

- **Board of Directors**
Engineering and Capital Programs Committee

January 8, 2008 Board Meeting

7-3

Subject

Appropriate \$1.95 million; and authorize seven rehabilitation projects within Metropolitan's service area (Approps. 15377 and 15441)

Description

The backbone of Metropolitan's conveyance and distribution system was initially constructed in the 1940s and has been in continuous service ever since. This system consists of approximately 800 miles of pipelines, 300 miles of aqueducts and canals, 16 hydroelectric plants, 45 pressure control structures, and nearly 5,000 related structures. Metropolitan staff conducts regular maintenance of the system's structures, mechanical components, and electrical equipment. Although the system continues to perform reliably today, portions of the system are exhibiting signs of normal wear and tear, as may be expected from over 60 years of operation.

Seven rehabilitation projects are recommended to move forward at this time. The recommended projects will protect Metropolitan's assets, increase the reliability of service to our customers, and reduce the risk of costly emergency repairs. The seven projects are described in detail below.

Project No. 1 – St. John's Canyon Channel Repair and Modifications – Construction (\$874,000)

The St. John's Channel repair and modifications are needed to protect Metropolitan facilities from storm runoff. St. John's Canyon Channel was constructed in 1999 as part of a series of flood control facilities designed to eliminate local flooding and to convey storm runoff east of Metropolitan's Diamond Valley Lake into the Salt Creek Channel.

St. John's Channel is a 3,000-foot-long concrete-lined and rock-lined channel, which varies in width from 51 to 63 feet and in depth from 9 to 16 feet. The channel was constructed on predominantly silty sands that are fine-grained and susceptible to erosion. Over the past few years, the channel has shown signs of degradation by erosion caused by storm runoff. Inspection of the channel shows that in some areas the concrete lining has cracked, the rock liner has been displaced, and the subgrade beneath both concrete and rock liners has voids. Metropolitan's Board authorized final design of repairs in September 2006. Final design has now been completed, and staff recommends proceeding with the repairs.

This action appropriates \$874,000 and authorizes construction of the St. John's Channel Repair and Modifications project. Metropolitan forces will perform the construction. The total cost of construction is estimated to be \$656,000. Requested funds include \$105,000 for staff support activities and \$113,000 for remaining budget. Support activities include project management; environmental monitoring; coordination with the U.S. Army Corps of Engineers, California Department of Fish and Game, and local flood control agencies during construction; preparation of a jurisdictional monitoring report at project completion; and preparation of as-built drawings. This project is categorized as an Infrastructure Rehabilitation and Replacement project within Metropolitan's Capital Investment Plan (CIP).

Project Milestone

September 2008 – Completion of construction

Project No. 2 – Valve Replacement for San Fernando Tunnel at Magazine Canyon – Final Design and Procurement (\$336,000)

The valve replacement for the San Fernando Tunnel is critical to the operational reliability of the western portion of Metropolitan's water conveyance system. The Foothill Feeder is a 36-mile-long, 16.75-foot-diameter pipeline which conveys untreated water from Castaic Lake to Magazine Canyon Shaft, north of the Jensen plant. From Magazine Canyon, water can be conveyed through the Balboa Inlet Tunnel into Jensen, or alternatively through the San Fernando Tunnel. The San Fernando Tunnel represents the initial stage of a conveyance line which was never completed. Since its construction in the early 1970s, the 5.5-mile-long, 18-foot-diameter San Fernando Tunnel has never been placed into service; the tunnel dead-ends at Pacoima Wash. The city of Burbank has requested a new service connection to be constructed at the terminus of the San Fernando Tunnel within the city of Los Angeles. Untreated water from this service connection will be conveyed to nearby Pacoima Wash spreading grounds for groundwater replenishment.

