



● **Capital Investment Plan Quarterly Report for period ending March 2019**

Summary

The attached report provides a summary of actions and accomplishments on the Capital Investment Plan (CIP) during fiscal year 2018/19. It also provides updates on the status of capital projects and capital expenditures to date, and information regarding service connections and relocations authorized by the General Manager during the reporting period of January to March 2019, the third quarter of fiscal year 2018/19.

This is the second issue of the CIP Quarterly Report following the Board action to delegate authority to the General Manager to allocate previously appropriated capital funds and authorize work to proceed on planned projects. Staff received feedback from the board on last quarter's report and modified the quarterly report as appropriate.

Purpose

Administrative Code Requirement Section 2720 (a) (1): General Manager's Quarterly Reports

Section 2720 of Metropolitan's Administrative Code requires the General Manager to report quarterly to the Engineering and Operations Committee on the Capital Investment Plan.

Sections 4700-4708 of Metropolitan's Administrative Code requires the General Manager to report on service connections approved by the General Manager with the estimated cost and approximate location of each.

Section 8122(c) of Metropolitan's Administrative Code requires the General Manager to report on the execution of any relocation agreement under the General Manager's authority involving an amount in excess of \$100,000.

Highlights of progress and major milestones on selected projects are presented in the attached report grouped by CIP program.

Attachments

Capital Investment Plan quarterly report for period ending March 2019



CAPITAL INVESTMENT PLAN

Quarterly Report

January – March 2019



THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

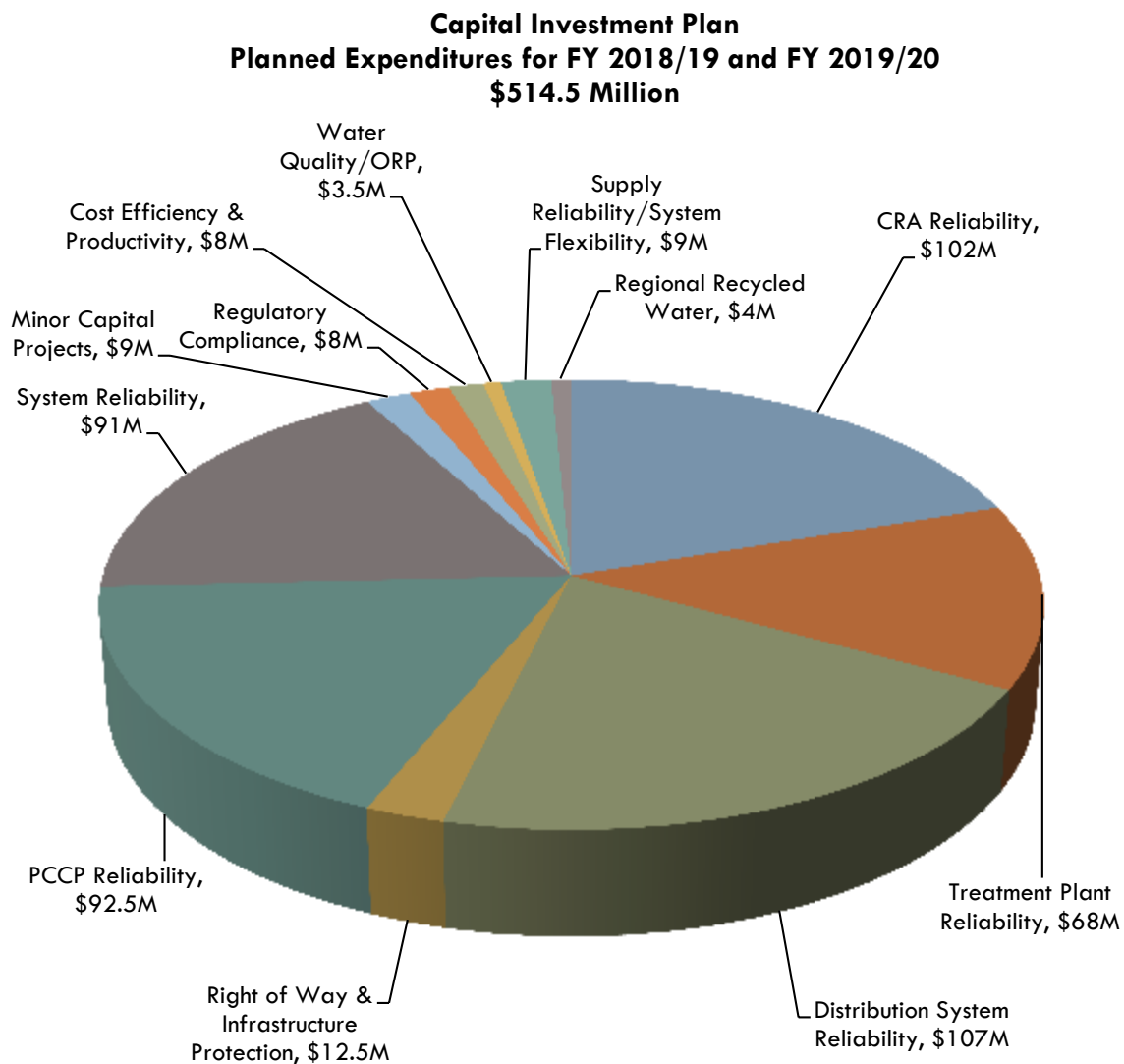
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CAPITAL INVESTMENT PLAN FOR FY 2018/19 & FY 2019/20

Metropolitan’s total Capital Investment Plan (CIP) planned expenditures for FYs 2018/19 and 2019/20 are \$514.5 million, and are shown in the figure below in relation to their associated program. The capital budget for the same period is \$400 million. This two-year capital budget is based on the historical variance between the annual actual expenditures and the annual planned expenditures. Based on the most recent five-year historical average, actual fiscal year CIP expenditures are approximately 80% of the annual planned expenditures.

Figure 1: CIP for FY2018/19 and FY2019/20 by Program



[Cover photo: Shop inspection of 42” Copper Basin discharge valve, and Copper Basin Reservoir]

THIRD QUARTER SUMMARY

Fiscal year expenditures through March 2019 totaled \$137.16 million (details shown in Table 15), and expenditures for the 3rd Quarter, January through March 2019, totaled \$51.54 million for all capital programs. All capital appropriations are within their authorized budgets.

In October 2018, the Board appropriated \$290 million, the estimated additional funds needed to perform the planned capital work for the rest of the biennium. The Board also delegated authority to the General Manager to initiate or proceed with the work, through a series of Management Actions, on all planned capital projects identified in the CIP for FYs 2018/19 and 2019/20, and delegated to the General Manager the authority to determine whether a project is exempt from the California Environmental Quality Act (CEQA).

During the 3rd Quarter, there were three project-specific Board actions heard in open session. These actions authorized two new agreements totaling \$1.38 million and awarded two contracts totaling \$37.43 million, as shown in Table 1 below. This report excludes information on Board items heard in closed session.

Table 1: 3rd Quarter Board Actions

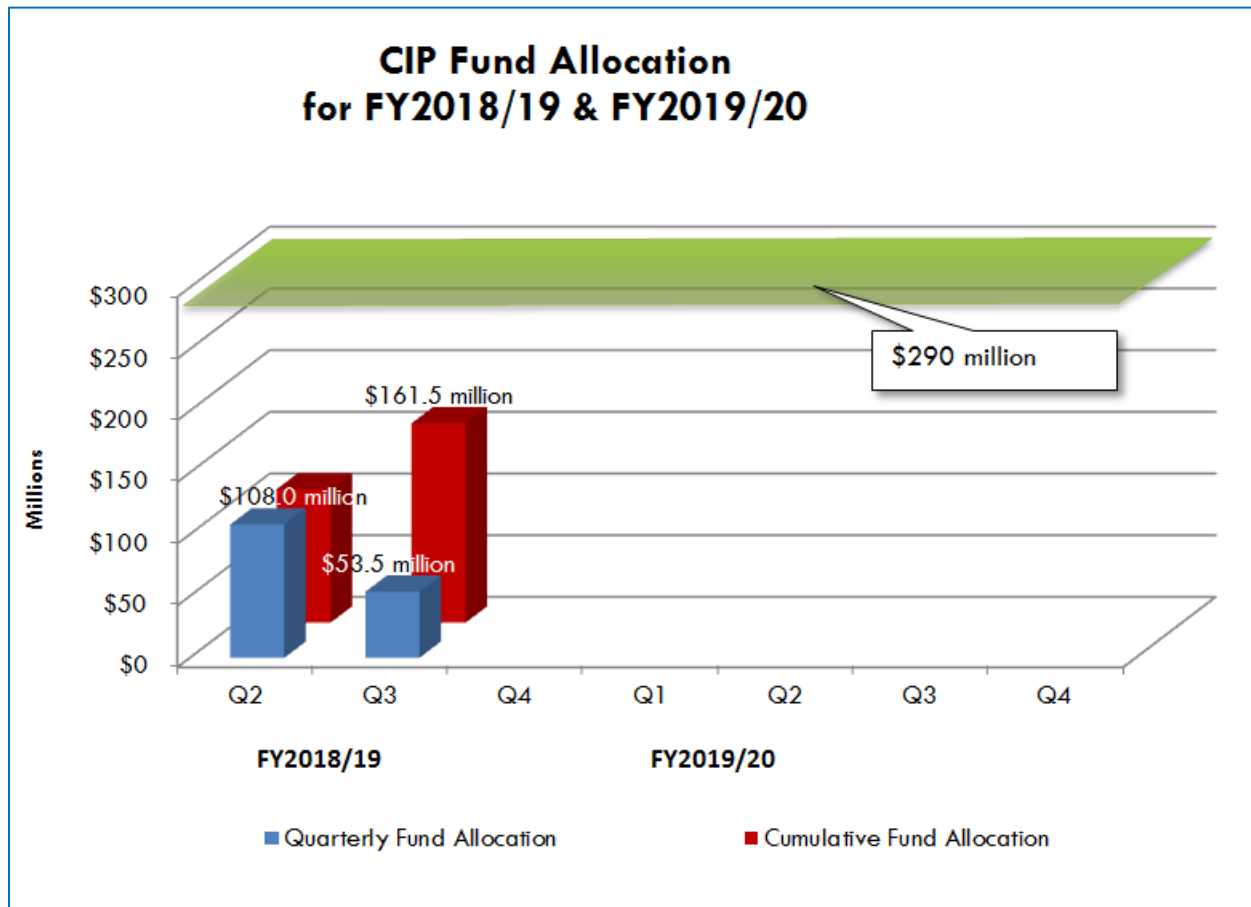
Month	Board Letter Item No.	Project	Action taken
January	7-1	Desert Microwave Tower Sites Upgrade	Authorized \$480,000 agreement
February	8-1	Greg Avenue Pump Station Rehabilitation	Awarded \$20,975,000 contract; Authorized \$900,000 agreement
February	8-2	CRA 6.9 kV Power Cable Replacement	Awarded \$16,452,832 contract

During the 3rd Quarter, the total amount authorized by the General Manager for the current biennium (FYs 2018/19 and 2019/20) through Management Actions, including the funds for the three projects shown in the table above, is approximately \$53.5 million. Details of the 15 Management Actions which occurred during the 3rd Quarter can be found in Table 4 in the **Project Actions** section of this report.

