



# Board of Directors Water Planning and Stewardship Committee

May 8, 2007 Board Meeting

8-2

## **Subject**

Authorize (1) amendment to the water management program agreement with Arvin-Edison Water Storage District to improve water quality and water supply reliability; and (2) expenditure of \$13.2 million of Proposition 13 funding; and appropriate \$1.2 million in Metropolitan funds

## **Description**

**Background:** The Board is requested to authorize the General Manager to amend the water management program agreement (Program) with Arvin-Edison Water Storage District (Arvin) to improve water quality and water supply reliability. The Board approved the Program in December 1997. Under the Program, Metropolitan stores State Water Project (SWP) supplies in Arvin's groundwater basin during wet years and Arvin returns the water to Metropolitan during dry years. To date, Metropolitan has stored 290 thousand acre-feet (TAF) and retrieved 76 TAF leaving a current balance of 214 TAF. In recent years, Metropolitan has worked with Arvin to time Program withdrawals of high quality groundwater to improve the quality of Metropolitan's SWP supplies. Arvin's groundwater has average concentrations of <0.5 mg/l bromide and .09 mg/l total organic carbon, which are lower than average SWP concentrations by over 80 and 60 percent, respectively.

In 2000, Metropolitan received a \$20 million Proposition 13 grant to enter into partnerships with San Joaquin Valley agricultural districts to improve the quality of water supplies Metropolitan receives via the California Aqueduct. In 2000 and 2001, Metropolitan's Board authorized expending these grant monies through partnerships with the Friant Water Users Authority (Friant) and the Kings River Water Association, respectively. To date, \$3.6 million of the grant monies have been spent through these partnerships evaluating facilities and institutional issues necessary for implementing water quality exchanges for Sierra water supplies. Securing these exchanges has proven difficult, however, due to our partners' concerns about the potential need to amend their water rights permits to allow Sierra water to flow to Southern California. Similarly, a Program provision requiring Arvin to provide Metropolitan with 150 TAF of Arvin supplied water at Arvin's cost of securing the water has not been implemented due to water rights concerns.

**Proposed Amendment:** One of the projects evaluated under the Friant partnership, which does not trigger the above water rights concerns, is increasing the capacity of Arvin's South Canal to allow Arvin to return higher volumes of high quality groundwater to Metropolitan. Currently, the South Canal has a capacity of 330 cfs leaving the Tejon Spreading Grounds, which produces Arvin's highest quality groundwater, and 150 cfs at Arvin's 175 cfs bi-directional Intertie Pipeline that connects to the California Aqueduct. The expansion would increase South Canal capacity to 340 cfs leaving the Tejon Spreading Grounds and 260 cfs at the Intertie Pipeline. This will allow Arvin to fully utilize the Intertie Pipeline capacity to return water to Metropolitan while ensuring sufficient capacity to meet its customers' needs off the South Canal. In addition, the expansion will allow Metropolitan to fully utilize the Intertie Pipeline to store additional water in the Program. The South Canal expansion is estimated to cost \$14.4 million. Staff is recommending using \$13.2 million of the Proposition 13 grant monies and \$1.2 million of Metropolitan funds to finance the expansion. This approach would allow Metropolitan to use the remaining grant monies to continue ongoing studies with Friant, which are necessary to determine the feasibility of water quality exchanges.

**Attachment 1** summarizes the proposed amendment terms. In addition to expanding the South Canal, the key terms include:

- Adding a new water quality exchange operation to the Program, thereby increasing opportunities to introduce Arvin's high quality groundwater into the California Aqueduct;
- Extending key Program terms, including the dates Metropolitan can no longer store and retrieve Program water and the date Metropolitan begins to incur Program losses;
- Increasing Arvin's annual return commitment to 75 TAF in all years;
- Adding Arvin's Intertie Pipeline as a new point of delivery to reduce Metropolitan's costs;
- Increasing the amount of water that can be stored in the Program;
- Delaying the date Metropolitan needs to notify Arvin regarding Program operations;
- Providing Arvin with a \$1 million annual payment between 2007 and 2030 to be applied to Metropolitan's Program costs consistent with Metropolitan's anticipated Program use; and
- Eliminating the Arvin-supplied water provision, which has not been implemented due to water rights issues.

**Metropolitan Benefits:** Following is a brief summary of the benefits Metropolitan will receive under the proposed amendment:

- Improves SWP water quality by providing up to 50 TAF per year of no or minimal cost water quality exchanges and increased Program extractions of high quality groundwater to blend down total organic carbon and bromide levels in the California Aqueduct;
- Reduces Program cycling costs from \$260/AF to \$200/AF;
- Increases operational flexibility by allowing Metropolitan to delay its decision to store water in the Program;
- Increases Arvin's annual Program return commitment;
- Increases the potential to fully utilize Program water; and
- Increases Program yield averaging approximately 100 TAF over the term of the Program.

