

- **Board of Directors**
Engineering and Operations Committee

February 14, 2006 Board Meeting

7-4

Subject

Appropriate \$530,000; and authorize (1) replacement of turbidimeters and particle counters for the Skinner Plant, and (2) replacement of air compressors to improve Lake Skinner water quality (Approps. 15365 and 15377)

Description

The Robert A. Skinner Water Treatment Plant was placed into service in 1976 to supply treated water to Riverside and San Diego Counties. Construction of the plant's fourth expansion is under way, and when complete, the facility will have seven treatment modules with a combined capacity of 630 million gallons per day.

Lake Skinner is the primary source of raw water for the plant. The lake was created in 1973 with the construction of Skinner Dam. It receives State project water, Colorado River water and rainfall run-off from its 51-square mile watershed. Metropolitan's member agencies that receive water from the Skinner plant include Eastern Municipal Water District, Western Municipal Water District of Riverside County, and San Diego County Water Authority.

Skinner Water Quality Monitoring Instrument Replacement – Procurement and Installation (\$333,000)

The Skinner plant's existing turbidimeters and particle counters in Modules 1-6 were installed twelve years ago. This instrumentation provides early warning of turbidity breakthrough of the filters. The manufacturers of the instruments are no longer in business and spare parts are difficult to obtain. Staff recommends replacing 108 turbidimeters and 15 particle counters for Modules 1-6 to ensure plant reliability and the ability to continue to comply with current water quality regulations.

This action appropriates \$333,000 and authorizes the procurement and installation of the turbidimeters and particle counters. Metropolitan will purchase all instruments, and Metropolitan forces will install the instruments in Modules 4-6. The instruments in Modules 1-3 will be installed by the contractor for the Skinner Chemical Systems Modifications contract. This construction contract includes the installation of Metropolitan-furnished turbidimeters and particle counters within its scope. It is anticipated that the cost of the turbidimeter and particle counter procurements will be within the Chief Executive Officer's contracting authority under Metropolitan's Administrative Code.

Lake Skinner Aerator Air Compressors Replacement – Procurement and Installation (\$197,000)

At Lake Skinner, two stationary air compressors and one portable diesel-powered air compressor have been used to supply air to the underwater aerator system that aids in improving lake water quality and facilitates treatment downstream at the Skinner plant. The 25-year-old stationary compressors are no longer used because they have reached the end of their useful service life. Instead, the smaller diesel-powered compressor located at the lake shoreline is used to supply compressed air to the aeration system. The 12-year-old portable, diesel-powered compressor was designed for intermittent use but has been operated continuously during recent Lake Skinner impaired-water quality episodes. The underwater aerator system was recently upgraded from a large bubble diffuser system that consumed about 750 cubic feet per minute (cfm) of air to a more efficient fine bubble diffuser system that consumes 140 cfm of air. Staff recommends replacing the two existing stationary compressors with two new electric-powered compressors. Each compressor will be rated at 140 cfm to match the new aerator system requirements with one compressor in operation and the other on standby.

This action appropriates \$197,000 and authorizes the procurement and installation of two new air compressors and associated equipment. Metropolitan forces will install the two compressors before the summer of 2006. It is

anticipated that the cost of the compressor procurement will be within the Chief Executive Officer's contracting authority under Metropolitan's Administrative Code.

These two projects have been evaluated and recommended by Metropolitan's Capital Investment Plan Evaluation Team and funds have been included within the fiscal year 2005/06 capital budget. See [Attachment 1](#) for the Financial Statements and [Attachment 2](#) for the Location Map.

Policy

Metropolitan Water District Administrative Code Section 5108: Appropriations

California Environmental Quality Act (CEQA)

CEQA determinations for Option #1:

Skinner Water Quality Monitoring Instrument Replacement - Procurement and Installation

The environmental effects from the replacement of the turbidimeters and particle counters at the Skinner plant were evaluated in the Robert A. Skinner Filtration Plant Reliability and Quality Program Final Program Environmental Impact Report (Final PEIR). The Board certified the Final PEIR on July 8, 2003. The Board also approved the Findings of Fact (findings), the Statement of Overriding Considerations (SOC), the Mitigation Monitoring and Reporting Program (MMRP), and the project itself.

Subsequent to certification of the Final PEIR, various changes and refinements were made to the project. The potential impacts associated with these changes and refinements were evaluated in two separate environmental documents. First, acting as Lead Agency, Metropolitan prepared a Mitigated Negative Declaration (MND) entitled, "Robert A. Skinner Filtration Plant Reliability and Quality Program Additional Construction Use Area and Creek Crossing." The MND was distributed for a 30-day public review period beginning on December 19, 2003, and ending on January 17, 2004. The Board adopted the MND, related findings, and MMRP on April 13, 2004.

Second, again acting as Lead Agency, Metropolitan prepared a Negative Declaration (ND) entitled, "Robert A. Skinner Filtration Plant Reliability and Quality Program Refinements to the Program." The ND was distributed for a 30-day public review period beginning on August 31, 2004, and ending on September 29, 2004. The Board adopted the ND and related findings on November 9, 2004.

All of the above documentation, including other materials that constitute the record of proceedings upon which the Lead Agency decision is based, has been and will be on file at Metropolitan's headquarters located at 700 North Alameda Street, Los Angeles, CA 90012. The present proposed board action is solely based on the replacement of equipment and is part of the project description in the PEIR, MND, and ND and not on any substantial changes to the approved project itself. Hence, the previously adopted environmental documentation fully complies with CEQA and the State CEQA Guidelines. Accordingly, no further environmental documentation is necessary for the Board to act on with respect to the proposed actions.

