



- **Internal Audit Report for May 2007**

## Summary

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Seven reports were issued during the month:

- **Vanir Construction Management, Incorporated Audit Report – Generally Satisfactory**
  - **IID/MWD Incentive Programs/Conservation Audit Report – Satisfactory**
  - **Central Arizona Water Conservation District Program Audit Report - Satisfactory**
  - **SWP Water Transfer Program with San Bernardino Valley Water District Audit Report - Satisfactory**
  - **SWP Water Transfer Program with Desert Water Agency, Coachella Valley Water District, and Mojave Water Agency Audit Report – Satisfactory**
  - **Environmental, Health, & Safety and Legal Department Applications Audit Report – Generally Satisfactory**
  - **Official Statement for the Water Revenue Bonds, 2006 Authorization, Series A**
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## Discussion Section

This report highlights the significant activities of the Internal Audit Department during May 2007. In addition to presenting background information and the opinions expressed in the audit reports, a discussion of findings noted during the examination are also provided.

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## Vanir Construction Management, Incorporated Audit Report

### Background

In January 2002, Metropolitan entered a \$1.2 million agreement with Vanir Construction Management, Incorporated (Vanir) to provide project management support services that included streamlining and enhancing program management processes, relating to the construction of the San Diego Pipeline No. 6. This Agreement has been amended several times to revise the fee schedules, increase the maximum payable amount not to exceed \$3 million, and to extend the term of Agreement to December 2008. As of February 28, 2007, Metropolitan has paid \$1.9 million under this Agreement.

In January 2006, Metropolitan entered into a five-year, \$600,000 per year contract with Vanir to provide project management support services for Metropolitan's treatment plants, such as conducting management studies, developing and maintaining project schedules, monitoring costs, and developing status reports, presentations, and graphics, as well as providing general project administration for other programs, and projects determined by Metropolitan. As of February 28, 2007, Metropolitan has paid \$320,000 under this Agreement.

### **Opinion**

In our opinion, the operating and administrative procedures over these Agreements include those practices usually necessary to provide for a generally satisfactory internal control structure. The degree of compliance with such policies and procedures provided effective control for the periods from January 2002 to January 2007 for the first Agreement and from January to December 2006 for second.

### **Comments and Recommendations**

During our review, we noted minor comments relating to untimely payment of consultant invoices. We recommend that the Agreement Administrator implement the invoice tracking report (currently under development) to monitor unpaid invoices.

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## **IID/MWD Incentive Programs/Conservation Audit Report**

### **Background**

Metropolitan entered into an agreement with Imperial Irrigation District (IID) in 1988 to implement a Water Conservation Program (Program). The Program conserves water through a number of conservation projects, such as the building of small regulating reservoirs, lining of lateral canals, and installation of tail-water recovery systems. These projects were completed in September 1998 at a cost of \$112.3 million. Following the completion of these projects, the 35-year O&M Phase of the Program commenced in October 1998. However, the First Amendment to the Agreement entered into by IID and Metropolitan contemporaneously with the 2003 Quantification Settlement Agreement, among IID and Metropolitan as well as others, extended the Program term through December 31, 2041, or 270 days beyond the termination of the Quantification Settlement Agreement, whichever is later.

Since Program implementation, the amount of water conserved determined by the Water Conservation Measurement Committee through 2006 has varied from 101,160 to 109,460 acre-feet (AF) in any given year. The operations and repairs of Program facilities and the changes in water use due to weather and crop markets can affect the amount of water conserved from year to year. During the calendar year 2006, the Program conserved 101,160 AF. In March 2007, the Board authorized amending the Agreement to fix the volume of water conserved by the Program at 105,000 AF per year and to include potable water conservation measures in the Program. This Second Amendment is currently being finalized.

As required under the Agreement, Metropolitan pays the costs incurred under the O&M Phase of the Program, including the ongoing costs for non-structural projects and the operation, maintenance, and replacement costs for structural projects to keep them in good operating condition. The annual O&M costs have varied from \$4.7 million to \$8.7 million over the last eight calendar years, averaging about \$6.6 million per year. During calendar year 2006, the Program O&M costs totaled \$8.7 million.

### **Opinion**

In our opinion, the accounting and administrative procedures over the Program include those practices usually necessary to provide for a satisfactory internal control structure. The degree of

compliance with such policies and procedures provided effective control for the period January 1, 2006 through December 31, 2006.

### **Comments and Recommendations**

During our review of eighty-one selected O&M transactions totaling approximately \$1.1 million, we noted that an equipment rental expense for approximately \$15,000 was erroneously billed to the Program by IID. We conveyed this exception to the Metropolitan Program Administrator and to IID Management, who corrected the error before our completion of this review. We recommend that Water Resource Management Group Management remind personnel of the importance of periodic and thorough review of Program O&M expenses to ensure the validity, accuracy, and propriety of billed charges and completeness of supporting documentation.

