

12/01/88

AGREEMENT  
FOR  
THE IMPLEMENTATION OF  
A WATER CONSERVATION PROGRAM  
AND USE OF CONSERVED WATER

Imperial Irrigation District  
The Metropolitan Water District of Southern California

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12/01/88

AGREEMENT  
FOR  
THE IMPLEMENTATION OF  
A WATER CONSERVATION PROGRAM  
AND USE OF CONSERVED WATER

THIS AGREEMENT is made and entered into the \_\_\_\_\_  
day of \_\_\_\_\_ 1988, by and between Imperial  
Irrigation District, a California irrigation district (IID)  
and The Metropolitan Water District of Southern California,  
a California metropolitan water district (MWD), each of  
which is at times referred to individually as "Party" and  
which are at times collectively referred to as "Parties."

RECITALS

A. MWD and IID, along with Palo Verde Irrigation  
District (Palo Verde) and Coachella Valley Water District  
(Coachella), are each contractors with the United States for  
delivery of Colorado River water, as authorized by the  
Boulder Canyon Project Act (Act of December 21, 1928; 45  
Stat. 1057; as amended).

B. Pursuant to those contracts, and in accordance with  
their rights under applicable federal and state law, Palo  
Verde, the Yuma Project (Reservation Division), IID and

Coachella (collectively "the agricultural agencies") have California's first three priorities to Colorado River water and are collectively entitled to the beneficial consumptive use of 3,850,000 acre-feet (AF) each year. The fourth and fifth priorities totaling 1,212,000 AF per year are held by MWD. The sixth priority of 300,000 AF per year is held by IID, Coachella and Palo Verde. The seventh priority of all remaining water available for use within California is reserved for agricultural use in the Colorado River Basin, as defined, within California, which includes the land within IID. MWD also has a surplus water contract with the Secretary of the Interior (Secretary) for a maximum of 180,000 AF per year.

C. IID has present perfected rights, with a priority date of 1901, as defined in the decree and the supplemental decree entered March 9, 1964 and January 9, 1979, by the United States Supreme Court in Arizona v. California.

D. With the commencement of operations of the Central Arizona Project, California may from time to time be limited to its basic apportionment of 4.4 million AF per year by the Secretary. At those times, under the priority system, MWD's dependable supply of Colorado River water may be reduced from 1,212,000 AF per year to 550,000 AF per year, less

appropriate Indian reservation and miscellaneous present perfected rights.

E. IID has undertaken water conservation improvements and measures and intends to undertake additional improvements and measures to its water delivery system, its operations, and the operations and systems of the members of its agricultural community. By engaging in these improvements and measures IID could, pursuant to applicable law, make water available for use by MWD.

F. IID wishes to undertake conservation measures and make available to MWD, and MWD desires to pay the costs of a water conservation program by providing the necessary funds in order to have made available to it, certain water which is the subject of this Agreement. This Agreement is based on IID receiving funds from MWD for undertaking conservation measures (collectively referred to herein as "The Program"), and making available on a dependable basis for use by MWD the water conserved by said measures. The duty of IID herein is to conserve and make the conserved water available as provided for herein for MWD's use; the duty of MWD is to provide funds for the construction of works and related costs and for ongoing costs necessary to conserve such water whether or not the water is used.

G. IID and MWD recognize that they have differences of opinion over various legal questions relating to the transfer of certain water and the entitlement of junior priorities to certain water, but each wishes to go forward with the Agreement embodied herein without regard to current or future legal differences, and both agree that nothing herein is intended to or should have the effect of adding to or subtracting from the legal positions heretofore or hereafter taken by either, as is more specifically set forth hereafter in Article VI hereof.

NOW, THEREFORE, for and in consideration of mutual obligations and undertakings set forth herein, the Parties hereby agree as follows:

#### ARTICLE I

#### THE PROGRAM

Section 1.1. Description of the Program. The Program shall comprise structural and non-structural projects generally consisting of the lining of existing canals, construction of reservoirs and interceptors, installation of gates and automation equipment together with monitoring and management measures which in total are estimated to conserve 100,000 AF of water annually for use by MWD. These projects are as set forth in Appendix A to this Agreement and general description of the projects and locations are contained in Appendix E.



Section 1.2. Program Coordinating Committee. As a means of securing effective cooperation and interchange of information and providing consultation, review, and approval on a prompt and orderly basis between the Parties in connection with the various financial, economic, administrative, and technical aspects of this Agreement, the Parties hereby establish the Program Coordinating Committee. The Program Coordinating Committee shall consist of three members, one representative member duly authorized and appointed by each Party and a third member mutually agreed to by each such Party's representative member. All such members shall be registered civil engineers and have technical competence in the design, construction, and operation of major water supply facilities. Each Party shall designate its representative member within thirty (30) days after the effective date of this Agreement. The third member selected by each Party's representative member shall be designated sixty (60) days after the effective date of this Agreement and shall serve at the pleasure of the Parties' representative members. Such third member shall be the chairperson of the Program Coordinating Committee and shall be responsible for presiding over the meetings of the Program Coordinating Committee. All actions of the Program Coordinating Committee shall be in writing, by majority vote, consistent with the intent and the rights of the Parties under this Agreement, and limited to the duties and

responsibilities delegated to it in Sections 1.3, 1.4, 1.5, 1.7, 1.8, 2.1(f), 2.1(h), 2.3(h), 3.2, 3.3, 4.1, 4.2, and 4.5. Following the initial selection of the members, all changes in the membership, whether it be a change in the representative member of either Party or a change in the third member selected by each Party's representative member, shall be made promptly and in such a fashion that it will not interfere with the duties and responsibilities of the Program Coordinating Committee. By mutual written agreement between the Parties, the duties and responsibilities of the Program Coordinating Committee may be modified.

Section 1.3. Modification and Substitution of Projects.

It is recognized and agreed that subject to further investigation, IID may find it desirable to modify projects set forth in Appendix A or substitute other projects therefor. Such modification or substitution may be undertaken by IID provided that the cost of a modified or substituted project would not exceed the estimated total cost, including the capital equivalent of the annual direct costs, in 1988 dollars of the original project, delay the availability of the respective estimated conserved water, or reduce the respective estimated amount of water conserved, all as determined by the Program Coordinating Committee using standard established engineering procedures and economic practices and the

respective estimates set forth in Appendices A, B, C, and D. In the event the feasibility-level estimate of capital costs in 1988 dollars for the total Program exceeds the estimate set forth in Appendix B, then IID shall:

- (a) substitute projects as necessary such that the sum of the feasibility-level estimate of capital costs and the capital equivalent of the annual direct costs for the total Program, both in 1988 dollars, does not exceed the sum of the estimate of capital costs in Appendix B and the capital equivalent of the annual direct costs in Appendix C, and the conserved water is not reduced below or delayed beyond the estimates set forth in Appendix A and Appendix D, all as determined by the Program Coordinating Committee; or
- (b) obtain written approval from MWD to proceed total Program at a higher capital cost estimate.

