



PROPOSED
CAPITAL INVESTMENT PLAN APPENDIX
FISCAL YEARS 2012/13 AND 2013/14

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INTRODUCTION

The primary focus of the CIP Appendix is to provide information on all capital programs that are scheduled to begin or will be underway during FY 2012/13 and FY 2013/14. Scope, accomplishments, objectives and financial projections are given for each program. The CIP budget for 2012/13 and 2013/14 is estimated to be \$257 million and \$298 million respectively and is funded by a combination of debt and current operating revenues (R&R and General Fund).

Since each project is submitted individually to the Board for authorization and funding during the fiscal year, no action is required on this section.

CAPITAL INVESTMENT PLAN DEVELOPMENT

Background

The projects that comprise the proposed CIP have been identified from many Metropolitan studies of projected water needs that are embodied in board-approved documents such as the IRP, Distribution System Overview Study, and the General Manager's Business Plan. In addition, staff and consultants have studied operational demands on aging facilities as well as new regulations and made recommendations for capital projects that will maintain infrastructure reliability and water quality standards, studied business and operational processes, and made recommendations for programs that will improve efficiency and provide future cost savings.

CIP Development Process

The CIP is structured to reflect Metropolitan's strategic goals of providing a reliable supply of high-quality water at the lowest cost possible. As part of the CIP process, all new and existing projects are evaluated against an objective set of criteria to ensure existing and future capital investments are aligned with Metropolitan's Business Plan Priorities for Water Supply Reliability and Water Quality.

A team comprised of staff from Water System Operations, Water Resource Management, Real Property Development and Management, Engineering Services, Business Technology, and Office of Chief Financial Officer evaluate and rate all projects. Those projects that directly support the priorities of Water Supply Reliability and Water Quality are prioritized for inclusion in Metropolitan's proposed CIP.

This rigorous evaluation process has resulted in a thorough review and assessment of all proposed capital projects by staff and managers prior to submittal to the evaluation team. Staff continues to conduct comprehensive field investigations that identify critical replacement and refurbishment projects and a variety of necessary facility upgrades related to infrastructure reliability as well as regulatory compliance. Project schedules are evaluated regularly in order to plan for steadily increasing capital investments in infrastructure reliability and to accommodate the urgency of each project. Additionally, current demand projections that account for ongoing conservation, planned increased local supply production, and the economy, have been evaluated to ensure that demand and growth-related projects are appropriately scheduled.

An iterative process is employed to first score and rank every new and existing project, and then solicit feedback from project sponsors, customers, and resource providers in order to establish schedules, and cash flow requirements. Those schedules, along with analyses of facility shutdown requirements, environmental permitting timeframes, and contracting process requirements, also enable resource managers to identify staffing needs. The final schedule and implementation plan for FY 2012/13 and 2013/14 are reflected in the budget and objectives for each of the individual programs described later in this document.

**Capital Investment Plan FY 2012/13 and
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Project Evaluation

Before a project is included in the CIP, it is evaluated and rated against an established set of criteria. Staff is required to submit proposals for all projects that include scope, justification, alternatives, impacts of scheduling work for a later time, impact on operations and maintenance costs, and an estimate of total project cost. For existing projects, staff must also provide justification for continuing the project, explain any changes since inception of the project, and describe critical phases for the upcoming years. Guidelines for project proposals start on page 13. The evaluation criteria cover four characteristics or objectives for capital projects: Project Necessity, Directive, Service Disruption, and Cost/Productivity/Sustainability. In addition, a

multiplier is applied to a project rating to factor in a risk assessment. See page 16 for a description of each criterion and multiplier.

New Projects for FY 2012/13

This year, a total of 61 new projects were recommended by the CIP Evaluation Team to either proceed as proposed, or be staged to perform only a portion of the work in FY 2012/13, and have been incorporated into existing programs or included in one of the newly established Capital Programs shown in Table 1. Additionally, several existing projects that have not yet been funded have been moved into appropriate new programs. Therefore, the bottom line total in Table 1 only reflects new projects and not the sum of all the new programs.

Table 1 – New CIP Projects/Programs for FY 2012/13

Program No.	Description	Total Program Estimate
12301	Business Operations Improvement Program	\$9.4 million
12302	Capital Program for Projects Costing Less Than \$250,000 for FY2012/13	\$5.0 million
12303	Conveyance and Distribution System – Rehabilitation FY 2012/13 – FY 2017/18	\$23.9 million
12304	CRA Reliability Program FY 2012/13 – FY 2017/18	\$16.2 million
12312	CRA Main Pump Reliability Program	\$27.7 million
12305	Diemer Water Treatment Plant – Improvements Program FY 2012/13 – 2017/18	\$14.7 million
15473	Headquarters Building Seismic Modifications	\$12.7 million
12306	IT Infrastructure Reliability Program	\$13.6 million
12307	Jensen Water Treatment Plant – Improvements Program FY 2012/13 – FY 2017/18	\$13.0 million
91002	Mills Service Area Supply Pump Station	\$1.0 million
12308	Mills Water Treatment – Improvements Program FY 2012/13 – FY 2017/18	\$0.4 million
12309	Skinner Water Treatment Plant – Improvements Program FY 2012/13 – FY 2017/18	\$42.0 million

**Capital Investment Plan FY 2012/13 and
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12310	Weymouth Water Treatment – Improvements Program FY 2012/13 – FY 2017/18	\$131.3 million
12311	RCMP Rehabilitation and Replacement Program	\$8.8 million
Various	New Projects Incorporated into Existing Programs	\$93.0 million
Various	New Projects Incorporated into New Programs	\$74.6 million
	Total Estimate – New Projects	\$167.6 million

New Projects by Driver

In order to better portray the nature of the estimated capital expenditures, the projects have been categorized under the following drivers Infrastructure Reliability, Water Quality, Cost/Efficiency/Productivity, Regulatory (other than Water Quality), and System Expansions/Supply Reliability.

These categories reflect the types of drivers that justify the need for projects in the CIP. The table below provides a definition of the drivers.

Table 2 – Project Drivers

Driver	Definition
Supply Reliability/System Expansion	Implementing the project will improve the capacity of Metropolitan’s water supply and delivery infrastructure to meet projected demand increases.
Infrastructure Reliability:	
➤ Replacement & Refurbishment	Implementing the project will replace or refurbish existing facilities and components in order to continue to reliably meet current service demands.
➤ Upgrades	Implementing the project will improve or modify Metropolitan’s treatment, conveyance, storage, or distribution facilities to effectively respond to changing operational conditions or requirements, and utilize new processes and/or technologies.

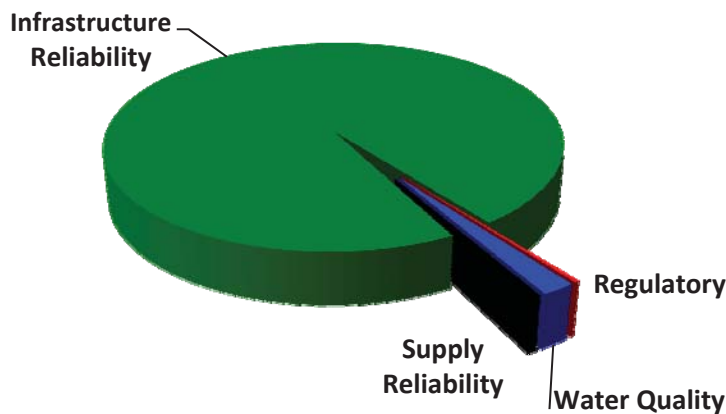
**Capital Investment Plan FY 2012/13 and
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Driver	Definition
➤ Seismic	Implementing the project will improve Metropolitan’s facilities to maintain reliable operation and to meet current seismic design practices and codes requirement.
➤ Energy	Implementing the project will ensure Metropolitan meets applicable goals as outlined in the Board approved Energy Management Plan.
➤ Safety/Security	Implementing the project will improve the protection, safety, and security of Metropolitan’s employees, visitors, and all real and intellectual properties and assets.
Water Quality	Implementing the project will ensure Metropolitan meets all applicable water quality regulations.
Cost/Efficiency/ Productivity	Implementing the project will provide economic savings that outweigh project costs through enhanced business and operating processes.
Regulatory	Implementing the project will help provide for prudent use and management of Metropolitan’s assets in compliance with all applicable regulations and codes.

Figure 1 shows a breakdown of the new projects identified by the driver categories.

The total estimate of expenditures for all new projects is \$167.6 million

Figure 1 – New CIP Projects by Driver Category



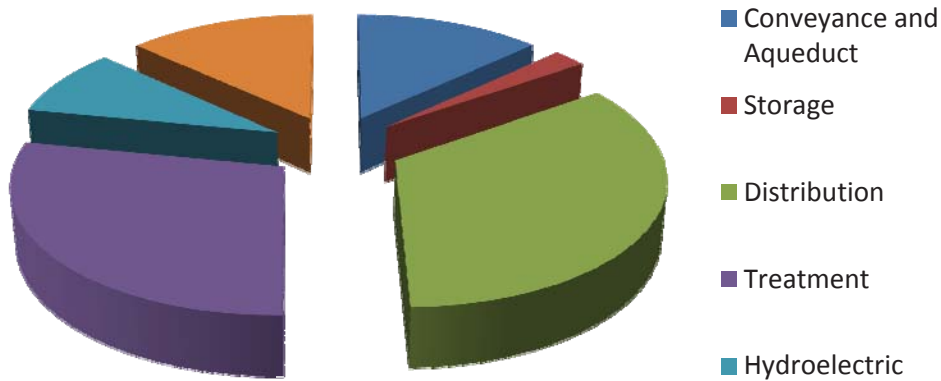
Total New Project Estimates – \$167.6 million

Cost of Service Category

The Cost of Service Categories for each program are: source of supply, conveyance and aqueduct, distribution, storage, treatment, hydroelectric, and administrative and general.

The categories support the development of rates and charges. Table 3 explains the Cost of Service Categories. Figure 2 shows the breakdown of the biennium CIP by Cost of Service category.

Figure 2 – FY 2012/13 – 2013/14 Biennium CIP by Cost of Service Category



New Project Biennium Estimates – \$41.6 million

Table 3 – Cost of Service Categories

Category	Description
Source of Supply	This category includes capital costs for water supplies. Included in those costs are supply-related programs such as Colorado River conjunctive use programs, in-basin conjunctive use programs, and other capital projects that develop additional reliable supplies.
Conveyance and Aqueduct	This category includes the capital costs for CRA facilities that convey water to Southern California and into Metropolitan’s distribution system. The Inland Feeder is a Conveyance and Aqueduct facility. Conveyance and Aqueduct facilities can be distinguished from Metropolitan’s other facilities primarily by the fact that they do not typically include direct connections to the member agencies.

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Category	Description
Transmission/ Distribution	This category includes capital costs for facilities and programs, for “in-basin” feeders, canals, pipelines, laterals and other appurtenant works. The “in-basin” facilities are distinguished from Conveyance and Aqueduct facilities at the point of connection to the SWP (with the exception of the Inland Feeder), the terminal reservoirs of the CRA, Lake Mathews, and other major turnouts along the CRA facilities.
Storage	This category includes the capital costs for Metropolitan’s reservoirs.
Treatment	This category includes the capital costs for Metropolitan’s five treatment plants.
Hydroelectric	Hydroelectric costs include the capital costs incurred for the 16 small hydroelectric plants located throughout the distribution system.
Administrative and General	This category includes capital costs for other projects such as information technology system upgrades that benefit all of the service function categories listed above.

MAJOR OBJECTIVES FOR FISCAL YEAR 2012/13 and 2013/14

There are 350 projects included in the 2012/13 and 2013/14 CIP. Major expenditures on CIP projects that will be in design and/or construction during the next biennium include \$145 million for Oxidation Retrofit Program (ORP) projects at the Weymouth and Diemer treatment plants; \$161 million for Infrastructure Reliability projects at Metropolitan’s five treatment plants, not including

the ORP; and \$170 million for Infrastructure Reliability projects throughout Metropolitan’s Colorado River Aqueduct, conveyance, and distribution systems.

The projects described above account for 86 percent of the total CIP expenditures for the biennium.

Table 4 – Major Programs Underway in FY 2012/13 and 2013/14

Program Description	FY 2012/13 Estimate	FY 2013/14 Estimate
Weymouth Water Treatment Plant – Oxidation Retrofit Program	\$54.9M	\$71.6M
Conveyance and Distribution System – Rehabilitation Program FY 2006/07 through FY 2011/12	\$14.6M	\$17.9M
CRA – Conveyance Reliability Program	\$8.6M	\$20.1M
CRA – Reliability Program FY 2006/07 through FY 2011/12	\$20.5M	\$9.3M
Jensen Water Treatment Plant – Improvements Program	\$7.2M	\$12.3M
Jensen Water Treatment Plant – Improvements Program FY 2006/07 through FY 2011/12	\$8.8M	\$12.8M
PCCP Rehabilitation and Replacement Program	\$8.9M	\$7.5M

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Diemer Water Treatment Plant – Improvements Program	\$6.0M	\$8.7M
Weymouth Water Treatment Plant – Improvements Program	\$6.7M	\$7.5M
LaVerne Shop Facilities Upgrade	\$13.0M	\$8.7M

Below, grouped by driver category, are descriptions of capital project major activities anticipated to be underway or completed during over the next two fiscal years.

Water Quality

Weymouth Water Treatment Plant – Oxidation Retrofit Program

Award a construction contract and commence construction of the new oxidation facilities.

Diemer Water Treatment Plant – Oxidation Retrofit Program

Complete construction and installation of the oxidation facilities and equipment. Complete testing and start-up, and begin as-built drawings.

Infrastructure Reliability

Weymouth Water Treatment Plant

Complete preliminary design and begin final design of the Filter Building Seismic Upgrades and Filter Rehabilitation.

Complete final design and begin construction of the Basins 5 -8 Rehabilitation and Filter Valve Replacements.

Complete construction of the Power System Upgrades.

Conveyance and Distribution System

Complete design and construction of the Rialto Pipeline, Foothill Feeder, and Sepulveda Feeder Prestressed Concrete Cylinder Pipeline replacements/joint rehabilitation at multiple locations, control gates refurbishment/replacement at the Eagle Rock Tower and Puddingstone Spillway, relocation of a 1,100-foot section of the Orange County Feeder in the City of Fullerton, rehabilitation of mechanical and electrical systems at the Foothill and San Dimas Hydroelectric

Power Plants, and cathodic protection system installations at multiple locations on the Sepulveda Feeder and Second Lower Feeder.

Complete design and begin construction of refurbishment of the Etiwanda Pipeline Liner and the Palos Verdes Reservoir Floating Cover and Liner Replacement. Complete design of the relining of a 9-mile segment of the Orange County Feeder.

Jensen Water Treatment Plant

Complete design and begin construction of the new Solids Dewatering Facility and Lagoons, and the Module 1 Filter Valve Replacement.

Complete design and construction of the Filters 1-20 Surface Wash and Service Pumps Improvements, and Modules 1 and 2 Flocculator Refurbishment.

LaVerne Shop Facilities

Complete all design and the majority of construction of upgrades to the machine, fabrication, and coating shops and equipment procurements/installation.

Diemer Water Treatment Plant

Complete design and begin construction of the Treatment Basin Rehabilitation, Filter Valve Replacements, Stage 2 of the Electrical Improvements, and Administration Building Seismic Upgrades.

Complete construction of the Chemical Feed System Upgrades and Seismic Upgrades to the slopes below the East Washwater Tank and Finished Water Reservoir.

Complete procurement and begin construction of the Yorba Linda Hydroelectric Power Plant turbine replacement and appurtenant systems.

Colorado River Aqueduct

Complete construction of the Pumping Plant Discharge Line Isolation Gates, Copper Basin Outlet Refurbishment, High Voltage Disconnect Switch Replacement, Access and Transition Cover Replacements, Sand Trap Equipment Upgrades, Siphon Repairs, Panel Replacements and Curbing Extensions, and the Pumping Plant Sump System Rehabilitation.

Continue the staged construction of Emergency Generators and Expansion Joint repairs at all five pumping plants.

Complete design and begin construction of the Iron Mountain Tunnel Rehabilitation and Main Pump Discharge Valve Refurbishment.

Information Technology Infrastructure

Begin procurement and installation of Communication Infrastructure and Equipment to replace outdated PBX-based equipment with unified Internet Protocol based technology.

Complete upgrades to the Wide Area Communication Network Capacity, SCADA Cyber Security, and Union Station Data Center UPS.

Complete design and begin deployment of the final phase of the Two-Way Radio System Upgrade.

Complete preliminary design of the replacement of the Controls and Electrical System Protection facilities at the Diamond Valley Lake Wadsworth Pumping Plant.