The previously referenced October 2018 board action appropriated \$290 million to perform work on planned capital projects through the current biennium. In order to be considered a planned project, the project must be included and described in the Capital Investment Plan Appendix for the two-year budget cycle. Consistent with this action, all requests to allocate funds and proceed with planned capital projects are reviewed and approved by the Chief Engineer acting under the General Manager's authority. Unplanned projects require Board authorization. Upon approval, such requested funds are then transferred from the \$290 million (Appropriation No. 15509) to the pertinent capital appropriation under which the project is budgeted. These transfers are based on both board actions and/or management decisions to initiate capital projects and/or proceed to the next phase of planned work.

The allocation of funds from Appropriation No. 15509 through these 15 Management Actions is shown in Figure 2 below¹. In the 3rd Quarter of the current fiscal year, \$53.5 million was allocated from Appropriation No. 15509 to approved projects (detailed in Table 4). The total allocation through the 3rd Quarter is \$161.5 million, leaving \$128.5 million available to be allocated during the remainder of the current biennium.

Figure 2: CIP Fund Allocation from Appropriation No. 15509 - FY2018/19 and FY2019/20



¹ The CIP Quarterly Report for the 2nd Quarter reported the CIP allocation for Q2 to be \$109.7 million, which is being amended to \$108.0 million in this quarter’s report. This change is necessary to reflect the correction of the amount authorized for CRA Pumping Plant Sump System Rehabilitation for the current biennium, from \$19,058,500 to \$17,310,500.

Information on construction and procurement contracts is summarized in Table 2 below, and presented in further detail in the **Construction and Procurement Contracts** section of this report. Progress payments for these contracts in the quarter totaled \$35.28 million, and primarily reflect progress on the procurement of steel pipe for Reaches 2 and 4 of the Second Lower Feeder Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation, repairs of the Iron Mountain Reservoir and Canal Liner, rehabilitation of the Diemer Water Treatment Plant West Basin and Filter Building, construction of the Metropolitan Headquarters Building Improvements, and the urgent relining of PCCP sections of the Sepulveda Feeder at Del Amo Boulevard.

Table 2: 3rd Quarter Contract Actions

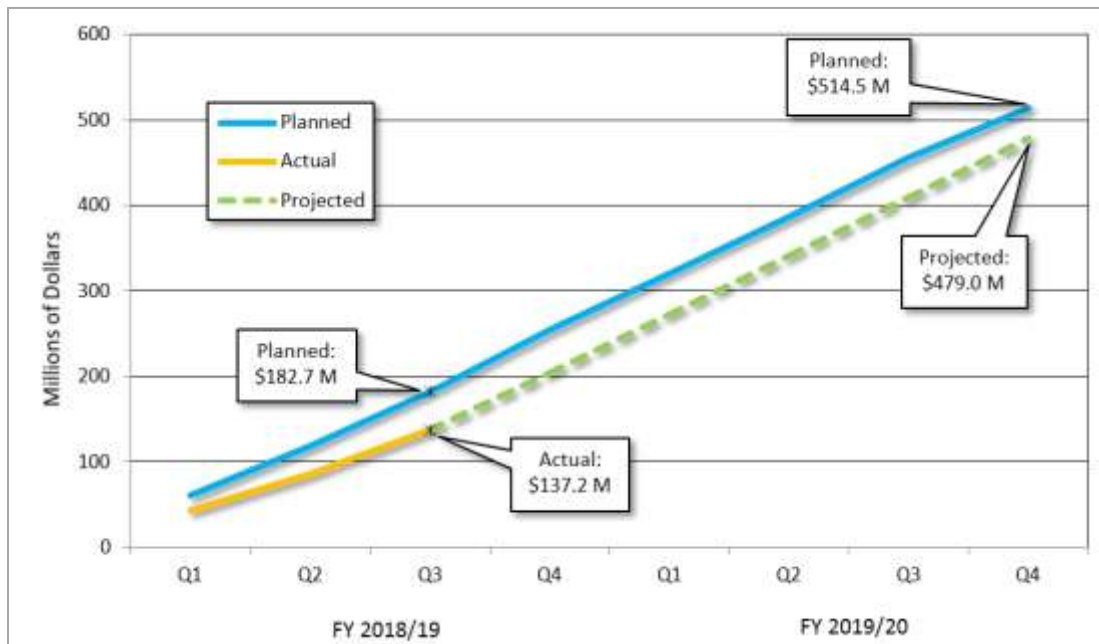
Contract Actions during Q3 for FY 2018/2019, January 2019 through March 2019	
Contracts Awarded	2 construction contracts totaling \$37.43 million No procurement contracts were awarded
Contract Payments Authorized	\$35.28 million
Contracts Completed	Notice of Completion was filed for 3 construction contracts
Active Contracts at end of Q3 ²	26 construction contracts, totaling \$265.67 million (Table 9) 15 procurement contracts, totaling \$59.19 million (Table 10) \$324.86 million total value

² Active contracts at the end of the 3rd Quarter include those that are ongoing at the end of March 2019.

PLANNED EXPENDITURE AND BUDGET

Figure 3 below shows actual expenditures for the fiscal year through the end of the 3rd Quarter and the forecast of expenditures through the end of the current biennium, against planned expenditures for the same time interval.

Figure 3: Current Biennium – Planned, Actual & Forecasted Expenditures



As stated previously, the total planned expenditures in the current biennium are \$514.5 million. The projected expenditures for the biennium are \$479 million, lowered from previous quarter’s projected expenditures of \$500 million. The revision is primarily due to shifts in the timing of planned construction contract awards. One of the contracts that was deferred is Etiwanda Pipeline Mortar Lining Repair. This project has been deferred by one year in order to allow for increased State Water Project deliveries over the 2019/20 shutdown season. Another set of projects that was rescheduled includes several Right-of-Way and Infrastructure Protection projects, since obtaining environmental permits is taking longer than anticipated, and recent storm damage is having an impact to the progress of the design.

Projected expenditures are based on approved work plans that include in-house and consultant labor, construction work currently underway, plus planned contract awards over fiscal years 2018/19 and 2019/20. Actual expenditures will depend on a variety of factors, including contractors’ work plans, unplanned O&M work, acquisition of permits and right-of-way, timing of facility shutdowns, and availability of labor resources.

Specific transfers from Appropriation No. 15509 to planned capital projects during the 3rd Quarter are listed in Table 4, in the **Project Actions** section of this report.

MAJOR CAPITAL PROGRAMS

Metropolitan's CIP is structured into three levels. In descending order, they are:

- Program
- Appropriation
- Project

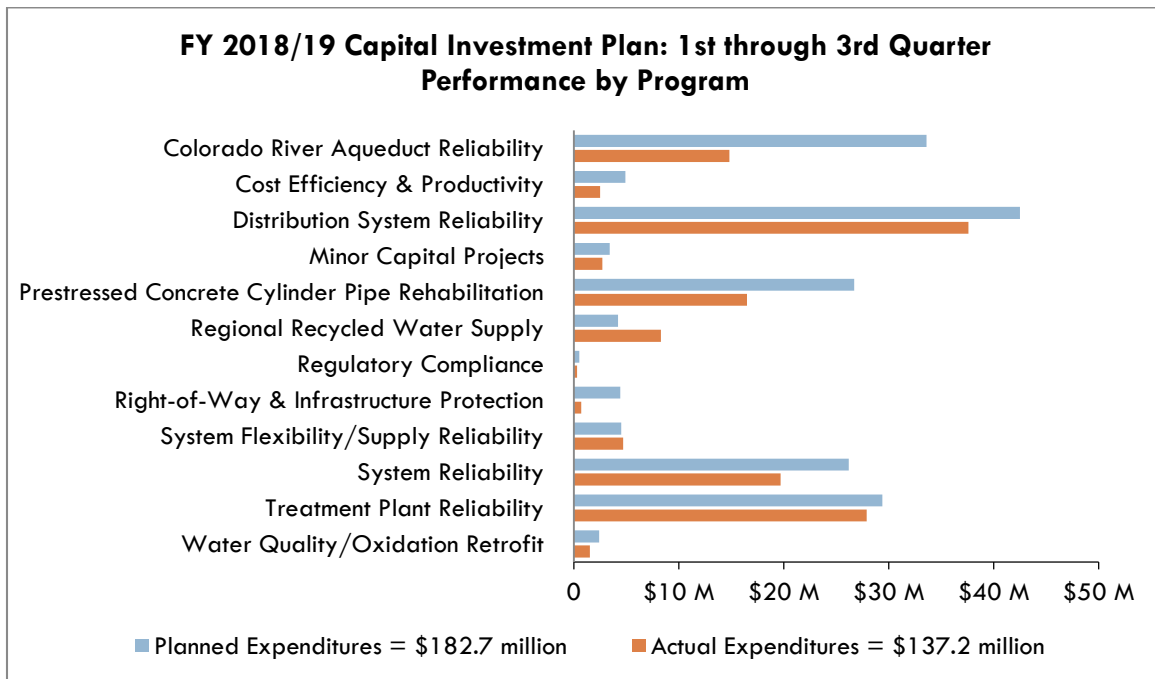
The highest level of the CIP structure is program. Twelve capital programs have been established at Metropolitan to capture all projects within the CIP at the time the budget was adopted for this biennium. The 12 capital programs are listed below in alphabetical order. Programs are comprised of one or more appropriations, and appropriations are comprised of one or more projects. The status of each of the programs is provided later in this section of the report.