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## **Central Arizona Water Conservation District Audit Report**

### **Background**

In October 1992, Metropolitan entered into a Demonstration Agreement with the Central Arizona Water Conservation District (CAWCD), to create and implement a demonstration project for underground storage in Arizona of Colorado River water for a maximum amount of up to 100,000 acre-feet. This Agreement was amended in December 1994 to increase the maximum storage amount of up to 300,000 acre-feet. Under the terms of the Agreement, Metropolitan pays CAWCD the costs of operation, maintenance, and pumping energy (ranging from \$68 to \$114 per acre-foot) for delivery and underground storage of Colorado River water. As of January 2007, Metropolitan has paid \$7.9 million to CAWD for these costs. The Agreement also requires CAWCD each year to obtain at least 30,000 acre-feet of stored water credits and to designate up to 30,000 acre-feet in a long-term stored water credits account created for Metropolitan by CAWCD. As of January 2007, Metropolitan's stored water totaled 80,909 acre-feet reflected in the account. The Secretary of the Interior has agreed, in May 1995, to honor Metropolitan's right to withdraw stored water by treating water recovered by Metropolitan as Arizona's unused apportionment made available to Metropolitan under its Colorado River Water Delivery contract. The recovery of water is through diversion of Arizona's Colorado River water entitlements to Metropolitan by CAWCD.

In December 2006, Metropolitan entered into a Letter Agreement with CAWCD and the Arizona Water Banking Authority to facilitate recovery of Metropolitan stored water created under the Demonstration Agreement. The Letter Agreement also stipulates CAWCD's commitment to recover 16,804 acre-feet for Metropolitan in calendar year 2007, as amended. Both the Demonstration Agreement and the Letter Agreement will remain in effect until all Metropolitan's stored water is recovered from CAWCD.

### **Opinion**

In our opinion, the operating and administrative procedures over the Demonstration Agreement with CAWCD include those practices usually necessary to provide for a satisfactory internal control structure. The degree of compliance with such procedures provided effective control for the period October 1992 (inception of the contract) through January 31, 2007.

**Comments and Recommendations**

There were no material findings to report.

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**State Water Project Water Transfer Program – Coordinated Use Agreement with San Bernardino Valley Municipal Water District Audit Report**

**Background**

In January 2002, Metropolitan entered into the Coordinated Use Agreement with the San Bernardino Valley Municipal Water District (Valley District) to maximize the beneficial use of State Water Project (SWP) water supplies, maximize the value of existing SWP contracts, and improve the reliability of existing conveyance systems. The Coordinated Use Agreement requires Metropolitan to purchase a minimum of 20,000 acre-feet per year of Valley District's SWP water supplies. In the event that Metropolitan's operational needs do not require all or a portion of the minimum purchase, that unused amount may be carried forward up to a total of 50,000 acre-feet for later delivery. The initial term of this agreement ends in December 2014, and thereafter, it will continue on an annual basis. The Valley District's SWP water supplies delivered to Metropolitan totaled 40,000 in 2005 and 2006. Metropolitan has paid \$10.4 million to Valley District for these water deliveries

**Opinion**

In our opinion, the operating and administrative procedures over the Coordinated Use Agreement include those practices usually necessary to provide for a generally satisfactory internal control structure. The degree of compliance with such policies and procedures provided effective control for the period January 1, 2005 through December 31, 2006.

**Comments and Recommendations**

There were no material findings to report.

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**SWP Water Transfer Program – Coordinated Use Agreement with Desert Water Agency, Coachella Valley Water District, and Mojave Water Agency Audit Report**

**Background**

In October 2003, Metropolitan entered into the 2003 Exchange Agreement with Desert Water Agency and the Coachella Valley Water District (DWCV) to transfer water associated with 100,000 acre-feet of Metropolitan's State Water Project (SWP) Table A entitlement to DWCV. The actual amount of water available to DWCV, because of the transfer, would vary from year-to-year based upon the percentage of entitlement actually allocated by the Department of Water Resources. The main benefits of this water transfer are (1) to reduce Metropolitan's SWP fixed costs in wetter years when there are more than sufficient supplies; and (2) to provide additional water supplies to DWCV in those wetter years. Under the terms of this Agreement, Metropolitan retains annual options to recall the water and pay all associated costs. Metropolitan exercised this recall option in calendar year 2005, and paid \$8.6 million to Department of Water Resources for all associated costs. Metropolitan did not exercise the recall option in calendar year 2006.

