

- **Board of Directors**
Engineering and Capital Programs Committee

November 18, 2008 Board Meeting

9-2
Subject

Status of Capital Project Scheduling for fiscal year 2008/09

Description

In response to concerns regarding the economy and the current credit market, Metropolitan’s Chief Financial Officer requested that staff examine the timing and urgency of all planned requests for capital project authorizations with the consideration of optimizing the sale of bonds for program funding. Analysis of projected capital expenditures for previously authorized projects that are already in construction shows that existing construction funds are likely to be exhausted by the end of December 2008. Metropolitan intends to issue \$150 million to \$200 million of new money revenue bonds in December to finance construction. As part of its review, staff specifically assessed the expenditure plan over the six-month period from November 2008 through April 2009, including all ongoing construction contracts, in order to verify progress and anticipated cash flow.

The majority of budgeted capital expenditures, \$310 million of the total fiscal year capital budget of \$469 million, are for construction contracts. Nearly 85 percent of the budgeted construction funds are for contracts that are already underway or were recently awarded. Because of the potential for penalties and claims associated with delaying or terminating ongoing contracts, as well as the delay of project completion, there is little opportunity for reducing expenditures on any of the existing construction contracts. As a result, and as presented to the Engineering and Capital Programs Committee last month, additional funding will be needed within the next two months in order to continue to fund the capital program. However, staff has proceeded with the evaluation of upcoming authorization/appropriation requests through April 2009 in an effort to balance the potential for expenditure reductions against risk, as well as to consider opportunities for overall reduced construction costs in the current market.

The table below lists the criteria that were utilized to prioritize projects. Actions are either categorized as Go, Rescheduled, or Deferred. Project actions identified as Go were determined to be urgently required in order to remain on schedule for the reasons defined in the Table under “Criteria”. Project actions recommended to be rescheduled were assessed as resulting in minimal to no impact if the action were to be rescheduled to after April 2009. Project actions recommended to be deferred were determined to have minimal to no impact if deferred to next fiscal year.

Recommended Action	Criteria
Go – A	Environmental Regulation Compliance
Go – B	Urgent Health/Safety Concern
Go – C	Water Quality Regulation Compliance
Go – D	Augmenting Source of Supply
Go – E	Critical Facility/Component Failure
Go – F	Opportunity to Save costs
Go – G	Legal or Other Commitment
Go – H	Energy Management/Benefit

The results of staff's reprioritization are shown in **Attachment 1**. A total of 42 items were evaluated. Of the \$469 million budgeted for the Capital Investment Plan (CIP) for fiscal year 2008/09, all but approximately \$75 million has already been appropriated by the Board through October 2008. The majority of the remaining funds were planned to be appropriated in accordance with the board actions listed in **Attachment 1**. The impact to the projected CIP expenditures in fiscal year 2008/09 for the identified projects as a result of the recommended rescheduling is estimated to be a reduction of approximately \$17.1 million. This reduction does not take into account the fluctuations or variances in capital expenditures that occur normally as a result of differences in projections of contractor and consultant invoices, rescheduling of plant and pipeline shutdowns, reevaluation of project scopes, etc.

Policy

Metropolitan Water District Administrative Code Section 5108: Capital Project Appropriation

Fiscal Impact

Reduction in 2008/09 fiscal year expenditures by approximately \$17.1 million associated with project rescheduling.