- Colorado River Aqueduct (CRA) Reliability
- Cost Efficiency & Productivity
- Distribution System Reliability
- Minor Capital Projects
- Prestressed Concrete Cylinder Pipe (PCCP) Reliability
- Regional Recycled Water Supply
- Regulatory Compliance
- Right-of-Way and Infrastructure Protection
- System Flexibility/Supply Reliability
- System Reliability
- Treatment Plant Reliability
- Water Quality/Oxidation Retrofit

Overall, there are currently 345 planned projects (excluding Minor Capital Projects) in 70 appropriations within the CIP for the current biennium. The list of appropriations that make up each of the programs, along with planned expenditures and actual costs to date for those appropriations, are provided in Table 15 at the end of this report.

Figure 4 below shows actual versus planned expenditures by **program** for the first three quarters of FY 2018/19.

Figure 4: FY Expenditures (Actuals vs. Planned) through 3rd Quarter



Variances between planned and actual expenditures for each program are mostly due to shifts in planned spending on construction work. The two largest variances are for the Colorado River Aqueduct (CRA) Reliability Program and the Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation Program. For the CRA Reliability Program, actual expenditures through the 3rd Quarter of this fiscal year were less than planned for a number of reasons: construction work on a number of projects within the program was rescheduled to coincide with the planned CRA shutdown; actual bids received for several contracts were lower than expected; and design of some projects has taken longer than planned in order to address unforeseen underground utilities.

Actual expenditures for the Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation Program were also less than planned, due to shifts in the timing of planned work. The large valve procurement contract for the Second Lower Feeder was awarded later than planned, causing a slight shift in planned spending. A much greater shift in planned spending occurred due to reprioritizing the award of the smaller Second Lower Feeder Reach 4 construction contract over the larger Second Lower Feeder Reach 2 construction contract, to accommodate member agencies' planned operations. In addition, the Reach 4 construction shutdown was delayed to accommodate Sepulveda Feeder Urgent Relining Work, which further contributed to the variance.

Table 3 on the following page lists the actual versus planned expenditures for the top 10 planned capital **projects** for the current biennium, based on their planned biennial expenditures. The planned versus actual expenditures through the end of the 3rd quarter of FY 2018/19 are also shown in this table.

Table 3: Top Ten Planned Capital Projects
Planned and Actual expenditures

Project	Planned (FY 2018/19 through FY 2019/20)	Planned (FY 2018/19 to end of 3 rd Quarter)	Actuals (FY 2018/19 to end of 3 rd Quarter)
Second Lower Feeder PCCP Rehabilitation	\$77.6M	\$19.7M	\$11.2M
Headquarters Improvements	\$24.3M	\$1.6M	\$4.7M
Orange County Feeder Lining Replacement	\$19.4M	\$4.2M	\$1.9M
Palos Verdes Reservoir Rehabilitation	\$15.0M	\$10.1M	\$9.8M
CRA 6.9kV Power Cable Replacement	\$14.0M	\$3.2M	\$0.4M
CRA Pumping Plant Sump System Rehabilitation	\$11.0M	\$3.1M	\$0.5M
Orange County Service Center	\$10.4M	\$2.7M	\$4.3M
Wadsworth Pumping Plant Control & Protection Upgrades	\$9.9M	\$5.5M	\$3.8M
CRA Water Distribution System & Roadway Asphalt Replacement	\$9.0M	\$1.2M	\$0.7M
Weymouth Filter Valve Replacement	\$9.0M	\$3.0M	\$0.2M
Total	\$199.6M	\$54.3M	\$37.5M

Total actual expenditures for the projects listed above lag planned expenditures by almost \$17 million for the first three quarters of this fiscal year. This cumulative variance can be attributed to the following:

- **Second Lower Feeder PCCP Rehabilitation:** Actual expenditures were less than planned due to shifts in the timing of planned work, details of which are described on the previous page.
- **Orange County Feeder Lining Replacement:** The actual vs. planned expenditure variance is due to a longer-than-anticipated lead-time to obtain permits from the cities, which in turn delayed the award of the Reach 2 construction contract.
- **CRA 6.9kV Power Cable Replacement:** The variance between planned and actual expenditures is primarily due to rescheduling the construction work to coincide with the planned CRA shutdown and the low bid being lower than expected.
- **CRA Pumping Plant Sump System Rehabilitation:** The variance can be attributed to the construction contract being awarded later than anticipated, due to design of utility relocations, as well as procurement and installation of isolation valves ahead of the rehabilitation work.
- **Weymouth Filter Valve Replacement:** The variance is due to the rescheduled delivery of the first set of Metropolitan-furnished valves in order to streamline the inspection and approval of the vendor submittals. This delivery schedule change does not impact the timing of planned installation of the valves.

The section that follows provides 3rd Quarter highlights for each Major Capital Program, while the Minor Capital Program is highlighted in its own section of this report. Status is provided for the

following projects within each Major Capital Program. The selected projects either achieved major milestones during the 3rd Quarter, or are scheduled to achieve major milestones in the 4th Quarter.

Program	Project
Colorado River Aqueduct (CRA) Reliability	CRA 6.9kV Power Cable Replacement
	CRA Pumping Plant Sump System Rehabilitation
	CRA Water Distribution System & Roadway Asphalt Replacement
Cost Efficiency & Productivity	Enterprise Content Management Phase I
	Project Controls and Reporting System
Distribution System Reliability	Orange County Feeder Lining Replacement – Reach 2
	Orange County Service Center
	Palos Verdes Reservoir Cover Replacement
Prestressed Concrete Cylinder Pipe (PCCP) Reliability	Second Lower Feeder PCCP Rehabilitation – Reach 4
	Sepulveda Feeder PCCP Urgent Relining
Regional Recycled Water Supply	Advanced Water Treatment Demonstration Facility
Regulatory Compliance	CRA Pumping Plant Wastewater System Replacement – Gene & Iron Mountain
Right-of-Way and Infrastructure Protection	Reliability Improvements in the Orange, Western San Bernardino, Los Angeles, and Riverside/San Diego County Operating Regions
System Flexibility/Supply Reliability	Greg Avenue Pump Station Rehabilitation
	Lake Perris Seepage Water Conveyance Pipeline
System Reliability	Headquarters Improvements
	Wadsworth Pumping Plant Control & Protection Upgrades
Treatment Plant Reliability	Diemer West Basin & Filter Building Rehabilitation
	Weymouth Filter Valve Replacement
Water Quality/Oxidation Retrofit	Weymouth Enhanced Bromate Control Facilities
	Weymouth Ozonation Facilities and Completion Activities

Colorado River Aqueduct (CRA) Reliability Program

Program Information: The CRA Reliability Program is composed of projects to replace or refurbish facilities and components of the CRA system in order to reliably convey water to Southern California.

**Planned FY2018/2019 Expenditures
(through March 2019)**
\$33.63 million

**Actual FY2018/2019 Expenditures
(through March 2019)**
\$14.79 million

PROGRAM HIGHLIGHTS (3rd Quarter)

Status

Fiscal year expenditures for this program are less than planned through March 2019 due to:

- Recently awarded contracts are in early phases in which submittal reviews and fabrication are proceeding, with major construction rescheduled to coincide with the planned CRA shutdown
- Actual bids received for several contracts were lower than expected
- Design of some projects has taken longer than planned in order to address unforeseen underground utilities

Accomplishments

- CIP work completed during the shutdown included:
 - Installation of surge chamber bypass covers at each pumping plant
 - Replacement of concrete lining at the CRA & Iron Mountain Reservoir
- Tie-in work by Metropolitan forces in support of the Intake powerline relocation
- February 2019 Board award of contract to replace the CRA's 6.9kV motor cables

Upcoming Activities

Upcoming work for the next quarter will include:

- Completion of design for the following projects:
 - Gene Wash Reservoir Discharge Valve Replacement
 - CRA Discharge Line Isolation Bulkheads and Couplings Replacement
 - CRA Radial Gates Replacement
 - Whitewater Erosion Protection Structure Rehabilitation

**CRA Reliability Program:
CRA 6.9kV Power Cable Replacement**

This project will replace deteriorated main power cables at each of the five CRA pumping plants.

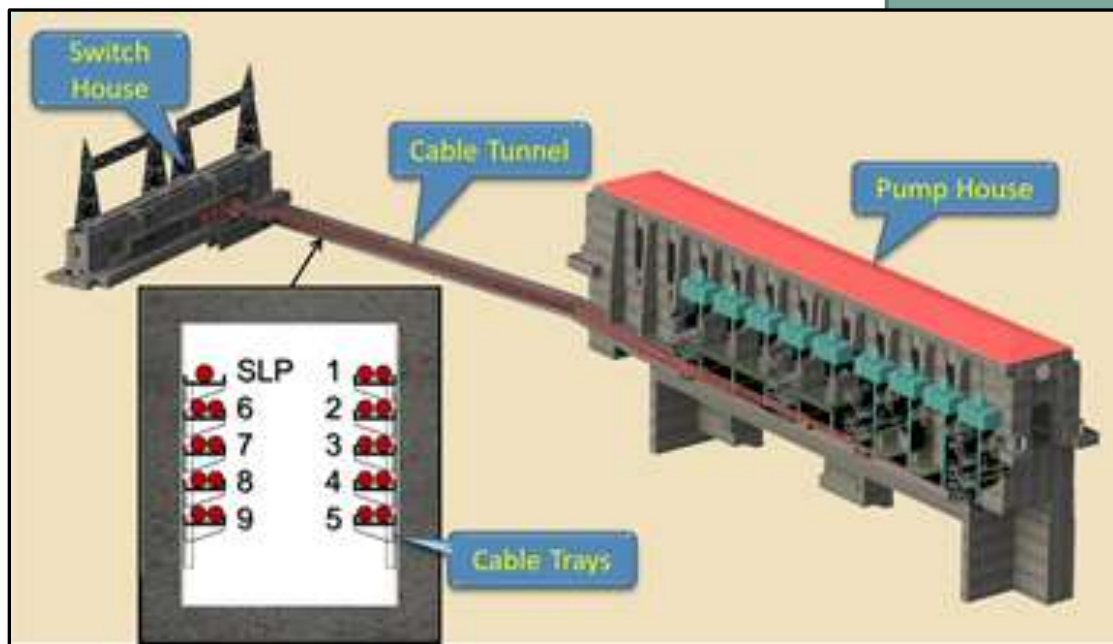
Phase	Construction
% Complete for Current Phase	1%
Construction Contract Awarded	February 2019
Appropriation Number	15384
Contract Number	1915

Review of contractor submittals is underway. The contractor plans to begin cable replacements in Fall 2019.

