

- **Board of Directors**
Water Planning, Quality and Resources Committee

August 19, 2003 Board Meeting

9-2

Subject

Approve Principles of Agreements with North Kern Water Storage District and Mojave Water Agency to demonstrate the feasibility of water banking programs and to take full delivery of available 2003 State Water Project supplies

Description

The Board is requested to approve Principles of Agreements with the North Kern Water Storage District (North Kern) and Mojave Water Agency (Mojave) to demonstrate the feasibility of groundwater banking programs. The Principles of Agreements (**Attachment 2** and **Attachment 3**) are for banking programs that would enhance Metropolitan's capabilities to: (1) take full delivery of available 2003 SWP supplies, (2) increase storage and dry-year supplies for the following years, and (3) establish partnerships with water agencies in the San Joaquin Valley and Southern California. It is anticipated that the Board will be requested to authorize execution of contracts consistent with the Principles in September 2003.

Metropolitan's Storage Strategy. In January 1996, the Metropolitan Board approved the Integrated Resources Plan, which included a storage strategy. This storage strategy calls for the development of storage in groundwater basins and reservoirs in order to ensure the reliable delivery of supplemental supplies to member agencies. Increased storage capabilities allow Metropolitan to take delivery of available water during years of normal and wet hydrology and to store the water to reliably meet the needs of the member agencies during dry years and emergencies.

In implementing this storage strategy, Metropolitan has put in place more than 2.6 million acre-feet of total storage capacity in the recent ten years as shown in **Attachment 1**. This represents over a ten-fold increase in Metropolitan's storage capacity and dry-year supply capability since the last critical drought of 1987-1992. With member agencies' improvements in groundwater basin operations and with a ten-fold increase in Metropolitan's storage capacity, Metropolitan can now take delivery of the majority of SWP water available to meet both consumptive demands and replenish storage. This year, Metropolitan is planning to take full delivery of its SWP supplies under a 90 percent allocation by maximizing use of storage. As a result, Metropolitan is proceeding to: (1) continue replenishment deliveries to member agencies, (2) maintain its storage in system reservoirs and existing groundwater banking programs, (3) initiate the fill of the Proposition 13 groundwater conjunctive-use programs, (4) continue to fill the North Las Posas Groundwater Storage Program, (5) utilize storage rights on the SWP system, and (6) develop new opportunities with North Kern and Mojave to demonstrate the feasibility of groundwater banking programs. By the end of 2003, Metropolitan will have more than 2.5 million acre-feet of "wet" water already in storage available for use. This is equivalent to the total supplemental demands in a critical dry year.

North Kern Program. Discussions between Metropolitan and North Kern have been completed and resulted in Principles of Agreement to implement a demonstration program. North Kern is a public water agency located in Kern County north of the city of Bakersfield.

The North Kern Program is a groundwater banking program located in the southern San Joaquin Valley. Under this program, Metropolitan would store a portion of its SWP supplies that is available in 2003 and 2004 in a storage account of 60,000 acre-feet (af) within the groundwater basin underlying North Kern. At Metropolitan's call, North Kern would return up to 30,000 af of the previously stored SWP water to Metropolitan from the

groundwater basin in a given subsequent year. It is anticipated that Metropolitan would call for the return of stored water within the next five years.

The payment terms for this program are structured on a cost basis. Metropolitan would pay \$33 per acre-foot to store ("put") the water to cover the cost of program replenishment facilities and \$25 per acre-foot to extract the supplies to cover the cost of program extraction facilities, operation and maintenance. In addition, Metropolitan would be responsible for actual conveyance costs between North Kern and the California Aqueduct, estimated at \$35 per acre-foot. This program does not require any annual or storage fee payments. The program cost including returning Metropolitan's water to the California Aqueduct in a given year under the North Kern Program is approximately \$95 per acre-foot plus energy. Based upon these payment terms, the North Kern Program is cost-effective and competitive with alternative storage and supply options.

Mojave Program. Discussions between Metropolitan and Mojave have resulted in Principles of Agreement to implement a demonstration program. Mojave Water Agency is a public agency that provides supplemental water to its service area and is a State Water Contractor with a SWP Table entitlement of 75,800 acre-feet per year. Historically, Mojave has taken up to 5,000 acre-feet per year of SWP deliveries to meet its firm demands and up to 15,000 acre-feet per year for groundwater replenishment.