Roy L. Wolfe
Manager, Corporate Resources

10/31/2008

Date



Jeffrey Kightlinger
General Manager

10/31/2008

Date

Attachment 1 – Re-Prioritized Capital Projects for fiscal year 2008/09

BLA #6355

Re-Prioritized Capital Projects for fiscal year 2008/09

Planned Board Date	Location	Planned Action	Proposed Revised Action and Date	Planned FY 08/09 Expenditures	Revised FY 08/09 Expenditure Projections	Comment
Nov-08	Mills	Appropriate \$X and authorize 1) preparation of preliminary design for the rehabilitation of the Mills Modules Nos. 3 and 4 weir gates and filter valves; and 2) amendment to the Lee & Ro agreement (for Mills Plant Capacity Upgrade).	Go - E	0	198,000	This work should proceed due to ongoing problems with the existing equipment that could result in unplanned plant shutdowns.
Nov-08	C&D West	Appropriate \$X and authorize study for relocation of Service Connection LV-01 from West Valley Feeder No.1 to West Valley Feeder No.2 to relieve supply constraints at Service Connection CA-02. This work will be partially reimbursed by the member agency.	Reschedule	0	25,000	Rescheduling the project would create minimal risk of service disruption.
Nov-08	Riverside	Authorize acquisition of property for the Proposed Riverside Treatment Plant Land. Funds were previously appropriated.	Reschedule	9,900,000	0	Rescheduling the land purchase would not increase costs or impact project completion dates.
Dec-08	Jensen	Appropriate \$X and authorize 1) study to upgrade the Jensen Modules Nos. 2 and 3 traveling bridges due to age and wear; and 2) final design to replace the Jensen Module No. 1 filter surface wash system and the filter valves due to corrosion, age, and wear.	Go - E	461,000	461,000	This work should proceed due to ongoing problems with the existing equipment that could result in unplanned plant shutdowns.
Dec-08	Weymouth	Appropriate \$X and authorize: 1) Weymouth Oxidation Retrofit Program design modifications to revise and repackage the previously advertised contract documents; 2) final design of the Weymouth plant raw water bypass; 3) amendments to existing agreements with Carollo Engineers and Tetra; and 4) agreement with Total Transportation Logistics for storage of the ozone equipment.	Reschedule 1 & 2 Go 3 & 4 - F	100,000	300,000	Rescheduling items 1 and 2 will not impact the approved completion date of 2014. The ozone equipment has been pre-ordered by Metropolitan and needs to be safely stored. Moving forward with items 3 and 4 will ensure protection this investment.
Dec-08	Diemer	Appropriate \$X and authorize: 1) Final design of seismic upgrades to the Diemer Finished Water Reservoir and adjacent south slope to install a retaining wall at the FWR south slope to stabilize the slope and prevent caissons failing during a maximum credible earthquake and thicken a portion of reservoir floor slab to mitigate potential cracking and prevent leakage; and 2) Final design of seismic upgrades to the Diemer East Washwater Tank to install retaining walls to retain the soil in place and support the north, northeast, and south edges of the East Washwater Tank foundation.	Go - E	766,000	766,000	This work should proceed in order to ensure the reliability of the Diemer plant and the safety of staff.
Dec-08	CRA	Appropriate \$X and authorize 1) final design of the 6.9kV CRA Pump Unit Motor Breakers to ensure safety by addressing fault concerns - the existing available system fault current exceeds the rating of the breakers; 2) preliminary design for the CRA Main Transformers Upgrades to replace aging transformers; 3) Construction of CRA Canal Rehabilitation to replace subgrade and replace distressed portions of canal liners; and 4) Final design for the replacement of the out-of-date 230 kV & 69 kV disconnects to ensure operational reliability and flexibility.	Go - E	1,501,100	1,501,000	This work should proceed due to the age and critical function of the transformers and power disconnects, the currently undersized and out of date pump unit breakers, and opportunity to perform canal work during low CRA flows.

