



## ● CIP Quarterly Report for the period ending June 2011

### 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. During fiscal year 2010/11, 44 Board actions appropriated a total of \$71.6 million, and 18 construction contracts were awarded. Through June 2011, 55 programs encompassing over 300 projects were underway. Actual fiscal year capital expenditures through June 2011 for these programs totaled \$224.2 million, compared to a budget of \$259 million.

During the period from July 2010 through June 2011, \$115.8 million in construction contract payments were made, primarily reflecting progress on the Diemer Oxidation Retrofit Program (ORP); the Weymouth inlet conduit relocation, domestic and fire water improvements, and Upper Feeder Junction Structure upgrade; electrical system upgrades at the Weymouth and Diemer plants; and the North Access Road at the Diemer plant. Fifteen construction contracts were completed during the fiscal year.

At the end of fiscal year 2010/11, 27 construction contracts were underway with a total value of approximately \$501.4 million. Five contracts are 99 percent complete, with punch-list work remaining.

More detailed information regarding accomplishments and budget variances is included in the following pages. Cumulative actual expenditures along with the total capital budget in each reporting category are shown in Figure 1.

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### Attachments

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Not applicable

### Detailed Report

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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 or treatment facility expansions, including service connections.

**Infrastructure Reliability** – Programs to upgrade, refurbish or replace, existing facilities and equipment, including pipeline relocations and protection; and to ensure the protection, safety, and security of Metropolitan's employees, visitors, and all real and intellectual properties and assets.

**Cost/Efficiency/Productivity** – Programs to upgrade, replace, or provide new facilities, software applications and technology that will provide economic savings that outweigh project costs through enhanced business and operating processes.

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

**Regulatory** – Programs to ensure Metropolitan's operations and processes are in full compliance with all applicable regulations and codes other than water quality regulations.

<p><b>Supply and Delivery Reliability</b></p> <ul style="list-style-type: none"> <li>• <b>Perris Valley Pipeline</b></li> </ul>	<p style="text-align: center;"><b>Through 4th Quarter</b></p> <p style="text-align: center;"><b>FY Budget: \$8.7M      FY Expended: \$15.3M</b></p> <p><b>Variance explanation:</b></p> <p>The fiscal year variance between budgeted and expended dollars is primarily due to the settlement payment to the contractor for the Perris Valley Pipeline North Reach. While the funds had been previously appropriated, the expenditure was not budgeted in fiscal year 2010/11.</p>
<ul style="list-style-type: none"> <li>• <b>Perris Valley Pipeline:</b></li> </ul> <p>South Reach: Two tunnel segments have been deleted from the contract due to unanticipated groundwater conditions near Van Buren Blvd. and the Interstate 215 Freeway. All remaining pipeline construction is complete. Work continued on ancillary items and site restoration. The contractor has exceeded the contract duration and liquidated damages are being assessed.</p> <p>Tunnels: The tunnel segments removed from the South Reach will be completed under a separate contract. This portion of the project has been deferred until fiscal year 2017/18 pending ongoing analysis of water service demands in the area.</p>	 <p style="text-align: center;"><b>Perris Valley Pipeline South Reach Placement of final segment of 97-inch diameter pipe</b></p>

<p><b>Infrastructure Reliability</b></p> <ul style="list-style-type: none"> <li>• <b>Diemer North Access Road</b></li> <li>• <b>F. E. Weymouth Water Treatment Plant</b></li> <li>• <b>Colorado River Aqueduct Access Covers and Water Tank Safety Improvements</b></li> <li>• <b>Box Springs Feeder Refurbishment</b></li> <li>• <b>Diemer Electrical Upgrades</b></li> </ul>	<p style="text-align: center;"><b>Through 4th Quarter</b></p> <p><b>FY Budget: \$146.8M    FY Expended: \$107.5M</b></p> <p><b>Variance explanation:</b></p> <p>The fiscal year variance between budgeted and expended dollars is primarily due to contractor progress payments for the CRA Fault Current Protection Upgrades and the Diemer Fire and Potable Water Pump Station projects, which were lower than the budgetary estimates. In addition, progress on the Diemer North Access Road construction was temporarily delayed due to heavy winter rains.</p>
<ul style="list-style-type: none"> <li>• <b>Diemer North Access Road:</b></li> </ul> <p>Construction is 75% complete and contract completion is projected for September 2011. The mechanically stabilized earth (MSE) retaining walls, soldier pile tie-back walls, and cast-in-place (CIP) concrete retaining walls were completed in June. Final grading of the road and cutting of permanent slopes, construction of storm drains and structures, and installation of conduits for electrical duct banks continued.</p> <p>All work is continuously monitored by environmental biologists as required under the project’s Environment Impact Report and Mitigation/Monitoring Plan.</p>	 <p style="text-align: center;"><b>Diemer North Access Road</b> <b>Setup of hydraulic ram for proof-testing tiebacks of soldier pile tieback wall</b></p>