In 2006, the San Fernando Tunnel was inspected for its entire length. As a result of the inspection, the tunnel and its liner were determined to be structurally sound. However, the shutoff valve at Magazine Canyon Shaft was identified to be in need of replacement. The 24-inch sectionalizing valve located at the floor of the shaft, 140 feet below ground surface, has deteriorated and cannot be operated with any degree of reliability. Reliable operation of this valve is critical to isolate flows between the Balboa Inlet Tunnel and the San Fernando Tunnel. Failure of this valve would require shutdown of the entire Foothill Feeder. The planned repair consists of removing the deteriorated valve and installing a new 24-inch submersible valve, along with a new actuator package. The actuator system includes two actuators, one at ground surface and a submersible actuator at the floor of the shaft. Shutdown of the Foothill Feeder is currently being planned and coordinated with member agencies, and is scheduled for February 2009.

This action appropriates \$336,000 and authorizes final design and procurement of a new 24-inch shutoff valve. All final design and procurement activities will be performed by Metropolitan staff. Requested funds include \$60,000 for final design, \$150,000 for valve and actuator procurement, \$95,000 for staff support activities, and \$31,000 for remaining budget. Support activities include project management, coordination with member agencies, and shutdown planning. The construction cost for this project is anticipated to range from \$450,000 to \$550,000. Staff will return to the Board at a later date to request authorization for installation work by Metropolitan forces. This project is categorized as an Infrastructure Rehabilitation and Replacement project within Metropolitan's CIP.

Project Milestones

April 2008 – Completion of final design

November 2008 – Delivery of valve

Project No. 3 – San Diego Canal Sodium Bisulfite Feed System – Addition to Scope of Final Design (\$187,000)

The San Diego Canal Bisulfite Feed System is required to comply with new environmental and fire code regulations. Chlorine is currently added to the San Diego Canal upstream of Lake Skinner to control algae growth on the canal walls. A 6,000-gallon tank filled with sodium bisulfite is currently located at the San Diego Canal at its entrance into Lake Skinner. This tank is used to feed sodium bisulfite into the canal to remove chlorine from the canal water so that it will not harm wildlife in the lake. The existing sodium bisulfite tank is old and is currently leaking into its secondary containment.

Metropolitan's Board previously authorized final design and construction of an in-kind replacement of the existing tank. However, new fire department and environmental regulations require an upgraded bisulfite feed system to prevent accidental spills, and to improve containment and monitoring. The upgraded system will include a concrete secondary containment structure, a depressed tank loading area, a canopy roof, additional alarms, valves, and meters, and a telemetry system to transmit information to the Skinner plant.

This action appropriates \$187,000 for upgrades to the San Diego Canal Bisulfite Feed System and increases the scope of final design to comply with requirements of the Riverside County Fire Department and Department of Environmental Health and Safety. All final design activities will be performed by Metropolitan staff. Requested funds include \$139,000 for final design, \$24,000 for staff support activities, and \$24,000 for remaining budget. Support activities include project management and coordination with the above Riverside County agencies for permits and approvals. The construction cost for this project is anticipated to range from \$850,000 to \$950,000. Staff will return to the Board for award of a construction contract at a later date. This project is categorized as an Infrastructure Upgrade project within Metropolitan's CIP.

Project Milestone

May 2008 – Completion of final design

Project No. 4 – Garvey Reservoir Automated Data Acquisition System Upgrade – Final Design (\$193,000)

The Garvey Reservoir Automated Data Acquisition System Upgrade is required to comply with Metropolitan's existing agreement with the city of Monterey Park. Garvey Reservoir, which is located within Monterey Park, was constructed in 1954. In 1989, seepage occurred at a section of the liner and the reservoir was taken out of service for approximately ten years. In 1999, the reservoir was repaired and an automated data collection system was installed to monitor groundwater levels surrounding the reservoir. As required by an agreement with Monterey Park, Metropolitan must radio-transmit data on groundwater levels to Monterey Park's offices on a daily basis.

