



● Information Technology Strategic Plan (ITSP) - Quarterly Report for the period ending March 2010

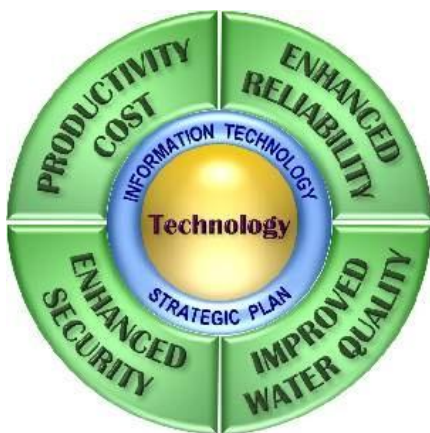
Summary

This report provides a quarterly update on progress to implement Metropolitan’s Information Technology Strategic Plan (ITSP) and on information technology (IT) activities in general for the period ending March 31, 2010. There were a number of important milestones reached during the period that are summarized in this report. A significant accomplishment was the completion of the “ITSP Refresh,” which examined IT’s business environment, staffing, and processes, and identified key recommendations, staffing and skill sets to meet Metropolitan’s future business needs. Major milestones for the upcoming quarter ending June 30, 2010 include: initiating a pilot for the Computer-Aided Design Management System; implementing a software interface between Metropolitan’s maintenance management system (Maximo) and the Oracle inventory system.




The ITSP provides a roadmap to guide the investment and deployment of information technology at Metropolitan over the next three to five years. The goal of the plan is to leverage information technology investments to increase long-term reliability, while improving Metropolitan’s overall efficiency and effectiveness. Oversight of IT investments is provided by the IT Guidance Committee consisting of senior management and the Capital Investment Plan (CIP) Evaluation Team as part of the annual CIP planning process.

Detailed Report

Attached are highlights of progress and major milestones reached on IT projects / initiatives during the period of January 1st through March 31, 2010. The projects are categorized by business driver as follows:



IT STRATEGIC PLAN
Enhanced Reliability – Enhance system reliability
Improved Water Quality – Ensure water quality excellence
Enhanced Cyber Security – Effectively manage and safeguard assets
Productivity / Cost Efficiency – Improve process efficiency and effectiveness

<p style="text-align: center;">Enhanced Reliability:</p>	<p style="text-align: center;">Fiscal Year 2009-10 Budget: \$ 7.06 M Expended: \$ 4.72 M</p>
<p>Key Accomplishments Included:</p> <p>Continued Development of the Electronic Discovery Management System (e-Discovery) Project</p> <ul style="list-style-type: none"> ■ The Electronic Discovery Management System project will configure and deploy a software package to manage, catalog, store and retrieve electronic documents in the context of litigation and for Public Records Act requests. This project provides a comprehensive system for e-Discovery and reduces the risk to Metropolitan as a result of new legal requirements stemming from the 2006 amended Federal Rules of Civil Procedure and the more recent 2009 legislation changing California’s civil discovery rules concerning electronically stored information (ESI). ■ Project benefits will include: <ul style="list-style-type: none"> ■ Ensuring the process of e-Discovery is accurately and thoroughly executed and documented with the use of comprehensive software tools; ■ Avoiding exposure to e-Discovery errors and inefficiencies that can result in delays and possible court-imposed sanctions; ■ Enhancing process efficiencies related to the retrieval and review of electronic information that in some cases, involve thousands of individual files. Currently, staff does not have automated and comprehensive tools for managing litigation holds, and perform this manually. ■ To date, the system design for e-Discovery hardware was completed; software and hardware were procured; and a detailed work plan and schedule were developed. In March, the hardware (e.g., servers) was received and staff began to build and configure the equipment required for the new e-Discovery system. Since most e-Discovery involves emails (approximately 85%), a phased deployment approach is planned, focusing first on Metropolitan’s email management system. Activities related to system development, software configuration and preliminary testing are scheduled to continue through June 2010, with initial rollout of e-Discovery for the email management system scheduled for the first quarter 	  

of fiscal year 2010/11.

Continued Development Phase for CAD Management System

- The Computer-Aided Design (CAD) Management System project will implement new software to manage Metropolitan’s CAD drawings and associated files. CAD is the use of computer technology for layout, design and drafting of engineering and architectural drawings which are complex (e.g., multiple layers of information with interdependencies) and usually involve multiple users from different engineering disciplines (e.g., Civil, Electrical, Mechanical, etc.). The new CAD management system will be used to effectively manage the production of design drawings, specifications and calculations by storing them in a secure repository, managing check-in and check-out of electronic files, and providing advanced search features to facilitate retrieval of these drawings.
- During the period, staff continued work in the development phase including software installation, set-up and configuration. Final preparations are currently underway to begin a pilot phase for the CAD Management System, with selected design staff. The pilot is scheduled to be completed in early fiscal year 2010/11.