Complete design and begin replacement of the approximately 300 Remote Terminal Units Input/Output components and operating systems utilized for monitoring and control of Metropolitan's treatment, conveyance, and distribution systems with new hardware and software.

Regulatory

Chlorine Containment

Complete design and begin construction of chlorine containment facilities at the Chemical Unloading Facility.

Capital Investment Plan FY 2012/13 and 2013/14

Financial Projections

The CIP budget for 2012/13 and 2013/14 is estimated to be \$257 million and \$298 million respectively and is funded by a combination of debt and current operating revenues (R&R and General Fund). All of the projects in the CIP are reviewed each year as part of the budgeting process. Considerations for timing and urgency, aging infrastructure, updated service demand projections, and regulatory requirements are all taken into account. Estimated capital expenditures are updated on a regular basis as new projects are added, other projects are completed, construction cost estimates are refined or contracts awarded. Overall, the combined capital expenditure estimates for 2012/13 and 2013/14 have been reduced by approximately \$162 million from last year's estimates. Over the five-year period from fiscal year 2011/12 through 2015/16, capital expenditure projections have been reduced by \$165 million. Table 5 is a comparison of last year's annual cash flow estimates over the 5-year period to the new estimated capital expenditures.

The primary factors driving the projected decrease in capital expenditures over the 5-year period are 1) further deferral of solar power projects that are not required for reliability and do not have an adequate return on investment, 2) rescheduling

several rehabilitation/retrofit projects that are still being studied, 3) rescheduling of other rehabilitation projects to optimize contract work in coordination with day-to-day treatment plant operations, and 4) redesign of the Weymouth ORP to stage the constructed capacity of the new facilities.

Facility expansions and other growth related projects continue to be scrutinized to ensure appropriate timing in consideration of projected service demands. While these adjustments have contributed to an overall reduction in capital expenditure estimates, several infrastructure reliability projects whose updated construction estimates reflect completion of preliminary work have partially offset the reductions.

The two largest areas of capital expenditures in FY 2012/13 and 2013/14 are Infrastructure Reliability and Water Quality. It is currently anticipated that infrastructure expenditures will continue to grow as more facilities reach the end of their service life.

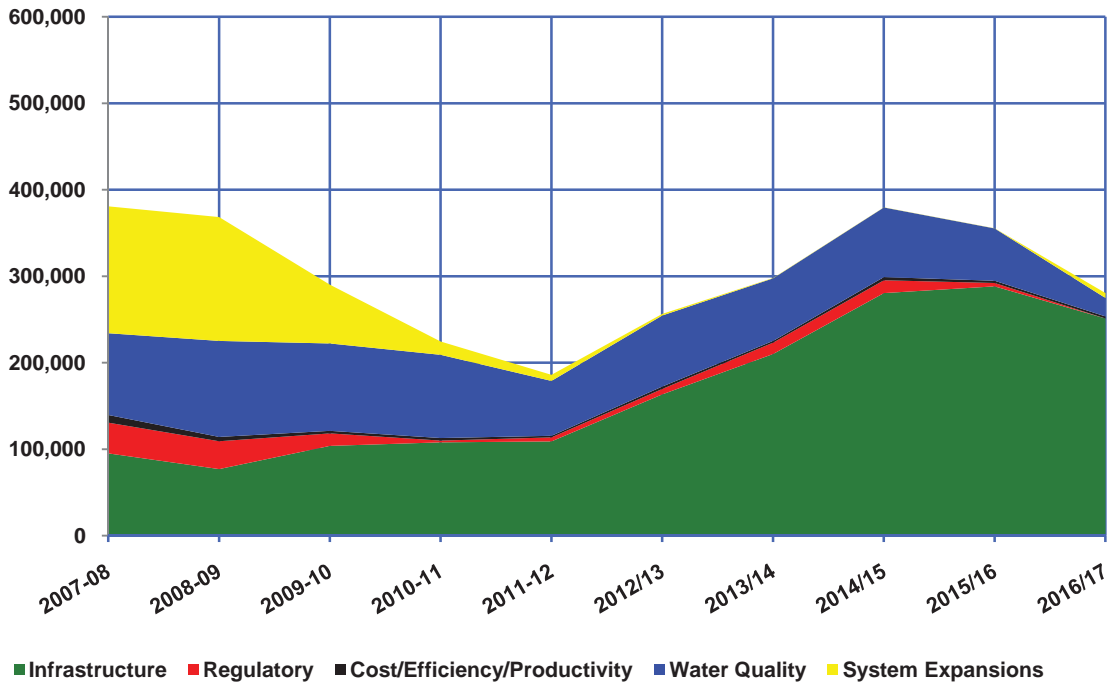
Figure 3 depicts the capital expenditure profile, including actual and projected cash flow, for the 10-year period from fiscal year 2007/08 through fiscal year 2016/17.

Table 5 – 5-year CIP Comparison

FY Budget	2011/12	2012/13	2013/14	2014/15	2015/16	TOTAL
FY 11/12 Baseline	\$282 M	\$347 M	\$370 M	\$352 M	\$290 M	\$1.641 B
FY 12/13-13/14	\$186 M	\$257 M	\$298 M	\$380 M	\$355 M	\$1.476 B
Difference	(\$96 M)	(\$90 M)	(\$72 M)	\$28 M	\$65 M	(\$165 M)

Capital Investment Plan FY 2012/13 and 2013/14

**Figure 3 – FY 2012/13 – 2013/14 Biennium CIP by Project Driver
10-year Window 2007/08 through 2016/17**



HOW TO USE THIS DOCUMENT

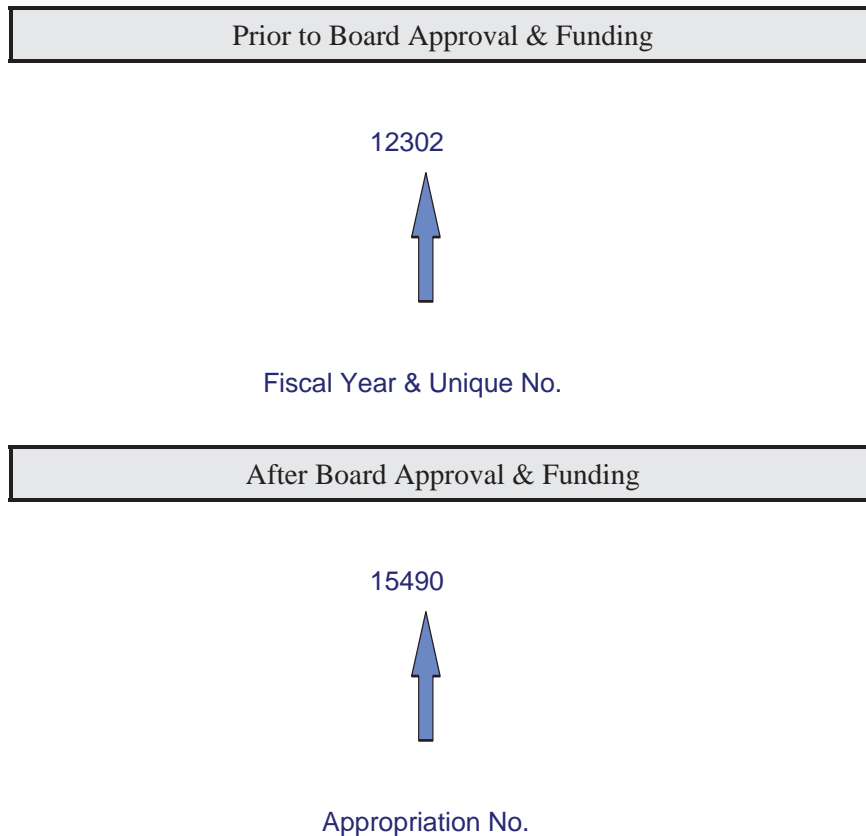
The core of this section is the Individual Program Summary, which provides information for each capital program that is scheduled to begin or will be underway during FY 2012/13. The Individual Program Summary is ordered by program title, starting on page 24. For assistance in locating a specific program, refer to page 21.

Explanation of Capital Program Numbers

Program numbers are comprised of a five-digit number. The five-digit number uniquely identifies a program.

If a program has not yet received board approval, the first three numeric digits represent the fiscal year the program was identified (e.g. “123” is FY 2012/13), the last two numeric digits uniquely identify the new program. If by board action, the authority to perform work and appropriation funding has been established, the five-digit numbers in the program number change to the appropriation number. Figure 4 shows examples of both types of program numbers.

Figure 4 – Program Number Naming Convention



**Capital Investment Plan FY 2012/13 and
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Explanation of Individual Program Summary

Each program planned to be underway during FY 2012/13 is included in the Individual Program Summary. For each program, key financial and schedule information is highlighted, and narratives are provided.

Key Information

For each program, key information is highlighted at the top of the Individual Program Summary page and includes total program estimate, appropriated amount, FY 2012/13 and 2013/14 biennial estimate, total projected cost through June 30, 2012, estimated percent complete and estimated completion date. Table 6 provides an explanation of each item.

Table 6 – Key Program Information

Item	Description
Total Program Estimate	The total estimate of cost from inception to completion of a program. It includes escalation and contingency, and may include actual expenditures if the program is underway. The total program estimate may have: (a) no funding authorization from the Board; (b) partial funding from the Board; or (c) complete funding from the Board.
Appropriated Amount	Amount of expenditures the General Manager is authorized to spend on a program.
Biennial Estimate	Estimate of expenditures from July 2012 through June 2014.
Total Projected through June 30, 2012	Actual expenditures to date and estimate of expenditures through June 2012.
Estimated Percent Complete	Estimated percent of work to be completed through June 2012.
Estimated Completion Date	Fiscal year in which the program will be completed according to the current schedule.

GUIDELINES FOR PROJECT PROPOSALS

Project Proposal

Sponsors are required to submit proposals for all projects to be considered for inclusion into the CIP

for FY 2012/13 and 2013/14. The projects are evaluated, rated and prioritized based on the contents of the proposals. The following guidelines are provided to the sponsors.

Table 7 – New Project Proposal Guidelines

Section	Guideline												
Program Title	If applicable, indicate the program to which the project belongs. For instance, the Weymouth Chlorine Containment and Handling Facilities is part of the Chlorine Containment and Handling Facilities Program.												
Project Title	Provide a title for the project being proposed.												
Sponsoring Group	Indicate the project sponsor from the following list of organizations: <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">1) Office of General Manager</td> <td style="width: 50%;">7) Office of Chief Financial Officer</td> </tr> <tr> <td>2) Water System Operations</td> <td>8) External Affairs</td> </tr> <tr> <td>3) Water Resources Management</td> <td>9) General Counsel Department</td> </tr> <tr> <td>4) Corporate Resources</td> <td>10) General Auditor Department</td> </tr> <tr> <td>5) Human Resources</td> <td>11) Ethics Office</td> </tr> <tr> <td>6) Real Property Development and Management</td> <td></td> </tr> </table>	1) Office of General Manager	7) Office of Chief Financial Officer	2) Water System Operations	8) External Affairs	3) Water Resources Management	9) General Counsel Department	4) Corporate Resources	10) General Auditor Department	5) Human Resources	11) Ethics Office	6) Real Property Development and Management	
1) Office of General Manager	7) Office of Chief Financial Officer												
2) Water System Operations	8) External Affairs												
3) Water Resources Management	9) General Counsel Department												
4) Corporate Resources	10) General Auditor Department												
5) Human Resources	11) Ethics Office												
6) Real Property Development and Management													
Total Project Estimate	Show the total estimate of cost from inception to completion of a project, including administrative overhead and contingency.												
GM Business Plan	Indicate which GM Business Plan Strategy/Initiative the proposed project best fits.												
Project Goal	Indicate which of the CIP goals below this project supports: <ol style="list-style-type: none"> 1) Reliability 2) Water Quality 3) Other Board Directive 4) Both Reliability and Water Quality 												
Project Drivers	Indicate which of the following is driving the need for the project: (see Table 2 for description of Drivers) <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">1) System Expansions/Supply Reliability</td> <td style="width: 50%;">4) Cost Efficiency/Productivity</td> </tr> <tr> <td>2) Infrastructure Reliability</td> <td>5) Regulatory</td> </tr> <tr> <td>3) Water Quality</td> <td></td> </tr> </table>	1) System Expansions/Supply Reliability	4) Cost Efficiency/Productivity	2) Infrastructure Reliability	5) Regulatory	3) Water Quality							
1) System Expansions/Supply Reliability	4) Cost Efficiency/Productivity												
2) Infrastructure Reliability	5) Regulatory												
3) Water Quality													

**Capital Investment Plan FY 2012/13 and
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Section	Guideline
Project Status:	
% Complete Now	Percent complete as of the date proposal submitted
% Estimated Complete on 6/30/12	Estimated percent complete as of June 30, 2012.
No. of Repair Calls and/or Cost of Maintenance	Rehabilitation projects should include the number of component maintenance repairs to substantiate the need to do the project.
Project Description	In describing the project, include any opportunities to “stage” the work. Include if it makes sense economically to only perform a portion of a project to meet foreseeable customer needs. Consider the possibility of new technology, changing demands, as well as environmental impacts and economies of scale
Changes to Existing Project	Explain any changes that have occurred on the project since its last evaluation.
Justification	Explain why the proposed project should be done (i.e., answer the question “why do we need to do the project?”). Describe how the project is essential for meeting the GM’s goals of Reliability and Water Quality and how it fits into the Business Plan. Include an explanation of the project driver(s) and Maximo documentation when available to substantiate the need for the project.
Impact of Deferral	Assess any risk and discuss the impacts of not implementing the project in the next fiscal year. Include risks of not meeting service demands, violating regulatory requirements, increasing future costs, etc.
Project Dependency	Identify any projects that are dependent upon or linked to this project.
Alternatives	Describe any alternatives to the project. Discuss both positive and negative aspects of each alternative. Include an alternative where the project would not be done at all. For IT projects, explain what other similar companies are doing about this issue.
Background Information	Provide any supplemental information (e.g., detailed history of a problem, supporting technical information) that will help in evaluating the project. This can also be attached to the proposal.
Schedule	Provide an overall schedule for the project. Indicate if there are any time sensitivity issues (e.g., shutdown windows) and if the work can be staged. If work can be staged, indicate when subsequent stages can be implemented. A standard phasing plan is provided in the template. Indicate the proposed beginning and end dates for all appropriate phases, and when initial authorization will need to be requested from the Board.
Detailed Project Estimate	Itemized list of all costs for the project include: <ol style="list-style-type: none"> 1) Direct Labor with additives 2) Materials and Supplies 3) Incidental Expenses 4) Professional/Technical Services (e.g., consultants)

**Capital Investment Plan FY 2012/13 and
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Section	Guideline
	5) Right-of-Way and Land Purchases (e.g., easements, fee title, escrow fees) 6) Operating Equipment Use and Rental 7) Contract Payments (e.g., construction contracts) 8) Administrative Overhead 9) Credits and Contingency A phase-based estimating form is linked through the template. All new project proposals and existing projects that have not yet been board authorized must include this estimating form.
Benefit/Cost Analysis and Pay-Back Period	Perform a simple economic analysis that quantifies the cost to do the project, O&M savings and/or avoided costs. Discuss intangible benefits and costs. State assumptions. For IT projects, include Return on Investment analysis, if available.
O&M Impacts, Costs, and Benefits	To the extent available/known, provide a description of the impacts, costs, and/or benefits this capital project is anticipated to have on Metropolitan’s current and future O&M expenses and services upon completion (e.g., labor, maintenance, and equipment costs; enhanced reliability; improved water quality, etc. For example, “Ozone generators will substantially increase electrical consumption by approximately \$1 million annually and the number of new pieces of equipment will require periodic maintenance per the manufacturer’s recommendations beginning in FY 2013/14. PDR and future studies will provide additional detail on the overall lifecycle costs”). This is required for projects greater than \$2 million and whose planned implementation date is within the next five fiscal years.
Approvals	1) Person submitting and/or sponsoring the proposed project 2) Team manager of the person submitting and/or sponsoring the project 3) Unit manager of the person submitting and/or sponsoring the project 4) Section manager of the person sponsoring the project (e.g. all new and existing WSO-sponsored projects) 5) Group manager sponsoring the project (e.g., all new WSO-sponsored projects) 6) Project manager signs in concurrence. (e.g., Engineering and IT organizations)

Evaluation Criteria

The evaluation criteria cover four characteristics or objectives for capital projects: Project Necessity, Directive, Service Disruption, and Cost/Productivity/Sustainability. In addition a

multiplier is applied to a project rating to factor in a risk assessment. Table 8 provides a description of the criteria and multiplier.

