MWD
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

BOARD ACTION

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

September 11, 2007 Board Meeting

8-1

Subject

Appropriate $7.33 million; award a $3,382,110 contract to Abhe & Svoboda, Inc., for rehabilitation of the Colorado River Aqueduct; and authorize study and design for five CRA reliability projects (Approps. 15373, 15374, 15384, and 15385)

Description

The Colorado River Aqueduct (CRA) is a 242-mile-long conveyance system that transports water from Lake Havasu to Lake Mathews. The CRA consists of five pumping plants, 124 miles of tunnel, 63 miles of concrete-lined canal, 55 miles of cut-and-cover conduit, and inverted siphons, and several reservoirs. The CRA provides the only means for Metropolitan to convey water from the Colorado River to Southern California.

Rehabilitation of the CRA was initiated in 2001 and the planned work is expected to be substantially completed by 2010. To execute this rehabilitation effort, four major programs were identified within Metropolitan's Capital Investment Plan (CIP). Six projects are recommended to proceed at this time. Each project has been evaluated and recommended by Metropolitan's CIP Evaluation Team, and funds have been included in the capital budget for fiscal year 2007/08. The six projects are described in detail in **Attachment 1**.

1. Aqueduct Rehabilitation – Phase 6 Construction ($5.02 million) – This action awards a construction contract to Abhe & Svoboda, Inc., for improvements at the San Jacinto Diversion Structure and the Desert Water/Coachella Valley service connections.
2. Access Structure, Transition Structure, and Manhole Covers Replacement ($460,000) – This action authorizes final design to replace deteriorated covers. The total cost for this project is estimated to range from $2.9 million to $3.5 million.
3. Desert Water Tanks Access and Safety Improvements ($760,000) – This action authorizes final design of safety improvements to access the water tanks and head gate structures at each of the CRA pumping plants. The total cost for this project is estimated to range from $3.5 million to $4 million.
4. Desert Pump Plant Oil Containment ($302,000) – This action authorizes preliminary design and preparation of environmental documentation to reduce the risk for potential discharge of contaminated water into the desert or into Lake Havasu. As part of this effort, a construction cost estimate will be developed for the work.
5. Danby Towers Foundation Rehabilitation ($420,000) – This action authorizes preliminary design and preparation of environmental documentation for rehabilitation of deteriorated foundations of electrical transmission towers at Danby Lake. As part of this effort, a construction cost estimate will be developed for the work.
6. Desert Sewer System Rehabilitation ($368,000) – This action authorizes field investigations and conceptual study to upgrade deteriorated sewer systems at each CRA pumping plant.

Summary

This action appropriates $7.33 million in budgeted funds; awards a $3,382,110 construction contract to Abhe & Svoboda, Inc., for rehabilitation of the CRA; authorizes final design of the Access Structure, Transition Structure, and Manhole Covers Replacement project and the Desert Water Tanks Access and Safety Improvements project;

authorizes preliminary design of the Desert Pump Plant Oil Containment project and the Danby Towers Foundation Rehabilitation project; and authorizes the Desert Sewer System Rehabilitation study.

Staff recommends that final design of the Desert Water Tanks Access and Safety Improvements project, and preliminary design of the Danby Towers Foundation Rehabilitation, be performed by MWH Americas, Inc. MWH America's work will be performed under an existing board-authorized agreement. Design of all other projects, along with construction management and inspection of the Aqueduct Rehabilitation – Phase 6 project, will be performed by Metropolitan staff. These six projects have been evaluated by Metropolitan's Capital Investment Plan Evaluation Team and funds have been included within the fiscal year 2007/08 capital budget. See **Attachment 2** for the Financial Statements, **Attachment 3** for the Abstract of Bids, and **Attachment 4** for the Location Map.