<p><b>Infrastructure Reliability</b></p> <ul style="list-style-type: none"><li>• <b>F. E. Weymouth Water Treatment Plant:</b> Construction of the Weymouth Electrical Upgrades is 70 percent complete and is scheduled to be completed by mid-2012. Construction of the Rapid Mix and Fire/Domestic Water Systems is 97 percent complete and is scheduled to be completed by September 2011. Construction of the Junction Structure Seismic Upgrades is complete.</li></ul>	 <p><b>Weymouth Plant</b> <b>Application of roof membrane at the main plant switchgear building</b></p>
<ul style="list-style-type: none"><li>• <b>Colorado River Aqueduct (CRA) Access Cover Replacements and Water Tank Safety Improvements:</b> Construction is approximately 95 percent complete and is scheduled to be completed by June 2011. All contract work at the Hinds, Eagle Mt., Iron Mt. and Gene Pumping Plants is complete. Installation of the transition and manhole covers along the aqueduct has also been completed. The contract is scheduled to be completed in July 2011 with some punch-list items remaining.</li></ul>	 <p><b>CRA Access Covers and Water Tank Improvements</b> <b>Setting of water tank platform at Intake Pumping Plant</b></p>

<p><b>Infrastructure Reliability</b></p>	
<ul style="list-style-type: none"> <li> <p><b>Box Springs Feeder Refurbishment:</b></p> <p>Repair of broken-back prestressed concrete cylinder pipe (PCCP) segments on the Box Springs Feeder was completed in March 2011. Environmental mitigation activities continue in Sycamore Canyon.</p> </li> </ul>	 <p style="text-align: center;"><b>Box Springs Feeder Refurbishment - Phase 3</b> <b>Erosion control and restoration work</b></p>
<ul style="list-style-type: none"> <li> <p><b>Diemer Electrical Upgrades :</b></p> <p>The Phase I project to construct new switchgear, emergency generators, and electrical duct banks is 98 percent complete. Metropolitan staff has completed all programming and testing of the new equipment. The remaining work to switch over the power supply from the old 12kV supply to the new 66kV service is scheduled to be completed by August 2011.</p> <p>Final design of the Phase II project, which will replace aging equipment and reconfigure the unit power centers so that critical systems are fed from at least two power sources, is 40 percent complete.</p> </li> </ul>	 <p style="text-align: center;"><b>Diemer Plant</b> <b>Installation of new electrical conduit</b></p>

<p><b>Cost/Efficiency/Productivity</b></p> <p><b>Materials Interface and Mobile Technology</b></p>	<p style="text-align: center;"><b>Through 4th Quarter</b></p> <p style="text-align: center;"><b>FY Budget: \$2.1M      FY Expended: \$3.0M</b></p> <p><b>Variance explanation:</b></p> <p>The fiscal year variance between budgeted and expended dollars is primarily due to project costs for the Exchange 2007 Upgrade and Inventory Bar-Coding projects that were budgeted in fiscal year 2009/10, but carried over into 2010/11; and the final purchase of handheld units for the Mobile Technology project. Further, additional effort than originally planned was expended to solicit proposals for revenue generating land development options on Metropolitan-owned property at Diamond Valley Lake. All projects remain within budget.</p>
<ul style="list-style-type: none"> <li>• <b>Materials Interface and Mobile Technology</b></li> </ul> <p>In support of Water System Operations’ initiative to streamline maintenance management activities, the Materials Interface and Mobile Technology project deployed hand-held units for field maintenance workers to capture information as part of the actual work process. This mobile computing capability allows staff to enter timekeeping and work order data, and key information about field assets.</p> <p>All hand-held units were received from the vendor and the project was completed.</p>	

