

- **Capital Investment Plan – Quarterly Report for the period ending December 2008**

## Summary

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This report provides a summary of accomplishments, fiscal year expenditures to date, and variance explanations for all Capital Investment Plan (CIP) programs. This report also identifies any service connections approved for construction as well as relocation/protection agreements executed under the General Manager's authority. During the first two quarters of fiscal year 2008/09, 14 Board actions appropriated a total of \$285.5 million and awarded 11 construction contracts. Additionally, 14 agreements for consulting services were authorized. Through December 2008, 65 programs encompassing over 400 projects were underway. Actual fiscal year capital expenditures through December 2008 for these programs totaled \$169 million, compared to a budget for the same period of \$245.7 million.

During the period from July 2008 through December 2008, over \$96 million in construction contract payments were made, reflecting progress on the Diemer and Skinner Oxidation Retrofit Programs (ORP), chlorine containment facilities at the Skinner, Mills, and Jensen plants, the Perris Valley Pipeline, and the Inland Feeder Arrowhead Tunnels. Five construction contracts were completed during the same period.

At the end of the second quarter, 25 construction contracts were underway with a total value of approximately \$937.6 million. Three contracts are 99 percent complete and will be completed with authorized time extensions.

Three new service connections (CB-14, CB-20, and EM0-22) were authorized for construction, and no new relocation/protection agreements were executed during the period.

More detailed information regarding accomplishments and budget variances is included in the following pages. Performance measures for construction inspection and design costs as a percentage of construction costs are tabulated for all projects on which construction or design, respectively, were completed in the first two quarters of the fiscal year. Cumulative projected expenditures in each reporting category along with the total actual expenditures are shown in Figure 1.

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Highlights of progress and major milestones on selected programs are presented below, grouped by reporting category. Variance explanations are provided for categories where actual expenditures differ from the budget by more than 10 percent. The programs are categorized as follows:


**Supply and Delivery Reliability** – Programs to provide new water supplies and/or major delivery facilities, including service connections.


**Infrastructure Reliability** – Programs to upgrade, refurbish, replace, or repair existing facilities and equipment, including pipeline relocations and protection.

**Cost** – Programs to upgrade, replace, or provide new software applications and technology.



**Water Quality** – Programs to ensure Metropolitan meets all applicable water quality regulations and codes.

**Stewardship** – Programs to ensure the protection, safety, and security of Metropolitan's employees, visitors, and all real and intellectual properties and assets; and to provide for prudent and cost effective use and management of Metropolitan's assets in compliance with all applicable regulations and codes.


<p><b>Supply and Delivery Reliability</b></p>	<p style="text-align: center;"><b>Through 2nd Quarter</b>  <b>Budget: \$99.4M      Expended: \$64.4M</b></p>
<ul style="list-style-type: none"> <li>• With the hole-through for the Inland Feeder Arrowhead West Tunnel on August 20, 2008, all of the mining for the two Arrowhead Tunnels has been completed. At the West Tunnel, the first reinforced concrete cylinder pipe was transported to the Waterman portal in late November. Through December, over 1,500 feet of pipe has been installed in the West Tunnel, and over 2,000 feet has been installed in the East Tunnel, representing nearly 20 percent of the entire tunnels' length.</li> <li>• The alignment feasibility study for the remaining portions of San Diego Pipeline No. 6 is nearly complete. Staff has worked in conjunction with the San Diego County Water Authority and with several consultants to evaluate the tunnel, environmental, pipeline, geotechnical, and right-of-way aspects of four alternative alignments. The final report is planned to be completed, and the results presented to the Board, in mid-2009.</li> <li>• Pipe installation on the Perris Valley Pipeline North Reach was completed in December 2008. Testing is underway and the pipeline is anticipated to be placed in service in February 2009. In June 2008, the construction contract for the South Reach was awarded. To date, the contractor is about 7 percent complete.</li> </ul>	<div style="text-align: center;">  <p style="text-align: center;"><b>Construction of the access structure at the Inland Feeder Arrowhead West Tunnel Devil Canyon Portal</b></p> </div> <p>The fiscal year variance is primarily due to three factors: negotiations for land acquisition have taken longer than anticipated for the future Riverside Treatment Plant; the successful bid for the South Reach of the Perris Valley Pipeline, which is currently under construction, was well below the budgeted amount; and bidding of the construction contract for the Mills Modules 1 and 2 Rehabilitation and Chemical Systems Upgrades has been rescheduled pending review of projected demands in that portion of the service area.</p>