Table 8 – Evaluation Criteria and Multiplier

Criteria	Description
Necessity	Assessment of the overall importance of a project. Criterion looks at whether or not a project does the following: <ul style="list-style-type: none"> <input type="checkbox"/> Infrastructure Reliability/Integrity/Business Systems Reliability <input type="checkbox"/> Stewardship <input type="checkbox"/> Water Supply
Directive	Assessment of whether or not a project is specifically identified in one of the core or strategic initiatives: <ul style="list-style-type: none"> <input type="checkbox"/> Regulatory/Legal Settlement <input type="checkbox"/> Special Initiative/Directive
Service Disruption	Assessment of not doing a project. Criterion evaluates the following: <ul style="list-style-type: none"> <input type="checkbox"/> Impact to Metropolitan’s business operations <input type="checkbox"/> Impact to system delivery and/or reliability <input type="checkbox"/> Cascading impact on system due to failure <input type="checkbox"/> Impact to operations
Cost/Productivity/Sustainability	Assessment of whether or not a project improves cost efficiency/productivity, specifically: <ul style="list-style-type: none"> <input type="checkbox"/> Cost/benefit analysis <input type="checkbox"/> Increased productivity <input type="checkbox"/> Sustainability <input type="checkbox"/> Customer service
Multiplier	Description
Risk Assessment	Assessment of the probability of: <ul style="list-style-type: none"> <input type="checkbox"/> Increased future costs <input type="checkbox"/> Dependent projects <input type="checkbox"/> Facility/component/process failure <input type="checkbox"/> Workplace health and safety <input type="checkbox"/> Loss of outside funding <input type="checkbox"/> Lost opportunity <input type="checkbox"/> Not meeting service demands

Narratives

For each program, narratives include the scope and purpose of the program, accomplishments through FY 2011/12, and objectives for

FY 2012/13 and FY 2013/14. In these narratives, major activities, milestones and actions presented to the Board are highlighted.

**Capital Investment Plan FY 2012/13 and
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Capital Investment Plan Summary – Three-Year Outlook

Program		Estimates		
		FY 2012/13	FY 2013/14	FY 2014/15
New Programs				
12301	Business Operations Improvement Program	639,800	1,422,200	3,307,500
12302	Capital Program for Projects Costing Less Than \$250,000 for FY2012/13	797,300	1,230,400	816,400
12303	Conveyance and Distribution System – Rehabilitation FY2012/13 through FY2017/18	6,958,600	6,559,600	2,244,200
12304	CRA – Reliability Program FY2012/13 through FY2017/18	1,077,200	1,502,600	3,452,200
12312	CRA Main Pump Reliability Program	1,849,900	3,015,100	11,050,600
12305	Diemer Water Treatment Plant – Improvements Program FY2012/13 through FY2017/18	877,300	2,914,500	2,104,500
12306	IT Infrastructure Reliability Program	1,038,100	2,965,400	5,113,700
12307	Jensen Water Treatment Plant – Improvements Program FY2012/13 through FY2017/18	446,500	1,559,300	2,312,700
12308	Mills Water Treatment Plant – Improvements Program FY2012/13 through FY2017/18	1,952,100	2,639,700	13,984,900
12311	RCMP Rehabilitation and Replacement Program	406,700	434,100	446,100
12309	Skinner Water Treatment Plant – Improvements Program FY2012/13 through FY2017/18	435,200	1,307,700	2,717,100
12310	Weymouth Water Treatment Plant – Improvements Program FY2012/13 through FY2017/18	3,606,700	11,297,400	16,444,200
Programs in Progress				
15292	All Facilities – Inspection and Replacement of Critical Vacuum Valves	143,900	137,900	137,900
15295	All Facilities – Security Systems Improvement	651,800	376,600	257,700
15320	Cabazon Radial Gate Facility Improvement	232,100	71,600	2,373,700
15430	Capital Program for Program costing less than \$250,000 for FY2005/06	33,800	23,400	0
15433	Capital Program for Program costing less than \$250,000 for FY2006/07	72,300	0	0
15448	Capital Program for Program costing less than \$250,000 for FY2007/08	107,300	0	0

**Capital Investment Plan FY 2012/13 and
2013/14**

Program	Estimates			
	FY 2012/13	FY 2013/14	FY 2014/15	
15454	Capital Program for Projects Costing Less than \$250,000 for FY2008/09	378,400	0	0
15460	Capital Program for Projects Costing Less than \$250,000 for FY2009/10	158,700	0	0
15468	Capital Program for Projects Costing Less than \$250,000 for FY2010/11	1,087,100	371,100	0
15470	Capital Program for Projects Costing Less than \$250,000 for FY2011/12	1,347,600	592,800	2,000
15346	Chlorine Containment and Handling Facilities	5,299,000	11,382,700	16,147,300
15377	Conveyance and Distribution System – Rehabilitation Program	2,792,000	5,006,500	14,342,300
15441	Conveyance and Distribution System – Rehabilitation Program Phase II	14,570,000	17,947,900	16,783,200
15373	CRA – Conveyance Reliability Program	8,596,700	20,103,100	4,425,200
15385	CRA – Discharge Containment Program	4,178,300	475,300	0
15384	CRA – Electrical/Power Systems Reliability Program	1,742,300	288,000	269,100
15374	CRA – Pumping Plant Reliability Program	3,405,800	576,600	58,700
15413	CRA – Real Property Recordation Program	452,200	0	0
15438	CRA – Reliability Program FY2006/07 through FY2011/12	20,518,400	9,272,100	8,065,200
15419	Dam Rehabilitation & Safety Improvements	1,028,200	730,500	0
15331	Diemer Water Treatment Plant – Construct Sedimentation Basin Spillways	11,400	14,600	21,900
15380	Diemer Water Treatment Plant – Improvements Program	5,989,300	8,708,600	28,118,100
15436	Diemer Water Treatment Plant – Improvements FY2006/07 through FY2011/12	6,570,000	9,331,700	20,442,800
15389	Diemer Water Treatment Plant – Oxidation Retrofit Program	17,479,100	964,300	0
15398	Distribution System – Control and Equipment Upgrade Program	22,400	0	0
15171	Distribution System – Treated Water Cross Connection Prevention Program	245,900	0	0
15334	DVL Transformation	836,600	300,000	0
15472	Enhanced Bromate Control Program	1,335,500	1,045,600	9,002,800

**Capital Investment Plan FY 2012/13 and
2013/14**

Program	Estimates			
	FY 2012/13	FY 2013/14	FY 2014/15	
15473	Headquarters Building Seismic Modification	1,148,800	4,315,300	4,507,600
15458	Hydroelectric Power Plant Improvements Program	2,438,500	6,916,700	2,513,300
15411	Information Technology System – Business, Finance & HR	887,200	0	0
15376	Information Technology System – Infrastructure	3,844,400	4,525,500	5,993,200
15378	Information Technology System – Security Program	563,200	592,100	
15122	Inland Feeder	944,100	0	0
15371	Jensen Water Treatment Plant – Improvements Program	7,236,900	12,301,000	30,140,900
15442	Jensen Water Treatment Plant – Improvements Program FY2006/07 through FY2011/12	8,815,300	12,829,200	1,856,100
15253	Lake Mathews Watershed – Drainage Water Quality Management Plan	114,700	0	0
15395	La Verne Shop Facilities Upgrades	13,028,800	8,673,100	1,722,600
91002	Mills Service Area Supply Pump Station	310,200	319,600	317,600
15381	Mills Water Treatment Plant – Improvements Program	1,401,500	1,313,100	250,700
15452	Mills Water Treatment Plant – Improvements Program FY2006/07 through FY2011/12	1,353,100	1,518,500	5,440,400
15434	Mills Water Treatment Plant – Ozone System Reliability Program	2,503,900	421,600	0
05065	Operations Support Facilities Improvement Program	256,900	528,000	1,085,400
15471	PCCP Rehabilitation and Replacement Program	8,927,300	7,527,800	9,766,800
15425	Perris Valley Pipeline	200,000	0	0
15391	Power Reliability and Energy Conservation Program	1,546,600	0	0
03407	Project Controls and Reporting System	1,066,900	1,500,500	119,100
15447	Quagga Mussel Control Program	966,500	0	1,073,700
15462	Regional Water Purification Program	347,000	0	0
15417	Reservoir Cover Replacement Program	1,274,000	4,834,400	5,103,500
10103	Right of Way Protection and Rehabilitation Program	250,100	500,000	0
15121	San Diego Pipeline No. 6	37,500	31,700	0

**Capital Investment Plan FY 2012/13 and
2013/14**

Program		Estimates		
		FY 2012/13	FY 2013/14	FY 2014/15
15365	Skinner Water Treatment Plant – Improvements Program	2,834,400	2,157,700	0
15435	Skinner Water Treatment Plant – Improvements Program FY2006/07 through FY2011/12	940,200	41,000	41,000
15388	Skinner Water Treatment Plant – Oxidation Retrofit Program	1,879,800	0	0
15467	Water Operations Control Program	1,494,900	2,557,000	11,731,300
15369	Weymouth Water Treatment Plant – Improvements Program	6,654,700	7,534,700	21,172,800
15440	Weymouth Water Treatment Plant – Improvements Program FY2006/07 through FY2011/12	4,379,300	6,213,200	6,804,700
15392	Weymouth Water Treatment Plant – Oxidation Retrofit Program	54,923,300	71,589,500	69,204,900
15341	White Water Siphon Protection	576,300	2,033,000	3,512,100
15446	Yorba Linda Power Plant Modification	4,000,000	12,435,200	1,195,500

Program		Estimates		
		FY 2012/13	FY 2012/13	FY 2013/14
Future Programs				
14501	Future System Reliability Projects FY 2014/15			11,722,300
	Report Totals	185,188,000	256,663,800	297,053,100

**Capital Investment Plan FY 2012/13 and
2013/14**

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All Facilities - Inspection and Replacement of Critical Vacuum Valves 15292

Total Program Estimate:	\$4,600,000	Total Projected Through June 30, 2012:	\$1,409,600
Appropriated Amount:	\$4,600,000	Estimated Percent Complete:	87%
Biennial Estimate:	\$281,800	Estimated Completion Date:	2015-2016

Scope

This program was established to replace aging and damaged vacuum and air release valves throughout the distribution system. The driver for this program is infrastructure reliability.

Purpose

To prevent any unplanned interruption in water delivery throughout the distribution system.

Accomplishments Through FY 2011/12

Through FY 2011/12, one hundred forty-four critical vacuum and air release valves throughout the distribution system have been replaced. One hundred four of the new valves have been identified as defective. Eighty four of the defective valves have been repaired by the manufacturer for replacement by District forces.

Major project milestones in FY 2011/12

Replace twenty-one defective valves – Continue construction.

Objectives for 2012/13 – 2013/14

All Facilities, Inspection and Replacement of Critical Vacuum Valves – Complete construction.

All Facilities - Security Systems Improvement 15295

Total Program Estimate:	\$19,600,000	Total Projected Through June 30, 2012:	\$17,210,100
Appropriated Amount:	\$19,600,000	Estimated Percent Complete:	88%
Biennial Estimate:	\$1,028,400	Estimated Completion Date:	2015-2016

Scope

This program was established to mitigate security threats district-wide and provide security improvements based upon a comprehensive threat assessment matrix developed by staff that identifies potential risks of physical, chemical and biological threats, as well as necessary modifications and improvements at all facilities. Major components of this program consist of physical security improvements, facility screening, and water quality monitoring enhancements.

Purpose

To mitigate security threats district-wide and improve the security of Metropolitan personnel and property.

Accomplishments Through FY 2011/12

Through FY 2011/12, twelve projects have been completed.

Major project milestones in FY 2011/12:

DVL Security Enhancement – Completed installation

Intake Pumping Plant Security Landscape Screening – Completed installation

Entry Point Control Standardization and Perimeter upgrade – Completed installation

Critical Lock Identification and change out – Completed installation

Objectives for 2012/13 – 2013/14

Physical Security Improvements At All Facilities – Continue construction

Business Operations Improvement Program

12301

Total Program Estimate:	\$9,388,000	Total Projected Through June 30, 2012:	\$ 0
Appropriated Amount:	\$ 0	Estimated Percent Complete:	0%
Biennial Estimate:	\$2,062,000	Estimated Completion Date:	2016-2017

Scope

This program was established to assess and implement projects ensuring customer service, efficiency/productivity, risk management and reliability of Metropolitan's Business applications.

Purpose

To ensure reliability, efficiency and effectiveness of Metropolitan's business applications

Accomplishments Through FY 2011/12

This is a new program; no projects have been completed.

Objectives for 2012/13 – 2013/14

Accounts Payable Process Improvements – Begin deployment

Oracle 12 Upgrade – Begin development

Peoplesoft Upgrade – Begin deployment

Cabazon Radial Gate Facility Improvements 15320

Total Program Estimate:	\$3,697,000	Total Projected Through June 30, 2012:	\$586,800
Appropriated Amount:	\$456,000	Estimated Percent Complete:	16%
Biennial Estimate:	\$303,700	Estimated Completion Date:	2014-2015

Scope

This program was established to convert the Cabazon Radial Gates Facility from an "active" spillway, which requires an operator to activate the gates, to a "passive" spillway which does not require an operator, by replacing both radial gates with a weir structure. Work includes: design, environmental documentation, purchase of materials and construction by contract.

Purpose

To divert flow in the event of an emergency shutdown of the Colorado River Aqueduct into the San Gorgonio Wash, and ultimately into the Whitewater River.

Accomplishments Through FY 2011/12

Through FY 2011/12 all environmental assessments have been completed and the draft E.I.R. completed

Major project milestones in FY 2011/12:

Cabazon Radial Gate Facility Improvement – Completed preliminary design

Objectives for 2012/13 – 2013/14

Cabazon Radial Gate Facility – Complete final design

Capital Program for Projects Costing Less Than \$250,000 for FY2005/06 15430

Total Program Estimate:	\$3,240,000	Total Projected Through June 30, 2012:	\$2,531,700
Appropriated Amount:	\$3,240,000	Estimated Percent Complete:	92%
Biennial Estimate:	\$57,200	Estimated Completion Date:	2013-2014

Scope

This program was established to implement capital projects costing less than \$250,000 on the distribution systems, conveyance systems, and treatment plants during FY 2005/06. In addition to the scheduled capital projects, the need invariably arises for additional unscheduled capital projects where there is no viable alternative but to perform the work. The common driver for most of the projects in this program is infrastructure reliability.

Purpose

To increase operational reliability and efficiency, and decrease maintenance costs.

Accomplishments Through FY 2011/12

Through FY 2011/12, seventeen projects have been completed.

Major project milestones in FY 2011/12:

Battery Monitoring System for Automatic Meter Reading System – Continued design

Mills Reservoir Cover Rainwater Removal System – Completed construction

Objectives for 2012/13 – 2013/14

Battery Monitoring System for Automatic Meter Reading System – Complete construction

Capital Program for Projects Costing Less Than \$250,000 for FY2006/07 15433

Total Program Estimate:	\$5,600,000	Total Projected Through June 30, 2012:	\$3,645,800
Appropriated Amount:	\$5,600,000	Estimated Percent Complete:	73%
Biennial Estimate:	\$72,200	Estimated Completion Date:	2012-2013

Scope

This program was established to implement capital projects costing less than \$250,000 on the distribution systems, conveyance systems, and treatment plants during FY 2006/07. In addition to the scheduled capital projects, the need invariably arises for additional unscheduled capital projects where there is no viable alternative but to perform the work. The common driver for most of the projects in this program is infrastructure reliability.

Purpose

To increase operational reliability and efficiency, and decrease maintenance costs.

Accomplishments Through FY 2011/12

Through FY 2011/12, twenty three projects have been completed.

Major project milestones in FY 2011/12:

San Dimas HEP Battery Bank and Generator Breaker – Completed construction

Mills WTP Influent Control Structure Ladder – Completed construction

Objectives for 2012/13 – 2013/14

Mills Maintenance Center Backup Generator Relocation – Complete construction

Capital Program for Projects Costing Less Than \$250,000 for FY2007/08 15448

Total Program Estimate:	\$5,000,000	Total Projected Through June 30, 2012:	\$4,004,300
Appropriated Amount:	\$5,000,000	Estimated Percent Complete:	97%
Biennial Estimate:	\$107,000	Estimated Completion Date:	2012-2013

Scope

This program was established to implement capital projects costing less than \$250,000 on the distribution systems, conveyance systems, and treatment plants during FY 2007/08. In addition to the scheduled capital projects, the need invariably arises for additional unscheduled capital projects where there is no viable alternative but to perform the work. The common driver for most of the projects in this program is infrastructure reliability.

Purpose

To increase operational reliability and efficiency, and decrease maintenance costs.

Accomplishments Through FY 2011/12

Through FY 2011/12, twenty four projects have been completed.