<p><b>Water Quality</b></p> <ul style="list-style-type: none"> <li>• <b>Diemer Oxidation Retrofit Program</b></li> <li>• <b>Weymouth Oxidation Retrofit Program</b></li> <li>• <b>Cross Connection Prevention Program</b></li> </ul>	<p style="text-align: center;"><b>Through 4<sup>th</sup> Quarter</b></p> <p><b>FY Budget: \$96.2M      FY Expended: \$96.2M</b></p>
<ul style="list-style-type: none"> <li>• <b>Diemer Oxidation Retrofit Program:</b> Construction of ozone facilities at the Diemer plant is approximately 72 percent complete and is scheduled to be completed in mid-2012. A 7-day full plant shutdown to tie-in the new 144-inch ozone contactor inlet conduit to the existing plant inlet conduit is scheduled for late 2011.</li> </ul>	 <p style="text-align: center;"><b>Diemer Plant Liquid Oxygen (LOX) tank farm</b></p>
<ul style="list-style-type: none"> <li>• <b>Weymouth Oxidation Retrofit Program:</b> Final design of the main Weymouth ORP construction contract is 95 percent complete. The advertisement for bids is scheduled for late 2011. Construction of the Weymouth inlet conduit relocation, which is required to support the Weymouth ORP, is 97 percent complete and is scheduled to be completed in September 2011.</li> </ul>	 <p style="text-align: center;"><b>Weymouth Inlet Conduit Installation of 36-inch yard piping</b></p>

- **Cross Connection Prevention Program:**

The Cross Connection Prevention Program was initiated to address 300 sites where air release/vacuum valves located in underground vaults create a potential cross connection. A total of 12 construction contracts are being utilized to relocate the valves to above-ground enclosures. Phases I and II have been completed, covering a combined total of 153 sites.

A total of 68 sites are currently being modified under Phase III. This work is approximately 94 percent complete. Phase IV, which addresses the remaining 79 sites, commenced construction in March 2011 and is scheduled to be completed by mid-2012.



**Installation of pipe for new air release and vacuum valve located in Tustin**

<p><b>Regulatory</b></p> <ul style="list-style-type: none"> <li>• <b>Chemical Unloading Facility Chlorine Containment</b></li> </ul>	<p style="text-align: center;"><b>Through 4th Quarter</b></p> <p><b>FY Budget: \$6.1M      FY Expended: \$2.0M</b></p> <p><b>Variance explanation:</b></p> <p>The fiscal year variance between budgeted and expended dollars is primarily due to the longer-than-anticipated evaluation of options for the Jensen tank farm chemical containment upgrades in conjunction with the design of the new tank farm roof. The evaluation has been completed and final design is proceeding.</p>
<ul style="list-style-type: none"> <li>• <b>Chemical Unloading Facility (CUF) Chlorine Containment:</b></li> </ul> <p>The CUF facilities will include a new chlorine storage building to house 90-ton liquid chlorine railcars and 19-ton cargo trailers; new control building; new maintenance, electrical/air compressor and chlorine process building; and a chlorine neutralization system to prevent an accidental chlorine release. The chlorine containment facility will also include a recompressor system for use during transloading operations and routine trailer maintenance. Final design has commenced and is scheduled to be completed by late 2012.</p>	 <p style="text-align: center;"><b>Existing Chemical Unloading Facility</b></p>

**Capital Program for Projects Costing Less Than \$250,000 for FY 2010/11**

The Minor Cap program is authorized each fiscal year to enable staff to expedite smaller, unscheduled capital projects that invariably arise during the year. Because many of these projects require rapid response to address unanticipated failures, urgent safety or regulatory compliance concerns, or to take advantage of shutdown opportunities, the Minor Cap program authorizes the General Manager to execute projects that meet the criteria during the fiscal year without seeking additional Board approval.

The following Minor Cap projects were authorized during the fourth quarter of fiscal year 2010/11:

- Operations Control Center Uninterruptable Power Supply (UPS) - Upgrade of the existing Operations Control Center UPS system.
- DVL Visitor Center Solar Power Optimization – Addition of two net meters in order to fully utilize the existing solar panels.
- Union Station Fire Water Reservoir Re-Coat – Removal of the existing membrane and re-coating of the reservoir.
- SCADA Communications Backbone Reliability Upgrade – Provision of communication reliability and increased bandwidth.
- Skinner Worker Safety Access Replacement – Removal of existing corroded steel ladders and installation of fiberglass ladders.
- Lake Mathews Vehicle Maintenance Exhaust System – Installation of vehicle exhaust systems in the heavy equipment bays, Dyno/Tire bay, and light duty bays.

The following table provides the overall status for the FY 2010/11 Minor Cap program.

<b>Minor Cap Program FY 2010/11</b>	<b>Total Estimate</b>
17 Projects Authorized	\$2,729,000
Unallocated Funds	\$ 468,000
Remaining Budget	\$ 303,000
<b>Total Program</b>	<b>\$3,500,000</b>

**Figure 1**  
**Cumulative Capital Budget vs. Actual Expenditures**  
**FY2010/11**

