



● Capital Investment Plan (CIP) Quarterly Report for the period ending September 2012

Summary

This report provides a summary of fiscal year accomplishments, capital expenditures to date, and status updates on major capital projects. Also included in this report is information regarding service connections and relocations authorized by the General Manager during the reporting period.

During the first quarter of fiscal year 2012/13 twelve board actions appropriated a total of \$11.9 million, and eleven construction contracts were awarded. Through September 2012, 73 programs encompassing over 350 projects were underway. All capital programs are within their appropriated budgets. Actual fiscal year capital expenditures through September 2012 for all programs totaled \$31.1 million, compared to a budget of \$49.9 million. The fiscal year variance between budgeted and expended dollars is due to rescheduling of construction projects to minimize potential conflicts with other ongoing projects at the same location, to better define the scope and cost of the work, and to evaluate alternative designs and schedules. Affected projects include the rehabilitation of the flocculation and settling basins and chemical feed system improvements at the Diemer plant, the replacement of the filter valves and upgrades to the filter surface wash and service water pumps at the Jensen plant, and improvements on the Colorado River Aqueduct (CRA) canal. Additionally, several pipeline rehabilitation projects with projected expenditures in fiscal year 2012/13 were actually completed ahead of schedule in fiscal year 2011/12. A high priority continues to be assigned to projects required for safety and to meet regulatory compliance deadlines, as well as those needed to ensure reliable and efficient operation.

During the quarter ending September 2012, \$13.7 million in construction contract payments were disbursed, reflecting progress on projects such as the Diemer and Weymouth Oxidation Retrofit Programs, the electrical system upgrades at the Weymouth plant, the LaVerne Coating Shop upgrades, and the access structure cover replacements on the CRA. No construction contracts were completed during the first quarter of fiscal year 2012/13.

At the end of the first quarter, 27 construction contracts were underway with a total value of approximately \$367 million. Four contracts are 99 percent complete.

More detailed information regarding accomplishments is included in the following pages.

Detailed Report

Section 2720 of the Administrative Code requires the General Manager to report quarterly to the Engineering and Operations Committee on the Capital Investment Plan, including service connections approved by the General Manager pursuant to Sections 4700-4708 with the estimated cost and approximate location of each and the execution of any relocation agreements involving an amount in excess of \$100,000 under the authority of Section 8122(c).

No new agreements for service connections or relocations were approved during the reporting period.

Highlights of progress and major milestones on selected projects are presented below, grouped by driver. The project drivers are described below:

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

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.

Board Report (Capital Investment Plan (CIP) Quarterly Report for the period ending September 2012)

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

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

Supply and Delivery – Programs to provide new water supplies and/or major delivery or treatment facility expansions, including service connections.

Water Quality

- **Diemer Oxidation Retrofit Program**
- **Weymouth Oxidation Retrofit Program**

- Diemer Oxidation Retrofit Program (ORP)

Construction of ozone facilities at the Diemer plant is approximately 98 percent complete. Testing and start-up activities are anticipated to commence in late 2012. A shutdown of the Diemer plant was successfully completed in January 2012 to tie-in the new facilities to the existing plant. The construction has exceeded the approved contract duration and a time extension is under negotiation. Approved change orders to date are less than two percent of the contract value.



**Diemer Plant
Main entrance road improvements**

- Weymouth Oxidation Retrofit Program

The Notice to Proceed for the main ozone facilities construction contract was issued in July 2012, and the contractor has mobilized. Construction of the new ORP Switchgear Building under a separate contract is 96 percent complete and is scheduled to be completed by March 2013. This building will house the circuit breakers and other electrical equipment to serve the new ozone facilities.



