ENGINEERING SERVICES

Engineering Services Group provides innovative, high-quality, and costeffective solutions to meet our customers' needs and to ensure the longterm reliability and successful operation of Metropolitan's infrastructure.

PROGRAMS

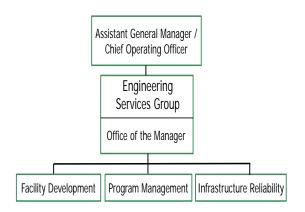
Engineering Services performs project management, design, construction management, environmental planning, infrastructure protection monitoring, and water-related facility planning, and manages Metropolitan's Capital Investment Plan (CIP).

Engineering accomplishes its mission through the following programs or sections:

Office of the Group Manager oversees the management of the Engineering Services Group by providing strategic leadership on engineering initiatives and core business efforts with special management of Metropolitan's CIP.

Facility Development is responsible for providing design, environmental planning, and local and regional water-related facility planning services to ensure the continued reliability and quality of water deliveries.

Program Management is responsible for providing project management and CIP implementation to ensure the continued reliability and quality of water deliveries. Infrastructure Reliability is responsible for construction management and infrastructure protection to ensure the continued reliability and quality of water deliveries.



GOALS AND OBJECTIVES

In FY 2014/15 and FY 2015/16, Engineering Services will focus on the following key issues:

CIP Management

Manage the CIP consistent with the General Manager's Business Plan. The primary emphasis is on providing technical support for Bay Delta efforts, maintaining key O&M initiatives in water delivery reliability and infrastructure protection, and managing capital programs, the majority of which involve refurbishment and replacement of aging infrastructure.

Continue to review all programs and projects in Metropolitan's CIP as part of the budget process.

Bay Delta Initiatives / BDCP Support

Provide core O&M technical support to the BDCP in support of Metropolitan's Bay Delta Initiatives office, the State Water Contractors, and the State Department of Water Resources.

Construction Management & Facility Development

Continue to manage construction of the final stages of the ORP at the Weymouth plant.

Complete commissioning of the Diemer ozone system.

Manage critical rehabilitation projects at Weymouth and Diemer plants focusing on the aging filters and treatment basins.

Complete development of hydraulic model of Metropolitan's entire distribution system. This model will be used as tool to minimize hydraulic impacts of pipeline and feeder repairs on member agencies and the overall repair costs.

Complete design and preparation of environmental documentation for full-scale repairs to replace the lining in the Etiwanda Pipeline, Orange County Feeder, and the Lakeview Pipeline. Complete design and preparation of environmental documentation for full-scale repairs of the Second Lower Feeder.

Initiate documentation for the rehabilitation of the PCCP feeders and develop a long-term staging plan for the 20-year PCCP Program.

Manage completion of drought response projects at the Greg Avenue Pumping Station and the Lakeview Pipeline/Inland Feeder Intertie<u>.</u>

Finalize electrical master plan on the CRA and move forward with series of electrical upgrade projects to modernize the 75-year-old power systems at the pumping plants.

Water Delivery Reliability and Infrastructure Protection

Continue to provide technical support to internal customers to efficiently operate the treatment plants and distribution system as well as comply with new regulations.

Continue to provide technical support to the DWR on the reliability of the SWP facilities and infrastructure.

Continue to perform seismic assessments of Metropolitan's facilities to maintain reliable water deliveries and to meet current seismic design codes and practices.

Manage structural upgrade projects, including the strengthening of Metropolitan's Union Station Headquarters building.

Continue scheduled inspections and ongoing monitoring of critical facilities such as dams, reservoirs, pipelines, and chemical tanks, to assess their condition and ensure facilities are operating efficiently.

Prepare Emergency Action Plans for dams per the state Division of Safety of Dams (DSOD).

Drought Response Efforts

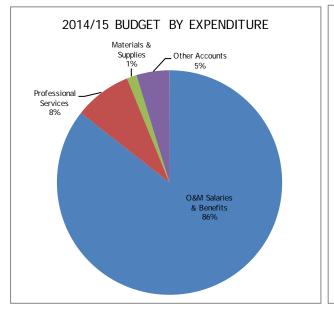
Complete studies on methods to supply water from Diamond Valley Lake to the Rialto Feeder and Mills plant as a means to expand the areas within Metropolitan's distribution system that can receive Colorado River water. This effort is in response to the current state-wide drought and historically low allocation of State Water Project supplies.

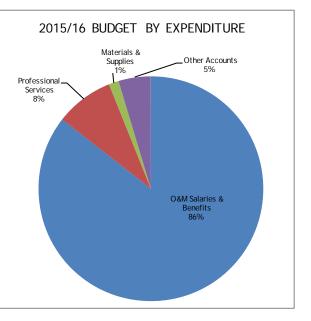
Workforce Development & Succession Planning