Section 1.4. Construction Timetable. IID shall act with due diligence to cause all projects of the Program to be completed and operable within five years after the effective date of this Agreement. The proposed timetable for completion of each project of the Program is as set forth in Appendix D. It is recognized and agreed that the proposed construction timetable is an estimate based on information and facts known

at this time and that, for reasons beyond control of IID, such timetable may require adjustment. In the event an adjustment of the construction timetable is so required, IID shall, in a timely manner, prepare a revised timetable reflecting such adjustments and stating the reasons therefor. Such revised timetable shall be submitted by IID to the Program Coordinating Committee for review and approval prior to becoming effective.

Section 1.5. Planning, Design and Construction Procedures. IID shall prepare or cause to be prepared a feasibility-level plan and estimate of cost of each structural project of the Program which plan and estimate of cost shall be submitted to the Program Coordinating Committee for review and approval. Unless modified by the Program Coordinating Committee, IID shall forthwith prepare or cause to be prepared final designs, plans, specifications and any necessary environmental documentation, and an engineer's estimate for each approved structural project, which documents shall be provided to the Program Coordinating Committee for its review and approval. IID may construct the Program and each project thereof utilizing outside contractors under bidding procedures authorized by the laws of the State of California or, if found practical and economical by IID, IID may implement certain projects of the Program with its own forces. If IID elects to implement certain projects with its own forces, it shall, prior

to implementation, prepare a schedule of estimated reimbursable costs which schedule shall be submitted to the Program Coordinating Committee for review and approval. IID shall furnish all construction management and inspection services for the Program. Prior to implementation of non-structural projects of the Program, IID shall prepare or cause to be prepared any necessary environmental documentation and a report(s) fully describing these projects and setting forth the costs thereof for review and approval by the Program Coordinating Committee.

Section 1.6. Lands and Rights-of-Way. IID shall use its power of eminent domain where necessary to acquire all lands, interests in lands, easements, rights-of-way and to perform necessary relocation of utilities required for construction of the Program.

Section 1.7. Consultation. The Program Coordinating Committee shall have the right to consult with IID and MWD concerning any aspect of the Program and shall be entitled to receive from IID monthly progress reports on the status of the Program. IID will conduct briefings on the status of the Program for the Program Coordinating Committee at the committee's request, and IID shall grant members of the Program

Coordinating Committee reasonable access to areas where construction of the Program is taking place.

Section 1.8. Operation and Maintenance of Program. IID shall at all times maintain the constructed Program and each project thereof in accordance with generally accepted engineering and operating practices in the water utility industry. In the event of loss or destruction, in whole or in part, of any project of the Program or the partial or complete loss of use thereof for any reason, IID shall exercise due diligence to remedy such loss or destruction with reasonable dispatch. Prior to completion of construction and initiation of full operation of the Program, IID shall prepare or cause to be prepared an operation and maintenance manual(s) for the Program and its projects, detailing therein operational procedures, requirements for personnel, materials, supplies, equipment, energy, and estimated annual costs therefor. This manual(s) shall be the basis for the annual budget and funding calls set forth in Article IV for ongoing annual direct costs described in Section 2.3. The manual(s) may be revised by IID from time to time based on the experience of actual operation. Annually, costs shall be reviewed by IID and revised by IID if required, with any such revisions to be fully documented as to the reasons therefor and submitted to the Program Coordinating

Committee at the time of the budget submittal provided in Article IV. The operation and maintenance manual(s) and revisions thereto shall be subject to review and approval by the Program Coordinating Committee before being finalized.

## ARTICLE II

### PROGRAM COSTS

Section 2.1. Capital Costs. Capital costs of the Program to be borne by MWD shall include the costs generally associated with planning, design and construction of a water supply project. Categories of capital costs for each project of the Program are set forth as follows and estimates therefor based on 1988 dollars are as presented in Appendix B:

- (a) Environmental documentation costs incurred after the effective date of this Agreement.
- (b) Acquisition of lands, interests in lands, rights-of-way, easements, crop losses occurring as a result of construction activities, environmental mitigation requirements, and relocation of utilities. However, use of lands, interests in lands or easements required for the

projects and owned by IID shall be donated by IID.

- (c) Materials, supplies, machinery and equipment, labor and services, and payments to construction contractors and suppliers.
- (d) Engineering and construction management services including inspection services (whether those of IID staff or consulting engineers), legal services and court costs, financial services, appraisal and negotiation services.
- (e) Liability which is not attributable to the gross negligence or willful misconduct of IID or its officers, employees or agents, and legal and other professional services and court costs, to the extent such costs are not reimbursable by insurance.
- (f) Changes in insurance premiums attributable to the projects of the program for the maintenance of comprehensive general liability insurance in a form and with limits approved by the Program Coordinating Committee, naming IID as the insured



and MWD as an additional insured. It is intended that insurance coverage shall be procured and maintained in accordance with the provisions of this Agreement, however, any insurance coverage issue arising with the insurer(s) shall be determined solely by the provisions of the insuring agreement(s) and policy(ies) issued by the insurers, and not by the provisions of this Agreement.

(g) A program of verification of conservation efforts and the measurement of water conserved by the Program and its several projects including the costs of necessary consultants and staff of IID and associated legal and other professional services and court costs for any challenges, excepting by IID or MWD, relating to the quantity of the conserved water.

(h) As approved by the Program Coordinating Committee, other expenses necessary for the planning, design, and construction of the projects.

Section 2.2. Indirect Costs. Pursuant to Section 4.4, MWD will have paid to IID for indirect costs by the time of completion of construction and initiation of full operation of the Program an amount of money equal to \$23,000,000. This payment will be made as sole compensation for the indirect costs and potential obligations of IID resulting from implementation of the Program. Such costs and obligations related to the conservation of water from the Program include, but are not necessarily limited to, loss of hydroelectric power revenue; mitigation of adverse impacts on agriculture from increased salinity in the water; loss of revenues from reduced water deliveries; public information; lateral canal pipelining; modernization of ancillary features of the IID water supply system; environmental mitigation and litigation relating to the impact, if any, of the Program on the water level or quality of the Salton Sea or the New and Alamo Rivers, to the extent such costs are not reimbursable by insurance; and liability related to operation and maintenance of the Program to the extent it exceeds the insurance provided in Section 2.3(b). In consideration of all payments made by MWD under this Agreement, and to the extent not covered by insurance, IID shall pay any claim, demand, judgment, damages or liability, other than a claim, demand, judgment, damages or liability arising, or allegedly arising, as an incident to the construction of the projects, for which MWD, its Directors, officers or employees

become obligated to third parties which arises or is alleged to arise out of IID's operation, maintenance, or replacement of the projects constructed or undertaken under the Program, or which relates to or is alleged to relate to the impacts of the Program on the water level or quality of the Salton Sea, or on the New or Alamo Rivers, or on any persons affected by such impacts, if any. The foregoing sentence shall not obligate IID to pay for activities for which MWD is obligated to pay under Section 2.3(c).