*Estimated Construction
Completion Date:
July 2020*

*Total Project Estimate:
\$26.1 million*

Cost to Date: \$2,217,298



Typical arrangement of 6.9 kV power cables to be replaced at all five CRA pumping plants

**CRA Reliability Program:
CRA Pumping Plant Sump System Rehabilitation**

This project will rehabilitate the sump discharge piping and circulating water system at each of the five CRA pumping plants.

*Estimated Construction
Completion Date:
March 2022*

*Total Project Estimate:
\$40.0 million*

Cost to Date: \$5,283,183

Phase	Construction
% Complete for Current Phase	2%
Construction Contract Awarded	December 2018
Appropriation Number	15438
Contract Number	1908

The contractor began the submittals process in preparation for the fabrication of approximately 60 pumps of varying sizes. Construction activities are planned to begin in January 2020 once the pumps have been fabricated and accepted.



Submerged sump pumps at Iron Mountain Pumping Plant

**CRA Reliability Program:
CRA Water Distribution System & Roadway Asphalt
Replacement**

This project will replace water distribution systems and asphalt roadways at all five CRA pumping plants.

Phase	Final Design
% Complete for Current Phase	95% Hinds & Eagle 55% Gene & Iron 5% Intake
Final Design Authorized	December 2017
Appropriation Number	15483

Ground penetrating radar subsurface utility investigation was completed at Iron Mountain. Similar utility investigations will be complete at Gene Pumping Plant in the next quarter.

Estimated Final Design

Completion Dates:

Hinds & Eagle: November 2019

Gene & Iron: March 2020

Intake: September 2020

Total Project Estimate:

\$27.6 million

Cost to Date: \$1,857,317



Gene Pumping Plant: Deteriorated asphalt pavement and water piping system

Cost Efficiency and Productivity Program

Program Information: The Cost Efficiency and Productivity Program is composed of projects to upgrade, replace, or provide new facilities, software applications, or technology, which will provide economic savings that outweigh project costs through enhanced business and operating processes.

**Planned FY2018/2019 Expenditures
(through March 2019)**

\$4.87 million

**Actual FY2018/2019 Expenditures
(through March 2019)**

\$2.51 million

PROGRAM HIGHLIGHTS (3rd Quarter)

Status	<p>Fiscal year expenditures for this program are less than planned through March 2019 due to several factors:</p> <ul style="list-style-type: none"> • Longer than anticipated time to move files and data on the network drives for the Enterprise Content Management • Delays in setting up IT servers for the PCRS consultant due to new IT security measures
Accomplishments	<ul style="list-style-type: none"> • Completed file permissions for Engineering for Enterprise Content Management Phase I • Completed reporting system mockups for the PCRS
Upcoming Activities	<p>Upcoming work for the next quarter will include:</p> <ul style="list-style-type: none"> • Completion of records retention schedules for Information Technology, Water Quality, Real Property, and Administrative Services

**Cost Efficiency & Productivity Program:
Enterprise Content Management Phase I**

This project will design an enterprise content management application that will classify and manage electronic documents and other media to allow for easy retrieval, review, and destruction of information in accordance with Metropolitan’s record retention schedule.

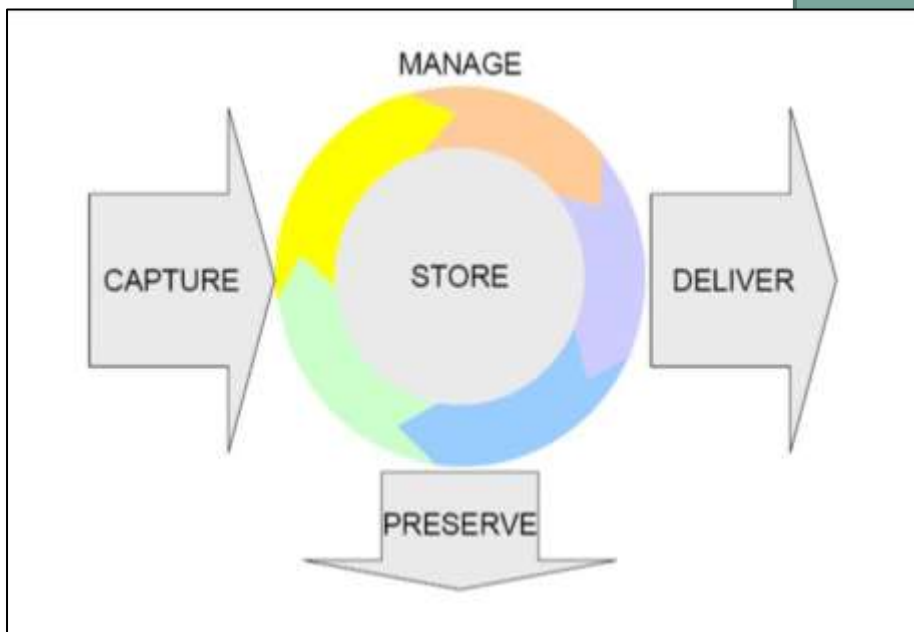
Phase	Design
% Complete for Current Phase	50%
Design Authorized	July 2017
Appropriation Number	15500

This component of the ECM program will deliver a new records retention schedule (RRS), thesaurus, security classification and metadata for the files currently residing on Metropolitan’s internal network. Setup of new file structures is underway.

Estimated Design Completion Date:
March 2020

Total Project Estimate:
\$1.9 million

Cost to Date: **\$ 610,545**



Enterprise content management concepts

**Cost Efficiency & Productivity Program:
Project Controls and Reporting System**

*Estimated Deployment
Completion Date:
December 2019*

*Total Project Estimate:
\$5.8 million*

Cost to Date: \$2,568,970

This project will replace the existing project control system that is now functionally obsolete.

Phase	Deployment
% Complete for Current Phase	33%
Board Authorized	October 2017
Appropriation Number	15490

Reporting system mockups were completed during the 3rd quarter. Upcoming activities include migration of initial test projects and testing in the development environment.



Proposed project controls and reporting system dashboard design

Distribution System Reliability Program

Program Information: The Distribution System Reliability Program is comprised of projects to replace or refurbish existing facilities within Metropolitan’s distribution system, including reservoirs, pressure control structures, hydroelectric power plants, and pipelines, in order to reliably meet water demands.

**Planned FY2018/2019 Expenditures
(through March 2019)**

\$42.48 million

**Actual FY2018/2019 Expenditures
(through March 2019)**

\$37.65 million

PROGRAM HIGHLIGHTS (3rd Quarter)

Status	Fiscal year expenditures for this program are slightly less than planned through March 2019 due to minor shifts in timing of the work.
Accomplishments	<ul style="list-style-type: none"> • Completed design and advertised for bids to procure two chemical storage tanks to replace the existing sodium hypochlorite storage tanks at Lake Mathews • Completed draft study for Lake Skinner and Lake Mathews spillway upgrades • Completed design for Garvey Reservoir and Drainage and Erosion Improvements at three sites • Completed preliminary design for the Casa Loma Siphon Barrel No. 1 permanent repairs • Advertised for procurement contracts for West Valley Feeder No. 1 valves
Upcoming Activities	<p>Upcoming work for the next quarter will include:</p> <ul style="list-style-type: none"> • Award a construction contract for Garvey Reservoir drainage and erosion improvements • Award a contract to procure two chemical storage tanks to replace the existing sodium hypochlorite storage tanks at Lake Mathews • Complete replacement of Palos Verdes Reservoir cover and liner • Complete construction of Wadsworth Pumping Plant Yard Piping relining • Continue construction of: electrical upgrades at 15 structures in Orange County; Orange County Service Center; and Castaic Valley blow-off valve replacement • Award valve procurement contracts for West Valley Feeder No. 1 valve replacement • Begin final design of the Casa Loma Siphon Barrel No. 1 permanent repairs

**Distribution System Reliability Program:
Orange County Feeder Lining Replacement**

This project will reline approximately 11 miles of the Orange County Feeder in three stages. Reach 1 is complete. Reach 2 construction will replace the deteriorated internal lining along a 4-mile portion of the feeder within the cities of Santa Ana and Costa Mesa. Reach 3 will reline the remaining 5 miles of the feeder.

Phase	Reach 1 – Construction Complete Reach 2 – Construction Reach 3 – Final Design
% Complete for Current Phase	Reach 2 – 25% Construction Reach 3 – 75% Final Design
Final Design Authorization	November 2014
Construction Contract Awarded	November 2018 (Reach 2)
Appropriation Number	15377
Contract Number	1904

Contractor completed construction activities that were scheduled to occur during the February 2019 shutdown of the Orange County Feeder. Rehabilitation of the steel lining is underway.

Orange County Feeder:
Preparation for removal of coal
tar enamel



*Estimated Construction
Completion Date–Reach 2:
September 2019*

*Total Project Estimate:
\$35 million*

Cost to Date: \$14,745,491

**Distribution System Reliability Program:
Orange County Service Center**

This project will construct a new 16,100-square-foot maintenance and storage facility to serve the Orange County region.

Phase	Construction
% Complete for Current Phase	40%
Construction Contract Awarded	March 2018
Appropriation Number	15480
Contract Number	1880

Concrete placement and other foundation work are underway. Electrical and plumbing activities at the hazardous waste storage facility are planned for next quarter.

*Estimated Construction
Completion Date:
March 2020*

*Total Project Estimate:
\$15.4 million*

Cost to Date: \$7,298,374



Orange County Service Center: Concrete placement at pump and valve storage room

**Distribution System Reliability Program:
Palos Verdes Reservoir Cover Replacement**

This project will replace the reservoir’s existing floating cover and liner, and modify the existing spillway, control tower, and outlet structures.

*Estimated Construction
Completion Date:
May 2019*

*Total Project Estimate:
\$47.5 million**

Cost to Date: \$42,338,243

** Revised in January 2019
from \$39.4 million for
unanticipated work related to
differing site conditions and
weather-related issues*

Phase	Construction
% Complete for Current Phase	98%
Construction Contract Awarded	November 2015
Appropriation Number	15417
Contract Number	1825

Palos Verdes Reservoir was placed into operation in February 2019.



Palos Verdes Reservoir: New floating cover installation complete

Prestressed Concrete Cylinder Pipe (PCCP) Reliability Program

Program Information: The PCCP Reliability Program is composed of projects to refurbish or upgrade Metropolitan’s PCCP feeders to maintain water deliveries without unplanned shutdowns.