Policy

Metropolitan Water District Administrative Code Section 5108: Appropriations

Metropolitan Water District Administrative Code Section 8121: General Authority of the General Manager to Enter Contracts

California Environmental Quality Act (CEQA)

Aqueduct Rehabilitation – Phase 6 – Award of Construction Contract

CEQA determination for Options #1 and #2:

The projects were previously determined to be categorically exempt under the provisions of CEQA (Class 1, Section 15301; Class 2, Section 15302; and Class 4, Section 15304 of the State CEQA Guidelines). A Notice of Exemption (NOE) was filed for the San Jacinto Diversion Structures and Warren Gates Rehabilitation Project in February 2006 and the statute of limitations has ended. A Notice of Exemption (NOE) was filed for the Desert Water/Coachella Valley Valve Replacement and Security Fence in February 2007 and the statute of limitations has ended. With the current board actions, there are no substantial changes proposed to the projects since the original NOEs were filed. Hence, the previous environmental documentation in conjunction with the projects 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 actions.

The CEQA determination is: Determine that the proposed actions have been previously addressed in the February 2007 NOE (Class 1 Section 15301; Class 2, Section 15302; and Class 4 Section 15304 of the State CEQA Guidelines) and the February 2006 NOE (Class 1 Section 15301; Class 2, Section 15302) and that no further environmental analysis or documentation is required.

CEQA determination for Option #3:

None required

Access Structure, Transition Structure, and Manhole Covers Replacement – Final Design

CEQA determination for Option #1:

To comply with CEQA and the State CEQA Guidelines, Metropolitan, as the Lead Agency prepared in October 2001, a Mitigated Negative Declaration (MND) for the Colorado River Aqueduct Conveyance Reliability Program, 2002 Shutdown Repairs. The Board later adopted the MND and the Mitigation Monitoring and Reporting Program (MMRP) on January 8, 2002. The proposed project was addressed in the MND, along with subsequent modifications with the preparation of Addendum No. 2 to the MND. The Board adopted Addendum No. 2 on August 17, 2004. The present board actions are solely based on the final designs and not on any changes to the approved projects themselves. Hence, the previously adopted environmental documentation in conjunction with the current actions 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 actions have been previously addressed in the adopted 2002 MND, its MMRP, and the 2004 Addendum No. 2 to the MND, and that no further environmental analysis or documentation is required.

CEQA determination for Options #2 and #3:

None required

Desert Water Tanks Access and Safety Improvements – Final Design

CEQA determination for Options #1, #2, and #3:

The projects were previously determined to be categorically exempt under the provisions of CEQA (Class 1, Section 15301; Class 2, Section 15302; Class 3, Section 15303; and Class 4, Section 15304 of the State CEQA Guidelines). A Notice of Exemption (NOE) was filed for the Iron Mountain Access Improvements on August 16, 2004 and the statute of limitations has ended. A Notice of Exemption (NOE) was filed for the Eagle Mountain Road Improvements in September 2004 and the statute of limitations has ended. With the current board actions, there are no substantial changes proposed to the projects since the original NOEs were filed. Hence, the previous environmental documentation in conjunction with the projects 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 actions.

The CEQA determination is: Determine that the proposed actions have been previously addressed in the August 2004 NOE (Class 1 Section 15301; Class 3, Section 15303; of the State CEQA Guidelines) and the September 2004 NOE (Class 1 Section 15301; Class 2, Section 15302; and Class 4, Section 15304) and that no further environmental analysis or documentation is required.

Desert Pump Plant Oil Containment – 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 consists 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 action qualifies as a Class 6 Categorical Exemption (Section 15306 of the State CEQA Guidelines).

The CEQA determination is: Determine that pursuant to CEQA, the proposed action qualifies under a Categorical Exemption (Class 6, Section 15306 of the State CEQA Guidelines).

CEQA determination for Options #2 and #3:

None required

Desert Sewer System Rehabilitation – Study

CEQA determination for Option #1:

The proposed action is categorically exempt under the provisions of CEQA and the State CEQA Guidelines. The proposed action consists 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 action qualifies as a Class 6 Categorical Exemption (Section 15306 of the State CEQA Guidelines).