Re-Prioritized Capital Projects for fiscal year 2008/09

Planned Board Date	Location	Planned Action	Proposed Revised Action and Date	Planned FY 08/09 Expenditures	Revised FY 08/09 Expenditure Projections	Comment
Dec-08	C&D West	Appropriate \$X and authorize study/preliminary design for 1) OC-88 fire protection study to construct entry and sprinkler system modifications to conform to current fire code regulations; 2) Upper Feeder Santa Ana River bridge seismic retrofit study to design modifications to conform to current seismic codes; 3) study/preliminary design of the expansion joint repair for the Upper Feeder at the Santa Ana River bridge crossing. The joint is currently leaking.	Go - B, E	409,000	409,000	This work should proceed in order to ensure the reliability of the Upper Feeder and to comply with fire code requirements at OC-88. Preliminary analysis has indicated that the Santa Ana River bridge may be damaged as a result of a maximum credible seismic event. The leaking joint would continue to corrode the walkway and bridge supports.
Dec-08	C&D West	Appropriate \$X and authorize 1) final design for Santiago Control Tower pavement replacement; and 2) construction of OC-44 service connection facility access road.	Defer	50,000	0	Deferring the project would create minimal risk of service disruption.
Dec-08	CRA	Appropriate \$X and authorize preliminary design of Quagga Mussels Barriers at Lake Havasu Intake, and Gene pump plant.	Go - E	766,900	766,900	This work should proceed move forward as part of the overall ongoing effort associated with control/management of Quagga Mussels.
Dec-08	Jensen	Appropriate \$X and award construction contract for Jensen Admin. Bldg Seismic Upgrades -- estimated construction cost: \$3.5M to \$5M to reinforce the building concrete roof structure and connections, including the clerestory that covers the entrance and lobby, and strengthen interior shear walls to increase structural reliability of this critical facility. The upgrade is NOT to mitigate risk due to a maximum credible earthquake. It is to bring the building structural system up to the current building code.	Go - E, F	2,943,600	2,943,600	This work should proceed in order to comply with building codes and to ensure the reliability of the structure and safety of the staff. Additionally, the design effort is nearly completed and the current bidding environment could result in greater competition and lower bids.
Dec-08	Mills	Appropriate \$X and award a construction contract to replace/repair broken back sections of the Box Springs Feeder.	Go - E	4,652,400	4,652,400	This work should proceed in order to ensure the reliability of the only raw water supply line to the Mills plant.
Jan-09	CRA	Appropriate \$X and authorize 1) Construction of Access Covers & Desert Water Tanks Access walkways, stairs, etc. to replace deteriorated concrete covers and provide safe and effective access to the water tanks for maintenance and inspection; 2) Final design of Danby Towers Repairs/Upgrades to electrical transmission tower footings.	Go - E	5,654,600	5,654,600	This work should proceed in order to ensure staff safety and the reliability of the CRA power supply.
Jan-09	CRA	Appropriate \$X and authorize study/preliminary design for 1) elimination of Intake Pumping Plant cooling and rejection water discharge to Lake Havasu; and 2) Gene Pumping Plant Main Transformers PCB Abatement.	Go - A	1,066,900	1,066,900	This work should proceed in order to comply with current regulations
Jan-09	Mills	Appropriate \$X and award construction contract for Mills Mods 1&2 Rehab & Chem System Upgrades - estimated construction cost: \$30M to \$40M to modify existing chemical storage and feed systems and construct a new chemical tank farm to provide sufficient capacity for 326 mgd plant operations. Also, rehabilitate Modules 1&2 to return them to service. Rehabilitation will include the replacement and/or refurbishment of mechanical and electrical equipment; the replacement of instrumentation and upgrade of control systems; and the replacement of basin sealant.	Go - C, F	21,096,500	21,096,500	This work should proceed in order to ensure the ability of the Mills plant to meet service demands. Additionally, the design effort is nearly completed and the current bidding environment could result in greater competition and lower bids.

Re-Prioritized Capital Projects for fiscal year 2008/09

Planned Board Date	Location	Planned Action	Proposed Revised Action and Date	Planned FY 08/09 Expenditures	Revised FY 08/09 Expenditure Projections	Comment
Jan-09	Skinner	Appropriate \$X and 1) award a procurement contract for Skinner Plant 1 filter gate stems & nuts; and 2) authorize final design and construction of pipe yard maintenance and storage shop upgrades to provide power supply to existing building and insulate existing building.	Go - B, E	697,600	697,600	This work should proceed due to ongoing problems with the existing equipment that could result in extended basin shutdowns. The yard maintenance area is insufficiently protected from inclement weather and power and lighting is insufficient.
Jan-09	DVL Recreation	Award a construction contract for DVL Boat Ramp extension.	Defer	0	0	Per Board direction, construction is being deferred pending availability of outside funding.
Jan-09	Weymouth	Appropriate \$X and authorize final design for the Weymouth Solar Power Generation Facility.	Reschedule - Repackage as a Power Purchase Agreement	175,000	50,000	Rescheduling this project is not anticipated to increase costs or result in impacts to service.
Jan-09	Garvey	Appropriate \$X and authorize construction of the Garvey Reservoir Monitoring System Upgrades.	Go - G	106,400	106,400	This work should proceed in order to comply with City of Monterey Park monitoring requirements.
Oct-08	Hayfield Ground Storage	Authorize design of the Hayfield Groundwater Extraction Project facilities to enable the retrieval of groundwater previously stored in the Hayfield basin.	Go - D: Moved to January 2009	566,000	400,000	This work should proceed in order to utilize available water supply.
Feb-09	Diemer	Appropriate \$X and authorize study/preliminary design of the Orange County Conveyance and Distribution Team Maintenance Facility.	Defer	216,900	0	Deferring the project would create minimal risk of service disruption.
Feb-09	Diemer	Appropriate \$X and authorize studies and preliminary designs for the Diemer Tank Farm Cover Replacement to replace the existing asbestos-containing roof over the tank farm with a new adequately sized cover and increase the height of the cover to provide adequate access to the top manway of the tanks.	Defer	46,400	0	Deferring the project would create minimal risk of service disruption.
Feb-09	Diemer	Appropriate \$X and authorize studies and preliminary designs for Diemer Chemical Feed System Improvements to conduct field testing of selected chemical feed pumps to update Metropolitan's chemical feed system design. Prepare a preliminary design report to optimize piping, pump and instrument sizing, and equipment arrangement based on the latest chemical feed requirements at the Diemer plant.	Go - C, E	602,400	602,400	This work should proceed due to ongoing problems with the existing equipment that could result in unplanned planned shutdowns.
Feb-09	Weymouth	Appropriate \$X and authorize preliminary designs at Weymouth to: 1) Reroute the above ground caustic/ammonia piping into a trench to replace deteriorating secondary containment piping at the combined filter effluent (CFE); and 2) increase chlorine dose (from 4 to 6 mg/L) at the CFE to enable higher post-WORP chlorine disinfection (after the filters become bioactive).	Go - A, C	234,600	234,600	This work should proceed in order to comply with containment and water quality requirements.
Feb-09	District -Wide	Appropriate \$X and authorize implementation of a E-Discovery/E-Retention system to support the legal department's management of e-discovery actions.	Go - F, G	500,000	500,000	This work should proceed in order to avoid increased costs to retrieve e-documentation, and increased risk of penalties during litigation.