The Mojave Program is a proposed groundwater banking program located in the Mojave Valley. Under this program, Metropolitan would store a portion of its SWP water that is available in 2003 and 2004 in a storage account of 75,000 acre-feet within the groundwater basin underlying Mojave. In years when Metropolitan requests the return of its stored water, Mojave will provide to Metropolitan, through exchange, its SWP deliveries in the amount requested by Metropolitan or available under Mojave's full SWP deliveries less Mojave's firm demands, whichever is less. The estimated maximum return in a multiple dry-year event is 25,000 acre-feet per year. It is anticipated that Metropolitan would call for the return of the stored water within the next five years.

The payment terms for this program are structured according to a cost basis. Metropolitan would be responsible for the full SWP costs associated with the delivery of Metropolitan's SWP water to Mojave's turnout on the California Aqueduct and the variable and off-aqueduct OMP&R costs associated with the conveyance of water returned to Metropolitan through the California Aqueduct by exchange. This program does not require any annual or storage fee payments. The program cost including returning Metropolitan's water to the California Aqueduct under the Mojave Program in a given year is approximately \$95 per acre-foot. Based upon these payment terms, the Mojave Program is cost-effective and competitive with alternative storage and supply options

Policy

These programs would implement the storage strategy to meet the future water supply and quality needs of Metropolitan's service area as outlined in Metropolitan's March 1996 Integrated Resources Plan.

California Environmental Quality Act (CEQA)

CEQA determination for Options #1 and #2:

The proposed actions, i.e., approvals of principles for entering into demonstration program agreements, are not defined as a project under CEQA because the proposed actions involve continuing administrative activities such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, where it can be seen with certainty that there is no possibility that the proposed action in question may have a significant effect on the environment, the proposed actions are not subject to CEQA (Section 15061 (b)(3) of the State CEQA Guidelines). Prior to formal approvals relating to the demonstration programs and related agreements or contracts from the Board, CEQA documentation will be prepared by the Lead Agencies and processed in accordance with CEQA and the State CEQA Guidelines. As the Responsible Agency, Metropolitan's Board will then review and consider the CEQA documentation before taking further actions.

The CEQA determination is: Determine that the proposed actions are not subject to the provisions of CEQA pursuant to Sections 15378(b)(2) and 15061(b)(3) of the State CEQA Guidelines.

Board Options/Fiscal Impacts

Option #1

Adopt the CEQA determination and

- a. Approve the Demonstration Program Principles, and authorize development of an agreement with North Kern, and
- b. Approve the Demonstration Program Principles, and authorize development of an agreement with Mojave.

Fiscal Impact: None

Option #2

Adopt the CEQA determination and provide direction to the CEO regarding the development of new contract principles.

Fiscal Impact: None

Staff Recommendation

Option #1

	8/8/2003
Debra C. Man	Date
Vice President, Water Transfers/Exchanges	

	8/8/2003
Ronald R. Gasterum	Date
Chief Executive Officer	

Attachment 1 – Metropolitan’s Storage Capacity for Annual Seasonal and Dry Year Need

