



MWD

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

8-8

June 23, 1998

To: Board of Directors (Water Planning and Resources Committee--Action)
(Budget and Finance Committee--Action)

From: General Manager

Submitted by: Debra C. Man, Chief
Planning and Resources



Debra C. Man

Subject: Approve Principles of Agreement with Coachella Valley Water District and
Desert Water Agency for Water Exchange and Storage Program and Authorize
\$750,000 for Preparation of the Environmental Documentation

Reference: Appropriation No. 15326

RECOMMENDATION

It is recommended that your Board authorize preparation of an Agreement among the Coachella Valley Water District (Coachella), the Desert Water Agency (Desert), and The Metropolitan Water District of Southern California (Metropolitan), along the terms described in this Board letter and appropriate \$750,000 for Metropolitan's share of the cost of preparing environmental documentation and investigation of the feasibility of a groundwater storage program in the Coachella Valley lower groundwater basin.

EXECUTIVE SUMMARY

This proposal has two components: a transfer of State Water Project (SWP) supplies and subsequent exchange for Colorado River water; and a groundwater storage program in the Coachella Valley groundwater basin. Under the transfer/exchange component, Metropolitan would transfer 100,000 acre-feet (AF) of its SWP entitlement to the Desert Water Agency (Desert) and Coachella Valley Water District (Coachella). Desert and Coachella would pay all SWP fees on the transferred entitlement and exchange the transferred entitlement water with Colorado River water from Metropolitan's Colorado River Aqueduct (CRA). When Metropolitan needs all of its SWP and CRA water to satisfy demands in Metropolitan's service area, Coachella and Desert would sell the transferred SWP entitlement to Metropolitan for payment of the SWP charges and Metropolitan would not deliver CRA water for exchange to Desert and Coachella. The intent of the program would be to exchange water with Desert and Coachella in at least half of the years of the program. The program would operate so that in wet

years, Metropolitan would receive SWP water in exchange for Colorado River water at the same price of delivering Colorado River water through the CRA; in dry years, Metropolitan would receive both its Colorado River water and water from the transferred SWP entitlement. The benefit to Desert and Coachella would be that they would receive additional wet year water supplies to replenish the Coachella Valley upper groundwater basin.

In the groundwater storage portion of the program, Metropolitan would store additional supplies of available Colorado River water in the upper groundwater basin of Coachella Valley. Coachella would return this water to Metropolitan by waiving its right to receive conserved water from the MWD/IID Phase I Conservation Agreement. Under the MWD/IID Agreement, Metropolitan receives up to 106,000 AF of conserved water. Under a separate agreement between Metropolitan and Coachella, Coachella has a right to receive about 50,000 AF of the conserved water in certain years. Under this proposal, Coachella would return 50,000 AF to Metropolitan of the stored water through waiver of its right in each year Coachella had a right to claim this conserved water.

JUSTIFICATION

The transfer portion of the program will result in lower overall water costs to Metropolitan in normal years and a full entitlement in dry years. The groundwater storage portion of the program will enable Metropolitan to store Colorado River water, and to then have access to this water on demand as a dry-year source.

ALTERNATIVE TO PROPOSED ACTION

This project is a part of Metropolitan's effort to comply with the requirements of the California 4.4 Plan. The alternative to compliance with the California 4.4 Plan is to accept a lower water supply reliability of Metropolitan's Colorado River supplies.

FUNDING REQUEST

Program Name: Desert/Coachella Water Transfer and Groundwater Storage Program		
Source of Funds: General Fund (included in FY 1998-99 and FY 1999-00 Budgets)		
Appropriation No.: 15326	Board Action No.: 1	FY 97/98 Budget:
Requested Amount:	\$750,000	Capital Program No.:
Total Appropriated Amount:	\$750,000	Capital Program Page No.:
Total Program Estimate:	N/A	Program Category: Supply & delivery reliability

ACTIONS AND MILESTONES

The water transfer/exchange program involves the transfer of SWP supplies and subsequent exchange for Colorado River water. No development or construction activities are involved. Operation of the program could commence upon signing the contract amendment, which could occur as soon as mid July 1998.

The groundwater storage program has been divided into two phases. Phase 1 involves the storage of water in Coachella's groundwater basin through the CRA Whitewater facility. Phase 2 involves a feasibility study, currently in its early stages, which will be completed by about January 1999. The required environmental compliance activities would then take about 12 months to complete. This would be followed by a one-year design period, the final agreement in early 2002, a one-year construction period, and initiation of program operations possibly in early 2003.

CEQA COMPLIANCE/ENVIRONMENTAL DOCUMENTATION

Currently it is envisioned that the Coachella Valley Water District would act as Lead Agency for the preparation of the environmental documentation required under the California Environmental Quality Act (CEQA) and State CEQA Guidelines, to assess the potential impacts associated with the proposed Water Storage and Transfer Program. Your Board acting as a Responsible Agency will be required to review and consider the CEQA documentation prior to approving ultimate implementation of the project. Part of the recommended action is the appropriation of funds to finance Metropolitan's share of the cost of preparing the environmental documentation.