Section 2.3. Annual Direct Costs. In addition to the capital and indirect costs, MWD shall also pay IID for the ongoing direct costs of the non-structural projects of the Program, and operation, maintenance and replacement costs of the structural projects of the Program necessary to keep the projects of the Program in good operating condition during the term of this Agreement. These categories of annual direct costs are set forth as follows and, except as specified in (b) below, estimates therefor based on 1988 dollars are as presented in Appendix C:

(a) Ongoing costs of non-structural projects of the Program:

(1) 12-hour Delivery

(2) Tailwater Assessment

(3) Irrigation Water Management

(b) \$200,000 per year beginning the third year after the effective date of this Agreement to cover IID's increased costs for insurance and liability related to ongoing direct costs of the non-structural projects of the Program, and the operation, maintenance, and replacement of the structural projects of the Program. Such amount shall be adjusted annually thereafter by the percentage change in the annual Consumer Price Index for all urban consumers for Los Angeles-Anaheim-Riverside, California.

(c) A program of verification of conservation efforts and the measurement of water conserved by the Program and its several projects including the costs of necessary consultants and staff of IID and associated legal and other professional services and court costs for any challenges, excepting by IID or MWD, relating to the quantity of conserved water.

(d) Replacements and repair of damage or destruction of the projects of the Program or any portion thereof not

paid for by insurance and necessary to keep the projects of the Program in good operating condition during the term of this Agreement.

- (e) That portion of salaries, wages, benefits and overhead of IID personnel necessary to the performance of or supervising of the operation and maintenance of the Program excluding the cost of the IID member for service on the Program Coordinating Committee.
- (f) The costs of the third member of the Program Coordinating Committee, who was selected by each Party's representative member to said committee.
- (g) Materials, supplies, machinery and equipment, labor, services, utilities, and fuel necessary for the operation and maintenance of the Program.
- (h) As approved by the Program Coordinating Committee, other expenses necessary for the operation and maintenance of the Program.

## ARTICLE III

### THE CONSERVED WATER SUPPLY

Section 3.1. General Proviso: Subject to the terms and conditions of this Agreement, IID hereby agrees to undertake conservation measures and to make available for use by MWD the water conserved by the Program, subject to the limitations of Sections 3.4 and 3.5. The extent of this IID obligation to make conserved water available is for IID to reduce its annual diversion from the Colorado River below that which it would otherwise have been absent the projects of the Program (in an amount equal to the quantity of water conserved by the Program) to permit the conserved water so made available to be delivered by the Secretary to MWD. This IID expressly agrees to do to permit the water so made available to be delivered by the Secretary to MWD through an increase by an equal amount in MWD's diversions at its Intake Pumping Plant on Lake Havasu. MWD shall have the exclusive right to receive such conserved water for beneficial consumptive use on the Coastal Plain of Southern California pursuant to a delivery schedule with the Secretary. MWD has no duty to take delivery of all or any part of said conserved water, and the payments provided for in this Agreement are payments by MWD to make funds available to IID for the Program and for the right to receive delivery of

Colorado River water equal in quantity to the water conserved by said Program, whether or not the water is actually used by MWD. Each year such water is used by MWD it shall be charged against the third priority set forth in the Colorado River Water Delivery Contracts of IID, MWD, Palo Verde, and Coachella with the Secretary.

Section 3.2. Amount. The amount of water to be conserved by the Program and to be made available for use by MWD is presently estimated to be 100,000 AF annually. The amount of water estimated to be conserved by each project of the Program, and the total amount for each year of the Agreement are as presented in Appendix D. It is projected that the total amount of conserved water will be available by January 1, 1994, in accordance with the following schedule:

<u>Effective Date</u>	<u>New Water Conserved and Available for Use by MWD (in AF/yr.)</u>	<u>Cumulative Amount of New Water Conserved and Available for Use by MWD (in AF/yr.)</u>
1-1-90	38,610	38,610
1-1-91	14,745	53,355
1-1-92	10,490	63,845
1-1-93	22,940	86,785
1-1-94	13,215	100,000
1-1-95 and each year thereafter until modified pursuant to Section 3.3	---	100,000


Conserved water shall be made available for use by MWD in accordance with the foregoing schedule unless modified by a delay in the construction schedule of the Program or any of its projects as recognized in Section 1.4. In the event of such delay, the Program Coordinating Committee shall revise the above schedule to reflect such delay so that the amount of water conserved by each project will be made available to MWD commencing January 1 of the year following completion of construction or initial operation, whichever is later.

Section 3.3. Amount Subject to Review and Modification.

It is recognized and agreed that the estimate of 100,000 AF annually to be conserved by the Program and the amount to be conserved by each project of the Program are based on information and data available at this time, but that the actual verification cited in Section 2.1(g) and the experience of actual operation and the continuing investigations cited in Section 2.3(c) may result in a determination of a different total amount of conserved water and differing amounts conserved by the several projects of the Program. Therefore, within one year after the effective date of this Agreement, the Program Coordinating Committee shall appoint one or more consultants with recognized competence in the field of water conservation and measurement. The consultant(s) shall serve at the pleasure of the Program Coordinating Committee. During the construction



period, the consultant(s) will be available to IID to advise IID of the measuring devices and techniques that should be used for the measurement of conserved water from the Program, and within six months after the appointment of the consultant(s), the consultant(s) shall recommend to the Program Coordinating Committee the measures to be undertaken and facilities to be installed for verification of amounts of conserved water from the Program. To the extent such measures and facilities are approved by the Program Coordinating Committee, IID shall implement the measures and construct the facilities in a timely manner to permit an accurate determination of the quantity of water conserved from each project of the Program by the end of calendar year 1994. Commencing in calendar year 1994, and in each of the four successive years thereafter, the consultant(s) will review the then available information and data with respect to the amounts of water conserved by the Program and each project thereof, and report the findings to the Program Coordinating Committee, and if recommended by the consultant(s) and approved by the Program Coordinating Committee, the total amount of water available for use by MWD under this Agreement in the ensuing years shall be adjusted to reflect the revised determination of the quantity of water conserved from the Program. Following these initial five annual reviews, such reviews and reports to the Program Coordinating Committee shall be made by the consultant(s) at five-year intervals for the



balance of the term of this Agreement. The Program Coordinating Committee shall provide all such reports and relevant data to the Secretary, Coachella, and Palo Verde. It will be presumed that the total amount of water conserved and the amount of water conserved by each project of the Program are as shown in Section 3.2 and Appendix D, until a technical determination is made by the Program Coordinating Committee to the contrary, or until a different amount is established by final court judgment or arbitration. In the event a technical determination is made by the Program Coordinating Committee, or a final court judgment or arbitration establishes, that the total amount of water conserved is more than 100,000-AF annually, MWD shall be entitled to receive the additional water. All provisions of this Agreement shall apply to this additional water. In the event a technical determination is made by the Program Coordinating Committee, or a final court judgment or arbitration establishes, that the total amount of water conserved is less than 100,000 AF annually, then IID shall proceed to implement additional conservation features to be paid for by MWD which would conserve annually an amount of water equal to the difference between 100,000 AF and the amount determined to have been conserved by the original Program, provided that the unit cost in 1988 dollars of water conserved by such additional features does not exceed the average unit cost in 1988 dollars of water of the original Program as determined by the Program Coordinating Committee. All

provisions of this Agreement shall apply to these additional features and the water conserved thereby.