<p><b>Infrastructure Reliability</b></p>	<p align="center"><b>Through 2nd Quarter</b>  <b>Budget: \$60.5M    Expended: \$34.1M</b></p>
<ul style="list-style-type: none"> <li>• Phase II of the Quagga Mussel Control Program includes the construction of chlorination facilities and isolation barriers such as drop gates, bulkheads, and stop logs, to control the spread of quaggas and to enable spot treatment of specific segments of the conveyance and distribution system. Construction of chlorination facilities at Copper Basin was completed by Metropolitan forces, and facilities at Lake Mathews were placed into service in November.</li> <li>• The Colorado River Aqueduct (CRA) Reliability – Phase 6 construction contract includes upgrades at the Desert Water and Coachella Valley service connection discharge structure (DW-CV-4) located in Whitewater Canyon, and slide gate rehabilitation and upgrades at the San Jacinto Diversion Structure. All work is complete at DW-CV-4 except for replacement of the valves and installation of vent piping and sump pumps. Valve and actuator fabrication is complete and all of the work at Whitewater is anticipated to be finished by April 2009. At the San Jacinto Diversion Structure, the work includes recoating and rehabilitation of 3 large slide gates; installation of a new motor control center and electric actuators; replacement of power, control and lighting systems; replacement of hand railing and floor grates; and installation of a new stationary emergency generator. Overall, the contract is 34 percent complete, and all work is planned to be completed during a three-week CRA shutdown scheduled for fall 2009.</li> <li>• Design of the electrical upgrades at the Weymouth plant is approximately 85 percent complete. A constructability review is planned for early 2009, and the construction plans are being closely coordinated with the Weymouth Plant inlet conduit relocation design.</li> </ul>	<div style="text-align: center;">  <p><b>The new Weymouth Plant Operations &amp; Maintenance Center</b></p> </div> <ul style="list-style-type: none"> <li>• Construction of the new Weymouth Plant Maintenance Center is complete. The new facility includes energy efficient lighting as well as active skylighting that utilizes motor controlled mirrors to effectively direct sunlight into the building throughout the day.</li> </ul> <p>There are over 250 projects in this category, with variances ranging from \$3 million below to \$2.7 million over the estimated expenditures for the first two quarters of the fiscal year. Over 160 infrastructure projects have fiscal year variances of less than \$100,000. The largest overage, \$2.7 million for the Diemer Electrical Service Upgrade, was due to changes in the payment schedule from Southern California Edison. The fiscal year variance is primarily due to several projects at the Skinner plant that are undergoing only a partial implementation to assess the feasibility of construction by Metropolitan forces, thereby reducing initial expenditures and extending the overall schedule.</p>