The CEQA determination is: Determine that pursuant to CEQA, the proposed action qualifies under a Categorical Exemption (Class 6, Section 15306 of the State CEQA Guidelines).

CEQA determination for Options #2 and #3:

None required

Danby Towers Foundation Rehabilitation – Preliminary Design

CEQA determination for Options #1, #2, and #3:

The project was previously determined to be categorically exempt under the provisions of CEQA (Class 1, Section 15301; Class 2, Section 15302; Class 4, Section 15304; and Class 9, Section 15309 of the State CEQA Guidelines) on November 16, 2006. 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. Accordingly, no further CEQA documentation is necessary for the Board to act with regards to the proposed actions.

The CEQA determination is: Determine that the proposed actions have been previously addressed in the November 2006 NOE (Class 1 Section 15301; Class 2, Section 15302; Class 4 Section 15304; and Class 9, Section 15309 of the State CEQA Guidelines) and that no further environmental analysis or documentation is required.

Board Options

Option #1

Adopt the CEQA determinations and

a. Appropriate $7.33 million in budgeted funds;
b. Award a $3,382,110 contract to Abhe & Svoboda, Inc., for rehabilitation of the CRA; and
c. Authorize five CRA reliability projects:
   - Final design to replace access structure, transition structure, and manhole covers;
   - Final design of the Desert Water Tanks Access and Safety Improvements project;
   - Preliminary design of the Desert Pump Plant Oil Containment project;
   - Desert Sewer System Rehabilitation study; and
   - Preliminary design to rehabilitate the Danby transmission towers foundations.

Fiscal Impact: $5.48 million of budgeted funds under Approp. 15373, $760,000 in budgeted funds under Approp. 15374, $420,000 in budgeted funds under Approp. 15384, and $670,000 in budgeted funds under Approp. 15385

Business Analysis: This option will enhance reliability and continued operation of the CRA, and will bring facilities into compliance with safety and environmental regulations.

Option #2

Adopt the CEQA determinations and

a. Appropriate $6.2 million in budgeted funds;
b. Award a $3,382,110 contract to Abhe & Svoboda, Inc., for rehabilitation of the CRA;
c. Authorize two CRA reliability projects:

- Final design of the Desert Water Tanks Access and Safety Improvements project; and
- Preliminary design to rehabilitate the Danby transmission towers foundations; and

d. Do not authorize three projects:
- Final design to replace access structure, transition structure, and manhole covers;
- Preliminary design of the Desert Pump Plant Oil Containment project; and
- Desert Sewer System Rehabilitation study.

Fiscal Impact: $5.02 million in budgeted funds under Approp. 15373, $760,000 in budgeted funds under Approp. 15374, $420,000 in budgeted funds under Approp. 15384

Business Analysis: Under this option, the projects which are necessary for CRA shutdowns, are important for workplace safety, or enhance power transmission reliability are recommended to proceed. For the remaining projects, staff will continue to monitor the facilities, which will incur increased maintenance costs. These 60-year-old facilities have reached the end of their useful life and deferring their repair will result in increased risk of structural failure or wastewater discharges, which would result in higher repair costs.

Option #3

Adopt the CEQA determinations and

a. Appropriate $1,180,000 in budgeted funds;
b. Do not award the contract for rehabilitation of the CRA and re-advertise in an attempt to obtain more favorable bids;
c. Authorize two CRA reliability projects:
- Final design of the Desert Water Tanks Access and Safety Improvements project; and
- Preliminary design to rehabilitate the Danby transmission towers foundations; and

d. Do not authorize three projects:
- Final design to replace access structure, transition structure, and manhole covers;
- Preliminary design of the Desert Pump Plant Oil Containment project; and
- Desert Sewer System Rehabilitation study.