Section 3.4. MWD Right Not Cumulative. MWD's right to receive conserved water made available to it by IID under this Agreement for beneficial consumptive use on the Coastal Plain of Southern California is not cumulative, and MWD has no right to such water that is not so used by it. Thus, the failure of MWD to use all water conserved by the Program in any one calendar year will not entitle MWD to more water from IID under this Agreement in any other year. Notwithstanding these provisions, any portion of the water conserved and made available for use by MWD in any year, which MWD banks in Lake Mead or any other reservoir pursuant to any valid banking agreement, shall be deemed to have been received and used by MWD during the year such water is credited to a bank.

Section 3.5. Reduction in Amount Due to Shortages. Following completion of construction of the Program, in any year that the Secretary declares he is unable to deliver and charge 3,850,000 AF of water to the first three priorities listed in the above referenced Colorado River Water Delivery Contracts (including the amount of water conserved by the Program and made available to MWD under this Agreement), IID, at its option, shall be relieved of its obligation to make the

conserved water available for use by MWD. IID shall give MWD written notice of its election to exercise this option prior to January 1 of any such year. Should IID exercise this option, the term of this Agreement as provided in Article VII shall be extended two years for each year IID so elects. MWD shall be relieved of its cost obligations to IID under this Agreement for that year IID so elects.

#### ARTICLE IV

##### FUNDING

Section 4.1. Budget. Prior to November 15 of each year of this Agreement, IID shall prepare and submit a budget to the Program Coordinating Committee for the ensuing calendar year setting forth requirements for capital costs and annual direct costs based on submittals by IID provided under Section 1.5 and on documentation and procedures provided under Section 1.8. Prior to January 1, the Program Coordinating Committee shall review the budget items with respect to conformance with documentation provided under Sections 1.5 and 1.8 and approve the budget or suggest any modification thereto after discussion with IID.

Section 4.2. Funding Call. Within 60 days after the effective date of this Agreement, MWD will provide to IID the amount of \$18,342,602 representing the estimated capital and

annual direct costs for the first year of Program implementation. Thereafter, during the first week of January of each year of this Agreement, IID shall issue a funding call to MWD for the approved amounts in the budget. MWD shall pay the amounts of the funding call so that funds are received by IID no later than the 15th day of January or if such day falls on a Saturday, Sunday or a legal holiday, the next succeeding business day (the "due day"). If the amounts paid by MWD pursuant to a January funding call, together with interest earned on the funds pursuant to Section 4.3, are insufficient to cover the costs for the calendar year, IID shall submit a revised budget to the Program Coordinating Committee for the balance of the year. Within fifteen days thereafter, the Program Coordinating Committee shall review the budget items with respect to conformance with documentation provided under Sections 1.5 and 1.8 and approve the budget or suggest any modification thereto after discussion with IID. Immediately following such approval and/or modification, IID shall issue a funding call to MWD for the approved amounts and MWD shall pay the amounts of said funding call so that funds are received by IID within 10 days after issuance of the funding call. If the 10th day falls on a Saturday, Sunday or a legal holiday, the "due day" shall be the next succeeding business day. If the amounts paid by MWD pursuant to all funding calls during the year, together with interest earned on the funds pursuant to Section 4.3, are in excess of the actual capital costs and

annual direct costs of the Program for that year, IID shall credit such excess against the first funding call occurring one year from the year for which such actual costs were determined. To the extent such excess exceeds such first funding call, the amount of the remaining excess shall be credited to the successive funding calls until exhausted.

Section 4.3. Deposit of Funding Call. IID shall promptly deposit the funds provided under Section 4.2 in a legally-permissible interest-bearing account at a bank or trust company having trust assets of at least \$500 million. Eligibility for deposits shall be limited to those financial institutions which maintain a rating equivalent to Keefe Bank Watch Service of "B/C" or better. Interest on the funds on deposit in such account shall be retained therein and used to pay expenses of the Program. IID shall make withdrawals from such account only as necessary to meet the capital costs and annual direct costs of the Program. Any funds remaining in this account at termination of this Agreement shall be refunded to MWD to the extent not needed to pay costs incurred pursuant to the terms of this Agreement before its termination.

Section 4.4. Funding of Indirect Costs. By July 1 following the effective date of this Agreement, and by July 1 of each of the four successive years, MWD shall pay to IID \$4,600,000 for the indirect costs set forth in Section 2.2. Funds received by IID for the indirect costs shall be deposited

in a separate legally permissible interest-bearing account at a bank or trust company or invested in legally permissible interest-bearing instruments. Said funds and interest thereon shall be used by IID to pay costs indirectly related to the conservation of water as provided in Section 2.2. Any of these funds for indirect costs remaining at the termination of this Agreement shall be the property of IID to be used by IID in any lawful manner.

Section 4.5. Reduction in Cost. To the extent the total cost, including annual direct costs, in 1988 dollars of the total Program is reduced below the estimates set forth in Appendix B and Appendix C, and providing the availability of the respective conserved water is not reduced below or delayed beyond the estimates set forth in Appendix A and Appendix D, all as determined by the Program Coordinating Committee, then MWD shall pay 25% of such total cost savings to IID for deposit in and disbursement from the indirect cost account established and governed by the provisions of Section 4.4 of this Agreement. Within two years following the construction and initial implementation of all projects of the Program, the determination of such cost savings shall be made by the Program Coordinating Committee using standard established engineering procedures and economic practices and an 8% discount factor to convert the annual direct costs to a capital equivalent. Actual capital costs and forecasted annual direct costs, based on the preceding history of operation, through the end of the

minimum term provided in Article VII shall be used by the Program Coordinating Committee in making such determination. To the extent such 25% cost savings is less than \$5,000,000, then MWD shall forward such 25% cost savings to IID by the July 1 following the determination of the cost savings by the Program Coordinating Committee. To the extent such 25% cost savings is greater than \$5,000,000, then MWD shall forward such 25% cost savings to IID in annual \$5,000,000 increments commencing with the July 1 following the determination of the cost savings by the Program Coordinating Committee, with the last such increment to be the balance owing.

Section 4.6. Standard of Care. In the handling and disbursement of funds needed for the acquisition and construction of the Program and in carrying out its other responsibilities under this Agreement, IID shall act with the same degree of diligence, care and skill that an ordinary prudent businessman would exercise in the management of his own personal business affairs. At all times, IID shall endeavor to construct, operate and maintain the Program at the least possible cost consistent with accepted practices in the water utility industry.

Section 4.7. Audit by MWD. Annually, MWD may audit or cause to be audited records of expenditures of funds provided by MWD to IID for Program purposes with respect to conformance to this Agreement. IID shall keep separate records of such



funds and expenditures thereof in accordance with generally accepted accounting practices. Unless MWD challenges the expenditures within one year after submittal of the records by IID, the expenditures shall be deemed to have been accepted by MWD.

Section 4.8. Limitation on Use of Funds. Funds provided by MWD to IID under this Agreement shall not be used by IID for negotiations with MWD or legal fees incurred by IID to resolve disputes with MWD regarding interpretation or enforcement of this Agreement nor may such funds be used by IID to test its contentions set forth in Article VI or for conservation projects undertaken in furtherance of such contentions.