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Planned Board Date	Location	Planned Action	Proposed Revised Action and Date	Planned FY 08/09 Expenditures	Revised FY 08/09 Expenditure Projections	Comment
Feb-09	Lake Mathews	Appropriate \$X and authorize preliminary design for the new Lake Mathews Support Facilities to address the need for a dedicated Mills Plant Maintenance Facility by co-locating the Eastern Conveyance and Distribution Unit maintenance facilities at Lake Mathews while upgrading the existing Construction Services support facilities and construction of a new sewer connection for the Lake Mathews site.	Defer	174,700	0	Deferring the project would create minimal risk of service disruption.
Feb-09	District -Wide	Authorize an agreement for replacement of the existing telephone and communication infrastructure system to promote reliable operation. Project will also implement unified communications architecture, and upgrade to Exchange 2007. Funds were previously appropriated.	Go - E	660,700	660,700	This work should proceed due to the age, unreliability, and lack of vendor support for the existing critical equipment.
Feb-09	District -Wide	Appropriate \$X and authorize Phase II the replacement of the existing emergency two way radio communication system with a more reliable and effective system.	Go - B, E	497,700	497,700	This work should proceed due to the unreliability of the existing critical equipment.
Feb-09	Skinner	Appropriate \$X and authorize construction of Electrical Building and Ground Fault Protection Upgrades at the Skinner plant to replace old UPC and MCC buckets in Electrical Buildings 1, 2, and 3 and all nine MCCs in Plant 1.	Go -E	6,906,000	6,906,000	This work should proceed due to the age and unreliability of the existing equipment that could result in unplanned plant shutdowns.
Feb-09	C&D Rehab	Appropriate \$X and authorize environmental study for the Orange County Backbay Road Repair to restore the road to the blow-off structure.	Defer	0	0	Deferring the project would create minimal risk of service disruption.
Feb-09	C&D Rehab	Appropriate \$X and authorize seismic studies of the San Gabriel Tower to conform to current seismic codes and address distribution system vulnerability.	Go - E	362,000	362,000	This work should proceed in order to ensure the reliability of the San Gabriel Tower and Upper Feeder.
Mar-09	CRA	Appropriate \$X and authorize construction to install an emergency standby generator at Eagle Mtn Pumping Plant to replace existing inoperable generator.	Go - E	243,300	243,300	This work should proceed to ensure necessary back-up emergency power is available for station power. The emergency generators at all 5 pumping plants are planned to be replaced to enable automatic start-up in the event of a power failure. The generator at Eagle Mtn. needs to be replaced immediately due to its recent failure. The plant is currently utilizing a portable generator as a back-up until a new unit is installed.
Mar-09	Mills	Appropriate \$X and authorize final design of Mills Washwater Reclamation Plant and Solids Thickeners. The project consists of designing a new washwater reclamation plant (WWRP), sludge thickeners, sludge splitter box, thickened sludge pumping station, thickener decant pumping station, polymer storage and feed facility, and washwater return pump station, modification and addition of necessary yard piping, mechanical, electrical, chemical, controls, and other facilities associated with the WWRP and thickener facilities.	Go - C	3,337,500	3,337,500	This work should proceed in order to ensure the ability of the Mills plant to meet service demands.