The automated data collection system includes automatic water sensing devices and high water level alarms to measure groundwater fluctuation within 41 piezometers and observation wells located around the reservoir. Over the past year, a number of the communication and processing units for the system have deteriorated and are providing incomplete or inaccurate data, which requires manual correction of the results. Repair of the devices is becoming increasingly more difficult as the units are no longer manufactured and spare parts are difficult to obtain. Staff recommends that the existing system be replaced with a new data collection system in order to reliably record groundwater levels at the reservoir and to comply with the Monterey Park agreement.

This action appropriates \$193,000 and authorizes final design for replacement of the automated data collection system at Garvey Reservoir. All final design activities will be performed by Metropolitan staff. Requested funds include \$62,000 for final design, \$59,000 for staff support activities, and \$25,000 for remaining budget. Support activities include project management and coordination with the city of Monterey Park. The construction cost for this project is anticipated to range from \$400,000 to \$450,000. Staff will return to the Board for award of a construction contract at a later date. This project is categorized as an Information Technology project within Metropolitan's CIP.

Project Milestone

October 2008 – Completion of final design

Project No. 5 - Palos Verdes Reservoir Energy Dissipation Structure Modification – Final Design (\$104,000)

The Palos Verdes Reservoir Energy Dissipation Structure Modification will facilitate Metropolitan's efforts to maintain the facility as required by the California Division of Safety of Dams (DSOD). Palos Verdes Reservoir, which is located in the city of Rancho Palos Verdes, was constructed in 1939. It serves as the terminus treated-water reservoir for the Sepulveda Feeder, and has a storage capacity of 1,100 acre-feet for both regulatory and emergency purposes. The reservoir is a pear-shaped structure with a detached spillway and a bowl-shaped energy dissipation structure in case of emergency overflows, which is located immediately downstream of the spillway.

The concrete energy dissipation structure was designed to reduce discharge flow velocities in the event of an overflow. However, because the bowl-shaped dissipation structure has no outlet, it becomes filled with trapped sediment and water. This encourages vegetation growth, potentially creating riparian habitat. Vegetation removal requires permitting and environmental mitigation. DSOD requires that the

structure be maintained in a vegetation-free state; this is impractical and expensive given the structure's current condition. Staff recommends that the dissipation structure be modified to convey nuisance flows downstream and avoid ponding.

This action appropriates \$104,000 and authorizes final design for modification of the Palos Verdes Reservoir energy dissipation structure. All final design activities will be performed by Metropolitan staff. Requested funds include \$29,000 for final design, \$52,000 for staff support activities, and \$9,000 for remaining budget. Support activities include project management and coordination with DSOD and the city of Rancho Palos Verdes. The construction cost for this project is anticipated to range from \$180,000 to \$220,000. Staff will return to the Board at a later date for authorization of construction. The construction contract is planned to be awarded by the General Manager under his Administrative Code authority. This project is categorized as an Infrastructure Upgrade project within Metropolitan's CIP.

Project Milestone

March 2008 – Completion of final design

Project No. 6 – OC-44 Service Connections Road Improvement – Final Design (\$163,000)

The OC-44 Service Connections Road Improvement is needed to allow Metropolitan staff to safely patrol and maintain these service connections. The East Orange County Feeder No. 2 is a 25-mile-long pipeline which delivers treated water from the Diemer plant to the cities of Anaheim, Orange, Santa Ana, and Irvine. It was completed in 1964. Service Connections Nos. OC-44A and OC-44B, located just north of San Joaquin Reservoir, were constructed in 1967 to deliver water to the Municipal Water District of Orange County (MWDOC).

Over approximately 40 years of service, the paved access road and paved areas surrounding the service connections have severely degraded. An inspection of the pavement shows raveling caused by wear and tear under increased traffic loads, and cracking caused by saturated subgrades from poor drainage and standing water. During rainy seasons when the soil becomes saturated, vehicles have difficulty accessing the site, making the roadway unsafe for routine patrols and maintenance by staff. Staff recommends that the site be regraded to improve drainage and that approximately 4,300 square feet of the existing asphalt and subgrade be removed and repaired to provide all-weather, safe paved surfaces.