**Planned FY2018/2019 Expenditures
(through March 2019)**

\$26.68 million

**Actual FY2018/2019 Expenditures
(through March 2019)**

\$16.50 million

PROGRAM HIGHLIGHTS (3rd Quarter)

Status	Fiscal year expenditures for this program are less than planned through March 2019 due to delays to the Reach 4 construction shutdown to accommodate the Sepulveda Feeder Urgent Relining.
Accomplishments	<ul style="list-style-type: none"> • Completed urgent relining on the Sepulveda Feeder at Del Amo Blvd • Completed design to rehabilitate Second Lower Feeder Reach 2 • Completed fabrication of Metropolitan Furnished Pipe for Second Lower Feeder Reach 4 • Mobilized to rehabilitate Second Lower Feeder Reach 4 • Completed shutdown of the Second Lower Feeder to isolate the pipeline for installation of steel liner
Upcoming Activities	<p>Upcoming work for the next quarter will include:</p> <ul style="list-style-type: none"> • Award a contract to rehabilitate Second Lower Feeder Reach 2 • Start construction to rehabilitate Second Lower Feeder Reach 2 • Continue construction to rehabilitate Second Lower Feeder Reach 4

**PCCP Reliability Program:
Second Lower Feeder PCCP Rehabilitation – Reach 4**

This project will rehabilitate approximately 2 miles of existing PCCP segments with a steel liner.

Phase	Construction
% Complete for Current Phase	30%
Construction Contract Awarded	November 2018
Appropriation Number	15497
Contract Number	1940

The Second Lower Feeder has been shut down, dewatered, and isolated within the work limits. The contractor has completed demolition activities and has begun installing steel liner.

*Estimated Construction
Completion Date:
November 2019*

*Total Project Estimate:
\$29.9 million**

*Cost to Date: \$4,990,202**

** Final design, pipe
procurement, and construction
phases only*



Removal of existing 42" isolation valve for Reach 4

**PCCP Reliability Program:
Sepulveda Feeder PCCP Urgent Relining**

This project relined approximately 400 feet of existing PCCP segments with a steel liner during a January 2019 shutdown. The project is now in the “post-construction” phase, which means that record drawings are being prepared.

Construction Completion Date:
February 2019

Total Project Estimate:
\$3.6 million

Cost to Date: \$2,437,229

Phase	Post-Construction
% Complete for Current Phase	Initiated
Construction Contract Awarded	December 2018
Appropriation Number	15496
Contract Number	1950

The contractor completed the steel liner installation and restored the site ahead of schedule. The pipeline went back into service in February 2019.



Welding of 20-foot long pipe segment after liner installation

Regional Recycled Water Supply Program

Program Information: The Regional Recycled Water Supply Program includes the design and construction of the Advanced Water Treatment Demonstration Plant, which represents the initial step in development of a potential regional recycled water system for recharge of groundwater basins within Southern California.

**Planned FY2018/2019 Expenditures
(through March 2019)**

\$4.19 million

**Actual FY2018/2019 Expenditures
(through March 2019)**

\$8.26 million

PROGRAM HIGHLIGHTS (3rd Quarter)

Status	Fiscal year expenditures for this program are more than planned through March 2019 due to shifts in timing of the work.
Accomplishments	<ul style="list-style-type: none"> • Construction is substantially complete. • System commissioning is being performed in anticipation of the facility start-up in July 2019.
Upcoming Activities	<p>Upcoming work for the next quarter will include:</p> <ul style="list-style-type: none"> • Completion of system commissioning in June 2019

**Regional Recycled Water Supply Program:
Advanced Water Treatment Demonstration Facility**

This project will construct an advanced water treatment demonstration facility at the Los Angeles County Sanitation Districts' Joint Water Pollution Control Plant to test the effectiveness of various advanced water treatment processes for regulatory approval of the potential regional recycled water program.

Phase	Construction
% Complete for Current Phase	95%
Construction Contract Awarded	July 2017
Appropriation Number	15493
Contract Number	1856

System commissioning is underway, and is planned to be completed in June 2019.

*Estimated Construction
Completion Date:
June 2019*

*Total Project Estimate:
\$17.0 million*

Cost to Date: \$15,999,303



Advanced Water Treatment Demonstration Facility

Regulatory Compliance Program

Program Information: The Regulatory Compliance Program is comprised of projects to provide for prudent use and management of Metropolitan’s assets in compliance with regulations and codes other than water quality.

**Planned FY2018/2019 Expenditures
(through March 2019)**

\$0.54 million

**Actual FY2018/2019 Expenditures
(through March 2019)**

\$0.29 million

PROGRAM HIGHLIGHTS (3rd Quarter)

Status	Fiscal year expenditures for this program are more than planned through March 2019 due to shifts in timing of the work.
Accomplishments	Awarded a contract under the General Manager’s authority for subsurface investigations at Gene Pumping Plant in support of the wastewater system replacement project.
Upcoming Activities	Complete subsurface investigations for the Gene Pumping Plant. The subsurface investigation will be used to verify the location of underground utilities shown on record drawings that are more than 70 years old. The findings from these investigations will be incorporated into the final design for the Gene Pumping Plant wastewater system replacement project.

**Regulatory Compliance Program:
CRA Pumping Plant Wastewater System Replacement – Gene
& Iron Mountain**

This project will replace wastewater systems at Gene and Iron Mountain Pumping Plants.

Phase	Final Design
% Complete for Current Phase	55%
Final Design Authorized	December 2012
Appropriation Number	15385

Completed ground penetrating radar subsurface utility investigation at Iron Mountain.

*Estimated Final Design
Completion Date:
Gene & Iron: March 2020*

*Total Project Estimate:
\$9.4 million**

*Cost to Date: \$690,543**

** Final design and construction
phases only*



Gene Pumping Plant: septic tank/leach field

Right-Of-Way and Infrastructure Protection Program

Program Information: The Right of Way Infrastructure Protection Program (RWIPP) is comprised of projects to refurbish or upgrade above-ground facilities and right-of-way along Metropolitan’s pipelines in order to address access limitations, erosion-related issues, and security needs.

**Planned FY2018/2019 Expenditures
(through March 2019)**

\$4.38 million

**Actual FY2018/2019 Expenditures
(through March 2019)**

\$0.73 million

PROGRAM HIGHLIGHTS (3rd Quarter)

Status

Fiscal year expenditures for this program are less than planned through March 2019 due to several factors:

- Orange County Region – Negotiations over environmental permits with California Department of Fish & Wildlife have taken longer than anticipated
- Orange County Region – Right-of-way acquisition has taken longer than anticipated due to negotiations with various entities

Accomplishments

- Orange County Region – Continued to address environmental permitting issues and began assessing recent storm damage and impacts to current design
- Western San Bernardino, Los Angeles, and Riverside/San Diego Regions – Began assessing recent storm damage and impacts to current design

Upcoming Activities

Upcoming work for the next quarter will include:

- Orange County Region – Proceed with preparation of bid package for project sites with no environmental permits required or right-of-way issues
- Western San Bernardino Region – Complete assessment of recent storm damage and incorporate changes into design drawings
- Los Angeles Region – Complete assessment of recent storm damage and complete preliminary design
- Riverside/San Diego Region – Complete assessment of recent storm damage and complete preliminary design

System Flexibility/Supply Reliability Program

Program Information: The System Flexibility/Supply Reliability Program is comprised of projects to increase the capacity and flexibility of Metropolitan’s water supply and delivery infrastructure to meet service demands.

**Planned FY2018/2019 Expenditures
(through March 2019)**

\$4.48 million

**Actual FY2018/2019 Expenditures
(through March 2019)**

\$4.67 million

PROGRAM HIGHLIGHTS (3rd Quarter)

Status

Fiscal year expenditures for this program are consistent with the planned expenditures through March 2019.

Accomplishments

- February 2019 Board award of contract to rehabilitate the Greg Avenue Pump Station
- Completed preliminary design for Lake Perris Seepage Water Conveyance Pipeline
- Began record drawing preparation for the Inland Feeder/Lakeview Pipeline Intertie

Upcoming Activities

Upcoming work for the next quarter will include:

- Begin final design for Lake Perris Seepage Water Conveyance Pipeline
- Begin construction to rehabilitate the Greg Avenue Pump Station
- Complete record drawings for the Inland Feeder/Lakeview Pipeline Intertie

**System Flexibility/Supply Reliability Program:
Greg Avenue Pump Station Rehabilitation**

This project will improve the reliability of the Greg Avenue Pump Station by replacing the existing pumps, control building, and surge tanks, and upgrading key electrical, mechanical, and control equipment at the facility.

Phase	Construction
% Complete for Current Phase	0%
Construction Contract Awarded	February 2019
Appropriation Number	15488
Contract Number	1911

In the upcoming quarter, the contractor plans to start the submittals process, mobilize to site, and start construction activities.

*Estimated Construction
Completion Date:
December 2021*

*Total Project Estimate:
\$33.6 million*

Cost to Date: \$5,723,734



Greg Avenue Pump Station

System Flexibility/Supply Reliability Program: Lake Perris Seepage Water Conveyance Pipeline

This project will design and construct a new pipeline to collect water from a Department of Water Resources planned wellfield located below Perris Dam. The pipeline will convey Lake Perris leakage water to the Colorado River Aqueduct.

*Estimated Preliminary Design
Completion Date:
August 2019*

*Total Project Estimate:
\$6.5 million*

Cost to Date: \$418,298

Phase	Preliminary Design
% Complete for Current Phase	30%
Preliminary Design Authorized	April 2017
Appropriation Number	15402

Prepared topographic survey of pipeline alignment and completed preliminary design report.



Proposed seepage recovery system alignment

System Reliability Program

Program Information: The System Reliability Program is comprised of projects to improve or modify facilities located throughout Metropolitan’s service area in order to utilize new processes and/or technologies, and improve facility safety and overall reliability. These include projects related to Metropolitan’s Supervisory Control and Data Acquisition (SCADA) system and other Information Technology projects.

**Planned FY2018/2019 Expenditures
(through March 2019)**

\$26.19 million

**Actual FY2018/2019 Expenditures
(through March 2019)**

\$19.66 million

PROGRAM HIGHLIGHTS (3rd Quarter)

Status Fiscal year expenditures for this program are less than planned through March 2019 due to shifts in timing of the work from the planned expenditures developed for the budget adoption in April 2018.