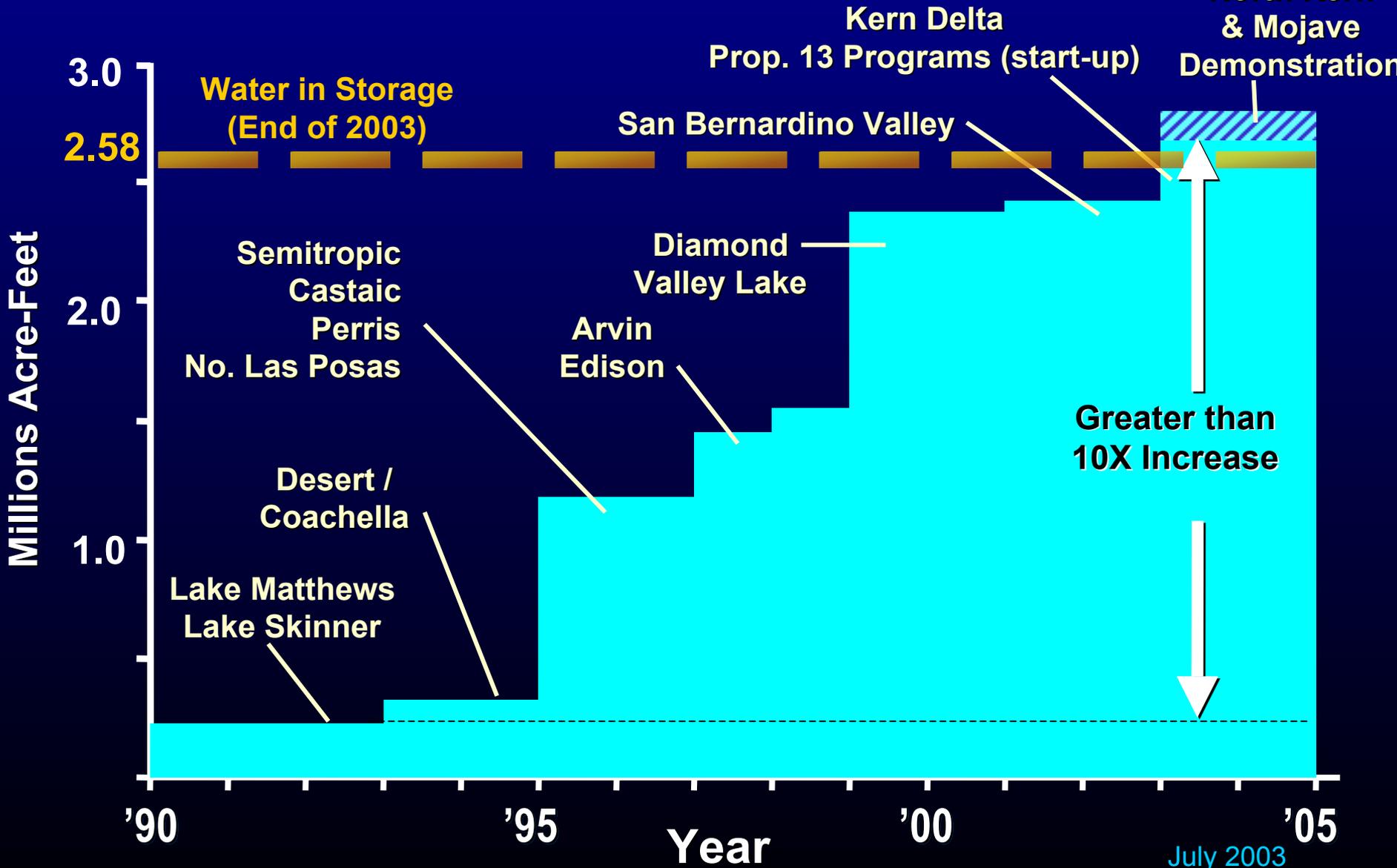
Attachment 2 – Principles of Agreement for a Demonstration Groundwater Banking Program between North Kern Water Storage District and Metropolitan Water District

Attachment 3 – Principles of Agreement for a Demonstration Water Exchange Program between Mojave Water Agency and Metropolitan Water District

Attachment 1

Metropolitan's Storage Capacity

For Annual Seasonal and Dry Year Need



July 2003

Principles of Agreement
For a Demonstration Groundwater Banking Program between
North Kern Water Storage District and Metropolitan Water District

General Discussion

- A. The Metropolitan Water District of Southern California (Metropolitan) is an agency created by act of the California Legislature, and empowered to enter into contracts to manage the water supply available to it for the benefit of its constituents.
- B. The North Kern Water Storage District (North Kern) is a water storage district formed under California Water Storage District Water Code, and empowered to enter into contracts to manage the water supply available to it for the benefit of its constituents.
- C. North Kern is willing to store water provided by Metropolitan to aid in replenishment of the groundwater basin underlying North Kern. North Kern is willing to return an equal amount, less losses, of water to Metropolitan at a time to help maximize Metropolitan's water supply reliability. North Kern and Metropolitan recognize that there may be mutual benefits of increased coordinated management of their water supplies and facilities.