This action appropriates \$163,000 and authorizes final design to improve the access road to the OC-44 service connections. All final design activities will be performed by Metropolitan staff. Requested funds include \$38,000 for final design, \$61,000 for staff support activities, and \$21,000 for remaining budget. Support activities include project management, surveying, and right-of-way and environmental coordination. The construction cost for this project is anticipated to range from \$300,000 to \$350,000. Staff will return to the Board for award of a construction contract at a later date. This project is categorized as an Infrastructure Rehabilitation and Replacement project within Metropolitan's CIP.

Project Milestone

March 2008 – Completion of final design

Project No. 7 – Santiago Control Tower Access Road Improvement – Preliminary Design (\$93,000)

The Santiago Control Tower Access Road Improvement is needed to allow Metropolitan staff to safely patrol and maintain facilities which surround the control tower. The 45.7-mile Lower Feeder is one of two main pipelines that originate at Lake Mathews and distribute untreated water toward the west. One major control facility on the Lower Feeder is the Santiago Control Tower, which is located in the city of Yorba Linda. This tower delivers flows from the Lower Feeder to the Santiago Lateral and to the Santiago Lateral Spillway Discharge Line. The tower was constructed in the mid-1950s. Staff regularly patrols the tower site and during an emergency, the facility requires access for manual operation.

The 4,000-foot-long paved access road to Santiago Control Tower and 500-foot-long unpaved road to the Santiago Lateral master meter and sectionalizing valve are approximately 15 feet wide without shoulders. The roads are located along steep rolling hills with thick, dense vegetation along either side of the roads. Over

approximately 50 years of service, the paved access road has severely degraded. An inspection of the pavement shows raveling caused by wear and tear under increased traffic loads and cracking caused by saturated subgrades from poor drainage and standing water. The unpaved road is in need of paving to provide safe access. Similar to the access road to the OC-44 service connections, during rainy seasons when the soil becomes saturated, vehicles have difficulty accessing the site, making the roadway unsafe for routine patrols and for maintenance by staff.

This action appropriates \$93,000 and authorizes preliminary design and preparation of environmental documentation for the Santiago Control Tower Access Road Improvement. All preliminary design activities will be performed by Metropolitan staff. These activities include right-of-way coordination and topographic surveys. Staff will return to the Board at a later date for authorization to perform final design. This project is categorized as an Infrastructure Rehabilitation and Replacement project within Metropolitan's CIP.

Project Milestone

May 2008 – Completion of preliminary design

Summary

This action appropriates \$1.95 million and authorizes seven rehabilitation projects within Metropolitan's conveyance and distribution system. The appropriated funds include \$152,000 for preliminary design; \$319,000 for final design; \$612,000 for Metropolitan force construction; \$150,000 for procurement of the replacement valve at Magazine Canyon; \$480,000 for all project support activities; and \$237,000 for remaining budget.

For the Valve Replacement for the San Fernando Tunnel at Magazine Canyon, the Garvey Reservoir Automated Data Acquisition System Upgrade, the Palos Verdes Reservoir Energy Dissipation Structure Modification, and the OC-44 Service Connection Road Improvement projects, the cost of final design is approximately 12 percent of the estimated construction costs for these projects. For the San Diego Canal Sodium Bisulfite Feed System, the cost of final design is approximately 15 percent of the estimated construction cost. Engineering Services' goal for design of projects with construction cost less than \$3 million is 9 to 15 percent.

These projects are consistent with Metropolitan's goals for sustainability by enhancing the reliability of the existing conveyance and distribution system, in order to maintain reliable water deliveries in the future. Six of these projects have been evaluated and recommended by Metropolitan's CIP Evaluation Team and funds have been included within the fiscal year 2007/08 capital budget. The Valve Replacement for the San Fernando Tunnel at Magazine Canyon is not budgeted for fiscal year 2007/08 because the San Fernando Tunnel inspection was conducted subsequent to adoption of the budget. Upon approval of this action, the fiscal year 2007/08 capital expenditure plan will be adjusted to reflect the new work.

