	0	0	0	743	1,805	1,789	1,895	1,767	1,577	1,938	1,875	116	13,505	
General conveyance	0	0	0	0	0	0	0	2,000	1,997	0	0	0	3,997	
Subtotal	39,253	983	2,975	42,211	195,365	178,607	232,623	200,117	78,988	113,818	87,675	60,801	1,233,416	
CVP Water														
CVC allocated deliveries	0	0	0	0	0	0	396	5,363	0	0	0	0	5,759	
Transferred water from CVP contractor	0	0	0	0	0	10,821	55,438	88,687	30,750	0	0	0	185,696	
Exchange water from CVP contractor to SWP contractor	10,864	0	5,360	8,940	0	0	11,883	0	0	0	0	0	36,651	
Conveying CVP water Annual Contract	43	50	59	41	7	56	44	77	76	86	81	24	644	
Conveying CVP water (Kern National Wildlife Refuge—the Bureau)	649	641	0	0	294	260	59	547	3,875	4,973	4,635	2,830	18,763	
Conveying CVP water recreation/fish and wildlife water (San Luis/Pyramid)	23	25	42	54	32	20	27	36	29	112	55	118	573	
Subtotal (CVP water)	11,579	716	5,461	9,035	333	11,157	67,451	94,710	34,730	5,171	4,771	2,972	248,086	
Total (Non-SWP water)	50,832	1,699	8,436	51,246	195,698	189,764	300,074	294,827	113,718	118,989	92,446	63,773	1,481,502	
Grand Total	193,120	86,814	161,534	179,018	344,393	398,992	465,907	449,288	253,944	289,191	217,716	167,005	3,206,922	4,124,136

Table 9-4. Total Amounts of Annual Table A Water and Water Conveyed, by Type, 1962-01 (Acre-feet)