Fiscal Impact: $760,000 in budgeted funds under Approp. 15374 and $420,000 in budgeted funds under Approp. 15384

Business Analysis: This option may or may not result in more favorable bids and would defer the Aqueduct Rehabilitation – Phase 6 project until the 2010 shutdown season (approximately one year later). Under this option, the projects which are important for workplace safety or would enhance power transmission reliability are recommended to proceed. For the remaining projects, staff will continue to monitor the facilities, which will incur increased maintenance costs. These 60-year-old facilities have reached the end of their useful life and deferring their repair will result in increased risk of structural failure or wastewater discharges, which would result in higher repair costs.

Staff Recommendation

Option #1

Roy L Wolfe 8/22/2007
Roy L Wolfe *Date*
Manager, Corporate Resources

Debra C. Man 8/24/2007
Debra C. Man *Date*
for Jeffrey Kightlinger
General Manager

Attachment 1 – Detailed Report

Attachment 2 – Financial Statements

Attachment 3 – Abstract of Bids

Attachment 4 – Location Map

BLA #4832

Detailed Report

Metropolitan initiated a major rehabilitation effort for the Colorado River Aqueduct (CRA) in 2001. Staff recommends that six CRA reliability projects proceed at this time. The projects are: (1) CRA Aqueduct Rehabilitation – Phase 6; (2) Access Structure, Transition Structure, and Manhole Covers Replacement; (3) Desert Water Tanks Access and Safety Improvements; (4) Desert Pump Plant Oil Containment; (5) Desert Sewer System Rehabilitation; and (6) Danby Towers Foundation Rehabilitation.

Aqueduct Rehabilitation - Phase 6 – Award of Construction Contract ($5,020,000)

In February 2006, Metropolitan's Board authorized final design of the San Jacinto Diversion Structure and Warren Road Gates Rehabilitation project and preliminary design of the Desert Water/Coachella Valley Service Connection Valve Replacement project. Staff has combined portions of the first project and the entire second project into a single construction contract (Specifications No. 1568) for efficiency, to make best use of available shutdown windows, and to allow sufficient time for fabrication and delivery of long lead-time equipment. Remaining elements of the first project will be constructed under a separate contract which will be the subject of a future board action.

Under Specifications No. 1568, improvements to the San Jacinto Diversion Structure include replacing electric power, control, and lighting systems, replacing electric actuators, refurbishing three slide gates, and removing one slide gate which is no longer needed. Improvements at the Desert Water/Coachella Valley (DW-CV) service connections include replacing four 16-inch-diameter, manually operated valves with new electric-operated butterfly valves. The DW-CV service connections discharge water into the Whitewater River for groundwater recharge. There are no barriers around the service connection outlet to protect the public from inadvertently hiking through this area. Prior to discharging water, Metropolitan staff must physically check and clear the area. Under this project, a security fence will be installed around the discharge to protect the public if flows initiate suddenly, and to permit automated operation of the valves.

Major construction work is scheduled to take place during a shutdown planned for February 2009. The duration of this contract is nearly 20 months to provide sufficient time for long lead-time items such as valves and actuators to be fabricated.

Specifications No. 1568 was advertised on June 19, 2007. As shown in Attachment 2, three bids were received and opened on July 31, 2007. The low bid from Abhe & Svoboda, Inc., in the amount of $3,382,110, complies with the requirements of the specifications. The bids ranged from $3,382,110 to $4.68 million. The engineer's estimate was $3.41 million. For this contract, Metropolitan established a Small Business Enterprise (SBE) participation level of at least 20 percent of the bid amount. Abhe & Svoboda has committed to meet this level of participation.

This action appropriates $5.02 million and awards a $3,382,110 construction contract to Abhe & Svoboda, Inc. In addition to the amount of the contract, the appropriated funds include $538,000 for construction inspection; $349,000 for Metropolitan force construction; $122,000 for environmental monitoring; $420,000 for program management, procurement, and all other staff and consultant support; and $208,890 in remaining budget. Support activities include project management, environmental monitoring, and technical support by the design consultants, Richard Brady and Associates, and MWH Americas. This technical support will be provided under existing board-authorized agreements. As the engineers of record, the consultants will review submittals received from the contractor, respond to requests for information, and advise inspection staff on technical issues as they may arise. For the MWH agreement, Metropolitan established an SBE participation level of 20 percent. Richard Brady and Associates is an SBE firm and thus achieves 100 percent participation. No amendments to the existing agreements are required.