Requested funds are included under two capital programs within Metropolitan's CIP. 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)

Project No. 1 – St. John's Canyon Channel Repair and Modifications – Construction

CEQA determination for Option #1:

The proposed action is categorically exempt under the provisions of CEQA and the State CEQA Guidelines. The activity involves the funding, design, minor alterations and reconstruction or replacement of existing public facilities, along with minor modifications in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees, with negligible or no expansion of use and no possibility of significantly impacting the physical environment. Accordingly, the proposed action qualifies under Class 1, Class 2, and Class 4 Categorical Exemptions (Sections 15301, 15302, and 15304 of the State CEQA Guidelines).

The CEQA determination is: Determine that pursuant to CEQA, the proposed action qualifies under three Categorical Exemptions (Class 1, Section 15301; Class 2, Section 15302; and Class 4, Section 15304 of the State CEQA Guidelines).

CEQA determination for Options #2 and #3:

None required

Project No. 2 – Valve Replacement for San Fernando Tunnel at Magazine Canyon – Final Design

CEQA determination for Options #1 and #2:

The project was previously determined to be categorically exempt under the provisions of CEQA (Class 1, Section 15301, Class 3, Section 15303, and Class 4, Section 15304 of the State CEQA Guidelines) on September 13, 2004. A Notice of Exemption (NOE) was filed on the project at that time and the statute of limitations has ended. With the current board actions, there are no substantial changes proposed to the project since the original NOE was filed. Hence, the previous environmental documentation in conjunction with the project fully complies with CEQA and the State CEQA Guidelines.

The CEQA determination is: Determine that pursuant to CEQA, the project have been previously addressed in the 2004 NOE (Class 1, Section 15301, Class 3, Section 15303, and Class 4 Section 15304 of the State CEQA Guidelines and that no further environmental analysis or documentation is required.

CEQA determination for Option #3:

None required

Project No. 3 – San Diego Canal Sodium Bisulfite Feed System – Final Design

CEQA determination for Options #1 and #2:

The project was previously determined to be categorically exempt under the provisions of CEQA and State CEQA Guidelines. The Board found this project to be exempt under Class 1, Section 15301; Class 2, Section 15302; and Class 3, Section 15303 of the State CEQA Guidelines on November 18, 2003. A Notice of Exemption (NOE) was filed on the project at that time and the statute of limitations has ended. With the current board action, there are no substantial changes proposed to the project since the original NOE was filed. Hence, the previous environmental documentation in conjunction with the project fully complies with CEQA and the State CEQA Guidelines. Accordingly, no further CEQA documentation is necessary for the Board to act with regards to the proposed action.

The CEQA determination is: Determine that the proposed action has been previously addressed in the 2003 NOE (Class 1, Section 15301; Class 2, Section 15302; and Class 3, Section 15303 of the State CEQA Guidelines) and that no further environmental analysis or documentation is required.

CEQA determination for Option #3:

None required

Project No. 4 – Garvey Reservoir Automated Data Acquisition System Upgrade – Final Design

CEQA determination for Options #1 and #2:

The proposed action is categorically exempt under the provisions of CEQA and the State CEQA Guidelines. The proposed action involves the funding of a study and minor modifications to existing public facilities with negligible or no expansion of use and no possibility of significantly impacting the physical environment. In addition, the proposed action consists of basic data collection and resource evaluation activities which does 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 action qualifies for both Class 1 and Class 6 Categorical Exemptions (Sections 15301 and 15306 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 6, Section 15306 of the State CEQA Guidelines).

