MWD
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

BOARD ACTION

- **Board of Directors**
  Water Planning and Stewardship Committee

June 12, 2007 Board Meeting

7-10

Subject

Authorize (1) amending the existing groundwater storage program with Calleguas Municipal Water District regarding operations and maintenance costs; and (2) initiation of studies for the final phase of the project

Description

Staff is recommending amendments to the existing agreement that will clarify responsibility for accrued and future operations, maintenance and repair costs and implement a plan to reduce those costs in the future. The incremental costs for these actions is estimated to be $30 per acre-foot. In 1995, Metropolitan entered into an agreement with Calleguas Municipal Water District (Calleguas) to develop a conjunctive use program (Storage Program) in the North Las Posas groundwater basin (Basin). The program was to be developed in three phases, with an ultimate storage capacity for Metropolitan of 210,000 acre-feet (AF) and a dry-year yield of 70,000 acre-feet-per year (AFY). The Storage Program was developed to meet two objectives: (1) Implement a conjunctive use program to help meet Metropolitan's Integrated Water Resources (IRP) dry-year yield target, and (2) use the facilities developed for the Storage Program to defer or eliminate the need for additional regional distribution facilities. Metropolitan's IRP dry-year yield target for 2010 is 275,000 AFY, of which the Storage Program is a significant portion. In addition to meeting critical dry-year yield storage targets, the Storage Program would also defer the need for a third West Valley Feeder that would otherwise be required to meet increasing demands in the West Valley service area. The cost for the third feeder has been estimated to be between $250 million and $400 million. The Storage Program also improves system reliability by providing local storage during emergency and planned outages.

To date, Metropolitan has expended approximately $28 million for the first two phases of the Storage Program, and Calleguas has expended $85 million on its internal distribution system that provides delivery capability for the water. At its April 18, 2007 board meeting, Calleguas awarded a contract for the construction of the Moorpark Pump Station, which is a critical component to completing the Storage Program and is scheduled to be operational in early 2009. When the Moorpark Pump Station is complete, the dry-year capacity of the first two phases of the Storage Program will be approximately 50,000 AFY. The existing agreement stipulates that the final phase of the program would be implemented after sufficient operation of the first two phases. Implementation of the third phase would increase the dry-year yield to approximately 70,000 AFY.

Under the terms of the existing agreement, Calleguas or Metropolitan can use the facilities to pump their own stored water, and the Operation & Maintenance costs would be shared proportionally. When the facilities are used to pump Metropolitan water, Metropolitan would reimburse Calleguas for O&M costs through a credit to Calleguas against Metropolitan's then-current purchase rate.

However, since the agreement was signed in 1995, a minimal amount of water has been pumped from the Storage Program to meet demands. Limited operation of the wells has caused mechanical clogging due to an accumulation of particles at the well-aquifer interface. Mitigation of these conditions has required significant rehabilitation, and some of the wells have had to be redeveloped, with the costs for these actions accruing over the past two years. Staff is proposing a number of changes to the agreement to address these problems.

Experience of Metropolitan and Calleguas staff in recent years has shown that the current, limited operations will not produce the most efficient operational readiness of the well field. In addition, analysis by Metropolitan and Calleguas staff and consultants has shown that the lack of operations of the wells has actually increased overall costs of the program.

Proposed Amendments

Calleguas has worked with experts in aquifer storage and recovery wells and developed a proposed operating strategy to use all of the wells during non-take years by pumping a limited amount of water from the basin and delivering it to Calleguas for consumptive use. Metropolitan would deliver additional water to be injected through the wells to maintain the balance of its storage account. If these operational changes are not implemented, Metropolitan and Calleguas would expect to see continued well field rehabilitation and redevelopment costs reflected by the $1.4 million expended over the past two years–approximately $700,000 per year. With the proposed changes, Calleguas and Metropolitan expect operational costs to be reduced to approximately $400,000 per year. Because staff agrees that this proposed operating strategy would be the most cost-effective and reliable approach to assure program benefits, it is recommending the following amendments to the agreement:

- Metropolitan and Calleguas would share equally the $1.7 million in rehabilitation, site maintenance, associated O&M and regulatory costs accrued since the agreement was signed in 1995, and would equally share these costs in the future. To date, Metropolitan has paid $387,000 for such work, leaving a balance of $463,000 to be directly paid by Metropolitan.
- Calleguas would bear all of the accrued and future labor, materials, modeling, vehicle and equipment costs to maintain the wells in working order. Current accrued costs are approximately $600,000, and estimated costs in the future would be approximately $200,000 per year.
- Metropolitan would directly pay for the power used to operate the well fields in the maintenance mode. Current accrued power costs for maintenance and testing are approximately $600,000, and are estimated to be approximately $200,000 per year in the future subject to the annual operating plan. Calleguas and Metropolitan would pay for their own power costs when putting or taking from the program, per the existing agreement.
- The agreement will include performance assurances for the 50,000 acre-foot extraction capacity of the program, online date for the Moorpark Pump Station, and non-performance penalties consistent with Metropolitan's other conjunctive use programs that have been developed in recent years.
- Metropolitan and Calleguas would initiate investigations, including analyzing existing CEQA documentation, into implementing the final phase of the program, increasing the dry-year yield of the program from 50,000 to 70,000 AFY.

Benefits to Metropolitan

The Storage Program is an integral part of Metropolitan's IRP strategy to develop and deliver a reliable water supply to the member agencies. Metropolitan's other conjunctive use programs involve integrating facilities into existing groundwater operations, but in this program Metropolitan and Calleguas partnered to develop an entirely new well field and delivery system. As a result, Calleguas and Metropolitan have encountered unique operating and maintenance issues described above. Failure to implement this solution would negatively affect the availability and cost of the program. For the term of the agreement, through 2035, phases 1 and 2 of the program have a potential yield of 300,000 AF. The incremental cost of these proposed changes is $30/AF. This is less expensive than developing another comparable conjunctive use program.

Policy

By Minute Item 45841, dated July 13, 2004, the Board adopted the Integrated Water Resources Plan Update report, which recommends developing an in-basin dry-year yield of 275,000 acre-feet per year by 2010 and 300,000 acre-feet per year by 2025.

California Environmental Quality Act (CEQA)

CEQA determination for Options #1 and #2:

The proposed actions are not subject to CEQA because they involve other government fiscal activities, which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines). In addition, the proposed actions consist of basic data collection and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource. This may be strictly for information gathering purposes, or as part of a study leading to an action which a public agency has not yet approved, adopted, or funded. Accordingly, the proposed actions also qualify for a Class 6 Categorical Exemption (Section 15306 of the State CEQA Guidelines).

The CEQA determination is: Determine that the proposed actions are exempt from CEQA pursuant to Sections 15306 and 15378(b)(4) of the State CEQA Guidelines.

Board Options

Option #1

Adopt the CEQA determination and

a. Authorize the General Manager to negotiate amendments to the existing agreement as outlined in the board letter; and
b. Appropriate approximately $1.063 million (for balance of accrued rehabilitation and O&M of $463,000 plus $600,000 in accrued energy cost to date).

Fiscal Impact: Approximately $1.063 million for accrued costs and actual power costs for pumping and injecting water in the future, estimated at $200,000 per year

Business Analysis: The IRP Update includes targets for developing an in-basin dry-year yield of 275,000 acre-feet by the year 2010. In-basin conjunctive use is an integral part of Metropolitan's overall plan to ensure the future reliability of Metropolitan's water supply. The recommended actions would ensure the operational readiness of the program. Metropolitan bears the risk of escalating energy costs, while Calleguas bears the risk of escalating labor and materials costs. Maintaining the viability of the program will likely be a financially better option than developing new storage programs.

Option #2

Do not authorize the General Manager to negotiate the amendments outlined in the board letter.

Fiscal Impact: Metropolitan would not expend the initial $1.063 million for accrued costs or the $200,000 annual power costs for circulating water through the well field. If the program is not operationally ready to deliver water, Metropolitan may not be able to meet its in-basin storage goals, and would need to develop additional groundwater storage programs, with the associated costs. Metropolitan would begin investigating a third West Valley Feeder at a cost of $250 million to $400 million. Calleguas and Metropolitan may have to enter into litigation to determine the disposition of existing accrued and future O&M costs.

Business Analysis: Not approving these actions could jeopardize Metropolitan's ability to meet its in-basin storage targets, and Metropolitan and Calleguas would need to settle the issue of the funds expended for O&M. Metropolitan would also need to begin developing plans for additional groundwater storage programs, and a third West Valley Feeder.

Staff Recommendation

Option #1

5/29/2007
Stephen N. Arakawa *Date*
Manager, Water Resource Management

5/29/2007
Jeffrey Kightlinger *Date*
General Manager

BLA #5376