Water Management Terms

1. Metropolitan will provide up to 60,000 acre-feet of its SWP supplies for storage in North Kern's service area on a schedule to be determined by North Kern in consultation with Metropolitan. The water will be held in trust by North Kern.
2. As between Metropolitan and North Kern, Metropolitan will be responsible for all costs and liabilities associated with the delivery of Metropolitan's SWP water to North Kern's service area.
3. North Kern will be responsible for all costs and liabilities within North Kern's service area.
4. In recognition of the conveyance/recharge facility usage and banking services provided by North Kern, Metropolitan will pay \$33 per acre-foot (Put Fee) for each acre-foot of water, plus losses, stored by North Kern.
5. At Metropolitan's request, North Kern will withdraw the previously stored water, less losses, and either deliver this return water to the California Aqueduct or exchange this return water with other supplies in the California Aqueduct in accordance with a schedule jointly developed by North Kern and Metropolitan.
6. As between Metropolitan and North Kern, Metropolitan will be responsible for all costs associated with the extraction (energy) of the previously stored water and conveyance of this water to the California Aqueduct.

7. In recognition of the extraction facility usage and banking services provided by North Kern, Metropolitan will pay \$25 per acre-foot for each acre-foot of water returned to Metropolitan.
8. North Kern and Metropolitan have established the losses of the pilot program (i.e. transportation, seepage) to be 10%.
9. Water requested and returned to Metropolitan by North Kern either by direct pump back or through exchange, shall be deducted from water previously stored by Metropolitan.

Miscellaneous

1. North Kern will be the lead agency with respect to environmental and any institutional approvals, and will be responsible for preparing such documentation and obtaining any necessary permits. Metropolitan will share the cost of preparing such documentation and obtaining such approvals equally with North Kern.
2. Neither party may assign the Agreement, in whole or in part, except with prior written consent of the other.
3. The performance by both parties may be contingent upon approval of the DWR and other approvals required by law.

Principles of Agreement For a Demonstration Water Exchange Program between Mojave Water Agency and Metropolitan Water District

General Discussion

- A. The Metropolitan Water District of Southern California (Metropolitan) is an agency created by act of the California Legislature, and empowered to enter into contracts to manage the water supply available to it for the benefit of its constituents.
- B. The Mojave Water Agency (Mojave) is an agency created by act of the California Legislature, and empowered to enter into contracts to manage the water supply available to it for the benefit of its constituents.
- C. Mojave is willing to store water provided by Metropolitan to aid in replenishment of the groundwater basin underlying Mojave. Mojave is willing to return an equal amount of water to Metropolitan to help maximize both Mojave's and Metropolitan's water supply reliability. Mojave and Metropolitan recognize that there may be mutual benefits of increased coordinated management of their water supplies and facilities.

Water Management Terms

1. Mojave will establish a mechanism to account for Metropolitan water stored within Mojave's service area utilizing Mojave's existing storage accounts.
2. Neither Mojave nor Metropolitan would have any responsibility for the management of water in the other agency's service area.
3. Metropolitan will deliver to Mojave up to 75,000 acre-feet of its SWP deliveries or other water on a schedule to be jointly determined. Mojave will attempt to take the maximum quantity of water that can be safely delivered by Metropolitan and reasonably managed by Mojave.
4. In years when Metropolitan requests water, Mojave will provide to Metropolitan through exchange of Mojave's SWP surface deliveries for that year, less Mojave's surface delivery firm demands. Metropolitan may request less than the full amount that Mojave is capable of returning.
5. Water requested and returned to Metropolitan by Mojave shall be deducted from water previously stored by Metropolitan. Water stored for Metropolitan by Mojave under the pilot program shall be returned within 5 years following delivery to Mojave.
6. As between Metropolitan and Mojave, Metropolitan will be responsible for all SWP costs and liabilities associated with the delivery of Metropolitan's water to Mojave's turnout on the California Aqueduct.

7. As between Metropolitan and Mojave, Metropolitan will be responsible for the Variable and Off Aqueduct OMP&R associated with the conveyance of water returned to Metropolitan by exchange after it is placed in the California Aqueduct. It is the intent that this program will not impact Mojave; Metropolitan will cover any variable cost associated with water movement.
8. Mojave will be responsible for all costs and liabilities downstream of Mojave's State Water Project turnout, within Mojave's service area.

Miscellaneous

1. Mojave will be the lead agency with respect to environmental and any institutional approvals, and will be responsible for preparing such documentation and obtaining any necessary permits. Metropolitan will share the cost of preparing such documentation and obtaining such approvals equally with Mojave.
2. Neither party may assign the Agreement, in whole or in part, except with prior written consent of the other.
3. The performance by both parties may be contingent upon approval of the DWR and other approvals required by law.