For this project, the anticipated cost of construction inspection is approximately 14.4 percent of the total construction cost. Engineering Services' goal for inspection of construction contracts greater than $3 million is 9 to 12 percent. The increased inspection cost estimate is attributed to costs related to multiple work locations, remoteness of rehabilitation work, and extended work shifts required during the CRA shutdown. All inspection will be performed by Metropolitan staff.

Actions and Milestones

June 2009 – Completion of construction

Access Structure, Transition Structure, and Manhole Covers Replacement – Final Design ($460,000)

In February 2006, Metropolitan's Board authorized preliminary design to replace deteriorated covers along the CRA conveyance system. The function of these covers is to restrict unauthorized access to the aqueduct and protect it from soil and debris intrusion. The original steel covers, which are over 60 years old, are deteriorating due to weathering and corrosion. Preliminary design has been completed to replace 173 covers, including three 16-foot wide by 24-foot long steel access covers, 75 18-foot wide by 24-foot long steel transition covers, and 95 2.5-foot wide by 8.5-foot long concrete manhole covers. Staff recommends proceeding with final design at this time to replace the covers, make repairs to concrete structures, and install safety handrails.

This action appropriates $460,000 in budgeted funds and authorizes final design of the Access Structure, Transition Structure, and Manhole Covers Replacement project. The design will be performed by Metropolitan staff. The anticipated cost of final design is approximately 11 percent of the estimated construction cost. Engineering Services' goal for design of projects with estimated construction cost less than $3 million is 9 to 15 percent. The construction cost for this project is anticipated to range from $2.3 million to $2.9 million. Staff will return to the Board at a later date for award of the construction contract.

Actions and Milestones

December 2007 – Completion of final design

April 2009 – Completion of construction

Desert Water Tanks Access and Safety Improvements – Final Design ($760,000)

In September 2005, Metropolitan's Board authorized preliminary design of safety improvements to the desert water tanks. The existing fire, cooling, and domestic water tanks (a total of 15 tanks at 5 plants) are located on steep, rocky slopes, high above each of the desert pumping plants. Metropolitan staff identified potential safety hazards in accessing the water tanks during maintenance or rescue operations. Examples of safety hazards include deteriorated access covers, substandard handrails and guardrails, lack of lighting for nighttime work, and lack of delineators or guard posts along access roads.

A preliminary design report was completed in June 2007 by MWH Americas. Staff recommends proceeding with final design at this time to construct new landings, install new handrails, improve pathways, install new lighting, install new spring-loaded hatch covers, perform grading to permit vehicles to turn around, install new guard posts and delineators along the edge of access roads, and make other improvements to improve workplace safety.

This action appropriates $760,000 in budgeted funds and authorizes final design of the Desert Water Tanks Access and Safety Improvements project. Staff recommends that the design be performed by MWH Americas under the above-referenced board-authorized agreement. No amendment to the existing MWH agreement is required. The anticipated cost of final design is approximately 15 percent of the estimated construction cost. Engineering Services' goal for design of projects with estimated construction cost less than $3 million is 9 to 15 percent. The construction cost for this project is anticipated to range from $2.6 million to $3.3 million. Staff will return to the Board at a later date for award of the construction contract.

Actions and Milestones

May 2008 – Completion of final design

Desert Pump Plant Oil Containment – Preliminary Design ($302,000)

Each of the five CRA pumping plants has several sumps which collect minor water leaks from throughout the pumping plants, including leakage from the main pumps, discharge valves, cooling water system, and air conditioner condensate lines. The sumps also collect water from several floor drains and sinks. Leakage water is collected in the sumps and then pumped back to the aqueduct, except at Intake pumping plant, where some of the sump water is returned to Lake Havasu, and at Hinds pumping plant, where some of the water is released via surface discharge.