Other Key Accomplishments During the Period:

Conducted IT Disaster Recovery Exercise and Training

- As part of an ongoing effort to refine Metropolitan’s ability to recover critical IT systems in the event of a disaster, staff continued to conduct training exercises involving the use of Metropolitan’s emergency notification system. During the period, IT and emergency response staff conducted training on the Emergency Notification System with the Incident Command Centers (ICC), Headquarters ICC and Information Technology Incident Command. The notification system allows for rapid, clear and efficient delivery of alerts, notifications, reporting instructions and other vital emergency communications in the event of a disaster.
- In addition, staff conducted a disaster recovery exercise in February as part of ongoing efforts to refine Metropolitan’s ability to recover critical business processes. The exercise involved



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<p>executing recovery strategies that support Metropolitan’s financial systems. The exercise was successfully completed and achieved its intended objectives of validating recovery capabilities and provided ongoing training to staff.</p> <p>Expenditures in the Enhanced Reliability category were lower than planned for the third quarter of fiscal year 2009/10. The variance in this category primarily stems from projects that were deferred to focus on the highest priority efforts. The deferred projects include the Water Planning Application and the Water Conservation Application. In addition, the schedule for Phase II of the IT Network Upgrade was extended to allow sufficient time to complete the procurement process. Planned expenditures for this project have been revised and extended to next fiscal year. As a result, a variance in this category is expected to remain through fiscal year 2009/10.</p>	
<p align="center">Enhanced Cyber Security:</p>	<p align="center">Fiscal Year 2009-10 Budget: \$ 0.51 M Expended: \$ 0.35 M</p>
<p>Key Accomplishments Included:</p> <p>Continued Phase II of the Information Security Remediation Initiative</p> <ul style="list-style-type: none"> ■ Staff continued efforts to enhance and upgrade Metropolitan’s IT security infrastructure as part of Phase II of the Information Security Remediation Initiative. In this project, proactive measures were implemented to better secure Metropolitan’s network environment against emerging cyber threats. ■ Currently, the Phase II Information Security Remediation project is substantially complete. Key accomplishments to dates include: <ul style="list-style-type: none"> ■ Physical migration of six SCADA-related applications to better segregate and secure the SCADA network; ■ Deployment of Metropolitan’s wireless network and associated security infrastructure; ■ Deployment of a Security Information Management system to provide a dashboard summarizing security monitoring data and highlighting any suspicious activity; ■ Deployment of a security vulnerability assessment tool; ■ Deployment of a new database security 	 

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monitoring and assessment system to better safeguard the information stored in Metropolitan's production databases.



- During the period, staff continued efforts related to laptop disk encryption to better protect sensitive data stored on hard drives in the event the devices are lost or stolen. A pilot is being conducted involving staff from across various business units. A formal assessment will be conducted based on the results of the pilot before a determination is made regarding future deployment of this technology.






Other Key Accomplishments During the Period:

- Staff continued to monitor and participate in national efforts aimed at enhancing security capabilities for water utilities to ensure that Metropolitan meets or exceeds national standards.
- In March, IT staff participated in the Cyber Asset Workshop Panel for the Water Sector held in Washington, D.C. The workshop was sponsored by the Department of Homeland Security (DHS) and Sandia National Laboratory. The objective of the panel was to help identify prudent steps that water utilities should take to mitigate cyber risks and to prioritize essential critical spare components that should be stockpiled and made available in the event of cyber, natural, accidental, and malicious attacks.

Expenditures in the Enhanced Cyber Security category were lower than planned for the third quarter of fiscal year 2009/10. A variance in this category is expected to remain, as Phase III of the Information Security Remediation Initiative has not received board approval as staff continues to focus on highest priority efforts. The Phase III project is currently in the define phase and is scheduled to seek board authorization in fiscal year 2010/11.