#### ARTICLE V

#### DEFAULT

Section 5.1. Default of MWD. If MWD should fail to tender the sums due under Article IV of this Agreement on or before the due day, IID shall notify MWD in writing of its breach and advise MWD of the remedy elected by IID, as between the following remedies:

- (a) IID may elect to require MWD to pay the sum due, plus interest. MWD and IID agree that the only adequate monetary remedy is the sum of money due under Article

IV plus interest, because MWD has received the right of receiving water pursuant to this Agreement and no market value can be established for such right. In the event IID elects this remedy, interest shall accrue from the due day on unpaid sums at 2% over the prime rate fixed from time to time thereafter and prior to payment in full by Wells Fargo Bank, San Francisco, California, or its successor bank. If MWD defaults and IID elects the remedy provided in this subparagraph (a), and MWD thereafter defaults again, IID shall with respect to any subsequent default, have the option to elect either remedy provided for herein.

- (b) In the alternative, and if MWD is in excess of 60 days late in tendering the sums due under Article IV, IID may elect to treat any default in payment of the sums due under Article IV as terminating this Agreement. The termination of the Agreement shall end all rights and duties of the Parties to this Agreement.

Section 5.2. Default of IID. If IID should refuse to make available to MWD the water agreed to hereunder, MWD shall notify IID in writing of its breach and advise IID of the remedy elected by MWD, as between the following remedies:

- (a) MWD may treat this Agreement as in full force and effect and seek specific performance against IID, and

IID and MWD agree that as to MWD the remedy of damages is inadequate and unavailable to enforce this Agreement. The Parties agree to stipulate to the entry of an injunction requiring each to continue performance under this Agreement until a final judicial resolution has occurred.

- (b) MWD may elect to treat any default by IID in refusing to make available to MWD the water agreed to hereunder as terminating this Agreement. The termination of the Agreement shall end all rights and duties of the Parties to this Agreement.

## ARTICLE VI

### WATER RIGHTS AND LEGAL CONSIDERATIONS

Section 6.1. Rights to Conserved Water. Both Parties to this Agreement recognize that conservation measures undertaken by IID with funds received from MWD will result in conserved water. Except for conserved water made available by the construction and implementation of projects set forth herein, all other water owned or claimed by IID may be used and disposed of by IID in any lawful manner. In addition, upon termination of this Agreement, all water owned or claimed by IID, including water conserved by the Projects identified

herein, is outside the scope of this Agreement and may be used and disposed by IID in any lawful manner.

Section 6.2. Legal Considerations. The purposes of this Agreement are for IID to undertake the Program, for MWD to make payments to IID for the funding of such Program, and for IID to make the water conserved by the Program available for MWD's use. At the same time, MWD and IID desire to preserve their respective contentions as to all other water, as if this Agreement did not exist. In order to accomplish the purposes of this Agreement without resorting to litigation, the Parties agree as follows:

- (a) This Agreement relates to the water conserved by the Program which will be made available pursuant to this Agreement and to no other water owned or claimed by IID.
- (b) Except as specifically set forth in this Agreement, nothing contained in this Agreement is intended or shall be construed to affect, alter, or in any way limit or restrict the rights held by either Party by contract or law to divert or use Colorado River water.
- (c) Except for any legal proceedings relating to the performance of this Agreement, both Parties agree that neither will base any legal contention on the fact

that this Agreement has been executed and performed by the Parties.

- (d) Subject to MWD's right to use water made available to it by IID under this Agreement, MWD shall not, during the term of this Agreement or after its termination, make any claim, or in any manner or context whatsoever, assert any right to water that has been conserved by IID through the use of funds provided by MWD for such conservation, on the grounds that MWD has paid for the facilities and measures which resulted in the conservation of such water. Nothing in this section, however, shall constitute a waiver of MWD's contentions as to the rights to such water with respect to MWD's and IID's contracts with the Secretary or according to law. In addition, subject to MWD's right to use water made available to it by IID under this Agreement, it is agreed that the execution, operation or performance of this Agreement will not result in any forfeiture, diminution, or impairment of any rights of IID in the conserved water.
- (e) MWD shall not own, pursuant to this Agreement, any of IID's water rights, but shall have the right, subject to the provisions of this Agreement, to use a specific quantity of water as provided herein. MWD shall have no ownership or contract rights in any water

conservation facilities, improvements, projects, or measures installed or operated by IID, including real property, for purposes of carrying out the obligations of IID to conserve water as provided in this Agreement.

(f) Water conserved by IID and made available for MWD's use pursuant to the terms of this Agreement shall at all times retain its "third priority" status under the several contracts with the Secretary for delivery of Colorado River water to California contractors. Subject to performance under this Agreement, during the term of this Agreement, and after its termination for any reason whatsoever, MWD agrees not to assert in any manner or in any context whatsoever that this Agreement and the use of water contemplated herein has resulted in a shift of priority from IID's third priority to MWD's fourth and fifth priorities or in any forfeiture, diminution, or impairment of the agricultural agencies' rights to receive 3,850,000 AF per annum of Colorado River water.

(g) Nothing in this Agreement shall constitute a waiver of MWD's contentions as to the rights of MWD to receive water not put to beneficial consumptive use by the holders of the first three priorities of the Seven Party Agreement as set forth in both IID's and MWD's water delivery contracts with the Secretary, nor a

waiver of IID's contentions as to rights of IID to the contrary.

- (h) The extent of IID's obligation to make the water available to MWD is to reduce its diversion from the Colorado River below that which it would otherwise have been absent the projects of the Program (in an amount equal to the quantity of water conserved by the program) to permit the water so made available to be delivered by the Secretary to MWD. Except as expressly provided for in this Agreement, there are no express or implied warranties or guaranties given or made by the Parties.

## ARTICLE VII

### TERM AND TERMINATION

Section 7.1. Term. The Agreement shall extend through December 31 of the year 35 years after the completion of construction of the last project of the Program or initial operation of that project, whichever is later, (i.e., December 31, 2028, based on completion of construction and initial operation of the last project of the Program during 1993 as set forth in the schedule contained in Appendix D), plus any extension pursuant to Section 3.5, and shall continue

thereafter until terminated as specified in Section 7.2 or in Article V of this Agreement.

Section 7.2. Termination.

- (a) IID may terminate this Agreement in its entirety, by giving MWD 15 years' written notice of termination on or after January 1 of the year following the 20th year after completion of construction and initial operation of the last project of the Program. If IID gives notice to terminate as provided herein, MWD shall not be required to make the payments as provided under Article IV during the last seven years of the 15-year notice period provided herein.
  
- (b) MWD shall have the right to terminate this Agreement in its entirety, by giving IID a 15-year written notice of termination on or after January 1 of the year following the 20th year after completion of construction and initial operation of the last project of the Program. If MWD gives notice to terminate as provided herein, MWD shall be required to continue to make the payments as provided under Article IV to the end of the term of this Agreement.
  
- (c) Any notice given pursuant to this Section 7.2 may be cancelled by mutual written agreement of IID and MWD.