Major project milestone in FY2011/12:

- Weymouth Building No. Hand Rail and Stairs Addition – Completed construction
- Diemer Eliminate Backup Generator Tie-bus – Completed construction
- Skinner Replacement for Wetcell Battery and Inverter – Completed construction
- Skinner Electrical Building HVAC Upgrade – Completed construction
- Ethics Office Tenant Improvement – Completed construction

Objectives for 2012/13 – 2013/14

- Water Quality Laboratory Mezzanine Sealing and Window Caulking – Complete construction
- Diemer Plant Used Washwater Return Pump Check Valves Upgrade – Complete construction

Capital Program for Projects Costing Less Than \$250,000 for FY2008/09 **15454**

Total Program Estimate:	\$4,825,000	Total Projected Through June 30, 2012:	\$3,917,400
Appropriated Amount:	\$4,825,000	Estimated Percent Complete:	83%
Biennial Estimate:	\$378,400	Estimated Completion Date:	2012-2013

Scope

This program was established to implement capital projects costing less than \$ 250,000 on the distribution systems, conveyance systems, and treatment plants during FY 2008/09. In addition to the scheduled capital projects, the need invariably arises for additional unscheduled capital projects where there is no viable alternative but to perform the work. The common driver for most of the projects in this program is infrastructure reliability.

Purpose

To increase operational reliability and efficiency, and decrease maintenance costs.

Accomplishments Through FY 2011/12

Through FY 2011/12, thirteen projects have been completed.

Major project milestones in FY 2011/12:

Skinner – Module 4 Influent Valve Replacement – Completed construction

Treatment Plant Fluoride Analyzers – Completed construction

Objectives for 2012/13 – 2013/14

Diemer Plant Ammonia and Caustic Diffuser Modification – Complete construction

Jensen Plant Influent Rejection Structure Instrumentation – Complete construction

Capital Program for Projects Costing Less Than \$250,000 for FY2009/10 15460

Total Program Estimate:	\$4,150,000	Total Projected Through June 30, 2012:	\$3,639,400
Appropriated Amount:	\$4,150,000	Estimated Percent Complete:	90%
Biennial Estimate:	\$158,700	Estimated Completion Date:	2013-2014

Scope

This program was established to implement capital projects costing less than \$ 250,000 on the distribution systems, conveyance systems, and treatment plants during FY 2009/010. In addition to the scheduled capital projects, the need invariably arises for additional unscheduled capital projects where there is no viable alternative but to perform the work. The common driver for most of the projects in this program is infrastructure reliability.

Purpose

To increase operational reliability and efficiency, and decrease maintenance costs.

Accomplishments Through FY 2011/12

Through FY 2011/12, seven projects have been completed.

Major project milestones in FY 2011/12:

Diemer Treatment Plant – Quagga Control for Raw Water System – Completed construction

Metering Circuits Modifications at Etiwanda and Valley View Power Plants – Completed construction

Valley View Metering Circuit Modifications – Completed construction

Objectives for 2012/13 – 2013/14

Etiwanda Cavitation Facility Infrastructure Rehabilitation – Complete construction

OC-88 Pump Plant Fire Protection – Complete construction

Capital Program for Projects Costing Less Than \$250,000 for FY2010/11 **15468**

Total Program Estimate:	\$3,500,000	Total Projected Through June 30, 2012:	\$1,664,800
Appropriated Amount:	\$3,500,000	Estimated Percent Complete:	52%
Biennial Estimate:	\$1,458,300	Estimated Completion Date:	2013-2014

Scope

This program was established to implement capital projects costing less than \$250,000 on the distribution systems, conveyance systems, and treatment plants during FY 2010/11. In addition to the scheduled projects, the need invariably arises for additional unscheduled capital projects where there is no viable alternative but to perform the work. The common driver for most of the projects in this program is infrastructure reliability.

Purpose

To increase operational reliability and efficiency, and decrease maintenance costs.

Accomplishments Through FY 2011/12

Through FY 2011/12, two projects have been completed.

Major project milestones in FY 2011/12:

Lake Matthews Outlet Tower Chlorination – Completed construction

Eagle Mt. Reservoir Slidegate #2 Refurbishment – Completed construction

Objectives for 2012/13 – 2013/14

Gene Camp Station Service Transformer Replacement – Complete construction

Union Station Headquarters Fire Water Reservoir Refurbishment – Complete construction

Capital Program for Projects Costing Less Than \$250,000 for FY2011/12 **15470**

Total Program Estimate:	\$3,000,000	Total Projected Through June 30, 2012:	\$633,200
Appropriated Amount:	\$3,000,000	Estimated Percent Complete:	21%
Biennial Estimate:	\$1,940,300	Estimated Completion Date:	2015-2016

Scope

This program was established to implement capital projects costing less than \$250,000 on the distribution systems, conveyance systems, and treatment plants during FY 2011/12. In addition to the scheduled capital projects, the need invariably arises for additional unscheduled capital projects where there is no viable alternative but to perform the work. The common driver for most of the projects in this program is infrastructure reliability.

Purpose

To increase operational reliability and efficiency, and decrease maintenance costs.

Accomplishments Through FY 2011/12

Through FY 2011/12, one project is scheduled to complete.

Major project milestones in FY 2011/12:

Jensen UPC-24 High Voltage Power Supply Rehabilitation – Completed construction

Objectives for 2012/13 – 2013/14

Jensen Plant Finished Water Reservoir No. 1 Inlet Gate Rehabilitation – Complete construction

Cajalco Creek Detention Dam Spillway Access Road – Complete construction

Capital Program for Projects Costing Less Than \$250,000 for FY2012/13 12302

Total Program Estimate:	\$5,000,000	Total Projected Through June 30, 2012:	\$ 0
Appropriated Amount:	\$ 0	Estimated Percent Complete:	0%
Biennial Estimate:	\$2,027,700	Estimated Completion Date:	2017-2018

Scope

This program was established to implement capital projects costing less than \$250,000 on the distribution systems, conveyance systems, and treatment plants during FY 2012/2013. In addition to the scheduled projects, the need invariably arises for additional unscheduled capital projects where there is no viable alternative but to perform the work. The common driver for most of the projects in this program is infrastructure reliability.

Purpose

To increase operational reliability and efficiency, and decrease maintenance costs.

Accomplishments Through FY 2011/12

This is a new program; no projects have been completed.

Objectives for 2012/13 – 2013/14

Major Project Milestones for FY 2012/13

Capital Projects Costing Less Than \$250,000 – Identify and evaluate projects and begin preliminary design

Chlorine Containment and Handling Facilities

15346

Total Program Estimate:	\$164,850,000	Total Projected Through June 30, 2012:	\$119,539,100
Appropriated Amount:	\$129,873,000	Estimated Percent Complete:	73%
Biennial Estimate:	\$16,681,700	Estimated Completion Date:	2015-2016

Scope

This program was established to construct facilities that handle and contain chlorine to prevent a chlorine release and to comply with security and safety regulations; and other related facilities that handle chlorine to meet water treatment process requirements. Since its inception, new chlorine containment and handling facilities at all five water treatment plants.

Purpose

To enhance hazardous chemical safety by reducing the potential for exposure to plant personnel or the public of a release of chlorine, and ensure compliance with current California Fire Code requirements.

Accomplishments Through FY 2011/12

Through FY 2011/12, sixteen projects have been completed

Major project milestones in FY 2011/12:

Chemical Unloading Facility Chlorine Containment – Continue final design

Diemer Plant Filter Effluent Chlorination Capacity Increase – Continue construction

Jensen Plant Filter Effluent Chlorination Capacity Increase – Continue final design

Weymouth Plant Filter Effluent Chlorination Capacity Increase – Continue final design

Objectives for 2012/13 – 2013/14

Chemical Unloading Facility Chlorine Containment – Complete design and start construction

Jensen Plant Filter Effluent Chlorination Capacity Increase – Complete construction

Weymouth Plant Filter Effluent Chlorination Capacity Increase – Complete construction

Conveyance and Distribution System – Rehabilitation 15377

Total Program Estimate:	\$117,505,000	Total Projected Through June 30, 2012:	\$65,200,400
Appropriated Amount:	\$66,736,000	Estimated Percent Complete:	55%
Biennial Estimate:	\$7,799,000	Estimated Completion Date:	2016-2017

Scope

This program was established to plan and implement multiple projects throughout the Distribution System. The common driver for many of the projects in this program is infrastructure reliability.

Purpose

To maintain the reliability of the distribution system through specific repair and rehabilitation projects on Metropolitan's distribution pipelines, reservoirs, and control structures.

Accomplishments Through FY 2011/12

Through FY 2011/12, forty-two projects have been completed.

Major project milestones in FY 2011/12:

Lake Skinner Aerator Replacement and Flow Meter Replacement – Completed construction.

West Valley Feeder No. 1. Access Roads and Valve Structure Improvements – Completed preliminary design

Objectives for 2012/13 – 2013/14

Box Springs Feeder Section Replacement Phase 3 and Phase 4 – Continue environmental review

Lake Skinner West Bypass Screening Structure Rehabilitation – Complete final design

Orange County Feeder Lining Repair – Complete preliminary design

Upper Newport Bay Blow-off Structure Rehabilitation – Complete final design

West Valley Feeder No. 1 Access Roads and Structures Improvements – Complete final design

Conveyance and Distribution System - Rehabilitation FY2006/07 through FY2011/12 15441

Total Program Estimate:	\$109,842,000	Total Projected Through June 30, 2012:	\$36,765,600
Appropriated Amount:	\$37,079,000	Estimated Percent Complete:	32%
Biennial Estimate:	\$32,518,000	Estimated Completion Date:	2018-2019

Scope

This program was established to plan and implement multiple projects throughout the Conveyance and Distribution System. The common driver for many of the projects in this program is infrastructure reliability.

Purpose

To maintain the reliability of the distribution system through specific repair and rehabilitation projects on Metropolitan's distribution pipelines, reservoirs and control structures.

Accomplishments Through FY 2011/12

Through FY 2011/12, four projects have been completed.

Major project milestones in FY 2011/12:

Garvey Reservoir Automated Data Acquisition System Replacement – Completed final design

OC-44 Service Connection Road Improvements – Completed final design

Temescal Power Plant Road Improvements – Completed final design

Santiago Control Tower Road Improvements – Completed final design

Eagle Rock Tower and Puddingstone Gates Rehabilitation – Completed final design

Corona Power Plant Emergency Generator Replacement – Completed final design

Temescal Power Plant Emergency Generator Replacement – Completed final design

West Valley Feeder No. 2 Cathodic Protection – Completed construction

Upper Feeder Rehabilitation of Three Service Connections – Completed construction

Objectives for 2012/13 – 2013/14

Allen Mccolloch Pipeline Stray Current Drain Station – Complete final design

Eagle Rock Tower and Puddingstone Spillway Gates Rehabilitation – Complete construction

Etiwanda Pipeline Lining Replacement – Complete design

Facility Cathodic Protection Remote Monitoring – Continue study

OC-Distribution System Electrical Improvements – Continue final design

OC-88 Pump Plant Air Compressor Replacement – Start construction

Capital Investment Plan FY 2012/13

San Gabriel Tower Seismic Retrofit – Continue design

Santa Ana River Bridge Seismic Retrofit – Complete final design

Sepulveda Canyon Control Facility Water Storage Tanks Seismic Retrofit – Complete final design

Sepulveda Feeder Stray Current Drain Station – Complete final design

Temescal Power Plant Replace Emergency Generator Replacement – Complete construction

Conveyance and Distribution System - Rehabilitation FY2012/13 through FY2017/18 **12303**

Total Program Estimate:	\$23,544,000	Total Projected Through June 30, 2012:	\$0
Appropriated Amount:	\$ 0	Estimated Percent Complete:	0%
Biennial Estimate:	\$12,722,000	Estimated Completion Date:	2021-2022

Scope

This program was established to plan and implement multiple projects throughout the Conveyance and Distribution System. The common driver for many of the projects in this program is infrastructure reliability.

Purpose

To maintain the reliability of the distribution system through specific repair and rehabilitation projects on Metropolitan's distribution pipelines, reservoirs and control structures.

Accomplishments Through FY 2011/12

This is a new program; no projects have been completed.

Objectives for 2012/13 – 2013/14

- Corona HEP Seepage Remediation – Complete construction
- Foothill PCS Internal Valve Liners Upgrade – Complete final design
- HVAC Modification for Electrical Safety and Reliability – Begin preliminary design
- Orange County Feeder Relocation for Street Improvements Sta. 1070 to 1098 – Complete design
- Second Lower Feeder 42 Inch Conical Plug Valve Replacement – Complete construction
- Skinner Tualota Creek Groundwater Recharge Bubbler – Complete construction
- Wadsworth Pumping Plant Stop Logs – Begin preliminary design
- Wadsworth Pumping Plant Yard Piping Recoating – Complete construction
- Etiwanda Test Facility – Begin preliminary design

CRA - Conveyance Reliability Program

15373

Total Program Estimate:	\$117,643,000	Total Projected Through June 30, 2012:	\$71,175,900
Appropriated Amount:	\$74,508,000	Estimated Percent Complete:	61%
Biennial Estimate:	\$28,700,000	Estimated Completion Date:	2014-2015

Scope

This program was established to plan and implement multiple projects throughout the Colorado River Aqueduct Conveyance System. The common driver for many of the projects in this program is infrastructure reliability.

Purpose

To ensure the reliability and operational efficiency of the Colorado River Aqueduct.

Accomplishments Through FY 2011/12

Through FY 2011/12, nine projects have been completed.

Major project milestones in FY 2011/12:

Copper Basin Reservoir Outlet Gates Rehabilitation – Completed final design

CRA Aqueduct Reservoir & Discharge Line isolation gates – Completed final design

Sand Trap Equipment Upgrades – Completed final design

Access Structure, Transition Structure and Manhole Covers Replacement, Phase I – Completed construction

Access Structure, Transition Structure and Manhole Covers Replacement, Phase II – Completed final design

San Jacinto Tunnel East Adit Rehabilitation – Completed preliminary design

Objectives for 2012/13 – 2013/14

Access Structure, Transition Structure and Manhole Cover Replacement – Complete construction

Copper Basin and Gene Dam Outlets and Copper Basin Gates Rehabilitation – Complete construction of Copper Basin Outlet Gates

Iron Mountain Tunnel Rehabilitation – Begin final design

Reservoir and Discharge Line Isolation Gates – Begin construction

Sand Trap Equipment Upgrades – Begin construction

San Jacinto Tunnel East Entrance Adit Rehabilitation – Begin construction

CRA - Discharge Containment Program

15385

Total Program Estimate:	\$8,354,000	Total Projected Through June 30, 2012:	\$2,716,400
Appropriated Amount:	\$2,384,000	Estimated Percent Complete:	35%
Biennial Estimate:	\$4,654,000	Estimated Completion Date:	2013-2014

Scope

This program was established to implement multiple projects throughout the Colorado River Aqueduct. The common driver for many of the projects in this program is regulatory compliance.

Purpose

To decrease risk of discharging chemicals and waste to the environment and violating regulations.

Accomplishments Through FY 2011/12

- Through FY 2011/12, one project has been completed.
- Desert Sewer System Rehabilitation Study – Completed study phase
- Hinds Pumping plant Equipment Wash – Completed construction

Objectives for 2012/13 – 2013/14

- Desert Sewer System Rehabilitation – Complete construction
- Transformer Oil and Sodium Hypochlorite Containment – Continue construction

CRA - Electrical/Power Systems Reliability Program 15384

Total Program Estimate:	\$22,170,000	Total Projected Through June 30, 2012:	\$17,970,200
Appropriated Amount:	\$18,875,000	Estimated Percent Complete:	59%
Biennial Estimate:	\$2,030,000	Estimated Completion Date:	2015-2016

Scope

This program was established to plan and implement multiple projects throughout the Colorado River Aqueduct’s electrical and power systems. The common driver for many of the projects in this program is infrastructure reliability.

Purpose

To ensure reliability of the power systems along the Colorado River Aqueduct by repairing or replacing aging and/or deteriorated electrical equipment/parts.

Accomplishments Through FY 2011/12

Through FY 2011/12, eight projects have been completed.

Major project milestones in FY 2011/12:

Danby Tower Foundation Rehabilitation - Completed final design

Transformer Reliability Study – Completed study

Objectives for 2012/13 – 2013/14

Main Transformer Replacement/Rehabilitation – Complete preliminary design

Pumping Plant Auxiliary Power System Rehabilitate/Upgrades – Complete preliminary design

CRA - Pumping Plant Reliability Program 15374

Total Program Estimate:	\$25,649,000	Total Projected Through June 30, 2012:	\$19,825,000
Appropriated Amount:	\$21,867,000	Estimated Percent Complete:	77%
Biennial Estimate:	\$3,982,400	Estimated Completion Date:	2014-2015

Scope

This program was established to plan and implement multiple projects at the five Colorado River Aqueduct pumping plants. The common driver for many of the projects in this program is infrastructure reliability.

