

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

September 11, 2007 Board Meeting

7-3

Subject

Appropriate \$1.01 million; and authorize design and construction of the IT Disaster Recovery Facility Upgrades at Lake Mathews (Approp. 15376)

Description

Metropolitan's critical business functions are dependent on Information Technology (IT) applications, data, and the supporting IT infrastructure. Loss of any of these components could result in disruption to critical IT systems. In accordance with Metropolitan's Business Continuity Plan, key IT systems (e.g., SCADA, telephone, email, etc.) need to be quickly available following a disruption in service, whether the disruption is minor, such as a power outage; or major, such as an earthquake. Adequate, reliable recovery capability for critical business systems and supporting infrastructure is essential to reduce the consequences of an interruption of service.

In 2002, a business impact analysis report was completed that outlined Metropolitan's business recovery needs. That study concluded that improvements were needed to IT systems and to Metropolitan's data recovery site, located adjacent to Lake Mathews, to increase the capability to recover all critical systems. In April 2004, Metropolitan's Board authorized the purchase of IT infrastructure components to meet the full recovery requirements identified in the study. In July 2005, new servers and other IT components were installed in the Disaster Recovery Facility (DRF). This system is now fully functional and its effectiveness has been verified in numerous emergency exercises.

In light of lessons learned as a result of Hurricane Katrina, some improvements are recommended to enhance the reliability of the DRF. Recommended improvements include: addition of an Uninterruptible Power Supply (UPS) to prevent power surges; addition of a permanent emergency generator to ensure back-up power is available; expansion of the existing fire suppression system to protect the entire DRF building; addition of security and remote monitoring systems; and upgrade of the HVAC equipment to replace the current portable system.

This action appropriates \$1.01 million; authorizes preliminary design of the fire suppression system; authorizes final design, procurement, and installation of the security and remote monitoring systems, UPS, and emergency generator; and authorizes final design and construction of the HVAC upgrades. The total cost for construction, procurement, and equipment installation, which will be performed by Metropolitan forces, is estimated to be \$696,300. In addition to the construction, the appropriated funds include \$10,000 for preliminary design, \$105,000 for final design; \$97,000 for all other staff support; and \$101,700 for remaining budget. Support activities include project management, environmental coordination and permitting, and technical support during construction. The final design cost, as a percentage of the anticipated total construction cost for this project, is approximately 15 percent. Engineering Services' goal for design of projects with construction cost less than \$3 million is 9 to 15 percent.

This project has been evaluated and recommended by Metropolitan's Capital Investment Plan Evaluation Team, and funds have been included in the fiscal year 2007/08 capital budget. See [Attachment 1](#) for the Financial Statement and [Attachment 2](#) for a Location Map.

Policy

Metropolitan Water District Administrative Code Section 5108: Appropriations

California Environmental Quality Act (CEQA)

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, design, and installation of equipment within existing public facilities along with the construction of minor appurtenant structures 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 Class 3 Categorical Exemptions (Sections 15301 and 15303 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 3, Section 15303 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Adopt the CEQA determination and

- a. Appropriate \$1.01 million in budgeted funds; and
- b. Authorize final design and construction of upgrades to the IT Disaster Recovery Facility.

Fiscal Impact: \$1.01 million of budgeted funds under Approp. 15376

Business Analysis: This improvement will protect critical business functions related to IT applications, data, and the supporting IT infrastructure, as identified in Metropolitan's Business Continuity Plan.

Option #2

Do not authorize the IT Disaster Recovery Facility Upgrades Project.

Fiscal Impact: None

Business Analysis: Staff would defer installation of a permanent HVAC system and would continue to operate the portable air conditioning unit. This option would forego an opportunity to improve reliability of the Disaster Recovery Facility.

Staff Recommendation

Option #1


 Roy L. Wolfe
 Manager, Corporate Resources

8/21/2007

Date


 Jeffrey Nightlinger
 General Manager

8/28/2007

Date

[Attachment 1 – Financial Statement](#)

[Attachment 2 – Location Map](#)

BLA #5579

Financial Statement for the Information Technology System – Infrastructure Program

A breakdown of Board Action No. 9 for Appropriation No. 15376 is as follows:

	Previous Total Appropriated Amount (June 2007)	Current Board Action No. 9 (Sept. 2007)	New Total Appropriated Amount
Labor	\$ 6,320,825	\$ -	\$ 6,320,825
Studies & Investigations	-	10,000	10,000
Final Design	-	49,600	49,600
Owners Costs (Program mgmt. permitting & envir. doc.)	-	97,000	97,000
Metropolitan Force Construction	-	311,000	311,000
Materials and Supplies	10,838,670	263,200	11,101,870
Incidental Expenses	97,874	81,600	179,474
Professional/Technical Services	3,936,597	55,400	3,991,997
Equipment Use	-	500	500
Contracts	245,000	40,000	285,000
Remaining Budget	1,222,034	101,700	1,323,734
Total	\$ 22,661,000	\$ 1,010,000	\$ 23,671,000

Funding Request

Program Name:	Information Technology System – Infrastructure Program		
Source of Funds:	Revenue Bonds, Replacement and Refurbishment or General Funds		
Appropriation No.:	15376	Board Action No.:	9
Requested Amount:	\$ 1,010,000	Capital Program No.:	15376-I
Total Appropriated Amount:	\$ 23,671,000	Capital Program Page No.:	E-35
Total Program Estimate:	\$ 47,637,300	Program Goal:	Reliability & Efficiency