## ARTICLE VIII

### ARBITRATION

Section 8.1. Any dispute between the Parties relating to the authority and actions of the Program Coordinating Committee under this Agreement shall be resolved by arbitration.

Section 8.2. Either Party desiring to invoke arbitration shall send written notice of such fact to the other. Such notice shall set forth in detail the position of the Party desiring arbitration. Within thirty (30) days from such notice, the General Managers of each Party shall have met and attempted to resolve the dispute to their mutual satisfaction. Any such resolution shall be in writing and be binding on the actions of the Program Coordinating Committee and the Parties under this Agreement.

Section 8.3. To the extent the dispute is not resolved by the General Managers of each Party within said thirty (30) days, each Party within sixty (60) days from the date of the initial written notice for invoking arbitration shall appoint one arbitrator and shall so notify the other Party in writing of its selection. All arbitrators shall be skilled and experienced in the field pertaining to the dispute. The two arbitrators thus

selected shall name a third arbitrator within ninety (90) days from the initial written notice for invoking arbitration. In the event of their failure to so name such third arbitrator, that arbitrator shall be named as provided in the Commercial Arbitration Rules of the American Arbitration Association. The third arbitrator shall act as chairperson of the panel. The arbitration shall be governed by the Commercial Arbitration Rules of the American Arbitration Association. The arbitration shall be limited to the issue submitted. The panel of arbitrators shall not rewrite, change, or amend this Agreement. The panel of arbitrators shall render a final decision in this dispute within sixty (60) days after the date of the naming of the third arbitrator. A decision of any two of the three arbitrators named to the panel shall be final and binding on the Parties.

#### ARTICLE IX

#### NO DEDICATION OF FACILITIES

Section 9.1. Any undertaking by one Party to the other Party under any provision of this Agreement shall not constitute the dedication by such Party of the system or any portion thereof to the public or to the other Party, and it is understood and agreed that any such undertaking under any

provision of this Agreement by a Party shall cease upon the termination of its obligations hereunder.

ARTICLE X

NON-WAIVER

Section 10.1. None of the provisions of this Agreement shall be considered waived by either Party except when such waiver is given in writing. The failure of either Party to insist in any one or more instances upon strict performance of any of the provisions of this Agreement or to take advantage of any of its rights hereunder shall not be construed as a waiver of any such provisions or their relinquishment of any such rights for the future, but such provisions and rights shall continue and remain in full force and effect.

ARTICLE XI

NO THIRD-PARTY RIGHTS

Section 11.1. The Parties do not intend to create rights in or to grant remedies to any third party or others as a beneficiary of this Agreement or of any duty, covenant, obligation or undertaking established hereunder.

ARTICLE XII

UNCONTROLLABLE FORCES

Section 12.1. Neither Party shall be considered to be in default in the performance of any of its obligations under this Agreement when a failure of performance shall be due to an uncontrollable force. The term "uncontrollable force" shall mean anything caused by the act of the other or the act of any agent of the other; action of the elements, excluding severe and/or prolonged low-flow conditions on the Colorado River; the act or threat of any public enemy; Acts of God; court order; war and war defense conditions; and strikes or other labor disputes; or other causes beyond its control. Each Party shall use reasonable diligence to avoid any such delay or default and to resume performance under this Agreement as promptly as possible after any such delay or default. However, nothing contained herein shall be construed so as to require a Party to settle any strike or labor dispute in which it may be involved. Either Party rendered unable to fulfill any of its obligations under this Agreement by reason of an uncontrollable force shall give prompt written notice of such fact to the other Party and shall exercise due diligence to remove such inability with all reasonable dispatch.

Section 12.2. The refusal of the United States, its agents and employees, including the Secretary, to deliver water which is the subject of this Agreement shall not cause termination of this Agreement until it is decided in a final judgment by a court of competent jurisdiction that the United States, its agents and employees are not required to honor the terms of this Agreement, and the time for appeal of the judgment has expired. During the period that the United States refuses to deliver water, and pending the outcome of the litigation above described, the obligations of IID and MWD under Articles I, II, III and IV are suspended. The sole remedy, as between the Parties hereto, for the refusal of the United States to honor the provisions of the Agreement, which refusal is sustained by the litigation above described, is termination of this Agreement, without liability of either Party to the other.

#### ARTICLE XIII

#### GOVERNING LAW

Section 13.1. This Agreement shall be interpreted, governed by and construed under the laws of the State of California and any applicable federal law.

ARTICLE XIU

BINDING EFFECT; ASSIGNMENT

Section 14.1. This Agreement shall be binding upon and inure to the benefit of the Parties and their successors and assigns. No Party may assign or transfer its rights or obligations under this Agreement without the prior written consent of the other Party hereto.

ARTICLE XV

NOTICES

Section 15.1. All notices, requests, demands and other communications required or permitted under this Agreement shall be in writing and shall be deemed to have been received either when delivered or on the fifth business day following the mailing, by registered or certified mail, postage prepaid, return receipt requested, whichever is earlier, addressed as set forth below:

(1) If to IID:

Imperial Irrigation District  
Attention: General Manager  
P.O. Box 937  
Imperial, CA 92251

(ii) If to MWD:

The Metropolitan Water District  
of Southern California  
Attention: General Manager  
P.O. Box 54153  
Los Angeles, CA 90054

Section 15.2. Either Party may change the addressee or address to which communications or copies are to be sent by giving notice of such change of addressee or address in conformity with the provision of this Article XU for the giving of notice.

#### ARTICLE XVI

#### EFFECTIVE DATE, VALIDATION, CONFIRMATION AND APPROVAL

Section 16.1. The effective date of this Agreement shall be the last date on which any of the following events shall have occurred unless waived by MWD or IID as indicated:

- (a) Approval by the Board of Directors of IID and due execution of this Agreement by IID.
- (b) Approval by the Board of Directors of MWD and due execution of this Agreement by MWD.
- (c) Written approval by Palo Verde, unless waived by MWD and IID.

- (d) Written approval by Coachella, unless waived by MWD and IID.
- (e) Written approval by the Secretary or his designated agent, unless waived by MWD and IID.
- (f) Vote approving this Agreement by a majority of those voters of IID voting at an election called for that purpose by the Board of Directors of IID, unless waived by IID and MWD.
- (g) The entry of a judgment by a court of competent jurisdiction declaring this Agreement to be valid and binding on IID and MWD, unless waived by IID and MWD.

Section 16.2. If any of the events set forth in Section 16.1 above listed has not occurred prior to December 31, 1989, unless extended by mutual agreement of the Parties, this Agreement shall be of no force and effect unless occurrence of such event(s) is duly waived as indicated above, in which case the effective date of this Agreement shall be the date of the last of such waivers.

THIS AGREEMENT, was approved by the Board of Directors of the Imperial Irrigation District on \_\_\_\_\_ 1988 and



by the Board of Directors of The Metropolitan Water District of Southern California on \_\_\_\_\_ 1988.