### **Policy**

By Minute Item 42760, dated December 9, 1997, the Board authorized the General Manager to enter into a proposed Agreement with Arvin-Edison Water Storage District for a water transfer/storage program.

Metropolitan Water District Administrative Code Section 4203: Water Transfer Policy

# California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

Pursuant to the provisions of CEQA and the State CEQA Guidelines, Arvin acting as the Lead Agency, adopted a Negative Declaration (ND) on January 9, 2007 for the proposed amendment to the water management program agreement. Metropolitan, as Responsible Agency under CEQA, is required to certify that it has reviewed and considered the information in the ND and adopt the Lead Agency's findings prior to approval of the formal terms and conditions for the proposed amendment. The environmental document is in **Attachment 2**. A copy of the environmental document is available in the office of the Board Executive Secretary.

The CEQA determination is: Review and consider information provided in the adopted 2007 ND and adopt the Lead Agency's findings related to the proposed amendment to the water management program agreement.

CEQA determination for Option #2:

None required

# **Board Options**

## Option #1

Adopt the CEQA determination and

- a. Authorize the General Manager to amend the Arvin Program to improve water quality and water supply reliability based on the terms in **Attachment 1**, all in a form approved by the General Counsel;
- b. Authorize expenditure of \$13.2 million of Proposition 13 funding; and
- c. Authorize expenditure of \$1.2 million in Metropolitan funds.

**Fiscal Impact:** The South Canal expansion is estimated to cost \$14.4 million, which will be financed using \$13.2 million of Proposition 13 grant monies and \$1.2 million of Metropolitan funds from the Water Transfer Fund. In addition, Metropolitan would guarantee Arvin \$1 million per year of Program payments between 2007 and 2030, which is consistent with Metropolitan's anticipated Program use.

**Business Analysis:** Approval will improve water quality, dry-year reliability, cost-effectiveness, and contribute toward the implementation of the Integrated Resources Plan.

#### Option #2

Do not authorize amendment of the Arvin Program.

Fiscal Impact: No increased costs

**Business Analysis:** Not amending the Arvin Program could result in a lost opportunity to optimize the Program for water quality and water supply benefits.

## **Staff Recommendation**

Option #1

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4/18/2007

Date

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Manager, Water Resource Management

Attachment 1 – Arvin-Edison/Metropolitan Water Management Program Amendment

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Attachment 2 - CEQA Documentation

**Key Proposed Terms** 

BLA #5107

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Arvin-Edison/Metropolitan Water Management Program Amendment Key Proposed Terms		
	TERM	DESCRIPTION
I.	New Facilities	Metropolitan will fund the South Canal Improvement Project, which is estimated to cost \$14.4 M, with \$13.2 M from Proposition 13 funding and \$1.2 M from Metropolitan funds.
II.	New Water Quality Exchange Operation	An up to 50 TAF water quality exchange operation will be added to the Program to increase opportunities to utilize Arvin's high quality groundwater to improve the quality of Metropolitan's State Water Project supplies. If Arvin initiates the exchange, Metropolitan incurs no cost. If Metropolitan initiates the exchange, Metropolitan incurs approximately \$20/AF cost.
III.	Extended Agreement Terms	All terms for the Regulation Program shall be extended to November 4, 2035. This will allow Metropolitan to bank supplies for an additional 13 years; avoid closeout losses for an additional eight years; and retrieve Program water for an additional three years.
IV.	Increased Return Commitment	Arvin's annual return commitment, which currently ranges from 24-75 TAF depending on availability of Arvin's supplies and the number of consecutive years Metropolitan has withdrawn Program water, will be increased to 75 TAF in all years. The new Program termination date will be extended one month for every 1 TAF of Metropolitan request water not returned by Arvin.
V.	New Point of Delivery	Arvin will add the Intertie Pipeline as an additional Point of Delivery, which will decrease Metropolitan's energy costs to store water by approximately \$25/AF.
VI.	Increased Program	Arvin will allow Metropolitan to cycle unlimited amounts of water in the Program.
VII.	Delayed Notification Date	The date Metropolitan is required to notify Arvin about Program operations will be moved from March 15 to May 15.
VIII.	Restructured Payment Schedule	Metropolitan will guarantee Arvin \$1 M per year of regulation fee payments between 2007-2030. Metropolitan's payments will not be subject to escalation and will be credited towards future regulation fee payments. In addition, these payments will be reduced by the following credits:  • \$50/AF for water banked when Arvin avoids well pumping;
		<ul> <li>\$40/AF when Arvin does not meet Metropolitan's return request; and</li> <li>\$8/AF when Arvin utilizes the Intertie Pipeline to convey its own water.</li> </ul>
IX.	Eliminating Arvin Supplied Water Provision	Arvin's requirement to provide Metropolitan with 150,000 AF of Arvin supplied water at Arvin's cost will be eliminated due to the difficulty with resolving water rights issues to make this water available.