Year	Annual Table A Water According to Long-Term Water Supply Contract							Water Conveyed								
	Upper Feather River Area (1)	North Bay Area (2)	South Bay Area (3)	San Joaquin Valley Area (4)	Central Coastal Area (5)	Southern California Area (6)	Total (7)	Deliveries					Initial Fill Water (14)	Operational Losses and Storage Changes ^d (15)	Total (16)	
								Annual Table A Water (8)	Article 21 Surplus and Unscheduled Water ^a (9)	Other Water ^b (10)	Feather River Diversions ^c (11)	Wildlife/ Recreation Water (12)				Subtotal (13)
1962	0	0	0	0	0	0	0	0	0	18,289	0	0	18,289	9	272	18,570
1963	0	0	0	0	0	0	0	0	0	22,456	0	0	22,456	71	185	22,712
1964	0	0	0	0	0	0	0	0	0	32,507	0	0	32,507	171	152	32,830
1965	0	0	0	0	0	0	0	0	0	44,105	0	0	44,105	93	729	44,927
1966	0	0	0	0	0	0	0	0	0	67,928	0	0	67,928	0	1,746	69,674
1967	0	0	11,538	0	0	0	11,538	11,538	0	53,605	0	0	65,143	8,328	4,212	77,683
1968	550	0	109,900	77,350	0	3,700	191,500	171,709	121,534	14,777	866,926	0	1,174,946	498,926	117,906	1,791,778
1969	620	0	98,700	163,075	0	5,000	267,395	193,020	72,397	18,829	794,374	0	1,078,620	510,614	72,196	1,661,430
1970	700	0	114,200	202,000	0	5,700	322,600	233,993	133,024	38,080	759,759	0	1,164,856	23,947	2,435	1,191,238
1971	890	0	116,200	251,800	0	6,700	357,590	357,340	296,019	44,119	778,362	8	1,475,848	7,853	5,812	1,489,513
1972	970	0	118,300	413,066	0	209,423	741,759	611,801	423,964	66,638	817,398	6,489	1,926,290	100,274	53,062	2,079,626
1973	1,100	0	120,400	383,652	0	481,100	986,252	694,388	296,416	42,511	800,743	1,155	1,835,213	204,638	53,798	2,093,649
1974	1,230	0	122,400	460,650	0	597,920	1,182,200	874,077	417,676	46,224	911,613	2,118	2,251,708	237,554	10,657	2,499,919
1975	1,610	0	124,500	545,809	0	714,950	1,386,869	1,223,990	622,902	63,793	862,218	3,377	2,776,280	103,352	(94,606)	2,785,026
1976	1,990	0	126,500	543,417	0	836,480	1,508,387	1,373,002	580,110	115,217	946,440	1,745	3,016,514	61,122	(681,025)	2,396,611
1977	2,420	0	128,600	581,400	0	954,901	1,667,321	574,155	0	389,065	581,994	1,111	1,546,325	0	(131,151)	1,415,174
1978	1,850	0	130,700	635,900	0	1,049,584	1,818,034	1,452,699	16,914	121,225	786,517	1,691	2,379,046	64,443	717,370	3,160,859
1979	2,130	0	132,700	702,685	0	1,190,573	2,028,088	1,659,896	648,389	187,630	882,549	1,766	3,380,230	12,302	(83,430)	3,309,102
1980	1,810	500	134,800	758,100	1,946	1,317,614	2,214,770	1,529,749	404,557	46,459	875,045	2,131	2,857,941	0	(26,606)	2,831,335
1981	1,940	650	137,000	818,000	2,813	1,432,065	2,392,468	1,909,562	908,428	279,161	838,557	4,688	3,940,396	0	(802,263)	3,138,133
1982	1,970	800	139,200	876,500	5,626	1,550,449	2,574,545	1,750,024	215,873	154,882	776,330	4,646	2,901,755	0	480,752	3,382,507
1983	2,000	950	141,400	867,118	8,439	1,681,257	2,701,164	1,184,869	13,019	181,453	602,905	7,849	1,990,095	0	(90,997)	1,899,098
1984	3,630	1,100	143,600	979,211	12,698	1,744,098	2,884,337	1,588,619	262,917	381,024	832,332	7,040	3,071,932	0	(140,182)	2,931,750
1985	3,760	1,250	145,800	1,019,049	21,138	1,864,849	3,055,846	1,995,453	307,672	404,842	870,008	4,033	3,582,008	0	92,885	3,674,893
1986	4,190	1,400	148,100	1,091,946	28,210	1,983,890	3,257,736	1,995,636	36,620	193,606	791,737	3,865	3,021,464	0	284,380	3,305,844
1987	4,620	1,550	150,300	1,188,500	35,204	2,103,941	3,484,115	2,130,086	114,907	377,592	831,947	7,672	3,462,204	0	(390,413)	3,071,791
1988	5,060	15,471	152,500	1,246,100	43,722	2,225,482	3,688,335	2,385,122	0	507,076	794,834	4,889	3,691,921	0	(92,850)	3,599,071
1989	5,500	24,615	156,700	1,290,400	56,342	2,424,633	3,958,190	2,853,747	0	474,559	830,500	8,135	4,166,941	0	447,917	4,614,858
1990	6,040	28,190	160,900	1,313,450	70,486	2,500,600	4,079,666	2,582,151	90	424,697	875,099	9,262	3,891,299	0	(528,869)	3,362,430
1991	11,880	29,590	166,400	1,338,011	70,486	2,510,200	4,126,567	549,113	3,521	551,051	565,395	4,879	1,673,959	0	167,435	1,841,394
1992	11,920	32,010	171,900	1,342,300	70,486	2,510,200	4,138,816	1,471,454	1,156	144,789	613,978	2,605	2,233,982	0	(63,541)	2,170,441
1993	11,960	34,620	177,400	1,342,300	70,486	2,510,200	4,146,966	2,315,235	0	254,854	822,589	2,609	3,395,287	0	726,123	4,121,410
1994	12,000	37,215	182,000	1,342,300	70,486	2,510,200	4,154,201	1,749,351	112,625	236,739	874,018	8,200	2,980,933	0	(295,405)	2,685,528
1995	12,050	44,030	184,000	1,342,300	70,486	2,510,200	4,163,066	1,967,093	64,330	78,425	860,077	2,575	2,972,500	0	69,536	3,042,036
1996	12,100	48,225	186,000	1,301,630	70,486	2,492,900	4,111,341	2,514,825	28,647	251,391	934,997	3,907	3,733,767	86	491,550	4,225,403
1997	12,150	49,315	188,000	1,297,300	45,201	2,492,900	4,084,866	2,325,775	21,432	322,000	993,211	4,146	3,666,564	527	(11,806)	3,655,285
1998	12,200	50,420	188,000	1,272,300	45,201	2,517,900	4,086,021	1,725,519	20,288	134,682	872,738	2,108	2,755,335	0	(132,491)	2,622,844
1999	12,250	51,500	188,000	1,272,300	70,486	2,519,900	4,114,436	2,738,891	158,070	85,312	1,108,672	4,324	4,095,269	0	(189,525)	3,905,744
2000	14,000	55,945	210,000	1,205,300	70,486	2,565,900	4,121,631	3,200,677	308,785	322,655	1,085,886	4,030	4,932,032	0	(20,103)	4,750,274
2001	14,670	66,561	220,000	1,185,519	70,486	2,566,900	4,124,136	1,546,742	43,435	535,160	1,078,656	2,929	3,206,922	0	159,983	3,378,772
Total	193,760	575,907	5,126,638	30,650,738	1,011,400	54,592,309	92,150,752	53,441,301	6,655,717	7,739,406	28,518,404	125,982	96,480,810	1,834,310	24,175	98,351,162