DETAILED REPORT

The Coachella Valley Water District (Coachella), Desert Water Agency (Desert) and Metropolitan are all State Water Project (SWP) contractors. Under existing agreements entered into in 1967 and revised in 1983, Metropolitan receives Desert's and Coachella's SWP entitlement water in exchange for delivery of Metropolitan's Colorado River water. In 1984 the parties entered into an agreement for advanced deliveries where Metropolitan delivers exchange water through the Colorado River Aqueduct (CRA) prior to receiving Desert's and Coachella's SWP entitlement water. These existing programs have enabled all three parties to enhance the reliability of their water supplies and this proposed program would work in conjunction with this ongoing, historic exchange.

Under this proposal, Metropolitan would transfer 100,000 acre-feet (AF) of its Table A SWP Entitlement to Desert and Coachella. Desert and Coachella would then exchange this water for Metropolitan's Colorado River water supplies. Desert and Coachella would pay all SWP-related charges associated with conveyance and delivery of this water to the point of delivery to Metropolitan--the Devil Canyon Afterbay. Metropolitan would pay the costs of delivering water to Desert and Coachella through the CRA to the Whitewater Facility or other turnouts along the CRA. During dry years, both the transferred entitlement and the Colorado River water supplies

would be made available to Metropolitan for use in meeting demands within its service area. In these years, Metropolitan would pay all associated SWP charges. It is the intent of the parties that this exchange would take place in at least half of the years over the term of the agreement; the agreement would be coterminous with the SWP contract.

Under the groundwater storage portion of the program, Metropolitan would provide available Colorado River water supplies to Coachella for storage in the Coachella Valley upper groundwater basin. The Coachella Valley's groundwater aquifer is divided into an upper and lower groundwater basin. Each of these basins are currently in overdraft. Water stored in the upper groundwater basin eventually migrates to the lower basin.

The groundwater storage program would be divided into two phases. The first phase of the program, an upper basin storage program, could be implemented with existing facilities. The second phase involves storage in the lower basin and would require further feasibility study and cost evaluation.

Under the first phase, Metropolitan would deliver available Colorado River water for storage into the upper basin. This water would be credited towards a Metropolitan Storage Account. Coachella would return this water to Metropolitan by waiving its right to receive any portion of conserved water from the MWD/IID Phase I Conservation Agreement.

Pursuant to the MWD/IID Phase I Conservation Agreement, Metropolitan funded water conservation measures in the Imperial Valley in exchange for a right to receive 106,000 AF of conserved water over the term of the agreement. In a separate agreement with Coachella (Approval Agreement), Coachella has a right to receive about 50,000 AF of the conserved water in certain years. By waiver of this right, Coachella would return 50,000 AF of Metropolitan's stored water in those years Coachella could have exercised its right under the Approval Agreement.

The second phase of the groundwater storage program calls for storage of water in the Coachella Valley lower groundwater basin. Metropolitan and Coachella would share costs of a feasibility study to determine the program's feasibility and cost effectiveness. The initial feasibility study could be completed by June 1999. If the program proves feasible and cost effective, a detailed plan could be completed by December 2000 and a lower basin program agreement could be brought to the Board for approval about June 2001.

Under the second phase of the program, water would be delivered through the Coachella Canal. These deliveries would be either stored in the lower basin or used to provide direct delivery to lower basin pumpers. Either method would reduce the overdraft condition of the lower basin. When water was to be returned to Metropolitan, these pumpers would return to pumping water from the lower basin. Metropolitan would take in-lieu delivery of the returned water through the CRA at Lake Havasu and Coachella would accordingly reduce its diversion of Colorado River water. This second phase of the groundwater storage program could only be implemented if agreement has been reached on quantification and other related California 4.4 Plan issues. It is estimated that return of such stored water could be approximately 100,000 AF per year.

In sum, the elements of this program provide a "win-win" opportunity for all agencies involved. The transfer/exchange program with Desert and Coachella would simply be an extension of the existing exchange program Metropolitan already conducts with these agencies. This program would allow Metropolitan to reduce its SWP charges while ensuring that it can receive needed SWP and Colorado River water in dry years. Desert and Coachella would receive more wet year water to reduce overdraft conditions in the Coachella Valley. The first phase of the groundwater storage program would allow Metropolitan to make its MWD/IID Phase I Conservation Agreement conserved water supply more reliable by Coachella's waiver of its right to a portion of that water. Water stored under this program would be stored at Metropolitan's discretion only when available. The second phase of the groundwater storage program would require further study and evaluation and the Board would only be committing to cost-sharing a feasibility study at this time. Should a lower basin program prove feasible and cost effective, an agreement on this phase of the program would be brought back to the Board for consideration. The attractive element of the lower basin phase of the groundwater storage program is that deliveries could be effected through the Coachella Canal and thus would not require diversion of CRA supplies.

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