Accomplishments • Began construction of Headquarters improvements

Upcoming Activities Upcoming work for the next quarter will include:

- Continue replacement of the control and protection equipment for the Wadsworth Pumping Plant
- Continue final design of the water quality laboratory seismic and HVAC improvements and the headquarters building audiovisual system upgrade projects

**System Reliability Program:
Headquarters Improvements**

This project will reduce the risk of significant damage to Metropolitan’s Headquarters building in the event of a major earthquake, along with the associated disruption of Metropolitan’s business processes.

Phase	Construction
% Complete for Current Phase	5%
Construction Contract Awarded	November 2018
Appropriation Number	15473
Contract Number	1905

Demolition activities and foundation excavation in the parking garage were completed. Placement of foundation reinforcement and demolition in Wing and kitchen are underway.



Excavation for grade beams in Union Station parking garage

*Estimated Construction
Completion Date:
January 2022*

*Total Project Estimate:
\$74.7 million*

Cost to Date: \$15,349,232

**System Reliability Program:
Wadsworth Pumping Plant Control & Protection**

This project will upgrade control and electrical protection systems for nine pump/turbine units at Wadsworth Pumping Plant at Diamond Valley Lake.

*Estimated Deployment
Completion Date:
February 2020*

*Total Project Estimate:
\$34.7 million*

Cost to Date: \$23,016,632

Phase	Deployment
% Complete for Current Phase	67%
Board Authorized	April 2017
Appropriation Number	15467

Upgrade of control system and electrical system protection equipment is continuing, with testing of control software and electrical protection system for pumping units 2, 3, and 4 planned for next quarter.



Pump/Turbine control cabinets

Treatment Plant Reliability Program

Program Information: The Treatment Plant Reliability Program is comprised of projects to replace or refurbish facilities and components of Metropolitan’s five water treatment plants in order to continue to reliably meet treated water demands.

**Planned FY2018/2019 Expenditures
(through March 2019)**

\$29.44 million

**Actual FY2018/2019 Expenditures
(through March 2019)**

\$27.85 million

PROGRAM HIGHLIGHTS (3rd Quarter)

Status	Fiscal year expenditures for this program are consistent with the planned expenditures through March 2019.
Accomplishments	<ul style="list-style-type: none"> • Began construction to rehabilitate the Diemer West Basins and Filter Building and to refurbish Diemer filter valve actuators • Completed planning for a half-plant shutdown of the Diemer plant to support construction of above projects • Completed design for Stage 2 construction of electrical upgrades at the Jensen plant • Advertised construction of Jensen Modules Nos. 2 and 3 Flocculator Rehabilitation
Upcoming Activities	<p>Upcoming work for the next quarter will include:</p> <ul style="list-style-type: none"> • Advertisement of Stage 2 construction of the electrical upgrades at the Jensen plant • Completion of work for Diemer West Basins and Filter Building Rehabilitation scheduled for the Diemer half-plant shutdown • Award a construction contract to rehabilitate Jensen Modules Nos. 2 and 3 flocculators

**Treatment Plant Reliability Program:
Diemer West Basin & Filter Building Rehabilitation**

This project will rehabilitate the Diemer Water Treatment Plant’s west flocculation/sedimentation basins and filter building. The work includes the replacement of treatment basin equipment, and filter valves, abatement of hazardous materials, and seismic strengthening of the filter building.

Phase	Construction
% Complete for Current Phase	13%
Construction Contract Awarded	October 2018
Appropriation Number	15380
Contract Number	1900

In Basin No. 5, the contractor has completed demolition of half the equipment and has started remediation of the joints. Upcoming activities include completion of shutdown work, including the seismic strengthening of the filter sump areas, and completion of equipment demolition in Basin No. 5.



Diemer West Basin No. 5, showing demolition of sludge rakes

*Estimated Construction
Completion Date:
November 2020*

*Total Project Estimate:
\$44.2 million**

*Cost to Date: \$3,891,944**

** Construction phase only*

**Treatment Plant Reliability Program:
Weymouth Filter Valve Replacement**

This project will replace the existing filter valves and actuators at the Weymouth Water Treatment Plant to enhance reliability and performance of the filtration process.

*Estimated Final Design
Completion Date:
December 2020*

*Estimated Procurement
Completion Date:
August 2020*

*Total Project Estimate:
\$24.5 million*

Cost to Date: \$1,921,490

Phase	Final Design/Procurement
% Complete for Current Phase	45% Final Design 20% Procurement
Final Design Authorization	May 2014
Procurement Contract Awarded	November 2017
Appropriation Number	15369
Contract Number	1867

Final design for valve installation is ongoing, and valve procurement contract has been awarded. Upcoming activities include continuing submittal review for the procurement of valves and actuators.



Weymouth Filter Gallery, showing equipment to be replaced

Water Quality/Oxidation Retrofit Program

Program Information: The Water Quality/Oxidation Retrofit Program is comprised of projects to add new facilities to ensure compliance with water quality regulations for treated water, located at Metropolitan’s treatment plants and throughout the distribution system.

**Planned FY2018/2019 Expenditures
(through March 2019)**

\$2.39 million

**Actual FY2018/2019 Expenditures
(through March 2019)**

\$1.54 million

PROGRAM HIGHLIGHTS (3rd Quarter)

Status	Fiscal year expenditures are less than planned through March 2019 due to shifts in timing of the work.
Accomplishments	<ul style="list-style-type: none"> • The Weymouth Oxidation Retrofit (ORP) Project facilities were placed into service in October 2017. Other activities have been completed including preparation of O&M manuals and record drawings. • The Weymouth Enhanced Bromate Control Facilities were placed into service in February 2019, and record drawings are being prepared.
Upcoming Activities	<p>Upcoming work for the next quarter will include:</p> <ul style="list-style-type: none"> • ORP Completion Activities – plan for replacement of ozone gas flowmeters during winter of 2019/20 • Enhanced Bromate Control Facilities – continue with record drawing preparation

**Water Quality/Oxidation Retrofit Program:
Weymouth Enhanced Bromate Control Facilities**

This project will upgrade ammonia storage and feed system to control bromate formation in support of the new ozone disinfection process at the Weymouth Water Treatment Plant.

Phase	Post-Construction
% Complete for Current Phase	10%
Construction Contract Awarded	August 2015
Appropriation Number	15472
Contract Number	1818

The system was placed into operation in February 2019. Upcoming activities include continuation of record drawing production.

*Estimated Post-Construction
Completion Date:
December 2019*

*Total Project Estimate:
\$8.8 million*

Cost to Date: \$8,088,668



Recently upgraded Weymouth Ammonia Storage Tanks and Feed Systems

**Water Quality/Oxidation Retrofit Program:
Weymouth Ozonation Facilities and Completion Activities**

*Estimated Completion Date for
ORP Completion Activities:
March 2020*

*Total Project Estimate:
\$162.7 million*

Cost to Date: \$161,155,071

This project will design and construct facilities that will replace the primary disinfectant to ozone, reduce the formation of chlorinated disinfection by-products, and controlling taste-and-odor causing compounds.

Phase	Post-Construction
% Complete for Current Phase	99%
Funding Authorized	December 2016
Appropriation Number	15392

Ozone gas flowmeter replacement rescheduled to winter 2019/20 shutdown season due to increase in State Water Project allocation.



Weymouth ozone generation building

MINOR CAPITAL PROGRAM

The Minor Capital Projects (Minor Cap) Program is authorized biennially to enable staff to expedite small capital projects. At the commencement of each biennium, the Board appropriates the entire two-year budget for the program. In order to be considered for inclusion in the Minor Cap program, a project must have a planned budget of less than \$400,000. The \$400,000 project budget cap was established by the June 2018 Board action Item 8-3. Prior to that action, the budget cap for minor cap projects was \$250,000. Staff manages these projects so that each project is completed within three years of its initial authorization.

For the past two bienniums, the two-year budgets for the Minor Cap Program have been \$8 million and \$10 million, respectively. Since many of these projects require rapid response to address unanticipated failures, safety or regulatory compliance concerns, or to take advantage of shutdown opportunities, the Minor Cap Program authorizes the General Manager to execute projects that meet defined criteria without seeking additional Board approval.

Minor Cap Program Historical Summary

The following table provides the overall status of the Minor Cap appropriations for the fiscal years 2014/15–2015/16 through 2018/19–2019/20.

	Fiscal Year			Totals
	2014/15– 2015/16	2016/17– 2017/18	2018/19– 2019/20	
Amount Appropriated	\$8M	\$10M	\$10M	\$28M
Expenditures through March 2019	\$6.3M	\$5.5M	\$1.0M	\$12.8M
Number of Projects Approved	36	46	18	100
Number of Projects Completed (through March 2019)	24	9	0	33
Percent of Work Complete	96%	69%	11%	N/A
Number of Projects with Durations of Over 3 Years	0	0	0	0

Through March 2019, 33 of the 100 projects have been completed, and no projects have exceeded three years in duration. Planned fiscal year expenditures to date (July 2018 through March 2019) for the Minor Capital Projects Program were \$3.42 million, while actual fiscal year expenditures for the same period were \$2.72 million.

Minor Cap Projects, 3rd Quarter

Authorized: Four projects were authorized under the Minor Cap Program during the 3rd Quarter of fiscal year 2018/19 (January through March 2019):

- CRA Casa Loma Siphon Barrel No. 1 – This project will procure and install internal seals for six pipe joints on the CRA Casa Loma Siphon Barrel No. 1, to maintain reliable water supplies. The project budget is \$353,800.
- Gene Inlet Surge Chamber Access Improvement – This project will design and install a new platform and ladders required at the Gene Inlet Surge Structure, to enhance infrastructure safety, security, and resiliency. The project budget is \$169,900.
- Skinner Flowmeter Replacement – This project will replace six (6) existing Accusonic-type flowmeter consoles at the Skinner plant with modern consoles of the same brand, to enhance accuracy of flow monitoring. The project budget is \$334,000.
- Weymouth Electric Vehicle Charging Station – This project will construct two dual electric vehicle charging stations at the Weymouth plant, including wiring, conduits, and protective bollards, consistent with Metropolitan’s sustainability initiative. The project budget is \$229,248.

Completed Projects

Six projects were completed under the Minor Cap Program during the 3rd Quarter of fiscal year 2018/19 (January through March):

- Eagle Mountain Pumping Plant Domestic Water Line Insulation
- Jensen Plant West Side Landscape Improvements
- Lake Skinner Aerator Compressor Air Receiver
- Santiago Lateral Sta. 364+04 Pipe Exposure
- Skinner Module No. 3 Electrical Raceway Replacement
- Auld Valley Pipeline Bubbler Installation

Cancelled Projects

- No projects were cancelled under the Minor Cap Program during the 3rd Quarter of fiscal year 2018/19 (January through March).