Purpose

To rehabilitate and/or replace aging equipment at the pumping plants to ensure reliability.

Accomplishments Through FY 2011/12

Through FY 2011/12, seven projects have been completed.

Major project milestones in FY 2011/12:

Hinds Pumping Plant Expansion Joints Repairs – Completed construction

Desert Water Tank Access and Safety Improvements – Completed construction

Objectives for 2012/13 – 2013/14

Main Pump Motor Exciters Rehabilitation – Begin construction

Main Pump Suction and Discharge Lines Expansion Joint Repairs – Complete final design

Hinds Pumping Plant Delivery Pipe Expansion Joint Replacement – Complete construction

CRA - Real Property Recordation Program

15413

Total Program Estimate:	\$24,665,000	Total Projected Through June 30, 2012:	\$23,893,300
Appropriated Amount:	\$24,665,000	Estimated Percent Complete:	96%
Biennial Estimate:	\$452,200	Estimated Completion Date:	2012-2013

Scope

This program will be implemented in a phased approach to survey, map, set permanent boundary markers, and record title/legal documentation for Metropolitan’s real property assets purchased in the 1930’s. Initially, “Official Maps”, now referred to as “Notice of Ownership of Real Property” (NOORP), based on the original Federal Government title documents, will be prepared and recorded with the county. In subsequent phases, consultants will perform the necessary field surveys, prepare detailed maps, set permanent boundary markers, identify encroachments, and record the maps with the county. In addition, consultants will perform title research, map and field book research, aerial photography and reconnaissance, field measurements, survey adjustments and analysis, CAD mapping, property monumentation, control monumentation, map processing and recordation.

Purpose

To record property at the county level and lessen Metropolitan's risk of losing its property and/or incurring substantial legal costs under California law.

Accomplishments Through FY 2011/12

Through FY 2011/12, 400 internal and external survey projects have been completed.

Major milestones in FY 2011/12:

- Official Map Project NOORP recorded – Completed
- New assessor parcel numbers assigned – Completed
- Record of Survey Maps recorded – 97% Complete
- Parcel location – 97% Complete
- Boundary markers set – 97% Complete
- Title reports – Completed

Objectives for 2012/13 – 2013/14

CRA Property Boundary Recordation & Surveys – Continue deployment

CRA - Reliability Program FY2006/07 through FY2011/12 15438

Total Program Estimate:	\$64,826,000	Total Projected Through June 30, 2012:	\$22,845,300
Appropriated Amount:	\$28,611,000	Estimated Percent Complete:	35%
Biennial Estimate:	\$29,791,000	Estimated Completion Date:	2014-2015

Scope

This program was established to continue to implement multiple projects throughout the Colorado River Aqueduct system. The common driver for many of the projects in this program is infrastructure reliability.

Purpose

To ensure the reliability and operational efficiency of the Colorado River Aqueduct and related facilities and equipment.

Accomplishments Through FY 2011/12

Through FY 2011/12, one project has been completed

Major project milestones in FY 2011/12:

Pumping Plant Standby Generator Replacement – Completed construction

Objectives for 2012/13 – 2013/14

- All Pumping Plant Flow Meter Replacement – Complete construction
- CRA Liner Panel Replacement and Curbing Extension Miles 28 - 104 – Complete construction
- Eagle Mountain Pumping Plant Standby Generator Replacement – Complete construction
- Gene Pumping Plant Standby Generator Replacement – Complete final design
- Gene Storage Building Replacement – Complete construction
- Hinds Pumping Plant Standby Generator Replacement – Complete construction
- Intake Plant - Power & Communication Line Replacement – Complete construction
- Iron Mountain Pumping Plant Standby Generator Replacement – Complete construction
- Iron Mountain Service Pit Rehabilitation – Complete construction
- Pumping Plant Sump Piping Replacement – Begin construction
- Pumping Plants 230 kv & 69kv Disconnect Switch Replacement – Complete construction
- Radial Gates and Slide Gate Rehabilitation – Complete final design
- Seismic Retrofit of 6.9kV Switch Houses – Complete preliminary design
- Siphon Rehabilitation – Complete construction
- Tunnel Lining Rehabilitation Whipple Mountain Tunnel – Complete preliminary design
- Intake Pumping Plant Standby Generator Replacement – Complete final design

CRA - Reliability Program FY2012/13 through FY2017/18 12304

Total Program Estimate:	\$16,217,000	Total Projected Through June 30, 2012:	\$141,000
Appropriated Amount:	\$ 0	Estimated Percent Complete:	0%
Biennial Estimate:	\$2,579,800	Estimated Completion Date:	2017-2018

Scope

This program was established to implement multiple projects throughout the Colorado River Aqueduct system. The common driver for many of the projects in this program is infrastructure reliability.

Purpose

To ensure the reliability and operational efficiency of the Colorado River Aqueduct and related facilities and equipment.

Accomplishments Through FY 2011/12

This is a new program; no projects have been completed.

Objectives for 2012/13 – 2013/14

Major Project Milestones for FY 2012/13

Fornat Wash and Mission Creek Cut and Cover Conduit Erosion Protection – Begin preliminary design

230 kV System Inter-Agency Operability – Begin preliminary design

CRA Main Pump Reliability Program

12312

Total Program Estimate:	\$27,664,000	Total Projected Through June 30, 2012:	\$0
Appropriated Amount:	\$ 0	Estimated Percent Complete:	0%
Biennial Estimate:	\$4,865,000	Estimated Completion Date:	2015-2016

Scope

This program was established to continue to implement multiple projects throughout the Colorado River Aqueduct Pumping plants. The common driver for many of the projects in this program is infrastructure reliability.

Purpose

To complete rehabilitation work necessary to ensure reliability and operation performance, provide operational flexibility and prolong the useful life for the pumping plants.

Accomplishments Through FY 2011/12

This is a new program; no projects have been completed.

Objectives for 2012/13 – 2013/14

- Main Pump Discharge Valve Lubricators Replacement – Begin preliminary design
- Main Pump Discharge Valve Refurbishment – Begin preliminary design

Dam Rehabilitation & Safety Improvements 15419

Total Program Estimate:	\$16,170,000	Total Projected Through June 30, 2012:	\$2,589,200
Appropriated Amount:	\$3,960,000	Estimated Percent Complete:	16%
Biennial Estimate:	\$1,758,800	Estimated Completion Date:	2017-2018

Scope

This program was established to facilitate monitoring, and assess stability, risks, and capacities of Metropolitan's dams and reservoirs. The program contains 4 projects: 1) The Upgrade of Dam Monitoring Systems project will install monitoring systems to remotely collect data and permit quick response to seepage rate changes at 8 reservoir sites, 2) The Dam Stability Assessment project will analyze the static and seismic stability of dams and appurtenant structures and establish the groundwork for ongoing re-evaluation, 3) The Dam/Reservoir Risk Assessment project will quantify risks and provide a framework for evaluating and comparing risks, and 4) The Spillway Capacity Study will analyze the spillways at Lake Mathews and Lake Skinner to determine if existing structures have sufficient capacity to pass the Probable Maximum Flood in a controlled manner.

Purpose

To implement multiple projects that will facilitate monitoring, and assess stability, risks, and capacities of Metropolitan's dams and reservoirs.

Accomplishments Through FY 2011/12

Through FY 2011/12, three projects have been completed.

Major project milestones in FY 2011/12:

Palos Verdes Reservoir Seismic Assessment Phase 3 – Continued assessment

Lake Skinner Seismic Assessment Phase 3 – Continued assessment

Objectives for 2012/13 – 2013/14

Dam Stability Assessment – Continue assessment on the remaining 4 of 15 reservoirs

DVL Automated Data Acquisition System Replacement – Complete construction

Diemer Water Treatment Plant - Construct Sedimentation Basin Spillways **15331**

Total Program Estimate:	\$8,740,000	Total Projected Through June 30, 2012:	\$7,567,800
Appropriated Amount:	\$8,740,000	Estimated Percent Complete:	87%
Biennial Estimate:	\$26,000	Estimated Completion Date:	2015-2016

Scope

This program was established to construct permanent spillways for the Sedimentation Basins No. 4 (East Side) and No. 8 (West Side) to isolate the overflow conduits from filter effluent conduits. Engineering design, preparation of specifications, contract administration and construction inspection were performed by Metropolitan forces. Both spillways have been constructed. Environmental mitigation and monitoring will continue after project completion.

Purpose

To prevent unfiltered water from contaminating the finished water reservoir and to comply with regulations issued by California Department of Public Health.

Accomplishments Through FY 2011/12

Through FY 2011/12 all construction has been completed.

Objectives for 2012/13 – 2013/14

Environmental mitigation and monitoring – Continue monitoring

Diemer Water Treatment Plant - Improvements Program 15380

Total Program Estimate:	\$285,285,000	Total Projected Through June 30, 2012:	\$97,774,600
Appropriated Amount:	\$101,292,000	Estimated Percent Complete:	34%
Biennial Estimate:	\$14,698,000	Estimated Completion Date:	2020-2021

Scope

This program was established to plan and implement multiple projects within the Diemer Water Treatment Plant. The common driver for many of the projects in this program is infrastructure reliability.

Purpose

To maintain reliability and ensure regulatory compliance of the Diemer plant.

Accomplishments Through FY 2011/12

Through FY 2011/12, sixteen projects have been completed.

Major project milestones in FY 2011/12:

- Used Washwater Return Pumps – Completed construction
- Plant Flow Meters and Vault – Completed construction
- Finished Water Reservoir and East Washwater Tank Seismic Upgrades – Completed final design.
- Power Reliability Project (Phase I) – Completed construction
- Partial Repaving of Plant Road – Completed construction
- Valve Starter and Electrical Wiring Upgrades – Completed construction
- Upgrade Power System to 66kV – Completed construction
- North Access Road – Completed construction

Objectives for 2012/13 – 2013/14

- Diemer Basin Rehabilitation – Complete final design
- Diemer Electrical Improvements Stage 2 – Complete final design
- Diemer Filter Outlet Conduit Seismic Upgrade – Complete final design
- Diemer Finished Water Reservoir and East Washwater Tank Seismic Upgrade – Begin construction

Diemer Water Treatment Plant - Improvements Program **15436**
FY2006/07 through FY2011/12

Total Program Estimate:	\$90,377,000	Total Projected Through June 30, 2012:	\$21,475,500
Appropriated Amount:	\$16,887,000	Estimated Percent Complete:	24%
Biennial Estimate:	\$15,901,700	Estimated Completion Date:	2017-2018

Scope

This program was established to plan and implement multiple projects at the Diemer Water Treatment Plant. The common driver for many projects in program is infrastructure reliability.

Purpose

To maintain reliability and ensure regulatory compliance of the Diemer plant.

Accomplishments Through FY 2011/12

Through FY 2011/12, ten projects have been completed.

Major project milestones in FY 2011/12:

- Fire and Potable Water Pump Station – Completed construction
- Emergency Broadcast System Rehabilitation – Completed construction
- East Basins Perimeter Waterline – Completed construction
- East Washwater Tank Roof Refurbishment – Completed construction
- Washwater Reclamation Plant No. 2 Flocculator Improvement – Completed construction
- Backup Water Supply for Solids Handling Facility – Completed construction
- Filter Valve Replacement – Completed preliminary design
- Chemical Feed Equipment Improvements – Completed preliminary design
- Ammonia Feed System Upgrades – Completed preliminary design
- Sample Line and Analyzer Improvements – Completed preliminary design
- Administration Building Seismic Upgrades – Completed preliminary design
- Filter Building Seismic Upgrades – Completed preliminary design

Objectives for 2012/13 – 2013/14

- Admin Building Seismic Improvement – Complete final design
- Chemical Feed System Improvements – Complete final design
- Diemer Filter Buildings Seismic Upgrade Phase 1 – Complete preliminary design
- Diemer Filter Media Replacement – Complete construction
- Filter Butterfly Valves Replacement – Complete final design and begin procurement
- Sample Line and Analyzer Improvements – Complete final design

Diemer Water Treatment Plant - Improvements Program 12305
FY2012/13 through FY2017/18

Total Program Estimate:	\$14,737,000	Total Projected Through June 30, 2012:	\$745,900
Appropriated Amount:	\$ 0	Estimated Percent Complete:	5%
Biennial Estimate:	\$3,792,000	Estimated Completion Date:	2016-2017

Scope

This program was established to plan and implement multiple projects at the Diemer Water Treatment Plant. The common driver for many projects is infrastructure reliability.

Purpose

To maintain reliability and ensure regulatory compliance of the Diemer plant.

Accomplishments Through FY 2011/12

This is a new program; no projects have been completed.

Objectives for 2012/13 – 2013/14

Diemer Caustic Tank Roof – Begin preliminary design

Diemer Fluoride Tank Farm Cover Replacement – Begin preliminary design

Diemer Lighting Improvements – Begin preliminary design

Orange County Conveyance and Distribution Team Maintenance Facility – Begin preliminary design

Diemer Water Treatment Plant - Oxidation Retrofit Program 15389

Total Program Estimate:	\$372,927,000	Total Projected Through June 30, 2012:	\$339,087,400
Appropriated Amount:	\$363,032,000	Estimated Percent Complete:	91%
Biennial Estimate:	\$18,443,000	Estimated Completion Date:	2013-2014

Scope

This program was established to design and construction of oxidation retrofit facilities at the Diemer plant. The program consists of the following projects: 1) Chemical Tank Farm Improvements, 2) Plant Maintenance Facility and Vehicle Maintenance Center, 3) Site Preparation (South Slope Stabilization), 4) Ozone Facilities, and 5) Purchase and Installation of Ozone Equipment.

Purpose

To reduce the level of disinfection by-products in the treated water supplied by the Diemer plant in order to meet state and federal standards and provide consistent and equitable high quality treated water to all of Metropolitan’s member agencies.

Accomplishments Through FY 2011/12

Through FY 2011/12, all projects have been completed with the exception of final construction, testing, and start up of the new ozonation facilities.

Major project milestones in FY 2011/12:

Ozone System Equipment Purchase – Completed equipment installation inspection

Construction of Ozonation Facilities – Completed 95% construction.

Objectives for 2012/13 – 2013/14

Diemer ORP Construction – Complete construction

Diemer Ozone System Equipment Procurement – Complete construction

Distribution System - Control and Equipment 15398

Total Program Estimate:	\$8,100,000	Total Projected Through June 30, 2012:	\$7,697,400
Appropriated Amount:	\$8,100,000	Estimated Percent Complete:	95%
Biennial Estimate:	\$22,400	Estimated Completion Date:	2012-2013

Scope

This program was established to plan and implement multiple projects that will assess the capabilities of the existing control equipment related to automation of the distribution system. The common driver for most of the projects is infrastructure reliability.

Purpose

To enhance and/or upgrade the instrumentation and equipment necessary to accomplish automation of the Distribution System.

Accomplishments Through FY 2011/12

Through FY 2011/12, two projects have been completed.

Major project milestones in FY 2011/12:

Distribution Equipment and Instrumentation Upgrades – Completed installation

Enhanced Distribution Control Phase I – Completed installation

Objectives for 2012/13 – 2013/14

Sepulveda Hydroelectric Plant Auto Pilots – Complete final design

Enhanced Distribution System Automatic Flow Transfer Software Development – Complete installation

Distribution System - Treated Water Cross Connection

15171

Total Program Estimate:	\$44,076,000	Total Projected Through June 30, 2012:	\$43,087,000
Appropriated Amount:	\$44,076,000	Estimated Percent Complete:	98%
Biennial Estimate:	\$245,900	Estimated Completion Date:	2014-2015

Scope

This program was established to identify all potential cross connection structures on the treated-water distribution system; perform preliminary design for each of the structures and propose relocation/modification configurations to prevent potential cross connection; make CEQA determination; select at-risk structures and prepare final design documents; and complete construction as required by the regulations of the State of California Department of Public Health (CDPH).

Purpose

Eliminate potential cross connection and prevent possible contamination of the drinking water supplies along distribution system.

Accomplishments Through FY 2011/12

Through FY 2011/12, six projects have been completed.

Major project milestones in FY 2011/12:

Construction packages 7, 8, 10 – Completed construction.

Objectives for 2012/13 – 2013/14

Construction packages 9, 11, 12– Complete construction.

DVL Transformation

15334

Total Program Estimate:	\$92,800,000	Total Projected Through June 30, 2012:	\$67,280,800
Appropriated Amount:	\$92,800,000	Estimated Percent Complete:	73%
Biennial Estimate:	\$1,136,600	Estimated Completion Date:	2013-2014

Scope

This program was established to begin transformation of the Diamond Valley Lake Property to incorporate revenue enhancement to extract value from the property while ensuring that Metropolitan’s core business is protected. Current spending is aimed at completing current commitments required by the ground leases and at encouraging future development opportunities within the DVL properties, in a cost-effective manner, consistent with board-approved objectives. Transform the DVL Visitor Center through a long-term lease with universities or the private sector. Develop the DVL marina through a long-term lease with a marina operator, including planning, designing, developing, operating, and maintaining an improved marina. Develop a recreation vehicle (RV) park at DVL through a long-term lease with an RV park developer, including planning, designing, development, operating, and maintaining RV park. Develop solar farms on the north, west, and Warren Road properties at DVL through long-term leases with solar farm developers.