As leakage water drains into the sumps, it may pick up contaminants such as grease and lubricating oil from the pumping plant equipment. Staff takes various precautions to prevent contamination of the CRA and the environment, such as using oil absorbent booms and periodically monitoring the sumps.

In order to reduce the risk for potential discharge of contaminated water into the desert or into Lake Havasu, and to avoid violation of environmental regulations, staff recommends that oil/water detectors be installed at each of the sumps. These instruments can detect floating oil and grease, and would be integrated with Metropolitan's SCADA system to shut down the sump pumps and alert staff to the presence of oil contamination on the water. This action appropriates $302,000 in budgeted funds and authorizes preliminary design and preparation of environmental documentation for the Desert Pump Plant Oil Containment project. All work will be performed by Metropolitan staff.

Actions and Milestones

April 2008 – Completion of preliminary design

Desert Sewer System Rehabilitation – Study ($368,000)

Each of the five CRA pumping plants and their surrounding villages is served by a sewer system, which consists of collection pipes, septic tanks, pumps, and leach fields. Each sewer system has been operational for more than 60 years and is now at the end of its useful life. As the sewage system has aged, there have been an increasing number of problems which require attention, including root infiltration which clogs and damages collection system pipes; corroded septic tanks and tank lids; aging sewage pumps; and inefficient leach fields due to clogging and sedimentation in the pipes and filter rock. A study is required to evaluate alternative means to rehabilitate the sewage systems.

The scope of work includes running video cameras through the collection pipes, performing detailed inspections of septic tanks and leach fields, and performing percolation tests to evaluate locations for new leach fields. The study will also evaluate these systems against current and proposed regulations such as the California State Water Resources Control Board's proposed Onsite Wastewater Treatment System regulations. As part of the effort, construction cost estimates will be developed.

This action appropriates $368,000 in budgeted funds and authorizes a study to rehabilitate the Desert Sewer Systems. The study will be conducted by Metropolitan staff.

Actions and Milestones

March 2008 – Completion of study

Danby Towers Foundation Rehabilitation – Preliminary Design ($420,000)

The West Mead 230 kV Transmission Line is one of two principal sources of power for the CRA. Erected in 1938, it begins at Hoover Dam and ends at Iron Mountain Pumping Plant. The line is 125 miles long. Near Iron Mountain, it passes through the Danby Dry Lake. A total of 26 towers are located in the vicinity of the dry lake. Each Danby Tower consists of a steel structure supported by concrete-capped timber piles. Discovery of localized erosion under a few pile caps prompted further investigations of the piles, which had not been fully assessed since their original construction. Metropolitan conducted a study of a representative sample of piles which concluded that many of them are infested by fungus which will eventually lead to structural failure if not addressed.

Under this project, the tops of all remaining piles, approximately 168, will be excavated and exposed to a depth of four feet below the concrete pile cap to assess their condition. Surveyors will monitor the pile caps for settlement, and the piles will be treated with a fungicide, and recommendations will be prepared for structural repairs if required.

This action appropriates $420,000 in budgeted funds and authorizes preliminary design and preparation of environmental documentation for the Danby Towers Foundation Rehabilitation project. Preliminary design will be performed by Metropolitan staff with specialized assistance from MWH Americas to inspect and assess the pile integrity. MWH will provide this support under the above-referenced board-authorized agreement. No amendment to the existing MWH agreement is required.