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<p><b>Cost</b></p>	<p align="center"><b>Through 2nd Quarter</b>  <b>Budget: \$4.7M      Expended: \$2.9M</b></p>
<ul style="list-style-type: none"> <li>• The Integrated Budget Management System (IBMS) provides a single integrated system by replacing five separate, existing budgeting systems. The IBMS is being used by budget coordinators to develop the O&amp;M and Capital budgets for fiscal year 2009/10. Staff continues to work on remaining tasks, including training for the capital budgeting portion of the system. The current target completion date for the IBMS project is March 2009.</li> <li>• Upgrading Metropolitan’s Water Information System (WINS) ensures timely, accurate and auditable invoicing and accounting of all billing system transactions critical to Metropolitan’s core business functions. Staff continued WINS integration testing, addressing issues as they arose. The initial deployment (Phase I) for the WINS Billing System Upgrade is scheduled for June 2009.</li> </ul>	 <p>The fiscal year variance is primarily due to costs significantly lower than anticipated for upgrading Metropolitan’s video conferencing capabilities. The upgrade approach chosen resulted in much lower material and labor costs as equipment selected was less expensive than anticipated, and installation was significantly easier utilizing “plug and play” technology, which used existing network jacks already in place for the computer network.</p>
<p><b>Water Quality</b></p>	<p align="center"><b>Through 2nd Quarter</b>  <b>Budget: \$64.7M      Expended: \$57.8M</b></p>
<ul style="list-style-type: none"> <li>• The addition of two new ozone contactors at the Mills plant to upgrade the plant’s ozonation capacity to 326 mgd is approximately 76 percent complete, and is scheduled to be completed by July 2009. Fabrication of additional ozone equipment under a separate procurement contract is approximately 25 percent complete, and is scheduled to be completed by September 2009.</li> <li>• At the Weymouth plant, final design of a new plant inlet conduit, which will relocate the existing conduit from beneath the Administration Building and to an alignment required for the planned ozone contactors, is 80 percent complete and is scheduled to be completed by April 2009.</li> <li>• Construction continued on the Skinner ORP, which is approximately 92 percent complete and is scheduled to be completed by mid-2009.</li> </ul>	 <p align="center"><b>Mills Plant Ozone Contactors Nos. 3 and 4</b></p> <p>The fiscal year variance is primarily due to the Diemer ORP contractor’s early invoices being less than anticipated. The project is scheduled to be completed by 2012 as planned.</p>

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Stewardship:	<p style="text-align: center;"><b>Through 2nd Quarter</b>  <b>Budget: \$16.4M      Expended: \$9.7M</b></p>
<ul style="list-style-type: none"> <li>• Construction of the chlorine containment facilities at both the Mills and Jensen plants has been completed and the facilities are now operational.</li> <li>• Construction of the new 1-megawatt solar power generation facility at the Skinner plant commenced in August as part of Metropolitan’s strategic power planning effort. The contract award was based on both the initial capital cost and projected long-term energy production to determine the best overall value to Metropolitan. Other solar facilities are under consideration at the Mills, Jensen, and Weymouth plants.</li> <li>• The CRA Real Property Boundary Survey project was authorized in 2003 to accurately locate and set visible boundary markers for all of Metropolitan’s CRA property, to identify encroachments, and to record precise boundary mapping with local county agencies. With over 215 field surveys completed encompassing over 92,000 acres; more than 9,500 boundary markers set; and approximately 400 maps filed with Riverside and San Bernardino Counties, that effort is over 60 percent complete.</li> </ul>	<div style="text-align: center;">  </div> <p style="text-align: center;"><b>Foundations for solar arrays for the Skinner Solar Power Generation Facility</b></p> <p>The fiscal year variance is primarily due to timing of contractor invoices for the Skinner Solar Power Generation facility. The facility is scheduled to be on-line by May 2009 as planned.</p>

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<b>Corporate Resources Capital Project Performance Measures FY 2008/09</b> <b>Through 2nd Quarter</b>	
<p>Achieved target for cost of construction inspection as a percentage of construction cost, for projects:</p> <ul style="list-style-type: none"> <li>• greater than \$3 million; target 9% - 12%</li> <li>• less than \$3 million; target 9% - 15%</li> </ul>	<p><b>* Exceeded Target</b> <b>Met Target</b></p>
<p>Achieved target for cost of final design as a percentage of construction cost, for projects:</p> <ul style="list-style-type: none"> <li>• greater than \$3 million; target 9% - 12%</li> <li>• less than \$3 million; target 9% - 15%</li> </ul>	<p><b>** Not applicable</b> <b>Met Target</b></p>

\* Represents the first three contracts to relocate air release and vacuum valves in the distribution system. (A total of twelve contracts are planned.) Due to the wide area covered by the contracts, an inspection goal of 17% was established for each. The final actual level of inspection required was 17.8%.

\*\* Note: no projects greater than \$3 million were completed in the quarter.

**Figure 1**  
**Cumulative Capital Budget vs. Actual Expenditures**  
**FY2008/09**