Purpose

To fully implement the Metropolitan’s Board directives on recreation and associated development at DVL.

Accomplishments Through FY 2011/12

Through FY 2011/12, nine projects have been completed.

Major project milestones in FY 2011/12:

Initiated entitlement process, including amending the Diamond Valley Lake Specific Plan and the existing specific plan covering the North Property as well as preparation of accompanying environmental assessments.

Objectives for 2012/13 – 2013/14

CEQA and Entitlement for Solar Power Facilities – Complete entitlement process and CEQA documentation

Enhanced Bromate Control Program 15472

Total Program Estimate:	\$18,093,000	Total Projected Through June 30, 2012:	\$508,500
Appropriated Amount:	\$390,000	Estimated Percent Complete:	3%
Biennial Estimate:	\$2,380,000	Estimated Completion Date:	2015-2016

Scope

This program was established to determine the feasibility, study, preliminary design, and construct necessary facilities for the ammonia-chlorine bromate control process at the Diemer, Jensen, Mills, Skinner, and Weymouth plants.

Purpose

To control the formation of bromate, which is a regulated disinfection by-product, during the ozonation process, and reduce chemical costs.

Accomplishments Through FY 2011/12

Through FY 2011/12, no projects have been completed.

Major project milestones in FY 2011/12:

Enhanced Bromate Control Facilities – Completed feasibility study

Enhanced Bromate Control Weymouth – Completed preliminary design

Enhanced Bromate Control Mills – Completed preliminary design

Objectives for 2012/13 – 2013/14

Enhanced Bromate Control Mills – Continue final design

Enhanced Bromate Control Weymouth – Continue final design

Headquarters Building Seismic Modification 15473

Total Program Estimate:	\$12,728,000	Total Projected Through June 30, 2012:	\$642,800
Appropriated Amount:	\$1,500,000	Estimated Percent Complete:	5%
Biennial Estimate:	\$5,464,000	Estimated Completion Date:	2014-2015

Scope

This program was established to resolve seismic modifications to Metropolitan's Headquarters Building at Union Station in Los Angeles. Planned preliminary design activities include the following: review of code and permit requirements; preparation of a preliminary design scaled testing of structural components; detailed structural analyses and evaluation; preparation of a preliminary design report and environmental documentation; and development of a preliminary construction cost estimate. Repair plans will be developed for areas which would likely be damaged in a major earthquake.

Purpose

To implement seismic modifications to Metropolitan's Headquarters Building which would likely be damaged in a major earthquake.

Accomplishments Through FY 2011/12

Major project milestones in FY 2011/12:

Headquarters Building Seismic Assessment – Started preliminary design

Objectives for 2012/13 – 2013/14

Headquarters Building Seismic Assessment – Complete final design

Hydroelectric Power Plant Improvements Program 15458

Total Program Estimate:	\$16,828,000	Total Projected Through June 30, 2012:	\$1,553,400
Appropriated Amount:	\$2,017,000	Estimated Percent Complete:	9%
Biennial Estimate:	\$9,355,200	Estimated Completion Date:	2014-2015

Scope

This program was established to implement a comprehensive rehabilitation plan that will identify deficiencies, ensure compliance with regulatory requirements, improve plant efficiency, and reduce maintenance on all hydroelectric power (HEP) plants. Inspection teams will identify physical conditions, needed repairs, upgrades, changes to maintenance procedures, and any unusual conditions. Several projects have been incorporated into this program and completed, including the San Dimas Hydroelectric Plant Needle Valve Rehabilitation and the Scrollcase and Tailrace Refurbishment.

Purpose

To ensure reliability of Metropolitan's hydroelectric power plants.

Accomplishments Through FY 2011/12

Through FY 2011/12, two projects have been completed.

Major project milestones in FY 2011/12:

Venice HEP Rehabilitation – Started preliminary design

San Dimas HEP Rehabilitation – Started preliminary design

Objectives for 2012/13 – 2013/14

Foothill HEP Rehabilitation – Complete final design

San Dimas HEP Rehabilitation – Complete final design

Seismic Retrofit of Hydro Electric Plants and Control Structure – Complete final design

Sepulveda HEP Rehabilitation – Complete final design

Venice HEP Rehabilitation – Complete preliminary design

Information Technology System - Business, Finance and HR 15411

Total Program Estimate:	\$22,468,200	Total Projected Through June 30, 2012:	\$19,976,900
Appropriated Amount:	\$22,468,200	Estimated Percent Complete:	96%
Biennial Estimate:	\$887,200	Estimated Completion Date:	2012-2013

Scope

This program was established to assess and implement multiple projects to ensure the regulatory adherence, customer service, cost efficiency/productivity, risk management and reliability of Metropolitan’s Business, Finance and Human Resources applications. Numerous projects have been incorporated into this program and completed including Integrated Budget Management System, Water Billing System, and Fleet Management.

Purpose

To ensure reliability, efficiency, and effectiveness of Business, Finance, and HR applications.

Accomplishments Through FY 2011/12

Through FY 2011/12, nine projects have been completed.

Major project milestones in FY 2011/12:

CAD Management – Completed deployment

Objectives for 2012/13 – 2013/14

Electronic Discovery Management – Complete deployment

Environmental and Safety Management Information System – Complete deployment

Information Technology System - Infrastructure **15376**

Total Program Estimate:	\$48,408,000	Total Projected Through June 30, 2012:	\$26,150,100
Appropriated Amount:	\$35,481,000	Estimated Percent Complete:	54%
Biennial Estimate:	\$8,369,800	Estimated Completion Date:	2016-2017

Scope

This program was established to implement multiple projects to ensure the reliability and efficiency of the Information Technology Infrastructure in support of Metropolitan’s operational and business applications. This program contains fourteen completed projects including IT Telecommunications Upgrade, IT Business System Data Recovery, Exchange Replacement, and Phonemail Replacement.

Purpose

To ensure reliability of IT infrastructure for critical business applications.

Accomplishments Through FY 2011/12

Through FY 2011/12, fourteen projects have been completed.

Major project milestones in FY 2011/12:

Exchange 2007 Upgrade – Completed deployment

Objectives for 2012/13 – 2013/14

Communication Infrastructure Reliability Upgrade –Begin final design

IT Disaster Recovery Facility Environmental Upgrade – Continue design

Two-Way Radio Phase II – Complete design

Union Station Data Center UPS Upgrade –Begin construction

Wide Area Communication Network Capacity and Reliability Improvements – Begin construction

Information Technology System - Security Program 15378

Total Program Estimate:	\$5,906,000	Total Projected Through June 30, 2012:	\$4,393,600
Appropriated Amount:	\$5,906,000	Estimated Percent Complete:	74%
Biennial Estimate:	\$1,155,300	Estimated Completion Date:	2014-2015

Scope

This program was established to enhance and upgrade the functionality, reliability, security and to protect against cyber threats of Metropolitan’s business and SCADA systems. This program contains several completed projects including the Information Security Monitoring Improvement, SCADA Security Improvement, SCADA Operator Authentication, and PeopleSoft Upgrade.

Purpose

To implement technologies that provide most cost-effective and threat reducing benefits to Metropolitan with public safety and security represented at all levels.

Accomplishments Through FY 2011/12

Through FY 2011/12, seven projects have been completed.

Major project milestones in FY 2011/12:

Information Security Remediation initiative Phase II – Completed deployment

Objectives for 2012/13 – 2013/14

SCADA Cyber Security Upgrades – Continue development

Inland Feeder

15122

Total Program Estimate:	\$1,186,460,000	Total Projected Through June 30, 2012:	\$1,153,538,300
Appropriated Amount:	\$1,186,460,000	Estimated Percent Complete:	100%
Biennial Estimate:	\$944,100	Estimated Completion Date:	2012-2013

Scope

This program was established to construct a major raw water conveyance facility to deliver State Project water. The 44.2-mile long tunnel/pipeline will provide system reliability by linking together the State Water Project and Colorado River systems and will improve water quality by blending State Project and Colorado River waters, and by conveying and storing available water in groundwater basins and surface reservoirs within the District's service area for use during drought emergency conditions. The system is made up of seven segments beginning at Devil Canyon in the San Bernardino mountains and terminating at the Eastside pipeline in Riverside County. The segments are as follows: Arrowhead West Tunnel, Arrowhead East Tunnel, Highland Pipeline, Mentone Pipeline, Riverside Badlands Tunnel, Riverside North Pipeline, and Riverside South Pipeline. The Inland Feeder was placed into operation with water flowing from Devil Canyon to Diamond Valley Lake in September 2009.

Purpose

To ensure projected system demands are met, maximize groundwater management programs, improve system reliability, and help facilitate Metropolitan's salinity goal of 500 mg/L total dissolved solids.

Accomplishments Through FY 2011/12

Through FY 2011/12, the Inland Feeder is operational.

Major project milestones in FY 2011/12:

Execution of environmental monitoring and mitigation program – Continued monitoring

Objectives for 2012/13 – 2013/14

Environmental monitoring and mitigation program – Continue monitoring

IT Infrastructure Reliability Program

12306

Total Program Estimate:	\$13,644,000	Total Projected Through June 30, 2012:	\$298,300
Appropriated Amount:	\$ 0	Estimated Percent Complete:	2%
Biennial Estimate:	\$4,003,300	Estimated Completion Date:	2015-2016

Scope

This program is established to implement multiple projects to ensure the reliability and efficiency of the Information Technology Infrastructure in support of Metropolitan's operational and business applications. This program contains three projects including, IT Network Reliability Upgrades, Enterprise Unix Server Upgrade and Business Systems Disaster Recovery Upgrade.

Purpose

To ensure reliability of IT infrastructure for critical business applications.

Accomplishments Through FY 2011/12

This is a new program; no projects have been completed.

Objectives for 2012/13 – 2013/14

Business Systems Disaster Recovery Upgrade – Begin design

Enterprise UNIX Server Upgrade – Begin design

IT Network Reliability Upgrades – Define scope

Jensen Water Treatment Plant - Improvements Program 15371

Total Program Estimate:	\$100,925,000	Total Projected Through June 30, 2012:	\$31,086,700
Appropriated Amount:	\$31,474,000	Estimated Percent Complete:	31%
Biennial Estimate:	\$19,538,000	Estimated Completion Date:	2015-2016

Scope

This program was established to plan and implement multiple projects within the Jensen Water Treatment Plant. The common driver for many of the projects in this program is infrastructure reliability.

Purpose

To maintain reliability and ensure regulatory compliance of the Jensen plant.

Accomplishments Through FY 2011/12

Through FY 2011/12, eleven projects have been completed.

Major project milestones in FY 2011/12:

Jensen Module 1 Traveling Bridge Repairs – Completed preliminary design

Module 1 Filter Valve Refurbishment – Completed preliminary design

Objectives for 2012/13 – 2013/14

Bulk Chemical Tank Facility Upgrades – Complete final design

Module 1 Filter Valve Replacement – Continue design and begin procurement

Module 1 Traveling Bridge Rehabilitation – Complete preliminary design

Solids Dewatering Facility and Lagoons – Complete final design

Washwater Return Pump Modifications Phase 2 – Complete final design

Modules Nos. 2 and 3 Traveling Bridge Rehabilitation – Complete preliminary design

Jensen Water Treatment Plant - Improvements Program 15442
FY2006/07 through FY2011/12

Total Program Estimate:	\$81,445,000	Total Projected Through June 30, 2012:	\$5,146,100
Appropriated Amount:	\$4,096,000	Estimated Percent Complete:	6%
Biennial Estimate:	\$21,644,400	Estimated Completion Date:	2017-2018

Scope

This program was established to plan and implement multiple projects at the Jensen Water Treatment Plant. The common driver for many of the projects in this program is infrastructure reliability.

Purpose

To maintain reliability and ensure regulatory compliance of the Jensen water treatment plant.

Accomplishments Through FY 2011/12

Through FY 2011/12, one project has been completed.

Major project milestones in FY 2011/12:

Chemical Trench Extension – Completed final design

Filters Numbers 1-20 Surface Wash System Upgrade – Completed final design

Basin Launder Gates Improvements – Completed final design

Objectives for 2012/13 – 2013/14

Jensen Module 1 Filter Surface Wash System Upgrades and Service Water Pump – Begin construction

Jensen Chemical Trench Extension – Complete construction

Jensen Electrical Improvements – Complete preliminary design

Jensen Modules 2 and 3 Flocculator Refurbishment – Begin final design

Jensen Washwater Tanks Seismic Upgrades – Complete final design

Jensen Water Treatment Plant - Improvements Program **12307**
FY2012/13 through FY2017/18

Total Program Estimate:	\$13,042,000	Total Projected Through June 30, 2012:	\$130,400
Appropriated Amount:	\$ 0	Estimated Percent Complete:	7%
Biennial Estimate:	\$2,005,800	Estimated Completion Date:	2015-2016

Scope

This program was established to plan and implement multiple projects at the Jensen Water Treatment Plant. The common driver for many of the projects in this program is infrastructure reliability.

Purpose

To maintain reliability and ensure regulatory compliance of the Jensen water treatment plant.

Accomplishments Through FY 2011/12

This is a new program; no projects have been completed.

Objectives for 2012/13 – 2013/14

Jensen Administration Building Roof Replacement – Complete construction

Jensen Liquid Polymer Tank Farm Facilities Improvement – Complete preliminary design

Lake Mathews Watershed - Drainage Water Quality

15253

Total Program Estimate:	\$37,400,000	Total Projected Through June 30, 2012:	\$36,044,400
Appropriated Amount:	\$37,400,000	Estimated Percent Complete:	96%
Biennial Estimate:	\$114,700	Estimated Completion Date:	2012-2013

Scope

This program was established as a joint participation to develop the Drainage Water Quality Management Plan (Plan) for the Lake Mathews watershed. Under the Plan, Metropolitan will participate in the design and construction of the Cajalco Creek Dam and Detention Basin and four smaller detention basins to protect the quality of water in Lake Mathews. The facilities will be designed by consultants and operated by Metropolitan. Metropolitan may also advance funds as necessary to the Riverside County Flood Control and Water Conservation District for design and construction of several flow-through wetland and water quality pond facilities in the upper watershed. In addition, funds have been appropriated to assist the RCFC & WCD in the construction of the Smith Road sediment detention basin, which will reduce the sediment load on Metropolitan's facility. The original Plan also called for construction of additional water quality facilities to protect the Lake. The concept for these facilities is out of date and the project is currently conducting a study to redefine the need for these facilities.

Purpose

To protect water quality in Lake Mathews.

Accomplishments Through FY 2011/12

Through FY 2011/12, three projects have been completed.

Major project milestones in FY 2011/12:

Watershed modeling and update the options for improving the quality of water draining for the watershed into Lake Mathews – Continued study

Objectives for 2012/13 – 2013/14

Watershed modeling and update the options for improving the quality of water draining for the watershed into Lake Mathews – Continue study

LaVerne Shop Facilities Upgrade

15395

Total Program Estimate:	\$40,866,000	Total Projected Through June 30, 2012:	\$15,427,900
Appropriated Amount:	\$17,320,000	Estimated Percent Complete:	38%
Biennial Estimate:	\$21,701,900	Estimated Completion Date:	2015-2016

Scope

This program was established to modernize the Maintenance Support Unit facilities at La Verne and will evaluate, recommend, design and build new or remodel shop building facilities, and upgrade through refurbishment or replacement aging shop equipment. The program includes three projects, 1) Existing Machine and Fabrication Shop Equipment Upgrades, 2) Shop Building Expansions of the Coating, Machine, and Fabrication Shops, and 3) Quality Management System – ISO certification and compliance.

Purpose

To modernize the machine, coatings, and fabrication shops so that they can continue to provide emergency response service, support routine maintenance throughout Metropolitan, and perform fee-for-service work for member agencies and the California Department of Water Resources.

Accomplishments Through FY 2011/12

Through FY 2011/12, one project has been completed.