**Weymouth Plant
Contractor field offices**

Infrastructure Reliability – Treatment Plants

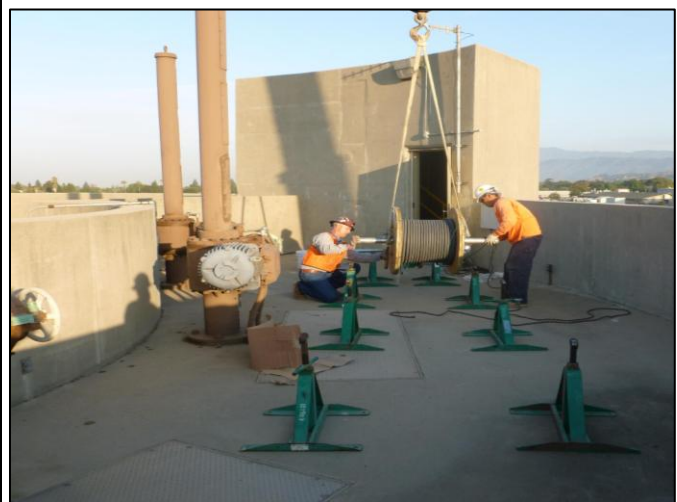
- **Diemer Filter Media Replacement**
- **Weymouth Electrical Upgrades**
- **Diemer Electrical Improvements**
- **Skinner Electrical Building Upgrade**

- **Diemer Filter Media Replacement**
This project will replace anthracite and sand filter media to improve filter performance and prevent the release of manganese into the plant’s treated water following the commencement of ozonation and biological filtration. Construction is 90 percent complete and is scheduled to be completed in October 2012.



**Diemer Plant
Filter media replacement**

- **Weymouth Electrical Upgrades**
This project will replace and upgrade numerous features of the plant’s power distribution system. The existing system’s principal components date back to the plant’s original construction and have reached the end of their service life. The upgrades will also enable the Weymouth plant to operate under the increased power demand of the new ozone facilities. Construction is 96 percent complete and is scheduled to be completed by March 2013.



**Weymouth Plant
Hoisting of new cable onto the Upper Feeder Junction
Structure**

Board Report (Capital Investment Plan (CIP) Quarterly Report for the period ending September 2012)

- **Diemer Electrical Improvements**
This project is being completed in two phases. The first phase, which included construction of new duct banks, main switchgear, and standby generators, was completed under the Diemer ORP construction contract.
Final design of the Phase II improvements, which will replace and upgrade the aged electrical components and reconfigure power distribution to critical plant processes, is 90 percent complete.



Diemer Plant
New switchgear and standby generator buildings

- **Skinner Electrical Building Improvements**
This project will replace and upgrade Unit Power Centers, Motor Control Centers, transformers, and ground fault protection systems for Plants Nos. 1 and 2. Construction by Metropolitan forces is 43 percent complete and is scheduled to be completed in August 2014.



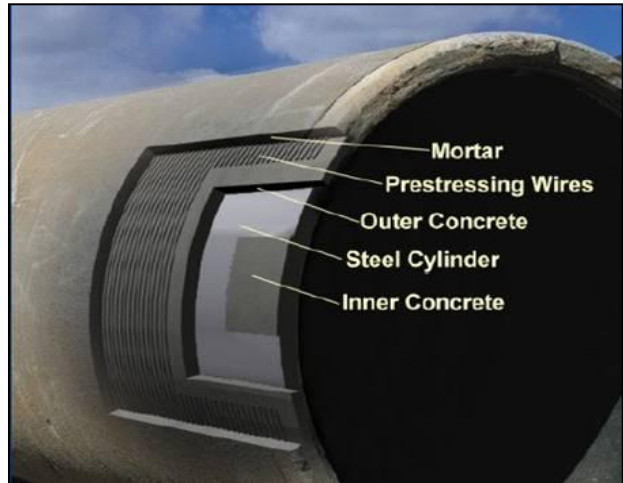
Skinner Plant
High-resistant ground fault equipment installed in Electrical Building No. 3

Infrastructure Reliability – Distribution System

- **Prestressed Cylinder Concrete Pipe Rehabilitation**
- **Eagle Rock Tower and Puddingstone Spillway Gates Rehabilitation**

- **Prestressed Cylinder Concrete Pipe (PCCP) Rehabilitation**

This comprehensive long-term program was established to enhance the reliability of Metropolitan’s distribution system and to reduce the risk of costly emergency repairs of PCCP lines. A construction contract for repairs to pipeline segments on four PCCP pipelines in the eastern region of the distribution system was awarded in August 2012. The repair work will be completed during the fiscal year.