^a Values include amounts of deliveries to short-term contractors (Mustang Water District, 1970-72; Tracy Golf and Country Club, 1974, 1979, and 1980; Green Valley Water District, 1974, 1975, 1978, 1979, 1980, and 1985; Granite Construction Company, 1980).
^b Includes amounts of SWP non-Table A water and non-SWP water conveyed for SWP and non-SWP water contractors.
^c Includes amounts of water diverted under various water rights agreements.
^d Amounts reflect net effect of (1) operational losses from SWP transportation facilities; (2) changes in reservoir storage south of Delta; (3) storable local inflows to SWP reservoirs; (4) side inflow to San Luis Canal; and (5) inflow into California Aqueduct from Kern River Intertie.

This amount included 1,546,742 acre-feet of approved Table A water, 43,435 acre-feet of Article 21 and unscheduled water, and 113,196 acre-feet of nonproject water.

Water Delivered in 2001 by Month

During 2001, the SWP provided water service to 44 agencies, including 26 long-term water contractors. Those agencies and the amounts of water delivered to them by month are listed in Table 9-3.

This section and the accompanying table summarize water deliveries for 2001. Information about those deliveries is categorized as SWP water and nonproject water.

SWP Water

SWP water delivered in 2001 is categorized as follows:

Long-term water supply contracts

- Article 21
- carryover Table A water
- current year approved Table A amounts
- flexible storage
- transfer and exchange of approved Table A water
- turnback pools A and B

Related water

- operational flood release
- recreation and fish and wildlife

In 2001, SWP water was delivered in the following classifications and amounts.

Approved Table A Water. A total of 1,546,742 acre-feet of 2001 approved Table A water was delivered to 26 long-term contractors. Also, 291,344 acre-feet of carryover water, and

74,992 acre-feet of flexible storage withdrawal water were delivered in 2001.

Exchanges and Transfers of Approved Table A Water. During 2001, a total of 21,592 acre-feet of approved Table A water was exchanged or transferred to SWP long-term contractors and non-SWP water agencies as follows:

- Kern transferred 2,874 acre-feet to Dudley Ridge;
- Tulare Lake transferred 1,082 acre-feet of water to Westlands and exchanged 1,975 acre-feet with Westlands;
- the Bureau received 11,487 acre-feet of exchange water from Kern; and
- Dudley Ridge received 4,174 acre-feet of exchange water from San Gabriel.

2000 Carryover Approved Table A Water. In 2001, 291,344 acre-feet of 2000 approved Table A water were delivered that had been stored in SWP storage facilities in 2000; this amount includes 500 acre-feet of carryover water transferred from Tulare Lake to Empire.

Article 21 Water. The Article 21 water program allows a contractor to take delivery of water over the approved and scheduled Table A amounts for the current year. In 2001, nine contractors participated in the program. A total of 43,182 acre-feet of Article 21 water was delivered to Napa, Solano, Alameda County, Dudley Ridge, Kern, Tulare, Santa Barbara, Castaic Lake, and Metropolitan. Empire took delivery of 253 acre-feet of unscheduled water.

Water for Recreation and Fish and Wildlife. A total of 2,929 acre-feet of SWP water was conveyed for recreational use and enhancement of fish and wildlife.

Recreational Use. The SWP delivered 784 acre-feet of water for facilities at Lake Oroville, Lake Del Valle, O'Neill Forebay, Silverwood Lake, and Lake Perris. In addition, 1,701 acre-feet were delivered to Castaic Lake and Castaic

Lagoon, an impoundment downstream from Castaic Lake devoted entirely to recreation.

Wildlife Management. The SWP delivered 444 acre-feet of water to use in managing wildlife in the Pilibos Wildlife Area, located on about 770 acres of land near O'Neill Forebay, 40 miles south of Los Banos.

Operational Flood Release Water

There was no operational flood water released in 2001.

Non-SWP Water

In 2001, the Department used SWP facilities to convey non-SWP water for various agencies according to the terms of water rights and water transfer and exchange agreements. Detailed information concerning those conveyances is found under "Miscellaneous Agreements with Other Agencies" in this chapter.