Major project milestones in FY 2011/12:

Equipment and Building Upgrades and Expansions – Completed final design

La Verne Maintenance Shops Buildings Expansions and Upgrades Roof and Bridge Cranes Replacement– Completed construction

Objectives for 2012/13 – 2013/14

Fabrication and Machine Shop Equipment Replacement – Begin construction

La Verne Fabrication and Machine Shop Buildings Expansion and Upgrades – Continue construction

New Coating Shop Building Construction – Complete construction

Mills Service Area Supply Pump Station 91002

Total Program Estimate:	\$947,400	Total Projected Through June 30, 2012:	\$ 0
Appropriated Amount:	\$ 0	Estimated Percent Complete:	0%
Biennial Estimate:	\$629,800	Estimated Completion Date:	2014-2015

Scope

This program was established to construct a new pump station located at Lake Perris. The pump station will discharge to the Lake Perris Bypass Line and provide a backup supply to the Mills plant. The new pumps would operate in parallel with the Perris Pump Station. The new Pump Station would involve significant electrical service upgrades to power 4 electric pumps with a total capacity of 235 cfs. and a total of 10,000 horsepower.

Purpose

To construct a new pump station located at Lake Perris and provide a backup supply to the Mills plant.

Accomplishments Through FY 2011/12

This is a new program; no projects have been completed.

Objectives for 2012/13 – 2013/14

Mills Service Area Supply Pump Station – Begin study

Mills Water Treatment Plant - Improvements Program 15381

Total Program Estimate:	\$8,747,000	Total Projected Through June 30, 2012:	\$4,856,400
Appropriated Amount:	\$4,881,000	Estimated Percent Complete:	71%
Biennial Estimate:	\$2,714,600	Estimated Completion Date:	2015-2016

Scope

This program was established to plan and implement multiple projects within the Mills Water Treatment Plant. The common driver for many of the projects in this program is infrastructure reliability.

Purpose

To maintain reliability and ensure regulatory compliance of the Mills water treatment plant.

Accomplishments Through FY 2011/12

Through FY 2011/12 seven projects have been completed.

Major project milestones in FY 2011/12:

Hazardous Waste Staging and Containment – Completed final design

Solids Removal Automation – Completed preliminary design

Objectives for 2012/13 – 2013/14

Hazardous Waste Staging and Containment – Complete construction

Solids Removal Automation – Complete final design and construction

Mills Water Treatment Plant - Improvements Program FY2006/07 through FY2011/12 15452

Total Program Estimate:	\$27,533,000	Total Projected Through June 30, 2012:	\$8,208,600
Appropriated Amount:	\$7,038,000	Estimated Percent Complete:	23%
Biennial Estimate:	\$2,871,600	Estimated Completion Date:	2018-2019

Scope

This program was established to plan and implement multiple projects at the Mills Water Treatment Plant. The common driver for many of the projects in this program is infrastructure reliability.

Purpose

To maintain reliability and ensure regulatory compliance of the Mills water treatment plant.

Accomplishments Through FY 2011/12

Through FY 2011/12, one project has been completed.

Major project milestones in FY 2011/12:

Industrial Wastewater Handling System Improvements – Completed final design

Electrical Buildings Nos. 1&2 Seismic Upgrades – Completed construction

Weir Gate and Filter Valve Rehabilitation – Completed construction

Modules 3 & 4 Potable Water Safety Station & Water Line Extensions – Completed construction

Sodium Hydroxide Tank Replacement – Completed final design

Modules 3 and 4 Turbidity Meters and Gas Detectors Replacement – Complete final design

Objectives for 2012/13 – 2013/14

Industrial Wastewater Handling System Improvements – Complete construction

Sodium Hydroxide Tank Replacement – Complete construction

Modules 3 and 4 Turbidity Meters and Gas Detectors Replacement – Complete construction

Mills Water Treatment Plant - Improvements Program FY2012/13 through FY2017/18 **12308**

Total Program Estimate:	\$44,925,00	Total Projected Through June 30, 2012:	\$0
Appropriated Amount:	\$ 0	Estimated Percent Complete:	0%
Biennial Estimate:	\$4,592,000	Estimated Completion Date:	2012-2013

Scope

This program was established to plan and implement multiple projects at the Mills Water Treatment Plant. The common driver for many of the projects in this program is infrastructure reliability.

Purpose

To maintain reliability and ensure regulatory compliance of the Mills water treatment plant.

Accomplishments Through FY 2011/12

This is a new program, no projects have been completed.

Objectives for 2012/13 – 2013/14

Modules 3 and 4 Backwash Chlorination System – Complete final design

MillsThickeners – Complete final design

Mills Water Treatment Plant - Ozone System Reliability 15434

Total Program Estimate:	\$7,169,000	Total Projected Through June 30, 2012:	\$4,038,300
Appropriated Amount:	\$5,000,000	Estimated Percent Complete:	56%
Biennial Estimate:	\$2,866,400	Estimated Completion Date:	2013-2014

Scope

This program was established to enhance plant reliability at the Mills water treatment plant when the plant expands from 220 mgd to 326 mgd. This program contains three projects, Equipment Procurement, Design and Installation. Equipment includes an additional ozone generator, an additional power supply unit, an additional liquid oxygen storage tank, a new nitrogen injection system, additional ambient ozone and oxygen gas analyzers, piping extensions, power feeds, control system programming, and related accessories.

Purpose

To meet the increasing ozone production and treatment demands while maintaining a standby ozone generation system when the capacity at Mills Plant is expanded from 220 mgd to 326 mgd.

Accomplishments Through FY 2011/12

Through FY 2011/12, one project has been completed.

Ozone System Reliability Upgrade Final Design – Completed final design

Objectives for 2012/13 – 2013/14

Ozone System Reliability Upgrade Construction – Complete construction

Ozone System Reliability Upgrade Equipment Procurement – Complete construction

Operations Support Facilities Improvement Program

05065

Total Program Estimate:	\$19,156,000	Total Projected Through June 30, 2012:	\$292,000
Appropriated Amount:	\$ 0	Estimated Percent Complete:	2%
Biennial Estimate:	\$784,900	Estimated Completion Date:	2018-2019

Scope

This program is established to conduct preliminary design and preparation of environmental documentation for new 15,000 sq. ft maintenance support facility building that will house 100 employees, and additional site improvements at Lake Mathews, including upgrade of the facility’s sewer system. The preliminary design report will evaluate facility requirements for staff offices, maintenance activities, and warehousing for operations functions for the Conveyance and Distribution Eastern Regional Unit, vehicle maintenance, emergency response, and Construction Support Services. In addition, this program will initiate projects, prepare designs, and construct new or remodeled facilities as needed throughout Metropolitan’s service area.

Purpose

To replace and/or expand support facilities to meet current and future operations and maintenance needs.

Accomplishments Through FY 2011/12

This is a new program; no projects have been completed.

Objectives for 2012/13 – 2013/14

Operations Support Facilities Improvements Preliminary Design Phase – Begin preliminary design of the sewer system upgrades.

PCCP Rehabilitation and Replacement Program **15471**

Total Program Estimate:	\$45,285,000	Total Projected Through June 30, 2012:	\$5,611,700
Appropriated Amount:	\$12,290,000	Estimated Percent Complete:	12%
Biennial Estimate:	\$16,455,100	Estimated Completion Date:	2016-2017

Scope

This program was established to plan and implement reliability projects throughout the Conveyance and Distribution System which will include structural engineering evaluation of all 163 miles of Prestressed Concrete Cylinder Pipe (PCCP) lines for the next five years, implement refurbishment and replacement projects for at-risk pipelines, and conduct pilot testing installation of fiber optic acoustic monitoring system up to 5 miles in either the Sepulveda Feeder and Second Lower Feeder.

Purpose

To identify pipelines whose age, location and condition warrant refurbishment/ replacement to insure long-term reliability of Metropolitan's PCCP lines water delivery.

Accomplishments Through FY 2011/12

Through FY 2011/12, two projects have been completed.

Major project milestones in FY 2011/12:

Allen McColloch Pipeline PCCP Carbon Fiber Joint Repair – Started preliminary design

Foothill and Sepulveda Feeder PCCP Carbon Fiber Joint Repair – Completed construction

Objectives for 2012/13 – 2013/14

Acoustic Fiber Optic Monitoring of PCCP Lines – Begin final design

Allen McColloch Pipeline PCCP Carbon Fiber Joint Repair – Complete construction

Electromagnetic Inspections of PCCP Lines – Continue inspections

Foothill and Sepulveda Feeder PCCP Carbon Fiber Joint Repair – Complete construction

Rialto Pipeline PCCP Repair – Begin preliminary design

Second Lower Feeder Repair at 5 Locations – Begin preliminary design

Second Lower Feeder Reliability for 3 Locations at Diemer – Begin preliminary design

Perris Valley Pipeline

15425

Total Program Estimate:	\$148,435,000	Total Projected Through June 30, 2012:	\$120,988,700
Appropriated Amount:	\$129,100,000	Estimated Percent Complete:	82%
Biennial Estimate:	\$200,000	Estimated Completion Date:	2019-2020

Scope

This program was established to design and construct a 6.5-mile, 96-inch diameter pipeline from the Mills water treatment plant to Eastern Municipal Water Districts’ member agency boundary, southeast of the Mills plant. This pipeline will have 4 new service connections. The project will be undertaken as a cooperative effort between Metropolitan, Eastern Municipal Water District, and Western Municipal Water District. The majority of the project will be designed and constructed by Metropolitan utilizing a traditional design-bid-build delivery. Construction will be performed utilizing separate construction contracts for the North and South Reaches.

Purpose

Expand service to Eastern Municipal Water District and Western Municipal Water District and optimize operations of the Mills and Skinner treatment plants.

Accomplishments Through FY 2011/12

Through FY 2011/12, four projects have been completed.

Major project milestones in FY 2011/12:

Perris Valley Pipeline South Reach – Completed construction

Perris Valley Pipeline South Reach Tunnels – design and construction deferred

Objectives for 2012/13 – 2013/14

Perris Valley Pipeline South Reach – Complete As-Builts

Power Reliability and Energy Conservation Program

15391

Total Program Estimate:	\$105,253,000	Total Projected Through June 30, 2012:	\$31,993,000
Appropriated Amount:	\$33,797,000	Estimated Percent Complete:	30%
Biennial Estimate:	\$1,546,600	Estimated Completion Date:	2017-2018

Scope

This program was established to implement multiple power and energy related projects throughout Metropolitan’s system. Since its inception, several projects have been incorporated into this program and completed , including the OC-88 Energy Savings Modifications Project which modified the pump station to reduce the energy required for pumping and provides significant energy savings, and the one Megawatt (1 MW) Skinner Solar Power Facility project.

Purpose

To reduce purchased electrical energy and costs, provide sufficient and reliable power, and reduce carbon-based emissions.

Accomplishments Through FY 2011/12

Through FY 2011/12, six projects have been completed.

Major project milestones in FY 2011/12:

Solar Power Generation projects at Weymouth, Mills, Jensen and Skinner Water Treatment Plants have been deferred.

Objectives for 2012/13 – 2013/14

Union Station Energy Efficiency and Renewable Energy Pilot Facility – Complete construction

Project Controls and Reporting System

03407

Total Program Estimate:	\$3,130,000	Total Projected Through June 30, 2012:	\$73,700
Appropriated Amount:	\$ 0	Estimated Percent Complete:	3%
Biennial Estimate:	\$2,567,400	Estimated Completion Date:	2014-2015

Scope

This program was established to replace outdated project reporting systems. Some of the tools in use today lack key fundamental capabilities, such as earned value and resource utilization reporting, and, due to the upgrades of other applications, have lost the former integration impacting timely reporting. Currently, the primary deliverable of this program is the implementation of an enterprise-wide Project Controls System to provide schedule and resource management and replace the fifteen year old Project Management Information System (PMIS).

Purpose

To ensure the accuracy, efficiency and effectiveness for enterprise-wide project controls, scheduling, budgeting, resource management, and management reporting.

Accomplishments Through FY 2011/12

This is a new program; no projects have been completed.

Objectives for 2012/13 – 2013/14

Project Controls Implementation – Complete preliminary design

Quagga Mussel Control Program

15447

Total Program Estimate:	\$18,201,400	Total Projected Through June 30, 2012:	\$10,512,400
Appropriated Amount:	\$12,280,000	Estimated Percent Complete:	58%
Biennial Estimate:	\$966,600	Estimated Completion Date:	2015-2016

Scope

This program was established as Metropolitan's comprehensive plan that incorporates enhanced detection, surveillance and mitigation strategies for controlling quagga mussel growth. The Quagga Mussel Control Program will be conducted in at least three phases. Phase I addressed immediate quagga mussel detection, surveillance and mitigation strategies for the first 7 months of infestation. Phase II consists of a comprehensive, multi-year approach for mussel management, and Phase III will address long-term needs and cost minimization strategies. Projects included in this program are: 1) Interim chlorination facility at Copper Basin 2) Interim chlorination facility at Lake Mathews, 3) Permanent chlorination facilities at various locations, 4) Isolation gates along the Colorado River Aqueduct, 5) Additional chlorine injection point at Lake Skinner outlet conduit, 6) Skinner ozone cooling water system quagga mussel control, 7) Diemer ozone cooling water system quagga mussel control, and 8) DVL quagga mussel control facility tank roofs.

Purpose

This program was established to assess the extent of the infestation within the CRA and other Metropolitan facilities to implement a comprehensive plan that incorporates enhanced detection, surveillance and mitigation strategies.

Accomplishments Through FY 2011/12

- Diemer Ozone Cooling Water Chlorination – Continued construction
- Skinner Outlet Conduit New Injection Point – Completed construction

Objectives for 2012/13 – 2013/14

- Diemer - Ozone Cooling Water Chlorination – Complete construction
- Wadsworth Pumping Plant Chemical Tank Farm Roof Covers – Continue final design

RCMP Rehabilitation and Replacement Program **12311**

Total Program Estimate:	\$8,821,000	Total Projected Through June 30, 2012:	\$0
Appropriated Amount:	\$ 0	Estimated Percent Complete:	0%
Biennial Estimate:	\$840,800	Estimated Completion Date:	2025-2026

Scope

This program is established to assess the condition of Reinforced Concrete and Metallic Pipe (RCMP) throughout Metropolitan's distribution system; perform RCMP repairs as needed, develop a risk-based method to prioritize RCMP inspection, rehabilitation or replacement work; develop plans for repairs, rehabilitation or replacement of RCMP to ensure future reliability of Metropolitan's distribution system in most cost effective manner.

Purpose

To identify pipelines whose age, location, and condition warrant refurbishment/replacement

Accomplishments Through FY 2011/12

This is a new program; no projects have been completed.

Objectives for 2012/13 – 2013/14

Reinforced Concrete and Metal Pipe Assessment – Perform baseline condition assessment

Regional Water Purification Program 15462

Total Program Estimate:	\$947,000	Total Projected Through June 30, 2012:	\$515,300
Appropriated Amount:	\$947,000	Estimated Percent Complete:	54%
Biennial Estimate:	\$347,000	Estimated Completion Date:	2012-2013

Scope

This program was established to evaluate the feasibility of a joint venture with the Los Angeles County Sanitation Districts (LACSD) to implement a regional water purification program to increase local water supplies and reduce discharges of treated wastewater to the Pacific Ocean. The potential program would involve the purification of treated wastewater from LACSD using advanced treatment technologies to achieve near-distilled water quality. The purified water would then be blended into an untreated potable water supply, such as a groundwater aquifer or surface water reservoir, and stored for sufficient time to permit additional treatment from natural processes and mixing. The water would later be withdrawn and further treated for potable use. LACSD estimates that 200 mgd of treated wastewater is currently available from LACSD’s Joint Water Pollution Control Plant (JWPCP) in Carson for implementation of a regional water purification program. The feasibility of this potential program will be studied in phases. The initial phase will screen potential program options, evaluate key implementation issues, identify facility requirements and estimate program costs.

Purpose

Evaluate the feasibility and cost of developing a significant local supply of reliable, drought resistant water to enhance Metropolitan’s supply reliability.

Accomplishments Through FY 2011/12

Through FY 2011/12 the Board was provided an update of the technical memoranda findings and was apprised of changed conditions that could affect the program.

Major project milestones in FY 2011/12:

Advance Treatment, Distribution and Storage of Reclaimed Wastewater Assessment – Continued assessment

Objectives for 2012/13 – 2013/14

Advance Treatment, Distribution and Storage of Reclaimed Wastewater Assessment – Continue assessment

Reservoir Cover Replacement Program **15417**

Total Program Estimate:	\$25,763,000	Total Projected Through June 30, 2012:	\$7,045,900
Appropriated Amount:	\$8,330,000	Estimated Percent Complete:	28%
Biennial Estimate:	\$6,108,400	Estimated Completion Date:	2016-2017

Scope

This program was established to perform studies, prepare design and construction documents, and coordinate with California Department of Public Health and Division of Safety of Dams for the replacement of floating reservoir covers at multiple locations. The scope includes remove existing covers, repair reservoir gunite lining, modify structures and protective grillages on reservoir bottoms, install underdrain leakage collection systems, install new geocomposite drainage course, install new Hypalon flexible membrane liners and floating covers, and upgrade reservoir electrical systems and surface drainage to accommodate new cover dewatering pumps. The Skinner Finished Water Reservoir is completed.