Cross-section of typical PCCP segment

- **Eagle Rock Tower and Puddingstone Spillway Gates Rehabilitation**

This project will replace the radial gate at Puddingstone Spillway with two slide gates, and rehabilitate five corroded slide gates at the Eagle Rock Tower. The Puddingstone Spillway radial gate is used to isolate a portion of the Upper Feeder. The five slide gates in the Eagle Rock Tower are used to regulate flows in the Upper Feeder, Santa Monica Feeder, and Palos Verdes Feeder.

Construction is 37 percent complete, and is scheduled to be completed by February 2013.



Refurbishment of Eagle Rock Gates

Infrastructure Reliability – Colorado River Aqueduct

- **CRA Access Structures, Transition Structures and Manhole Cover Replacement**
- **Copper Basin Reservoir Outlet Structure Rehabilitation**

- CRA Access Structures, Transition Structures and Manhole Cover Replacement

This project will remove damaged and corroded steel plate transition covers, pre-cast concrete and plate steel manhole covers, and metal support beams along the CRA; replace 56 transition covers with new steel covers and 75 manhole covers with new pre-cast concrete covers; and repair 66 manhole structures.

Construction is 93 percent complete, and is scheduled to be completed by February 2013.



Colorado River Aqueduct - Unloading of transition structure covers

- Copper Basin Reservoir Outlet Structure Rehabilitation

This project consists of rehabilitating three slide gates; fabrication of two drop gates; replacement of one ladder; construction of a storm drain line and a pre-fabricated concrete building to house the new electrical control and power systems; and installation of a wire-mesh slope stabilization system, Metropolitan-furnished transformer, switchboard, and transfer switch.

Construction is 45 percent complete, and is scheduled to be completed by May 2013.



Copper Basin Reservoir Outlet Structure Installation of refurbished slide gate

Infrastructure Reliability – Other

- La Verne Coating Shop Upgrades
- Yorba Linda Power Plant Upgrade

- La Verne Coating Shop Upgrades

This project will upgrade two coating shop buildings at La Verne to relieve overcrowding and bring the facility into compliance with current building codes. The equipment in the coating shops is 30 to 50 years old and has reached the end of its service life. The project includes a self-contained sand blasting booth; a modern blast media collection and filter system, several new paint/drying booths, material staging areas, and work benches. Construction of the coating shop upgrades is 90 percent complete and is scheduled to be completed by December 2012.

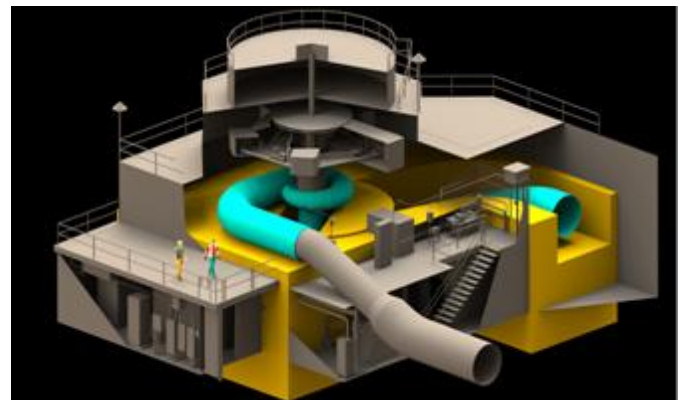


**La Verne Coating Shop
New blast booth**

- Yorba Linda Power Plant Upgrades

This project at the Diemer plant will replace the existing Pelton hydraulic turbine with a Francis turbine capable of operating under post-ORP hydraulic conditions, and will modify the electrical configuration to use the power on-site to meet energy demands of the Diemer plant.

The turbine manufacturer has submitted detailed shop drawings for the turbine and equipment for Metropolitan review. Final design of the installation contract is 60 percent complete.



3-dimensional rendering of the Yorba Linda Power Plant

Regulatory

- **Chemical Unloading Facility Chlorine Containment**
- **Mills Hazardous Waste Staging and Containment**

- Chemical Unloading Facility (CUF) Chlorine Containment

The Chemical Unloading Facility, which was constructed in 1975, is used to transfer liquid chlorine from vendor-supplied rail cars to Metropolitan-owned cargo trailers. The new chlorine containment facilities will include an enclosed building to house chlorine rail cars and cargo trailers, trans-loading equipment, chlorine neutralization system, process monitoring room, and an emergency generator.