O&M	Financial	Summary
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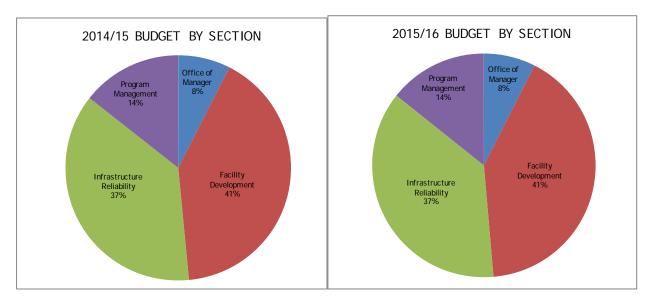
	2012/13 Actual	2013/14 Budget	2014/15 Budget	Change from 2013/14	2015/16 Budget	Change from 2014/15	
Total Salaries and Benefits	57,850,800	69,723,600	68,129,400	(1,594,200)	68,811,500	682,100	
Direct charges to Capital	(35,081,200)	(46,010,800)	(41,486,700)	4,524,100	(41,895,500)	408,800	
O&M Salaries & Benefits	22,769,600	23,712,800	26,642,700	2,929,900	26,916,000	273,300	
% Change		4.1%		12.4%		1.0%	
Professional Services	997,700	1,051,700	2,567,800	1,516,100	2,631,400	63,600	
Materials & Supplies	385,600	446,600	438,000	(8,600)	448,800	10.800	
Taxes & Permits	251,500	272,100	302,000	29,900	302,000	0	
Travel Expenses	141,800	175,100	259,500	84,400	261,900	2,400	
Utilities Charges	146,100	100,000	240,000	140,000	240,000	0	
Memberships & Subscriptions	62,600	93,600	147,900	54,300	146,700	(1,200)	
Communication Expenses	106,900	125,000	130,000	5,000	130,000	0	
Other Accounts	209,700	312,800	397,400	84,600	380,200	(17,200)	
Total O&M	25,071,500	26,289,700	31,125,300	4,835,600	31,457,000	331,700	
% Change		4.9%		18.4%		1.2%	
Operating Equipment	706,900	434,500	539,500	105,000	406,300	(133,200)	
Total O&M and Operating Equipment	25,778,400	26,724,200	31,664,800	4,940,600	31,863,300	198,500	
% Change		3.7%		18.5%		0.6%	

Note – Totals may not foot due to rounding.





O&M BUDGET BY SECTION



	2013/14	2014/15	Change from	2015/16	Change from	Personnel Budget		
	Budget	Budget	2013/14	Budget	2014/15	13/14	14/15	15/16
Office of Manager	2,066,900	2,338,000	271,100	2,355,400	17,400	8	8	8
Facility Development	9,685,900	12,749,600	3,063,700	12,940,800	191,200	48	55	55
Infrastructure Reliability	10,371,800	11,563,800	1,192,000	11,659,700	95,900	57	60	60
Program Management	4,165,100	4,473,900	308,800	4,501,000	27,100	21	23	23
Total O&M	26,289,700	31,125,300	4,835,600	31,457,000	331,700	134	146	146

Note - Totals may not foot due to rounding.

Personnel Summary

	2012/13 Actual	2013/14 Budget	2014/15 Budget	Change from 2013/14	2015/16 Budget	Change from 2014/15	
Regular	342	372	371	(1)	371	0	
0&M	136	134	146	12	146	0	
Capital	206	238	225	(13)	225	0	
Temporary	2	0	0	0	0	0	
O&M	0	0	0	0	0	0	0
Capital	2	0	0	0	0	0	
Total Personnel	344	372	371	(1)	371	0	
0&M	136	134	146	12	146	0	
Capital	208	238	225	13	225	0	

Note - Totals may not foot due to rounding.

SIGNIFICANT BUDGET ISSUES

Engineering Services biennial budget is \$31.1 million in FY 2014/15 and \$31.5 million in FY 2015/16 or an increase of 18.4% and 1.1% respectively from the prior budget years. The increase is due primarily to three factors.

- An increase in efforts in support of the BDCP, and preparation of Emergency Action Plans for dams per the state Division of Safety of Dams (DSOD) is impacting the primary factor, Salaries and Benefits, as well as ancillary costs such as travel.
- Merit increases for qualified employees and an increase in retirement-related benefits is also impacting Salaries and Benefits costs.
- Professional Services costs are increasing due to additional efforts in environmental-related documentation for O&M activities within the distribution system, and technical support to DWR for the reliability of SWP facilities.

The following are the significant changes by budget year.

FY 2014/15

Personnel-related issues

Net personnel levels remain consistent with last year's overall personnel. The FY 14/15 budget reflects a reduction of one regular position.

The number of regular positions budgeted to O&M is increasing by 12 positions while the number of regular positions budgeted to capital is decreasing by 13. This reassignment is consistent with a focus on major O&M activities that include technical support of Metropolitan's Bay Delta Initiatives office and additional efforts to comply with new regulations.

The budget reflects an overall decrease in budgeted capital labor. Planned capital expenditures for fiscal year 2014/15 are approximately \$36.6 million less than in fiscal year 2013/14. This decrease in planned expenditures reflects a readjustment of project budgets and schedules as a result of some very favorable bids on construction contracts, and to optimize facility shutdowns.

Other

Taxes and Permits budget reflects increasing quantity and complexity of environmental permits.

Utilities budget reflects higher power costs associated with a new Southern California Edison substation and maintenance agreement at La Verne.

FY 2015/16

Personnel-related issues

Overall personnel count for both O&M and capital work remains flat from the FY 2014/15 budget.

Budgeted capital labor is increasing slightly from FY 2014/15. Planned capital expenditures for fiscal year 2015/16 are approximately \$18.5 more than in fiscal year 2014/15. The CIP increase is due principally to a ramp-up of contractor payments. Additionally, construction is anticipated to commence on relining of the Lakeview Pipeline, electrical system upgrades at the Jensen plant, filter valve replacement at the Weymouth plant, and relining of the Orange County Feeder.

Other

Operating Equipment – FY 2014/15 and FY 2015/16

The operating equipment budget reflects increases due to a higher quantity of vehicles requiring replacement.