Purpose

To replace reservoir floating covers that have exceeded their useful life and are increasingly difficult to repair.

Accomplishments Through FY 2011/12

Through FY 2011/12, one project has been completed.

Major project milestones in FY 2011/12:

Jensen Finished Water Reservoir No. 2 Floating Cover – Completed preliminary design

Palos Verdes Reservoir Cover – Removed old cover and began geotechnical investigation of liner condition.

Objectives for 2012/13 – 2013/14

Jensen Finished Water Reservoir No. 2 Floating Cover – Begin final design

Palos Verdes Reservoir Cover – Complete final design and begin construction

Right of Way Protection and Rehabilitation Program

10103

Total Program Estimate:	\$2,000,000	Total Projected Through June 30, 2012:	\$ 0
Appropriated Amount:	\$0	Estimated Percent Complete:	0%
Biennial Estimate:	\$750,000	Estimated Completion Date:	2013-2014

Scope

This program is established to protect Metropolitan’s investment in its rights of way by securing and rehabilitate rights of way in a manner that will complement aesthetic qualities of communities and neighborhoods, provide adequate access and buffer area, install security measures (e.g., fencing and signage) to boundaries and restricted areas, and correct or evict encroachments and trespassers.

Purpose

To assess and resolve the known encroachments and rights of way gaps, develop best management practices, and install security measures.

Accomplishments Through FY 2011/12

This is a new program; no projects have been completed.

Objectives for 2012/13 – 2013/14

Right of way protection and rehabilitation – Continue assessment

San Diego Pipeline No. 6

15121

Total Program Estimate:	\$117,913,800	Total Projected Through June 30, 2012:	\$105,646,600
Appropriated Amount:	\$117,913,800	Estimated Percent Complete:	100%
Biennial Estimate:	\$69,200	Estimated Completion Date:	2013-2014

Scope

This program was established as a joint project between Metropolitan and the San Diego County Water Authority, includes the construction of a 30-mile, nine to ten-foot diameter pipeline and tunnel conveyance system to meet supplemental water needs in southern Riverside and San Diego Counties. The construction of the North Reach was successfully completed and the Notice of Completion was issued on January 26, 2007. The current total program estimate only includes costs for the portion in Riverside County.

Purpose

To provide raw water for municipal, industrial, and agricultural users in southern Riverside and San Diego counties, and to increase system reliability and operational flexibility.

Accomplishments Through FY 2011/12

Through FY 2011/12, one project has been completed.

Major project milestones in FY 2011/12:

North Reach Environmental Monitoring – Continued monitoring in compliance with the Mitigation/Monitoring Plan

The South Reach portions have been deferred

Objectives for 2012/13 – 2013/14

North Reach Environmental Monitoring – Complete monitoring

Skinner Water Treatment Plant - Improvements Program 15365

Total Program Estimate:	\$154,221,000	Total Projected Through June 30, 2012:	\$145,540,200
Appropriated Amount:	\$154,221,000	Estimated Percent Complete:	97%
Biennial Estimate:	\$4,992,100	Estimated Completion Date:	2013-2014

Scope

This program was established to plan and implement multiple projects within the Skinner Water Treatment Plant. The common driver for most of the projects in this program is infrastructure reliability.

Purpose

To maintain reliability and ensure regulatory compliance of the Skinner plant.

Accomplishments Through FY 2011/12

Through FY 2011/12, fifteen projects have been completed.

Major project milestones in FY 2011/12:

Skinner Solids Handling Area Improvements – Started design

Skinner Washwater Reclamation Plant No. 3 Construction – Completed construction

Chemical System and Collection Improvements Construction – Completed construction

Electrical Building Upgrades Phase 2 HVAC and Seismic Upgrades Construction – Completed construction

Objectives for 2012/13 – 2013/14

Skinner Electrical Building Upgrade – Continue construction

Skinner Upgrade Surface Wash Valves and Actuators Module 4, 5 and 6 – Continue construction

Skinner Water Treatment Plant - Improvements Program 15435
FY2006/07 through FY2011/12

Total Program Estimate:	\$4,150,000	Total Projected Through June 30, 2012:	\$1,067,800
Appropriated Amount:	\$3,475,000	Estimated Percent Complete:	29%
Biennial Estimate:	\$981,200	Estimated Completion Date:	2014-2015

Scope

This program was established to plan and implement multiple projects at the Skinner Water Treatment Plant. The major driver for most of the projects is infrastructure reliability.

Purpose

To maintain reliability and ensure regulatory compliance of the Skinner plant.

Accomplishments Through FY 2011/12

Through FY 2011/12: Two projects have been completed.
 Potable Water Connection at the Finished Water Reservoir – Completed construction

Objectives for 2012/13 – 2013/14

Plant 1 Filter Gate Stems and Nuts Replacement – Complete construction

Skinner Water Treatment Plant - Improvements Program 12309
FY2012/13 through FY2017/18

Total Program Estimate:	\$41,950,000	Total Projected Through June 30, 2012:	\$37,200
Appropriated Amount:	\$ 0	Estimated Percent Complete:	1%
Biennial Estimate:	\$1,742,900	Estimated Completion Date:	2018-2019

Scope

This program was established to plan and implement multiple projects within the Skinner Water Treatment Plant. The common driver for most of the projects in this program is infrastructure reliability.

Purpose

To maintain reliability and ensure regulatory compliance of the Skinner plant.

Accomplishments Through FY 2011/12

This is a new program; no projects have been completed.

Objectives for 2012/13 – 2013/14

- Lake Skinner Entrance Improvement – Begin preliminary design
- Skinner Facility Maintenance and Vehicle Service Center – Begin preliminary design
- Skinner Module 4 Surface Wash Pipe Coupling Replacement – Begin preliminary design
- Skinner Paved Access to Buildings – Begin preliminary design
- Skinner Solids Handling Area Improvements – Begin preliminary design

Skinner Water Treatment Plant - Oxidation Retrofit Program 15388

Total Program Estimate:	\$245,492,000	Total Projected Through June 30, 2012:	\$242,384,700
Appropriated Amount:	\$245,492,000	Estimated Percent Complete:	96%
Biennial Estimate:	\$1,879,800	Estimated Completion Date:	2014-2015

Scope

This program was established to design and construction of oxidation retrofit facilities at the Skinner Water Treatment Plant. This program consists of four contracts: 1) Site preparation, 2) Oxygen Equipment Procurement, 3) Oxidation Retrofit Program (ORP) General Construction, and 4) ORP large pipe procurement. This program also includes design and construction of the Skinner Incoming 33 kV Electrical service by Southern Calif. Edison, and design and construction of the ORP Facilities Access Road project.

Purpose

To reduce the level of disinfection by-products in the treated water supplied by the Skinner plant in order to meet state and federal standards and provide consistent and equitable high quality treated water to all of Metropolitan’s member agencies.

Accomplishments Through FY 2011/12

Through FY 2011-12 seven projects have been completed.

Major project milestones in FY 2011-12:

Oxygen/Ozone System Equipment – Completed installation, punch list/warranty

Objectives for 2012/13 – 2013/14

Major Project Milestones for FY 2012/13

Skinner ORP Facilities Construction – Complete As-Built

Water Operations Control Program 15467

Total Program Estimate:	\$42,000,000	Total Projected Through June 30, 2012:	\$429,800
Appropriated Amount:	\$450,000	Estimated Percent Complete:	1%
Biennial Estimate:	\$4,051,800	Estimated Completion Date:	2016-2017

Scope

This program is established to further coordinate the capabilities of Metropolitan's control system, Supervisory Control and Data Acquisition (SCADA) with operational and business needs. The program will focus on maintaining system reliability, system integration, and improving operational and business capabilities and efficiencies. There are 4 active projects including, Wadsworth Pumping Plant Control and Protection Upgrade Project, System -Wide SCADA Master Planning, SCADA Remote Terminal Unit CPU (hardware) & OS (software) Replacement, and SCADA Remote Terminal Unit Input/Output (component) System Retrofit.

Purpose

Maintain the reliability and integrity of Metropolitan's Control system.

Accomplishments Through FY 2011/12

Through FY 2011/12, one project has been completed.

Major project milestones in FY 2011/12:

Wadsworth Pumping Plant Control and Protection Upgrade – Define scope

System -Wide SCADA Master Planning – Define scope

Objectives for 2012/13 – 2013/14

SCADA Remote Terminal Unit Input/Output System Retrofit – Begin deployment

System-wide SCADA Master Planning – Complete assessment

Wadsworth Pumping Plant Control and Protection Upgrade – Complete preliminary design

Weymouth Water Treatment Plant - Improvements Program 15369

Total Program Estimate:	\$271,363,000	Total Projected Through June 30, 2012:	\$153,549,700
Appropriated Amount:	\$161,832,000	Estimated Percent Complete:	57%
Biennial Estimate:	\$14,189,400	Estimated Completion Date:	2018-2019

Scope

This program was established to plan and implement multiple projects at the Weymouth Water Treatment Plant. The common driver for many of the projects in this program is infrastructure reliability.

Purpose

To maintain reliability and ensure regulatory compliance of the Weymouth plant.

Accomplishments Through FY 2011/12

Through FY 2011/12, twelve projects have been completed.

Major project milestones in FY 2011/12:

- Weymouth Coagulant Tank Farm – Completed construction
- Weymouth Junction Structure Seismic Upgrade – Completed construction
- Weymouth Inlet Conduit – Completed shutdown work
- Weymouth Washwater Reclamation Reliability Upgrades – Started construction
- Weymouth Filter Building Seismic Upgrade – Started final design

Objectives for 2012/13 – 2013/14

- Weymouth Administration and Control Building Seismic Upgrades – Begin final design
- Weymouth Drop Gate Improvements – Continue preliminary design
- Weymouth Filter Building No. 2 Filter Valve and Actuator Rehabilitation – Continue final design
- Weymouth Filter Buildings Seismic Upgrades – Continue final design
- Weymouth Power Systems Upgrade – Complete construction
- Weymouth Washwater Reclamation Reliability Upgrade – Continue construction

Weymouth Water Treatment Plant - Improvements Program 15440
FY2006/07 through FY2011/12

Total Program Estimate:	\$30,904,000	Total Projected Through June 30, 2012:	\$7,186,500
Appropriated Amount:	\$7,382,000	Estimated Percent Complete:	23%
Biennial Estimate:	\$10,592,500	Estimated Completion Date:	2015-2016

Scope

This program was established to implement multiple rehabilitation projects at the Weymouth plant. The common driver for many of these projects is infrastructure reliability. Since its inception in FY 2006/07, numerous projects have been incorporated into this program and completed including, The Reservoir Gate Repair, Combined Filter Outlet Conduit Repairs, and the Emergency Broadcast System Rehabilitation.

Purpose

To maintain reliability and ensure regulatory compliance of the Weymouth plant.

Accomplishments Through FY 2011/12

Through FY 2011/12, one project has been completed.

Major project milestones in FY 2011/12:

- Weymouth Filet Outlet Conduit Repairs – Completed construction
- Weymouth Dry Polymer System – Completed preliminary design
- Weymouth Raw Water Bypass – Completed final design
- Weymouth Caustic and Ammonia Trench – Completed final design
- Weymouth Emergency Broadcast System Rehabilitation – Completed final design
- Weymouth Basin 5-8 Refurbishment Project – Started preliminary design

Objectives for 2012/13 – 2013/14

- Weymouth Basin 5-8 Refurbishment – Continue preliminary design
- Weymouth Caustic And Ammonia Trench – Begin construction
- Weymouth Dry Polymer System – Begin final design
- Weymouth Emergency Broadcast System Rehabilitation – Begin construction
- Weymouth Raw Water Bypass – Begin construction
- Weymouth Reservoir Inlet Gates Replacement Phase II – Begin preliminary design

Weymouth Water Treatment Plant - Improvements Program **12310**
FY2012/13 through FY2017/18

Total Program Estimate:	\$131,264,000	Total Projected Through June 30, 2012:	\$55,600
Appropriated Amount:	\$ 0	Estimated Percent Complete:	0%
Biennial Estimate:	\$15,098,000	Estimated Completion Date:	2019-2020

Scope

This program was established to plan and implement multiple projects at the Weymouth Water Treatment Plant. The common driver for many of the projects in the program is infrastructure reliability.

Purpose

To maintain reliability and ensure regulatory compliance of the Weymouth plant.

Accomplishments Through FY 2011/12

This is a new program; no projects have been completed.

Objectives for 2012/13 – 2013/14

Major Project Milestones for FY 2012/13

- Weymouth Asphalt Refurbishment – Begin preliminary design
- Weymouth Basin Foam Abatement System – Begin preliminary design
- Weymouth Chemical Mixing Improvements in the Combined Filter Effluent Conduit – Define scope
- Weymouth Chlorine Transloading – Begin preliminary design
- Weymouth Filter Building No.1 Filter Valve and Actuator Rehabilitation – Begin preliminary design
- Weymouth Filter Building Sump Sparger Rehab – Begin preliminary design
- Weymouth Filter Rehabilitation - Design and Construction – Begin preliminary design
- Weymouth Laverne Water Quality HVAC Chiller Replacement – Complete final design
- Weymouth WTP - Chlorine System Upgrade – Define scope

Weymouth Water Treatment Plant - Oxidation Retrofit Program 15392

Total Program Estimate:	\$338,510,000	Total Projected Through June 30, 2012:	\$69,761,900
Appropriated Amount:	\$74,412,000	Estimated Percent Complete:	20%
Biennial Estimate:	\$126,512,800	Estimated Completion Date:	2016-2017

Scope

This program was established to design and construct all systems and facilities that are required to provide ozone disinfection capability and to integrate those systems and facilities into the existing plant operations. This program consists of the following projects: 1) Weymouth Filtration Plant Oxidation - Design, 2) Ozone Equipment Procurement, 3) Inlet Conduit Relocation, 4) Oxidation Facilities - Final Design, and 5) ORP Switchgear Construction.

Purpose

To reduce the level of disinfection by-products in the treated water supplied by the Weymouth plant in order to meet state and federal standards and provide consistent and equitable high quality treated water to all of Metropolitan’s member agencies.

Accomplishments Through FY 2011/12

Through FY 2011-12, one project has been completed.

Major project milestones in FY 2011-12:

Inlet Conduit Relocation – Completed construction

Final Design of Ozone Facilities Staged Approach – Completed final design

Switchgear Construction – Completed 90% construction

Sodium Hypochlorite Tank Facility – Started 5% final design

Objectives for 2012/13 – 2013/14

Weymouth ORP Switchgear – Complete construction

Weymouth Oxidation Retrofit Facilities Construction – Begin construction

Weymouth Sodium Hypochlorite Tank Facility – Complete final design

White Water Siphon Protection

15341

Total Program Estimate:	\$12,010,000	Total Projected Through June 30, 2012:	\$2,495,200
Appropriated Amount:	\$2,255,000	Estimated Percent Complete:	21%
Biennial Estimate:	\$2,609,300	Estimated Completion Date:	2015-2016

Scope

This program was established to design and construct a protective barrier for the Whitewater siphons to prevent further erosion of streambeds from undermining the siphons, and remediate the Whitewater Mining Pit in accordance with State regulations and prevent head-cutting of the mining pit from undermining the siphons in the event of a major flood.

Purpose

To prevent damage to the Whitewater Siphon due to storm flows on the Whitewater River and to ensure deliveries of CRA water.

Accomplishments Through FY 2011/12

Through FY 2011/12, completed a draft of the reclamation plan for the Whitewater Mining Pit.

Major project milestones in FY 2011/12:

Development of environmental documentation – Completed EIR

Objectives for 2012/13 – 2013/14

Whitewater Siphon Protection Improvements – Complete final design

Yorba Linda Power Plant Modifications 15446

Total Program Estimate:	\$23,464,000	Total Projected Through June 30, 2012:	\$3,041,100
Appropriated Amount:	\$3,495,000	Estimated Percent Complete:	13%
Biennial Estimate:	\$16,435,000	Estimated Completion Date:	2014-2015

Scope

This program was established to retrofit the Yorba Linda Power Plant to operate under the Diemer Oxidation Retrofit Program new hydraulic conditions and to connect electrical power output into the Diemer plant's new Southern California Edison electrical service.

Purpose

To increase power reliability and generate clean hydro power to offset retail power purchases at the Diemer Water Treatment Plant.

Accomplishments Through FY 2011/12

Through FY 2011/12, no projects have been completed.

Major project milestones in FY 2011/12:

Procurement contract for a turbine/generator – Procurement contract awarded

Yorba Linda Power Plant Modifications – Continued final design

Objectives for 2012/13 – 2013/14

Yorba Linda Power Plant Modifications – Complete final design and begin construction