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Mar-09	Mills	Appropriate \$X and authorize preliminary design of Mills Mod 3 and 4 Potable Water Safety Stations and Industrial Waterline extension to extend potable water lines and install fixed (plumbed) emergency eyewash/shower units in piping galleries to replace portable stand-alone units, and extend the industrial water line to the top deck for washdown purposes.	Go - A, B	50,000	50,000	This work should proceed in order to provide an acceptable level of employee safety in the event of a chemical spill. The existing stand-alone units were allowed as a temporary measure and need to be replaced.
Mar-09	Weymouth	Appropriate \$X million and award a construction contract for Weymouth Perimeter Improvements Phase III -- estimated construction cost: \$1.5M to \$2.5M to upgrade the communication and lighting system, replace the guard shack, and install a new gate and truck inspection location at Weymouth's Wheeler Gate entrance; install a CMU block wall along the north boundary; and perform landscaping improvements around the WQ Lab.	Defer	1,698,000	0	Deferring the project would create minimal risk of service disruption.
Mar-09	Jensen	Appropriate \$X and award a construction contract for the caustic tank farm upgrades and tank farm roofs -- estimated construction cost: \$15M (for all) to demolish existing caustic soda tank farm asphalt containment area and replace with concrete and upgrade the drainage system and increase the containment wall height to meet California Fire Code regulatory requirements.	Go - A, F	1,960,000	1,960,000	This work should proceed in order to comply with containment and water quality requirements.
Mar-09	Weymouth	Appropriate \$X and award a construction contract for the Water Quality Pilot Plant building. The existing pilot plant, located in the basement of the recently renovated Softener Building 3 at La Verne, does not meet building and safety code requirements for this type of use. The new pilot plant will enable pilot scale testing of alternative, cost effective treatment technologies and/or operational adjustments that Metropolitan and member agencies may need to implement to meet water quality goals.	Defer	4,155,900	0	Deferring the advertisement and contract award would most likely not result in significant risk.
Mar-09	Weymouth	Appropriate \$X and award a contract for the first phase of the La Verne Shops Upgrade to replace the machine shop roof which is leaking; structurally retrofit the fabrication shop roof to comply with updated seismic criteria; and replace or refurbish 12 pieces of shop equipment in the Machine/Fabrication Shops. Also, a consultant will institute phase II (procedure and process definition) for ISO 2001 certification of the shops.	Defer	500,000	0	This work can be deferred because the building meets current code requirements and the roof can be temporarily repaired. Both items will be addressed when the building is expanded under the Laverne Shops Upgrade program next year.
Mar-09	Skinner	Appropriate \$X and award a contract to replace the Skinner Finished Water Reservoir floating cover. The existing cover was installed over 20 years ago, has reached the end of its useful life and is showing signs of deterioration. All of Metropolitan's treatment plants have covered FWR's to protect treated water from contaminants and to maintain compliance with water quality requirements.	Go - C, E	23,000	23,000	The existing cover has exceeded its useful life. Deferral of this project risks cross connection contamination and issuance of boil-water notice in the event of cover damage.

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Apr-09	Mills	Appropriate \$X and award a construction contract for the Mills Ozone System Reliability Upgrade to construct facilities to add standby ozone generation capacity to support 326-mgd plant operation, which includes making connections to existing facilities; testing and commissioning; installation of Metropolitan-furnished equipment (MFE) such as liquid oxygen tank, ozone generator, power supply unit, nitrogen injection system, ozone and oxygen analyzers, control panels, and related systems and accessories.	Go - F	1,582,700	1,582,700	Operating the ozone system without standby ozone generation capacity could require switching to the chlorine system if one of the three existing ozone generators fails. Also, the equipment has been pre-ordered and MWD would be subject to additional storage and handling charges if the installation contract is delayed.
Apr-09	Skinner	Appropriate \$X and authorize preliminary design, environmental, and right of way entry permitting for the recommended alignment of the remaining portions of San Diego Pipeline No. 6.	Go - G	100,000	100,000	Depending on the selected alignment, deferral of this action could risk delay of the project completion date beyond the currently identified on-line date of 2018.
Apr-09	WRM	Authorize implementation of a web-enabled system to support the management of Metropolitan's water conservation programs.	Defer	468,600	0	Deferring the project would create minimal risk of service disruption.