PROJECT ACTIONS

Table 4 lists capital projects authorized by the General Manager, through 15 Management Actions, during the 3rd Quarter³ through the authority delegated by the Board in October 2018. The total amount authorized by the General Manager for the current biennium during the 3rd Quarter is approximately \$53.5 million. In some cases listed below, the Total Amount Authorized may differ from the Amount Authorized for Current Biennium. This occurs when the Total Amount Authorized for the project exceeds the estimated expenditures authorized for the current biennium, since the work authorized is scheduled to be completed beyond the current biennium. In these cases, it is anticipated that staff will request sufficient funds to be allocated from the CIP Appropriation for the next biennium to cover the planned remaining future-year costs of the project. When the Amount Authorized for Current Biennium is equal to the Total Amount Authorized, it is anticipated that the authorized work will be completed within the current biennium, unless unforeseen circumstances arise.

Table 4: Capital Projects Funded by General Manager Authorization

Project Authorized	Activity Authorized	Amount Authorized for Current Biennium ⁴	Total Amount Authorized ³
Hinds Pumping Plant Discharge Valve Platform Replacement	Preliminary Design	\$370,000	\$370,000
Jensen Site Security Upgrades	Preliminary Design	\$225,000	\$225,000
Foothill Feeder - Castaic Valley Blow-Off Valves Replacement	Design, Procurement & Construction	\$535,000	\$535,000
Maximo Mobile Computing Upgrade	Deployment	\$630,000	\$630,000
Ozone Generator Open Loop Cooling Water System Improvements	Design	\$125,000	\$125,000
Garvey Reservoir Cover and Liner Replacement	Initiate Project	\$61,000	\$61,000
Desert Microwave Tower Site Upgrades (Phase 1 of 2)	Final Design	\$2,293,007	\$2,293,007
System-wide Control System Upgrade	Demonstration	\$2,170,971	\$2,170,971
Greg Avenue Pump Station Rehabilitation	Construction	\$21,839,000	\$28,900,000
Datacenter Modernization Upgrade Phase 2	Design	\$1,857,200	\$1,857,200
New La Verne Warehouse	Initiate project	\$60,000	\$60,000
Flow Meter Replacement	Study	\$90,000	\$90,000
Cyber Security Remediation Phase 2	Preliminary Design	\$2,174,720	\$2,174,720
Fuel Management System Upgrade	Initiate Project	\$85,000	\$85,000
CRA 6.9 kV Power Cable Replacement	Construction	\$20,986,234	\$23,900,000
Total		\$53,502,132	\$63,476,898

³ This report excludes Minor Capital projects as well as any Board items heard in closed session

⁴ Authorized Amount includes each project's remaining budget

CEQA DETERMINATIONS

Table 5 lists CEQA exemption determinations made by the General Manager during the 3rd Quarter. Consistent with CEQA, the Board delegated this authority to the General Manager in October 2018. Adoption of Negative Declarations and Mitigated Negative Declarations, and certification of Environmental Impact Reports will continue to require action by Metropolitan’s Board. As previously stated, this report excludes information on Board items heard in closed session.

Table 5: CEQA Exemption Determinations

Projects
Chlorine Unloading Facility Ejector Water Meter Installation
CRA 6.9 kV Power Cable Replacement
Desert Microwave Tower Site Upgrades (Phase 1 of 2)
Greg Avenue Pumping Station Rehabilitation
Subsurface Utility Investigation at Gene Pumping Plant
Union Station Emergency Generator Underground Storage Tank Upgrade

CONSTRUCTION AND PROCUREMENT CONTRACTS

The table below summarizes the status of all active construction and procurement contracts.

*Table 6: Summary of Construction and Procurement Contracts during 3rd Quarter
(January through March 2019)*

Summary	Construction	Procurement
Number of Contracts Active during this Quarter ⁵	29	15
Total Contract Amount of Active Contracts	\$276,636,351	\$59,192,265
Number of Contracts Completed this Quarter ⁶	3	0
Number of Contracts Awarded this Quarter	2	0
Total Contract Amount of Contracts Awarded this Quarter	\$37,427,832	\$0
Contract Earnings ^{7, 8, 9} this Quarter	\$28,225,237	\$7,051,154

The following figures on the next two pages show the locations of the 29 active and recently completed construction contracts:

Figure 5: Construction contracts – Greater Los Angeles Region

Figure 6: Construction contracts – Colorado River Aqueduct

⁵ Number of Contracts Active during this Quarter include those that were underway as well as those that were completed during the 3rd Quarter.

⁶ Completed contracts are those which Metropolitan has accepted as physically complete and has filed Notice of Completion during the 3rd Quarter.

⁷ Contract earnings reflected in this report represent the value of the work performed by the contractor by the 25th day of the month. Contract earnings include contract retention and other similar deductions for the amounts earned by the contractor, but otherwise required to be withheld by Metropolitan by law or by contract.

⁸ Contract payments are typically made by Metropolitan in the month following performance of the work.

⁹ For the reasons listed above in the preceding two footnotes, contract payments in Metropolitan's financial system will be less than the earnings until the final payment has been made to the contractor.

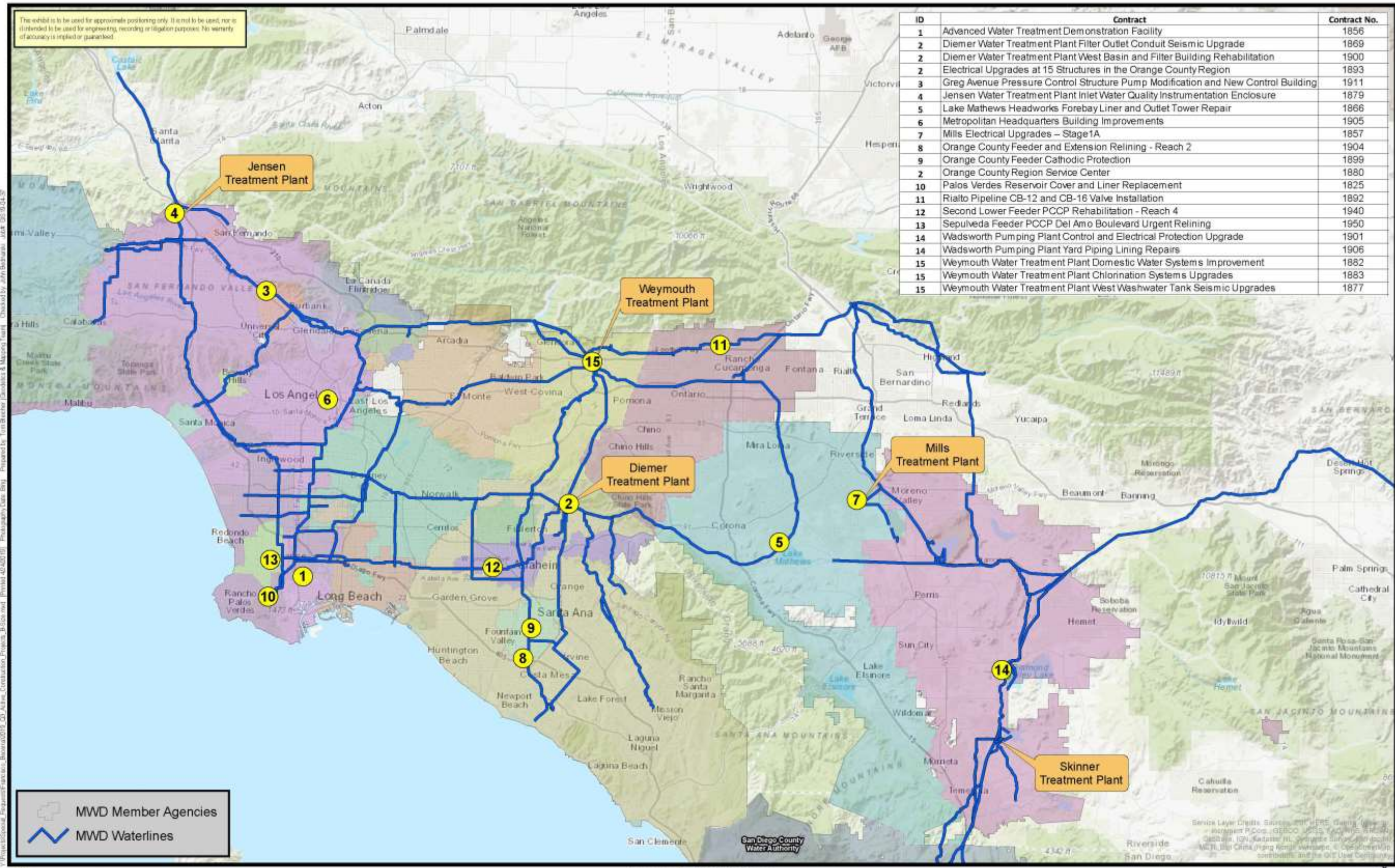


Figure 5: CIP Projects
Construction Contracts - Greater Los Angeles Region

The Metropolitan Water District of Southern California
Engineering Services Group