Existing Chemical Unloading Facility

Final design is 90 percent complete and is scheduled to be completed by March 2013.

- Mills Hazardous Waste Staging and Containment

This project will construct a new containment structure that meets up-to-date code requirements. The new facility will be used as a staging area for hazardous products such as used chemicals, oils, and paint, until a waste contractor removes the products for proper disposal. Construction is approximately 74 percent complete and is expected to be completed in December 2012.



**Mills Plant
Placement of concrete for the Hazardous Waste Staging
and Containment Facility**

Cost/Efficiency/Productivity

- **CEQA and Entitlement for Solar Power Facilities at Diamond Valley Lake**

- CEQA and Entitlement for Solar Power Facilities at Diamond Valley Lake

In February 2011, the Board authorized initiation of CEQA compliance and entitlement activities related to the proposed Diamond Valley Lake solar power projects. Currently, SunEdison received approval from Southern California Edison (SCE) on the interconnection to SCE’s grid. Additionally, SunEdison is finalizing a Power Purchase Agreement with Riverside Public Utilities (Riverside) to sell the energy generated by the project. The agreement between SunEdison and Riverside is anticipated to be executed in October 2012. This phase of the project is 25 percent complete.



SunEdison Solar Farm in Tucson, AZ

Board Report (Capital Investment Plan (CIP) Quarterly Report for the period ending September 2012)

Capital Program for Projects Costing Less Than \$250,000

The Minor Cap program is authorized each fiscal year to enable staff to expedite small capital projects that invariably arise during the year. Since many of these projects require rapid response to address unanticipated failures, 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 defined criteria during the fiscal year without seeking additional board approval.

Six projects were authorized under the 2012/13 Minor Cap program through the first quarter of fiscal year 2012/13:

- CRA Protective Slab at Station 9704 + 77 – This project will construct a concrete protective slab over a cut-and-cover conduit section of the CRA.
- Oak Street Pressure Control Structure Valve Actuator – This project will replace the damaged actuator on a motor-operated isolation valve.
- Jensen Chlorine Scrubber Platform – This project will construct elevated access platforms around the chlorine scrubber equipment.
- Wadsworth Pumping Plant – 144” Pump House Conduit Coupling Replacement – This project will replace the existing coupling with a welded butt strap.
- Wadsworth Pumping Plant – Forebay Gantry Crane Upgrade – This project will retrofit the existing hydraulically operated forebay gantry crane/trash rake to an electrically operated installation.
- Jensen Administration Building Roof Replacement – This project will replace the leaking roof on the plant’s Administration Building.

Board Report (Capital Investment Plan (CIP) Quarterly Report for the period ending September 2012)

The following table provides the overall status of the 2006/07 through 2012/13 Minor Cap programs.

FY Budget	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Amount Appropriated	\$5.6M	\$5.0M	\$4.825M	\$4.5M	\$3.5M	\$3.0M	\$5.0M
Number of Projects Approved	31	32	22	23	17	17	6
Number of Projects Completed Through September 2012	29	32	21	19	8	6	0
% of Work Complete	98%	100%	97%	93%	74%	60%	10%
Number of Projects Over 3 years	2	0	1	0	0	0	0
Expenditures Through September 2012	\$3.87M	\$4.65M	\$3.74M	\$3.15M	\$1.82M	\$1.63M	\$0.072M

Through September 2012, 115 of the 148 projects have been completed, while three have exceeded three years in duration. The three projects and their variance explanations are as follows:

Fiscal Year 2008/09 Minor Cap – Projects Over Three Years in Duration

- Replace 6 residual solids pumps at the Skinner plant

Fiscal Year 2006/07 Minor Cap – Projects Over Three Years in Duration

- Install an Uninterruptable Power Supply at the Perris Control Facility
- Upgrade Microwave Buildings at 6 locations for code compliance associated with the emergency generators and fuel tanks

These projects have experienced delays due to either non-responsive bids for equipment that required re-advertisement, incorrect equipment delivered by the vendor, delays in permitting with local agencies, or scheduling shifts to accommodate other projects or shutdowns. All three projects are scheduled to be completed by December 2012.