Furthermore, since DWCV has no physical connection to any SWP facilities, the water transfer under the 2003 Exchange Agreement would be delivered to DWCV through the existing Exchange Agreements executed with DWCV in July 1983, whereby Metropolitan receives DWCV's SWP water entitlement and in exchange deliver a like amount of Colorado River water to DWCV. In addition, because DWCV has a large groundwater basin to store Colorado River water deliveries, an Advance Delivery Agreement was also executed in June 1984, whereby Metropolitan makes advance deliveries of Colorado River water to DWCV to be credited against Metropolitan's SWP water exchange obligations. The 1983 and 2003 Exchange Agreements and the Advance Delivery Agreement will expire in December 2035. From October 2003 through December 31, 2006, Metropolitan has transferred a total of 307,106 acre-feet of Colorado River water to DWCV under the 2003 and 1983 Exchange Agreements and the Advance Delivery Agreement.

In February 2004, Metropolitan entered into an agreement with Mojave Water Agency (MWA) for reimbursement of costs to implement the Mojave/Metropolitan Water Management Program. Under the terms of this Agreement, Metropolitan equally shares with MWA the consultants' costs for engineering, hydro-geologic, geography, legal, and environmental services and for the cost analysis for a long-term water storage and exchange program within MWA. Metropolitan and MWA received the deliverables required under this Agreement, and Metropolitan paid its full share of costs totaling \$240,000. This Agreement will expire upon notice by either party.

### **Opinion**

In our opinion, the operating and administrative procedures over the agreements include those practices usually necessary to provide for a satisfactory internal control structure. The degree of compliance with such policies and procedures provided effective control for the period January 1, 2005 through December 31, 2006.

### **Comments and Recommendations**

There were no material findings to report.

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## **Environmental, Health, & Safety and Legal Department Applications Audit Report**

### **Background**

The Environmental, Health, & Safety (EHS) Section is responsible for maintaining information on Metropolitan's permits/licenses for certain type of equipment, such as elevators, generators, or pressure valves. Information on these licenses is maintained in the Permits Database System (PERMITS). EHS staff also maintains a database of hazardous materials items with associated rules and regulations on handling them. These regulatory material handling instructions are kept in a "Material Safety Data Sheet" (MSDS) in the Hazardous Materials Database System (3E System). A "third system", the Incident Reporting System (IR) is used by the EHS staff for reporting environmental or health and safety related incidents, such as hazardous material spills, job related stress, etc. Responsibility for maintaining the IR data belongs to the Legal Department. Our review consisted of evaluating the information controls over these software applications as of December 31, 2006.

### **Opinion**

In our opinion, the operating and administrative procedures over Environmental Compliance Applications include those practices usually necessary to provide for a generally satisfactory internal control structure. However, we did note instances of inadequate security access, incomplete application documentation and non-integration with other legacy systems that if ignored, could have an adverse effect on the District's internal control structure and resulting data accuracy in the PERMITS, 3E and IR Systems.

### **Comments and Recommendations**

As noted in the opinion, our audit revealed concerns over access controls, system documentation, and integration with other systems. Specific concerns are presented in detail, while other comments are summarized.

### **Access Controls**

Access controls should be established to protect against unauthorized destruction, disclosure, or modification of electronically stored data. This control is achieved by limiting access to computer systems based on an analysis of staff duties and responsibilities. For Metropolitan, the End User Computing Information Security Standards define the principles and convention used to setup and administer user ID's and passwords. These practices include standards for password format and length, procedures for the suspension of a user ID based on unsuccessful logon attempts, automatic password expiration every 60 days, and remind management of the responsibility to discuss the confidential nature of passwords with staff. For the applications under review, the Environmental Health and Safety (EHS) Section is responsible for the administration of the Permits (PERMITS) and Hazardous Substances (3E) databases, whereas the Legal Department is responsible for administering the Incident Reporting (IR) system.

During our review, we could not locate documentation that evidenced the periodic review of user access rights to the IR and PERMITS production data. Furthermore, our review of users' access list revealed users with inappropriate access rights to IR and PERMITS production data. This information was presented to the Legal Department and EHS Management, who have initiated a request to the Information Technology Section for corrective action.

Our audit also noted noncompliance with the End User Computing Information Security Standards for the IR, PERMITS and 3E Systems. Specifically, we noted that:

- Administrator password for the 3E system was being shared between several EHS staff and an outside vendor. This contract vendor assists in the administration of the 3E software and controls the production data that resides on a Web Server outside Metropolitan's network.
- Password format, length, expiration, and unsuccessful logons standards were not implemented in the coding of the logon module to the IR, PERMITS, and 3E systems.