The CEQA determination is: Determine that the proposed action has been previously addressed in the certified 2003 Final PEIR, adopted MND, and adopted ND and related documents (adopted findings, adopted SOC, and adopted MMRPs), and that no further environmental analysis or documentation is required.

Lake Skinner Aerator Air Compressors Replacement - Procurement and Installation

The proposed action is categorically exempt under the provisions of CEQA and the State CEQA Guidelines. The overall activities involve the funding, design, minor alterations and replacement of existing public facilities with negligible or no expansion of use and no possibility of significantly impacting the physical environment. Accordingly, the proposed action qualifies under Class 1 and 2 Categorical Exemptions (Sections 15301 and 15302 of the State CEQA Guidelines).

The CEQA determination is: Determine that pursuant to CEQA, the proposed action qualifies under two Categorical Exemptions (Class 1, Section 15301 and Class 2, Section 15302 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options/Fiscal Impacts

Option #1

Adopt the CEQA determinations and

- a. Appropriate \$530,000 in budgeted funds;
- b. Authorize replacement of turbidimeters and particle counters for Skinner Modules 1-6; and
- c. Authorize replacement of two Lake Skinner air compressors.

Fiscal Impact: \$333,000 of budgeted funds under Approp. 15365; and \$197,000 of budgeted funds under Approp. 15377

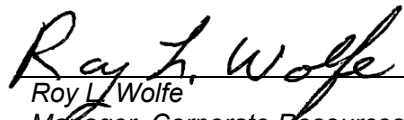
Option #2

Do not authorize the work described in this letter. Implementation of this option will increase the risk of unplanned plant outages and difficulty in meeting water quality objectives.

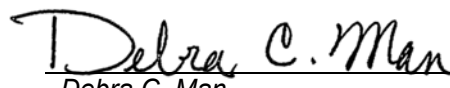
Fiscal Impact: None

Staff Recommendation

Option #1


 Roy L. Wolfe
 Manager, Corporate Resources

1/20/2006
 Date


 Debra C. Man
 Interim CEO/General Manager

1/20/2006
 Date

Attachment 1 – Financial Statements

Attachment 2 – Location Map

BLA #3988

Financial Statement for Skinner Water Treatment Plant Improvements Program

A breakdown of Board Action No. 11 for Appropriation No. 15365 is as follows:

	Previous Total Appropriated Amount (Nov. 2005)	Current Board Action No. 11 (Feb. 2006)	New Total Appropriated Amount
Labor			
Studies and Investigations	\$ 609,000	\$ 0	\$ 609,000
Design and Specifications	680,500	0	680,500
Owner Costs (Program management)	3,431,500	20,000	3,451,500
Construction Inspection and Support	8,527,600	0	8,527,600
Metropolitan Force Construction	2,447,300	110,000	2,557,300
Materials and Supplies	1,776,000	0	1,776,000
Turbidimeters	0	239,000	239,000
Particle Counters	0	92,000	92,000
Incidental Expenses	308,000	2,000	310,000
Professional/Technical Services	4,001,000	0	4,001,000
Equipment Use	268,000	0	268,000
Contracts	101,663,500	0	101,663,500
Remaining Budget	7,249,300	(130,000)*	7,119,300
Total	\$ 130,961,700	\$ 333,000	\$ 131,294,700

* Includes reallocation of \$130,000 from Remaining Budget for replacement of turbidimeters and particle counters for the Skinner Plant.

Funding Request

Program Name:	Skinner Water Treatment Plant Improvements Program		
Source of Funds:	Revenue Bonds, Replacement and Refurbishment or General Funds		
Appropriation No.:	15365	Board Action No.:	11
Requested Amount:	\$ 333,000	Capital Program No.:	15365-I
Total Appropriated Amount:	\$ 131,294,700	Capital Program Page No.:	E-59
Program Estimate:	\$ 131,308,000	Program Goal:	I-Infrastructure Reliability

Financial Statement for Conveyance and Distribution System Rehabilitation Program

A breakdown of Board Action No. 16 for Appropriation No. 15377 is as follows:

	Previous Total Appropriated Amount (Dec. 2005)	Current Board Action No. 16 (Feb. 2006)	New Total Appropriated Amount
Labor			
Studies & Investigations	\$ 2,606,200	\$ 0	\$ 2,606,200
Final Design	2,249,920	0	2,249,920
Owners Cost (Program management)	2,888,800	19,000	2,907,800
Construction Inspection & Support	1,318,800	0	1,318,800
Metropolitan Force Construction	8,884,830	85,000	8,969,830
Materials and Supplies	3,778,075	65,000	3,843,075
Incidental Expenses	1,040,620	2,000	1,042,620
Professional/Technical Services	666,500	0	666,500
Equipment Use	750,350	0	750,350
Contracts	11,592,400	0	11,592,400
Remaining Budget	3,418,205	26,000	3,444,205
Total	\$ 39,194,700	\$ 197,000	\$ 39,391,700

Funding Request

Program Name:	Conveyance and Distribution System Rehabilitation Program		
Source of Funds:	Revenue Bonds, Replacement and Refurbishment or General Funds		
Appropriation No.:	15377	Board Action No.:	16
Requested Amount:	\$ 197,000	Capital Program No.:	15377-I
Total Appropriated Amount:	\$ 39,391,700	Capital Program Page No.:	E-16
Total Program Estimate:	\$ 48,535,000	Program Goal:	R-Reliability