Actions and Milestones

March 2008 – Completion of preliminary design

Financial Statement for CRA Conveyance Reliability Program

A breakdown of Board Action No. 11 for Appropriation No. 15373 for Phase 6 of the Aqueduct Rehabilitation, and for the Access Structure, Transition Structure, and Manhole Cover Replacement project, is as follows:

	Previous Total Appropriated Amount (Nov. 2006)	Current Board Action No. 11 (Sept. 2007)	New Total Appropriated Amount
Labor			
Studies and Investigations	$ 2,946,700	$ -	$ 2,946,700
Final Design	1,097,000	277,000	1,374,000
Owner Costs (Program management, environmental monitoring)	3,462,300	599,000	4,061,300
Construction Inspection and Support	4,485,220	538,000	5,023,220
Metropolitan Force Construction	7,134,870	349,000	7,483,870
Materials and Supplies	1,643,300	17,000	1,660,300
Incidental Expenses	306,400	18,000	324,400
Professional Services	3,757,000	-	3,793,000
Richard Brady and Associates	-	21,000	-
MWH Americas	-	15,000	-
Right of Way	10,000	-	10,000
Equipment Use	101,450	-	101,450
Contracts	36,821,751	3,382,110	40,203,861
Remaining Budget	4,072,009	263,890	4,335,899
Total	**$ 65,838,000**	**$ 5,480,000**	**$ 71,318,000**

Funding Request

Program Name:	CRA Conveyance Reliability Program		
Source of Funds:	Revenue Bonds, Replacement and Refurbishment or General Funds		
Appropriation No.:	15373	**Board Action No.:**	11
Requested Amount:	**$** 5,480,000	**Capital Program No.:**	15373-I
Total Appropriated Amount:	**$** 71,318,000	**Capital Program Page No.:**	E-16
Total Program Estimate:	**$** 93,580,000	**Program Goal:**	I-Infrastructure Reliability

Financial Statement for CRA Pumping Plant Reliability Program

A breakdown of Board Action No. 8 for Appropriation No. 15374 for the Desert Water Tanks Access and Safety Improvements project is as follows:

	Previous Total Appropriated Amount (Mar. 2006)	Current Board Action No. 8 (Sept. 2007)	New Total Appropriated Amount
Labor			
Studies and Investigations	$ 889,000	$ -	$ 889,000
Final Design	1,087,700	31,000	1,118,700
Owner Costs (Program management, environmental monitoring)	1,367,800	240,000	1,607,800
Construction Inspection and Support	754,800	-	754,800
Metropolitan Force Construction	2,904,500	-	2,904,500
Materials and Supplies	2,666,000	-	2,666,000
Incidental Expenses	46,800	4,000	50,800
Professional Services	342,000	-	763,000
MWH Americas	-	421,000	-
Equipment Use	82,700	-	82,700
Contracts	260,000	-	260,000
Remaining Budget	1,570,700	64,000	1,634,700
Total	**$ 11,972,000**	**$ 760,000**	**$ 12,732,000**

Funding Request

Program Name:	CRA Pumping Plant Reliability Program		
Source of Funds:	Revenue Bonds, Replacement and Refurbishment or General Funds		
Appropriation No.:	15374	**Board Action No.:**	8
Requested Amount:	**$** 760,000	**Capital Program No.:**	15374-I
Total Appropriated Amount:	**$** 12,732,000	**Capital Program Page No.:**	E-19
Total Program Estimate:	**$** 23,290,000	**Program Goal:**	I-Infrastructure Reliability

Financial Statement for CRA Electrical/Power Systems Reliability Program

A breakdown of Board Action No. 5 for Appropriation No. 15384 for the Danby Towers Foundation Rehabilitation project is as follows:

	Previous Total Appropriated Amount (Mar. 2004)		Current Board Action No. 5 (Sept. 2007)	New Total Appropriated Amount
Labor				
Studies and Investigations	$ 250,000		$ 110,000	$ 360,000
Final Design	878,000	*	-	878,000
Owner Costs (Program management, environmental monitoring)	1,142,000	*	140,000	1,282,000
Construction Inspection and Support	1,732,000	*	-	1,732,000
Metropolitan Force Construction	2,011,000		-	2,011,000
Materials and Supplies	500,000	*	-	500,000
Incidental Expenses	98,000	*	5,000	103,000
Professional Services	-		-	110,000
MWH Americas	-		110,000	-
Equipment Use	29,000	*	-	29,000
Contracts	10,277,000	*	-	10,277,000
Remaining Budget	1,343,000	*	55,000	1,398,000
Total	**$ 18,260,000**		**$ 420,000**	**$ 18,680,000**