CEQA determination for Option #3:

None required

Project No. 5 – Palos Verdes Reservoir Energy Dissipation Structure Modification – Final Design

CEQA determination for Option #1:

The proposed action is categorically exempt under the provisions of CEQA and the State CEQA Guidelines. The proposed project involves the funding and minor alterations of existing private or public facilities, along with the construction of minor appurtenant structures, with minor modifications in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees. These activities would result in negligible expansion of use and no possibility of significantly impacting the physical environment. Accordingly, the proposed action qualifies under Class 1, Class 3, and Class 4 Categorical Exemptions (Sections 15301, 15303, and 15304 of the State CEQA Guidelines).

The CEQA determination is: Determine that pursuant to CEQA, the proposed action qualifies under three Categorical Exemptions (Class 1, Section 15301; Class 3, Section 15303; and Class 4, Section 15304 of the State CEQA Guidelines).

CEQA determination for Options #2 and #3:

None required

Project No. 6 – OC-44 Service Connections Road Improvement – Final Design

CEQA determination for Option #1:

The proposed action is categorically exempt under the provisions of CEQA and the State CEQA Guidelines. The proposed action involves the funding and minor alterations of existing private or public facilities, along with minor modifications in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees. These activities would result in negligible or no expansion of use and no possibility of significantly impacting the physical environment. Accordingly, the proposed action qualifies under both Class 1 and Class 4 Categorical Exemptions (Sections 15301 and 15304 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 4, Section 15304 of the State CEQA Guidelines).

CEQA determination for Options #2 and #3:

None required

Project No. 7 – Santiago Control Tower Access Road Improvement – Preliminary Design

CEQA determination for Option #1:

The proposed action is categorically exempt under the provisions of CEQA and the State CEQA Guidelines. The proposed action involves the funding of final design with no possibility of significantly impacting the physical environment. In addition, the proposed action consists of basic data collection and resource evaluation activities which does 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 action qualifies for both Class 1 and Class 6 Categorical Exemptions (Sections 15301 and 15306 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 6, Section 15306 of the State CEQA Guidelines).

CEQA determination for Options #2 and #3:

None required

Board Options

Option #1

Adopt the CEQA determinations and

- a. Appropriate \$1.95 million; and
- b. Authorize seven distribution system rehabilitation projects:
 - Construction to repair erosion damage to St. John's Canyon Channel;
 - Final design and procurement of the valve replacement at Magazine Canyon shaft for the San Fernando Tunnel;
 - Final design for upgrade of the San Diego Canal bisulfite system;
 - Final design for rehabilitation of the Garvey Reservoir seepage data collection system;
 - Final design for modification of the Palos Verdes Reservoir energy dissipation structure;
 - Final design of road improvements at Service Connection OC-44; and
 - Preliminary design for the Santiago Control Tower access road improvement.

Fiscal Impact: \$1,061,000 of budgeted funds under Approp. 15377; \$553,000 of budgeted funds under Approp. 15441; and \$336,000 of unbudgeted funds under Approp. 15441 for the valve replacement at Magazine Canyon

Business Analysis: These projects will protect Metropolitan's assets, increase service reliability to customers, and reduce the risk of costly emergency repairs.

Option #2

Adopt the CEQA determinations and

- a. Appropriate \$716,000; and
- b. Authorize three distribution system rehabilitation projects:
 - Final design and procurement for valve replacement at Magazine Canyon shaft for the San Fernando Tunnel;
 - Final design for upgrade of the San Diego Canal bisulfite system; and
 - Final design for rehabilitation of the Garvey Reservoir seepage data acquisition system.
- c. Do not authorize four projects:
 - Construction to repair erosion damage to St. Johns Canyon Channel;
 - Final design for modification of the Palos Verdes Reservoir energy dissipation structure;
 - Final design of road improvements at Service Connection OC-44; and
 - Preliminary design for the Santiago Control Tower access road improvement.

Fiscal Impact: \$187,000 of budgeted funds under Approp. 15377; \$193,000 of budgeted funds under Approp. 15441; and \$336,000 of unbudgeted funds under Approp. 15441 for the valve replacement at Magazine Canyon

Business Analysis: Under this option, the projects that result in an immediate improvement to water delivery reliability are recommended to proceed. For the remaining projects, staff will continue to monitor the facilities and incur increased maintenance costs. Staff will continue to pay permitting fees to remove vegetation from the Palos Verdes energy dissipation structure.

