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METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Debra C. Man
EXECUTIVE SECRETARY

June 25, 1996

To: Board of Directors (Executive Committee--Information)
(Water Planning and Resources Committee--Information)

From: General Manager

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

Subject: Status Updates on Groundwater Conjunctive Use Storage Programs within
Metropolitan's Service Area

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Debra C. Man

RECOMMENDATION

For information only.

EXECUTIVE SUMMARY

Groundwater conjunctive use storage programs within Metropolitan's service area were identified through the Integrated Resources Plan (IRP) as an important part of Metropolitan's future water resource mix. These programs are cost-effective ways to maximize the use of available water supplies from the Colorado River and the State Water Project for use during droughts and emergencies. The regional benefit of this storage is estimated to be up to \$300 per acre-foot, which is now used to establish a budget range for developing such programs. The IRP identified the need for Metropolitan to develop an additional 200,000 acre-feet of yield per year from local groundwater basins during dry years. As a first step in meeting this goal, Calleguas Municipal Water District and Metropolitan have agreed to implement a groundwater storage program. When completed, the program will increase regional groundwater production by approximately 70,000 acre-feet per year and approximately 100,000 acre-feet of storage capacity. The yield from this program approaches 25 percent of the IRP objective. In order to meet the rest of the IRP goal, additional groundwater storage programs in the Raymond and Orange County basins are under discussion. Central Basin and West Basin Municipal Water Districts, Chino Basin Municipal Water District, and the San Fernando Basin Watermaster have also expressed interest in groundwater storage agreements.

DETAILED REPORT

In January 1996, the Board approved the Integrated Resources Plan (IRP) as a planning guideline for Metropolitan's resources and facility development. Under this approved plan, groundwater conjunctive use storage is an important part of the resource strategy to

ensure supply reliability within Metropolitan's service area over the next 25 years. Groundwater conjunctive use storage would allow Metropolitan to maximize the use of water supplies from the State Water Project and Colorado River by delivering water to storage for later use during emergencies and droughts. The regional benefit of managing resources through coordinated storage operations is estimated to be up to \$300 per acre-foot, of dry-year yield, which is a cost-effective resource option. This estimate will be used to establish a budget range for developing groundwater conjunctive use storage.

An additional 200,000 acre-feet of dry year yield from local groundwater basins is required by 2010. To accomplish this additional dry-year production, about one million acre-feet of dedicated storage capacity within the local basin is needed.

Calleguas Municipal Water District (Calleguas) and Metropolitan have implemented an agreement for a groundwater storage program in the North Las Posas Groundwater Basin. When completed, the program will provide the region with approximately 70,000 acre-feet per year of additional groundwater production and 100,000 acre-feet of storage capacity. Calleguas has completed drilling and development for the first four Aquifer Storage and Recovery (ASR) wells and is close to completing right-of-way negotiations for a pipeline to connect the ASR wells with Calleguas' existing delivery system. Using in-lieu storage, Metropolitan and Calleguas have already stored approximately 10,000 acre-feet of water this past year. This water will be available for regional benefit by June, 1997 when the pipeline is connected to Calleguas' system.

As an information item at its July quarterly meeting, members of the Raymond Basin Management Board will receive an update from their chairman on discussions to date with Metropolitan for developing a groundwater storage program in the Raymond Basin. As an initial step to entering into negotiations with Orange County, Metropolitan, the Orange County Water District and the Municipal Water District of Orange County are discussing guidelines for a conjunctive use agreement. In addition, Central Basin and West Basin Municipal Water Districts, Chino Basin Municipal Water District, and the San Fernando Basin Watermaster have also expressed interest in storage agreements. Activities to secure groundwater storage programs are progressing, and your Board will be informed of future developments.

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