* Includes previous reallocation of $528,000 from remaining budget to: (a) CRA Switchyards and Head Gates Rehabilitation ($267,000) for construction change orders due to unforeseen conditions and new circuit breaker gas testing equipment; (b) 230kV Transformer Protection Relays Replacement ($171,000) for procurement of spare relays and additional labor required to install relays, and (c) Copper Basin Power Pole Replacement ($90,000) for expediting work due to unanticipated environmental constraints; and reallocation of $44,000 from Transformer Lightning Arresters to remaining budget due to project completion under budget.

Funding Request

Program Name:	CRA Electrical/Power Systems Reliability Program		
Source of Funds:	Revenue Bonds, Replacement and Refurbishment or General Funds		
Appropriation No.:	15384	**Board Action No.:**	5
Requested Amount:	**$** 420,000	**Capital Program No.:**	15384-I
Total Appropriated Amount:	**$** 18,680,000	**Capital Program Page No.:**	E-18
Total Program Estimate:	**$** 18,890,000	**Program Goal:**	I-Infrastructure Reliability

Financial Statement for CRA Discharge Containment Program

A breakdown of Board Action No. 5 for Appropriation No. 15385 for the Desert Pump Plant Oil Containment and Desert Sewer System Rehabilitation projects is as follows:

	Previous Total Appropriated Amount (Sept. 2006)	Current Board Action No. 5 (Sept. 2007)	New Total Appropriated Amount
Labor			
Studies and Investigations	$ 116,000	$ 352,000	$ 468,000
Final Design	202,000	-	202,000
Owner Costs (Program management, environmental monitoring)	212,000	141,000	353,000
Construction Inspection and Support	17,000	-	17,000
Metropolitan Force Construction	90,000	-	90,000
Materials and Supplies	33,000	-	33,000
Incidental Expenses	46,000	6,000	52,000
Professional Services	81,000	80,000	161,000
Equipment Use	10,000	-	10,000
Contracts	541,000	-	541,000
Remaining Budget	156,000	91,000	247,000
Total	**$ 1,504,000**	**$ 670,000**	**$ 2,174,000**

Funding Request

Program Name:	CRA Discharge Containment Program		
Source of Funds:	Revenue Bonds, Replacement and Refurbishment or General Funds		
Appropriation No.:	15385	**Board Action No.:**	5
Requested Amount:	**$** 670,000	**Capital Program No.:**	15385-W
Total Appropriated Amount:	**$** 2,174,000	**Capital Program Page No.:**	E-17
Total Program Estimate:	**$** 5,500,000	**Program Goal:**	W-Water Quality

The Metropolitan Water District of Southern California

Abstract of Bids Received on July 31, 2007 at 2:00 P.M.

Specifications No. 1568

CRA Reliability Phase 6

The project consists of rehabilitation of the San Jacinto Diversion Structure, including refurbishing power, control, and lighting systems; replacing electric actuators; refurbishing three slide gates and removing one slide gate which is no longer needed. The project also includes replacement of valves at the Desert Water/Coachella Valley service connection, and security fence installation.

Engineer's Estimate: $3,410,000

Bidder and Location	Total	SBE $	SBE %	Met SBE*
Abhe & Svoboda, Inc. Alpine, CA	$ 3,382,110	$ 682,727	20.2%	Yes
Cora Constructors Inc. Palm Desert, CA	$ 3,600,000	-	-	-
Gantry Constructors, Inc. Clarkdale, AZ	$ 4,680,000	-	-	-

* SBE (Small Business Enterprise) participation set at 20 percent

CRA Reliability Projects