IMPERIAL IRRIGATION DISTRICT

By \_\_\_\_\_  
President

ATTEST: \_\_\_\_\_  
Secretary

APPROVED AS TO FORM:

\_\_\_\_\_  
J. Penn Carter  
Chief Counsel  
Imperial Irrigation District

THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA

By \_\_\_\_\_  
General Manager

ATTEST: \_\_\_\_\_  
Executive Secretary

APPROVED AS TO FORM:

\_\_\_\_\_  
F. Vendig  
General Counsel  
The Metropolitan Water  
District of Southern  
California



APPENDIX B  
 ESTIMATED CAPITAL COSTS  
 (1988 Dollars)

<u>Project</u>	<u>Estimated Capital Cost</u>
1) Trifolium Reservoir	\$ 1,600,000
2) South Alamo Canal Lining, Phase I	992,000
3) Lateral Interceptor	2,358,000
4) "Z" Reservoir	1,461,000
5) South Alamo Canal Lining Phase II	1,455,000
6) Sperber Outlet	55,000
7) Lateral Canal Lining	42,674,000
8) Trifolium Interceptor	5,200,000
9) 12-Hour Delivery	0
10) Vail Supply Canal Lining	2,800,000
11) Rositas Supply Canal Lining	2,900,000
12) Non-leak Gates	284,000
13) Tailwater Assessment	0
14) Irrigation Water Management	0
15) System Automation	14,843,000
16) Westside Main Canal Lining, North	8,685,000
Program Coordination and Conserved Water Verification	<u>6,671,000</u>
Total	91,978,000

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APPENDIX C

ESTIMATED ANNUAL COSTS  
(1988 Dollars)

<u>Project</u>	<u>Estimated Annual Costs</u>
1) Trifolium Reservoir	\$ 23,300
2) South Alamo Canal Lining, Phase I	2,300
3) Lateral Interceptor	50,700
4) "Z" Reservoir	18,000
5) South Alamo Canal Lining Phase II	3,300
6) Sperber Outlet	4,000
7) Lateral Canal Lining	79,500
8) Trifolium Interceptor	94,200
9) 12-Hour Delivery	833,000
10) Vail Supply Canal Lining	3,400
11) Rositas Supply Canal Lining	3,200
12) Non-leak Gates	15,900
13) Tailwater Assessment	833,000
14) Irrigation Water Management	382,000
15) System Automation	356,000
16) Westside Main Canal Lining, North	20,000
Program Coordination and Conserved Water Verification	213,000
Insurance	<u>200,000</u>
Total	\$3,134,800

APPENDIX D

SCHEDULES OF ESTIMATED CASH FLOW FOR PROJECTS (1988 \$) AND AMOUNTS OF WATER CONSERVED

PROJECT	1989	1990	1991	1992	1993	1994 - 2028
<b>Trifolium Reservoir</b>						
Capital and Annual Expenditure	\$1,823,300	\$23,300	\$23,300	\$23,300	\$23,300	\$23,300
New Water Available for Yr. (AF)	0	4,600	0	0	0	0
Total Water Available for Yr. (AF)	0	4,600	4,600	4,600	4,600	4,600
<b>South Alamo Canal Lining, Phase I</b>						
Capital and Annual Expenditure	\$496,000	\$497,150	\$2,300	\$2,300	\$2,300	\$2,300
New Water Available for Yr. (AF)	0	755	755	0	0	0
Total Water Available for Yr. (AF)	0	755	1,510	1,510	1,510	1,510
<b>Lateral Interceptor</b>						
Capital and Annual Expenditure	\$2,358,000	\$50,700	\$50,700	\$50,700	\$50,700	\$50,700
New Water Available for Yr. (AF)	0	5,700	0	0	0	0
Total Water Available for Yr. (AF)	0	5,700	5,700	5,700	5,700	5,700
<b>"I" Reservoir</b>						
Capital and Annual Expenditure	\$0	\$1,461,000	\$18,000	\$18,000	\$18,000	\$18,000
New Water Available for Yr. (AF)	0	0	3,850	0	0	0
Total Water Available for Yr. (AF)	0	0	3,850	3,850	3,850	3,850
<b>South Alamo Canal Lining, Phase II</b>						
Capital and Annual Expenditure	\$0	\$0	\$727,500	\$729,150	\$3,300	\$3,300
New Water Available for Yr. (AF)	0	0	0	1,200	1,200	0
Total Water Available for Yr. (AF)	0	0	0	1,200	2,400	2,400

PROJECT	1989	1990	1991	1992	1993	1994 - 2029
<b>Eperber Outlet</b>						
Capital and Annual Expenditure	\$55,000	\$4,000	\$4,060	\$4,000	\$4,000	\$4,000
New Water Available for Yr. (AF)	0	465	0	0	0	0
Total Water Available for Yr. (AF)	0	465	465	465	465	465
<b>Lateral Canal Lining</b>						
Capital and Annual Expenditure	\$8,534,800	\$8,550,790	\$8,586,600	\$8,632,500	\$8,598,400	\$79,500
New Water Available for Yr. (AF)	0	5,830	5,830	5,830	5,830	5,830
Total Water Available for Yr. (AF)	0	5,830	11,660	17,490	23,320	29,150
<b>Trifolium Interceptor</b>						
Capital and Annual Expenditure	\$0	\$0	\$0	\$5,200,000	\$94,200	\$94,200
New Water Available for Yr. (AF)	0	0	0	0	10,700	0
Total Water Available for Yr. (AF)	0	0	0	0	10,700	10,700
<b>12 Hour Delivery</b>						
Capital and Annual Expenditure	\$833,000	\$833,000	\$833,000	\$833,000	\$833,000	\$000,000
New Water Available for Yr. (AF)	0	12,000	0	0	0	0
Total Water Available for Yr. (AF)	0	12,000	12,000	12,000	12,000	12,500
<b>Vail Supply Canal Lining</b>						
Capital and Annual Expenditure	\$0	\$0	\$280,000	\$1,260,000	\$1,261,700	\$3,400
New Water Available for Yr. (AF)	0	0	0	0	1,000	1,000
Total Water Available for Yr. (AF)	0	0	0	0	1,000	2,000

PROJECT	1989	1990	1991	1992	1993	1994 - 2026
<b>Bosiltae Supply Canal Lining</b>						
Capital and Annual Expenditure	\$0	\$0	\$290,000	\$1,305,000	\$1,306,600	\$3,200
New Water Available for Yr. (AF)	0	0	0	0	1,000	1,000
Total Water Available for Yr. (AF)	0	0	0	0	1,000	2,000
<b>Non-leak Gates</b>						
Capital and Annual Expenditure	\$57,000	\$60,190	\$63,360	\$66,570	\$68,750	\$15,900
New Water Available for Yr. (AF)	0	710	710	710	710	710
Total Water Available for Yr. (AF)	0	710	1,420	2,130	2,840	3,550
<b>Tailwater Assessment</b>						
Capital and Annual Expenditure	\$833,000	\$833,000	\$833,000	\$833,000	\$833,000	\$833,000
New Water Available for Yr. (AF)	0	5,000	0	0	0	0
Total Water Available for Yr. (AF)	0	5,000	5,000	5,000	5,000	5,000
<b>Irrigation Water Management</b>						
Capital and Annual Expenditure	\$382,000	\$382,000	\$382,000	\$382,000	\$382,000	\$382,000
New Water Available for Yr. (AF)	0	3,400	0	0	0	0
Total Water Available for Yr. (AF)	0	3,400	3,400	3,400	3,400	3,400
<b>System Automation</b>						
Capital and Annual Expenditure	\$565,250	\$4,867,750	\$3,255,100	\$2,538,800	\$4,680,200	\$356,000
New Water Available for Yr. (AF)	0	150	2,450	1,800	1,350	3,525
Total Water Available for Yr. (AF)	0	150	2,600	4,200	5,550	9,075