<p align="center">Improved Water Quality:</p>	<p align="center">Fiscal Year 2009-10 Budget: \$ 0.23 M Expended: \$ 0.00 M</p>
<p>Key Accomplishments Included:</p> <p>Skinner Oxidation Retrofit Program</p> <ul style="list-style-type: none"> ■ During the period, IT staff continued to support the startup phase at the Skinner plant. <p>Diemer Oxidation Retrofit Program</p> <ul style="list-style-type: none"> ■ During the period, IT staff continued review of contractor submittals for compliance with Metropolitan’s specifications. <p>Other Key Accomplishments During the Period:</p> <ul style="list-style-type: none"> ■ IT staff completed an upgrade to the Laboratory Information Management System (LIMS) used to manage Metropolitan’s water quality compliance data and to track the large volume of water quality samples taken throughout the distribution system. This upgrade was needed because vendor support for the prior software version ended in December 2009. The benefits of the new system include enhanced processing performance and ease of use (improved navigation). The LIMS upgrade interfaces with in-house applications that support scheduling water sampling and managing laboratory workflow involving the hundreds of water samples taken daily within the distribution system. This upgrade was completed entirely by in-house staff, as part of routine O&M activities. ■ During the period, IT staff provided control system design review, technical support, system start-up support, and participated on a number of water quality-related capital projects that included: <ul style="list-style-type: none"> ■ Skinner Sodium Bisulfite project; ■ Weymouth Coagulant Tank Farm Modifications; ■ Weymouth Inlet Conduit Relocation and Rapid Mix System. <p>Capital expenditures in the “Improve Water Quality” category were minimal during the third quarter of fiscal year 2009/10. The Water Quality Monitoring and Rapid Event Detection System project was authorized by the Board in December 2009. Expenditures are expected to increase in the fourth quarter, as internal labor and vendor invoices are processed.</p> <p>It should also be noted that IT expenditures associated with other capital projects (e.g., the Oxidation Retrofit Program) are reported as part of those initiatives and therefore are not reflected in this report.</p>	 

<p>Productivity / Cost Efficiency:</p>	<p>Fiscal Year 2009-10 Budget: \$ 1.05 M Expended: \$ 0.61 M</p>
<p>Key Accomplishments Included:</p> <p>Conducted Pilot / User Acceptance Testing of the New Inventory Bar-Coding System</p> <ul style="list-style-type: none"> ■ The Inventory Bar-Coding project deploys bar-coding technology and mobile handheld devices that communicate through wireless communications to improve Metropolitan’s warehouse operations. ■ In February, staff conducted a pilot rollout of the new Inventory Bar-Coding System at one of Metropolitan’s warehouses located at the Weymouth facility. The new system allows storekeepers to scan products quickly when receiving and issuing goods, replacing manual data entry of tasks. As a part of the deployment effort for the bar-coding system, a number of related business process improvements have been made, such as standardization of key storekeeping procedures and streamlined processes, to enhance warehouse operations. ■ Key benefits include improved inventory accuracy through the use of automation, replacing manual entry tasks related to receiving and issuing inventory; 20% reduction in transaction data entry time in La Verne; 10% at the remaining warehouses; and 100% elimination of the paper associated with daily inventory cycle counting at all warehouses. ■ As part of the pilot rollout, user acceptance testing was conducted and the system is scheduled to be placed into production in May. Upon successful deployment of the new bar-coding system at the Weymouth facility, rollout will continue to the remaining Metropolitan warehouses. <p>Other Key Accomplishments During the Period:</p> <p>Enhanced Efficiency by Implementing the Industrial Wastewater Reporting Application</p> <ul style="list-style-type: none"> ■ As part of industrial wastewater handling for the Jensen, Weymouth, and Diemer water treatment plants, Metropolitan must provide comprehensive data regarding direct measurement of the discharge flow rates per the permit requirements. The new Industrial Wastewater Reporting application eliminates the time required for staff to manually obtain and summarize the data necessary 	<div data-bbox="950 369 1344 655" style="border: 1px solid black; padding: 5px;"> <p>Inventory Receipt Label</p> <p>Item: -itemno </p> <p>Description: -description</p> <p>Receipt Qty: -quantity Receipt Date: -receiptdate</p> <p>Receipt #: -receiptno </p> <p>Supplier: -supplier PO #: -pojno </p> </div> <div data-bbox="878 779 1419 1184" style="border: 1px solid black; padding: 5px;">  </div> <div data-bbox="883 1310 1414 1902" style="border: 1px solid black; padding: 5px;">  </div>

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for mandatory compliance reporting.

IT Leadership Forum

- In March, staff attended an information technology leadership forum designed to explore critical business, technology and leadership strategies. The forum brought together senior-level IT representatives from the private and public sectors. Key topics discussed at the forum included use of IT benchmarking, social media technology, and cloud computing.

Expenditures in the Productivity/Cost Efficiency category were lower than planned for the third quarter of fiscal year 2009/10. The fiscal year variance between planned and expended dollars is primarily due to work that has been deferred for the Ozone Optimization project and procurement expenses for the Material Interface project, which are expected to be charged in the fourth quarter of this fiscal year. Based on directives related to the fiscal year 2010/11 budgeting process, a variance is expected to remain in this category as the Ozone Optimization project was recommended for deferral.