Failure to maintain adequate access control over computer-stored data could result in the unauthorized destruction, disclosure, or modification of data.

We recommend that the Data Owners (Legal Department for IR and EHS Section for PERMITS and 3E Systems) perform periodic reviews of the users' access authorization. We also recommend

that the “End User Computing Information Security Standards” be enforced for the IR, PERMITS, and 3E Systems.

### **PERMITS and 3E Systems – Application Documentation**

During our review, we noted that detailed instructions for the PERMITS and 3E software features when maintaining data for the systems was incomplete. We did note that the generic vendor instructions were available, however, instructions related to the usage of the systems’ specific EHS Section business rules for maintaining the data could not be located.

We recommend that the EHS Section enhance the existing Application Manuals for the PERMITS and 3E applications by including specific instructions related to EHS Section business rules, to ensure that data is maintained in a consistent and appropriate manner.

### **PERMITS System – Data Accuracy**

The PERMITS system is used to record license/permit information for equipment needing Environmental, Safety, and Health permits.

Our testing revealed that equipment details recorded in the PERMITS System, such as barcode number, manufacturer’s name, equipment location, and description were missing and/or did not always match the corresponding information in the ORACLE or MAXIMO Systems. Further review revealed that an integration of shared information between the PERMITS and ORACLE/MAXIMO databases did not exist. Accordingly, we noted that EHS staff has had to expend significant resources to collect and input equipment details into the PERMITS System. This condition creates operating inefficiencies.

We recommend EHS Management request that an interface be designed to integrate the PERMITS, ORACLE Financials, and MAXIMO Systems. As an alternative, we recommend that Management consider the feasibility of replacing the PERMITS System entirely by using MAXIMO system features to record data on Environmental Permits for equipment.

### **3E System – Data Accuracy**

California law establishes standards for the use, handling, and storage of hazardous substances in all places of employment. The Material Safety Data Sheet (MSDS) is used to document the handling of hazardous substances and are input into the Hazardous Materials Database (3E System). The 3E System is also used to record the material location, manufacturer name, product description, and an “Inventory Internal Number”. This information is readily available from the Oracle Financials and PCard Systems and MWD’s IT Enterprise Architecture should provide an integration between these applications, in order to minimize duplicate data entry and errors.

Our testing revealed that the hazardous substances information recorded in E3, such as manufacturer name, product description and the “Inventory Internal Number” were missing and/or did not always match the corresponding information in the ORACLE or PCard Systems. Furthermore, there was no distinction between the active/non-active inventory materials in the 3E System making it difficult to select/report information on active hazardous materials with MSDS information. In addition, our review revealed that an integration of shared information between the 3E and ORACLE/PCard databases does not exist. Accordingly, we noted that EHS staff has had to expend significant resources to collect and input hazardous substances information

materials into the 3E System, while other business units are maintaining similar information in the ORACLE Financials and PCard Systems. This condition results in operating inefficiencies.

We recommend EHS management request that an interface be designed to integrate the 3E, ORACLE Financials and PCard Systems.

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### **Official Statement for the Water Revenue Bonds, 2006 Authorization, Series A**

The Audit Department has completed a review of the Official Statement for the Water Revenue Bonds, 2006 Authorization, Series A. This review was undertaken to provide the underwriters of the Water Revenue Bonds (Bonds) “comfort” that the Official Statement for the Bonds is complete, consistent with supporting financial records, and accurate in all material respects. The review was completed and no exceptions were noted. We issued letters describing the agreed upon procedures performed, and the results obtained, to the underwriters of the Bonds.

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### **Continuous Audit Activities (monthly reviews)**

#### **Inland Feeder Project**

Our review included agreeing actual costs reported to the Board to source documentation, including the general ledger, the Inland Feeder Project (IFP) Monthly Report, and selected contract payments; reviewing estimated costs at completion; analyzing changes in various cost components; and attending on-site meetings held to review actual costs and discuss current problems. Our review did not reveal any material differences between reported amounts and supporting documentation.

In addition, our ongoing review procedures for potential claims, liability exposures, and other pending issues have been designed to track such items in accordance with applicable reporting requirements under Financial Accounting Standards #5 (Accounting for Contingencies). Accordingly, for all pending legal claims, we consult with the Chief Financial Officer, IFP management, or General Counsel’s office to evaluate the magnitude of potential losses to Metropolitan. It should be noted that the IFP Project Manager reports on contractors’ claims currently in litigation and other potential claim issues to the Board monthly.

#### **Center for Water Education**

Participated with management representing the General Manager, General Counsel and Chief Financial Officer on assessing the Center’s debts and on transition processes.<sup>3</sup>