PROJECT	1989	1990	1991	1992	1993	1994 - 2028
<b>Westside Main Canal Lining</b>						
Capital and Annual Expenditure	\$434,252	\$2,062,887	\$2,067,887	\$2,072,687	\$2,077,687	\$20,000
New Water Available for Yr. (AF)	0	0	1,150	1,150	1,150	1,150
Total Water Available for Yr. (AF)	0	0	1,150	2,300	3,450	4,600
<b>Program Coordination &amp; Verification</b>						
Capital and Annual Expenditure	\$2,171,000	\$1,125,000	\$1,125,000	\$1,125,000	\$1,125,000	\$213,000
New Water Available for Yr. (AF)	0	0	0	0	0	0
Total Water Available for Yr. (AF)	0	0	0	0	0	0
<b>Insurance</b>						
Capital and Annual Expenditure	\$0	\$0	\$200,000	\$200,000	\$200,000	\$200,000
New Water Available for Yr. (AF)	0	0	0	0	0	0
Total Water Available for Yr. (AF)	0	0	0	0	0	0
<b>TOTALS</b>						
Capital Expenditure	\$16,203,502	\$18,461,937	\$16,118,687	\$22,526,197	\$18,667,687	\$0
Annual Direct Expenditure	\$2,139,100	\$2,288,540	\$2,602,880	\$2,699,920	\$2,894,460	\$3,134,800
Indirect Expenditure	\$4,600,000	\$4,600,000	\$4,600,000	\$4,600,000	\$4,600,000	\$0
Total Expenditure	\$22,942,602	\$25,350,477	\$23,321,567	\$29,826,037	\$26,162,147	\$3,134,800
Cumulative Expenditure	\$22,942,602	\$48,293,079	\$71,814,646	\$101,440,653	\$127,602,800	\$130,737,600 (YR 1994)
New Water Available for Yr. (AF)*	0	38,610	14,745	10,490	22,940	13,215 (YR 1994)
Total Water Available for Yr. (AF)*	0	38,610	53,355	63,845	86,785	100,000

\* available as per agreement

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11/29/88



## Appendix E

### GENERAL DESCRIPTION OF PROJECTS IN PROGRAM AND LOCATION MAP

- 1) Trifolium Reservoir. A 340 acre-foot regulating reservoir and pump facility located along the Trifolium Extension for conserving water that would have otherwise been discharged into the drain system.
- 2) South Alamo Canal Lining, Phase I. Concrete lining of a two-mile section of the unlined South Alamo Canal.
- 3) Lateral Interceptor. An interceptor canal, 80 AF regulating reservoir, and pump facility located on the East Highline Canal System for recovery of water that would have otherwise been discharged into the drain system.
- 4) "Z" Reservoir. A 210 AF regulating reservoir at the head of the Z Spill Lateral for conserving water that would have otherwise been discharged into the drain system.
- 5) South Alamo Canal Lining, Phase II. ~~Concrete~~ lining of a 3.2 mile section of the unlined South Alamo Canal.
- 6) Sperber Outlet. An outlet structure and pump facility from the Sperber Reservoir to the Redwood Canal to provide greater use of the reservoir and conserve water that would have otherwise been discharged into the drain system.
- 7) Lateral Canal Lining. Concrete lining of 265 miles of existing unlined laterals.
- 8) Trifolium Interceptor. An interceptor canal, 160 AF regulating reservoir, and pump facility located at the terminus of the Trifolium laterals for recovery of water that would have otherwise been discharged into the drain system.

9) Twelve-Hour Delivery. A system water management practice entailing the addition of an estimated 18 persons to permit delivery changes to be made on a twelve-hour basis instead of the previous twenty-four hour basis, thereby reducing the amount of water that would have otherwise been discharged into the drain system.

10) Vail Supply Canal Lining. Concrete lining of 13 miles of the unlined Vail Supply Canal.

11) Rositas Supply Canal Lining. Concrete lining of 9.6 miles of the unlined Rositas Supply Canal.

12) Non-Leak Gates. Replacement of 284 wooden gates with non-leak aluminum gates.

13) Tailwater Assessment. A system water management practice entailing expansion of the existing assessment program in which a farmer is fined in the form of "triple charges" for all water used on a day when it is determined that excessive tailwater exists on his fields. This expansion would entail the addition of an estimated 18 persons to permit increased surveillance of the tailwater in the valley.

14) Irrigation Water Management. A system water management practice entailing an on-farm water conservation education program which includes training of water users in irrigation scheduling, improved irrigation techniques, irrigation evaluation, and tailwater return systems. This project will entail an estimated seven persons and fifty percent of a supervisors time.

15) System Automation. Automation of key flow control structures to provide for better overall system control, more water user flexibility, and less variability in water deliveries due to substantial elimination of flow fluctuations in laterals, thereby reducing the amount of water that would have otherwise been discharged into the drain system.

16) Westside Main Canal Lining, North. Concrete lining of 20 miles of the unlined Westside Main Canal.



Example C--50,000 Acre-foot Reduction  
(C&A Programs 75 Percent Completed)

Assumptions on Use Absent Reduction:

	Calendar Year Use (acre-feet)
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PVID (Exclusive of its Third Priority Mesa Land) & Yuma Project, Reservation Division	450,000
IID	2,920,418
PVID for its Third Priority Mesa Land	20,000
CVWD	430,000
	-----
IID, PVID for its Third Priority Mesa Land, and CVWD Subtotal	3,370,418
Conserved Water (MWD)	79,582
	-----
Total	3,900,000
Limitation	- 3,850,000
	-----
Reduction Required	50,000

Allocation of Reduction Required:

	(acre-feet)
First Increment	
$[50,000 \times (79,582 / 106,110)] / [(79,582 + 2,920,418) / (79,582 + 3,370,418)] = 43,125$	
Conserved Water (MWD)	
$43,125 - [43,125 \times (20,000 + 430,000) / (79,582 + 3,370,418)]$	37,500
PVID for its Third Priority Mesa Land	
$43,125 \times [20,000 / (79,582 + 3,370,418)]$	250
CVWD	
$43,125 \times [430,000 / (79,582 + 3,370,418)]$	5,375
	-----
Total	43,125

Remaining Reduction Required

6,875

Second Increment

$50,000 - 43,125 = 6,875$

PVID for its Third Priority Mesa Land

$6,875 \times [20,000 / (79,582 + 3,370,418)]$

40

CVWD

$6,875 - 40$

6,835

Total

-----  
6,875

Total Reduction: First and Second Increments

MWD

37,500

PVID for its Third Priority Mesa Land

290

CVWD

12,210

Total

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50,000