Option #3

Do not authorize the seven distribution system rehabilitation projects. The existing facilities will continue to function as currently, and repairs will be made should problems occur.

Fiscal Impact: None

Business Analysis: For this option, staff will continue to monitor the facilities and incur increased maintenance costs.

Staff Recommendation

Option #1


Roy L. Wolfe
Manager, Corporate Resources

12/17/2007
Date


Jeffrey Kightlinger
General Manager

12/17/2007
Date

Attachment 1 – Financial Statements

Attachment 2 – Location Map

BLA #5606

Financial Statement for Conveyance and Distribution System Rehabilitation Program

A breakdown of Board Action No. 23 for Appropriation No. 15377 for the San Diego Canal Sodium Bisulfite Feed System and the St. John’s Canyon Channel Repair and Modification projects is as follows:

Labor

Studies & Investigations	\$ 3,204,700	\$ -	\$ 3,204,700
Final Design	3,172,920	139,000	3,311,920
Owners Costs (Program mgmt. permitting & environ. doc.)	3,710,550	129,000	3,839,550
Construction Inspection & Support	1,540,050	-	1,540,050
Metropolitan Force Construction	9,807,330	612,000	10,419,330
Materials and Supplies	4,545,075	21,000	4,566,075
Incidental Expenses	1,092,620	10,000	1,102,620
Professional/Technical Services	836,500	-	836,500
Equipment Use	759,350	13,000	772,350
Contracts	15,008,955	-	15,008,955
Remaining Budget	2,543,650	137,000	2,680,650
Total	\$ 46,221,700	\$ 1,061,000	\$ 47,282,700

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.:	23
Requested Amount:	\$ 1,061,000	Capital Program No.:	15377-I
Total Appropriated Amount:	\$ 47,282,700	Capital Program Page No.:	E-14
Total Program Estimate:	\$ 63,790,000	Program Goal:	R-Reliability

Financial Statement for Conveyance and Distribution System Rehabilitation Program – Phase II

A breakdown of Board Action No. 5 for Appropriation No. 15441 for the Valve Replacement for San Fernando Tunnel at Magazine Canyon, the Garvey Reservoir Automated Data Acquisition System Upgrade, the Palos Verdes Reservoir Energy Dissipation Structure Modification, the OC-44 Service Connections Road Improvement projects is as follows:

	Previous Total Appropriated Amount (Sept. 2007)	Current Board Action No. 5 (Jan. 2008)	New Total Appropriated Amount
Labor			
Studies & Investigations	\$ 217,000	\$ 153,000	\$ 370,000
Final Design	222,500	189,000	411,500
Owners Costs (Program mgmt, permitting & environ. doc.)	391,500	299,000	690,500
Construction Inspection & Support	28,500	-	28,500
Metropolitan Force Construction	1,342,000	-	1,342,000
Materials and Supplies	157,500	-	157,500
Incidental Expenses	82,500	-	82,500
Professional/Technical Services	373,500	-	373,500
Equipment Use	68,000	-	68,000
Contracts (valve procurement)	341,000	150,000	491,000
Remaining Budget	494,000	98,000	592,000
Total	\$ 3,718,000	\$ 889,000	\$ 4,607,000

Funding Request

Program Name:	Conveyance and Distribution System Rehabilitation Program - Phase II		
Source of Funds:	Revenue Bonds, Replacement and Refurbishment or General Funds		
Appropriation No.:	15441	Board Action No.:	5
Requested Amount:	\$ 889,000	Capital Program No.:	16704-I
Total Appropriated Amount:	\$ 4,607,000	Capital Program Page No.:	E-15
Total Program Estimate:	\$ 19,200,000	Program Goal:	R-Reliability