Floodwater. Occasionally, during wet years, the Department accepts floodwater from the Kern River into the California Aqueduct through the Kern River-California Aqueduct Intertie under an agreement entitled *Agreement among the State of California, Kern County Water Agency, and the Kern River Interests for Diversions of Floodwaters through the Kern River-California Aqueduct Intertie*, dated November 18, 1975. In 2001, the Department did not accept any floodwater into the California Aqueduct.

Water Rights Water. Water in this category is transported through SWP facilities to long-term SWP contractors and other agencies according to terms of various local water rights agreements. Some water simply passes through SWP transportation facilities; a portion is stored in SWP reservoirs for release at a later time. In 2001, 1,101,841 acre-feet of water in this category were delivered to the Feather River and South Bay and Southern California areas.

Feather River Area. Ten nonproject agencies in the Feather River area received 1,078,656 acre-feet. Those agencies are

- Last Chance Creek Water District, 10,959 acre-feet
- Thermalito Irrigation District, 2,516 acre-feet
- Oroville-Wyandotte Irrigation District, 6,632 acre-feet
- Western Canal Water District, 296,617 acre-feet
- Joint Water Districts Board, 734,236 acre-feet
- Oswald Water District, 289 acre-feet
- Tudor Mutual Water Company, 3,681 acre-feet
- Garden Highway Mutual Water Company, 15,101 acre-feet
- Plumas Mutual Water Company, 7,945 acre-feet
- Dana Brothers, 680 acre-feet

South Bay Area. In the South Bay area, 17,654 acre-feet of local water were delivered to Alameda-Zone 7 and Alameda County. These two South Bay Aqueduct contractors hold water rights to runoff from Lake Del Valle watershed.

Southern California. In Southern California, 600 acre-feet of local runoff from the Houston Creek watershed were stored and delivered to Crestline under water rights held by the Department on Houston Creek. The authorized place of use is limited to Crestline.

In 2001, Castaic entered into transfer agreements with four parties downstream of Castaic Lake to transfer 4,931 acre-feet of local water to Castaic.

Annual Table A Water and Water Delivered Since 1962

Information about annual Table A water and water conveyed for the past 40 years is contained in Table 9-4. The following discussion of conveyed Table A water is arranged according to column numbers.

Annual Table A. Columns 1 through 7 of Table 9-4 show the amount of long-term contractor's annual Table A water by area for years 1962 through 2001 as specified in the Table A

schedules of the long-term water supply contracts.

In some instances Table A schedules—projections of each contractor’s need for water to 2035—have been amended to meet the needs of individual contractors. The amounts of annual Table A water each contractor may request for years 1962 through 2035 can be found in Table B-4 in Appendix B.

Water Delivered. Columns 8 through 16 show water delivered or conveyed, including initial fill water and operational losses and storage changes.

Approved Table A Water. Column 8 shows amounts of approved Table A water delivered each year from 1962 through 2001.

Article 21 and Unscheduled Water. Article 21 and unscheduled water is water in excess of that required to meet all demands for the year’s approved Table A water and water to be stored in SWP reservoirs.

Column 9 shows amounts of Article 21 water, as defined under *SWP Deliveries*, and unscheduled water delivered from 1962 through 2001.

Other Water. Column 10 includes amounts of water classified as other water delivered in 2001, including nonproject water conveyed through SWP facilities and regulated delivery of local supply.

In 2001, a total of 535,160 acre-feet of other water was delivered.

Feather River Diversions. Column 11 includes amounts of water from the Feather River delivered according to agreements for water rights water. In 2001, a total of 1,078,656 acre-feet in this category was delivered to agencies in the Feather River area.

Recreation Water. Column 12 shows water conveyed for recreational use or to provide water to improve water quality for fish and wildlife. In 2001, a total of 2,929 acre-feet of SWP water was conveyed for this purpose.

Initial Fill Water. The quantities listed in Column 14 represent the amounts used to initially fill the aqueducts and reservoirs south of the Delta to maximum operating capacities. Initial filling began in 1962 with the filling of the South Bay Aqueduct and was completed in 1979 when Lake Perris reached its maximum operating capacity of 127,000 acre-feet. In 1996 and 1997, the Coastal Aqueduct was initially filled.

Operational Losses. Column 15 includes the total amounts of water lost through evaporation and seepage, net storage changes in reservoirs south of the Delta, and amounts of inflow from local drainage areas, including inflows into San Luis Canal and from the Kern River Intertie.

Negative values are indicated for years when withdrawals and evaporation from reservoirs south of the Delta exceed the amounts of water added to the reservoirs.

Information for this chapter was provided by the State Water Project Analysis Office.