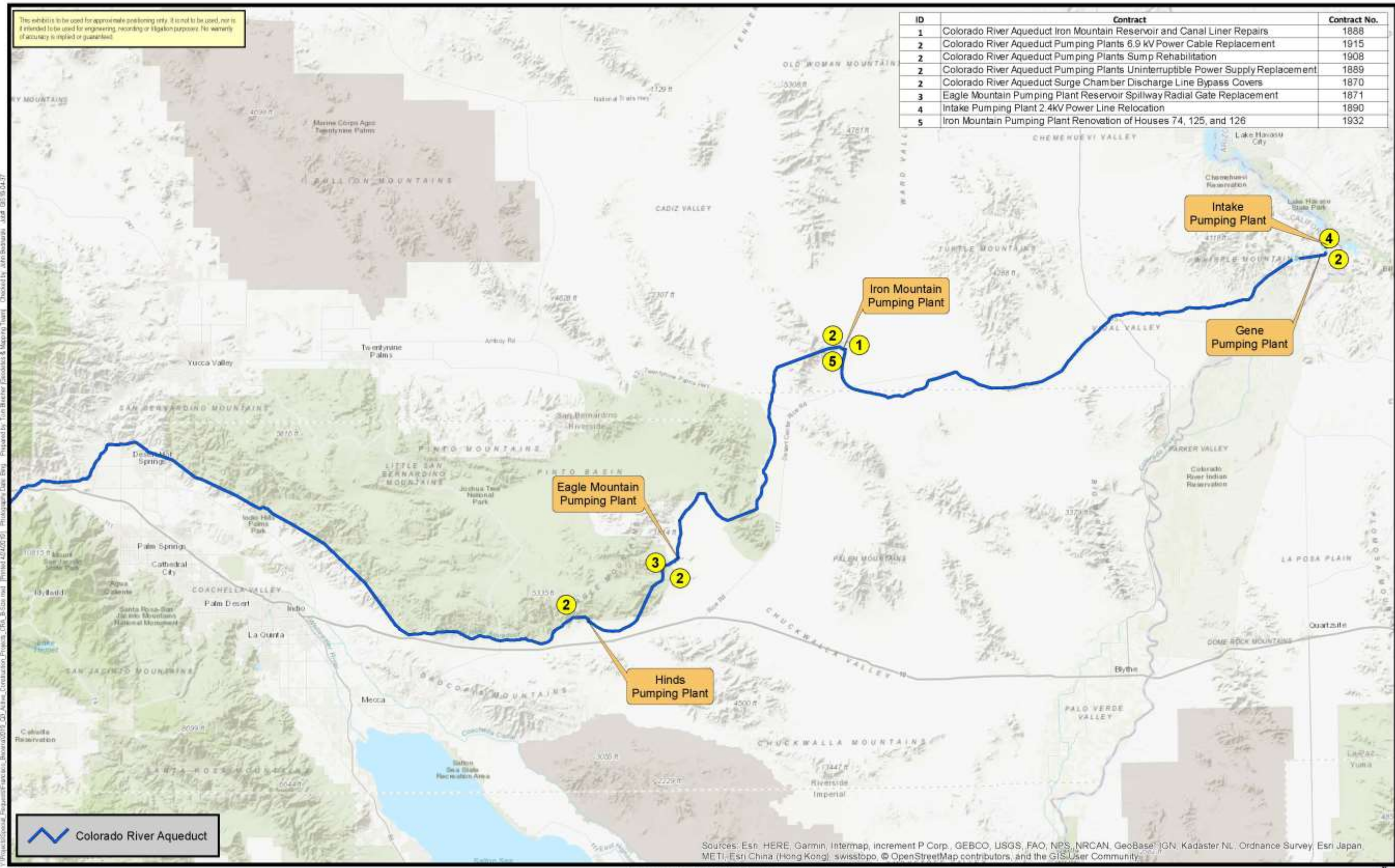


Figure 6: CIP Projects
Construction Contracts - Colorado River Aqueduct

The Metropolitan Water District of Southern California
Engineering Services Group

Notice of Completion during 3rd Quarter:

The following table shows the three contracts for which Notice of Completion (NOC) was filed during the 3rd Quarter. In accordance with Section 9204 of the Civil Code of the State of California, an NOC is filed within 15 days of acceptance by Metropolitan of completion of construction by the contractor. Negative entries under the “Change Order” column indicate credits back to Metropolitan.

Table 7: Notice of Completion Filed This Quarter

Contract No.	Contract	Notice of Completion	Original Bid Amount	Final Contract Costs	Change Order	Percent Change
1869	Diemer Plant Filter Outlet Conduit Seismic Upgrade	February 2019	\$4,394,400	\$4,352,070	-\$42,330	-0.96%
1906	Wadsworth Pumping Plant Yard Piping Lining Repairs	March 2019	\$5,416,000	\$5,390,918	-\$25,082	-0.46%
1950	Sepulveda Feeder PCCP Del Amo Boulevard Urgent Relining	February 2019	\$1,200,000	\$1,200,000	\$0	0.00%
Totals:			\$11,010,400		-\$67,412	-0.61%

For the 3rd quarter, the total amount of completed contracts was just over \$11 million. The change order percentage during same period was just under -1%; in other words, Metropolitan staff were able to negotiate credits totaling \$67,413 back from contractors. The rolling average of change orders on completed contracts during the preceding 12-month period (April 2018 through March 2019) is 3.22%¹⁰.

Metropolitan’s Administrative Code authorizes the General Manager to execute change orders on construction contracts in an aggregate amount not to exceed five percent of the original amount of the contract or \$250,000, whichever is greater. If changes occur on a construction contract that will exceed this total, additional authorization from the Board is required. In the 3rd Quarter, no contracts exceeded the General Manager’s authority to execute change orders on construction contracts.

¹⁰ Original amount of contracts completed (April 2018 through March 2019) = \$87,292,164
Sum of change orders for completed contracts (April 2018 through March 2019) = \$2,810,301
Change order percentage for (April 2018 through March 2019) = 3.22%

Contracts Awarded during 3rd Quarter:

Two construction contracts, totaling \$37.43 million, were awarded during the period of January through March 2019, shown below.

Table 8: Construction Contracts Awarded This Quarter

Greg Avenue Pressure Control Structure - Pump Modification and New Control Building	
Contract Number	1911
Contractor	J. F. Shea Construction, Inc.
Amount	\$20,975,000
Colorado River Aqueduct Pumping Plants 6.9 kV Power Cable Replacement	
Contract Number	1915
Contractor	Baker Electric, Inc.
Amount	\$16,452,832

No procurement contracts were awarded this quarter.

The following table lists the 26 ongoing construction contracts through the end of the 3rd Quarter.

Table 9: Active Construction Contracts at the End of 3rd Quarter

	Cont. No.	Contract Title	Contractor	Contract Amount¹¹	Earnings Through March 2019	Start Date	Est. Completion Date	Est. Percent Complete
1.	1825	Palos Verdes Reservoir Cover and Liner Replacement	OHL, USA, Inc.	\$31,612,187	\$31,573,487	12/21/15	4/19	99%
2.	1856	Advanced Water Treatment Demonstration Facility	Kiewit Infrastructure West Co.	\$14,050,200	\$13,730,400	8/16/2017	4/19	98%
3.	1857	Mills Electrical Upgrades – Stage 1A	Stronghold Engineering Incorporated	\$3,097,927	\$1,790,035	9/11/2017	5/19	58%
4.	1866	Lake Mathews Headworks Forebay Liner and Outlet Tower Repair	J.F. Shea Construction, Inc.	\$3,248,000	\$3,235,983	12/7/2017	4/19	99%
5.	1870	Colorado River Aqueduct Surge Chamber Discharge Line Bypass Covers	Abhe & Svoboda, Inc.	\$2,560,232	\$2,434,168	1/25/2018	5/19	95%
6.	1871	Eagle Mountain Pumping Plant Reservoir Spillway Radial Gate Replacement	Lasater Construction Co.	\$1,433,000	\$1,151,927	1/25/2018	4/19	80%

¹¹ The Contract Amount may differ from the original bid amount due to periodic change orders approved by the General Manager or, if required, by the Board.

	Cont. No.	Contract Title	Contractor	Contract Amount ¹¹	Earnings Through March 2019	Start Date	Est. Completion Date	Est. Percent Complete
7.	1877	F. E. Weymouth Water Treatment Plant - West Washwater Tank Seismic Upgrades	Canyon Springs Enterprises dba RSH Construction	\$2,591,576	\$1,568,480	3/21/2018	6/19	61%
8.	1879	Joseph Jensen Water Treatment Plant Inlet Water Quality Instrumentation Enclosure	Unispec Construction, Inc.	\$988,725	\$528,375	3/23/2018	4/19	53%
9.	1880	Orange County Region Service Center	R.I.C Construction Co.	\$9,263,661	\$3,586,091	4/17/18	11/19	39%
10.	1882	Weymouth Plant Domestic Water Systems Improvement	Mladen Buntich Construction Company, Inc.	\$3,740,000	\$601,705	6/4/2018	2/20	16%
11.	1883	F. E. Weymouth Water Treatment Plant Chlorination Systems Upgrades	J. F. Shea Construction, Inc.	\$8,487,170	\$229,908	1/28/19	1/21	3%
12.	1888	Colorado River Aqueduct Iron Mountain Reservoir and Canal Liner Repairs	Bosco Constructors, Inc.	\$4,674,444	\$4,341,089	11/7/18	4/19	93%
13.	1889	Colorado River Aqueduct Pumping Plants Uninterruptible Power Supply Replacement	CSI Electrical Contractors, Inc.	\$939,000	\$37,540	6/18/2018	10/19	4%
14.	1890	Intake Pumping Plant 2.4kV Power Line Relocation	Henkels & McCoy, Inc.	\$5,553,669	\$1,189,265	7/11/2018	8/19	21%
15.	1892	Rialto Pipeline CB-12 and CB-16 Valve Installation	J.F. Shea Construction, Inc.	\$866,600	\$866,600	10/15/18	4/19	99%
16.	1893	Electrical Upgrades at 15 Structures in the Orange County Region	Minako America Corporation dba Minco Construction	\$2,606,700	\$61,500	12/14/18	1/20	2%
17.	1899	Orange County Feeder Cathodic Protection	American Construction and Supply, Inc.	\$556,000	\$46,392	10/18/18	7/19	8%
18.	1900	Diemer Water Treatment Plant West Basin and Filter Building Rehabilitation	Environmental Construction, Inc.	\$38,539,196	\$5,149,750	11/13/18	11/20	13%
19.	1901	Wadsworth Pumping Plant Control and Electrical Protection Upgrade	Southern Contracting Co.	\$411,533	\$420,000	10/1/18	4/19	99%
20.	1904	Orange County Feeder and Extension Relining - Reach 2	Michels Corporation dba Michels Pipeline Construction	\$6,967,500	\$814,230	12/7/18	9/19	12%
21.	1905	Metropolitan Headquarters Building Improvements	Bernards Bros. Inc.	\$43,998,000	\$2,884,801	1/14/19	6/22	7%
22.	1908	CRA Pumping Plants - Sump Rehabilitation	Michels Corporation dba Michels Pipeline Construction	\$26,900,000	\$403,500	1/24/19	3/22	0%

	Cont. No.	Contract Title	Contractor	Contract Amount ¹¹	Earnings Through March 2019	Start Date	Est. Completion Date	Est. Percent Complete
23.	1911	Greg Avenue Pressure Control Structure - Pump Modification and New Control Building	J. F. Shea Construction, Inc.	\$20,975,000	\$558,000	3/7/19	12/20	0%
24.	1915	Colorado River Aqueduct Pumping Plants 6.9 kV Power Cable Replacement	Baker Electric, Inc.	\$16,452,832	\$0	3/11/19	6/20	0%
25.	1932	Iron Mountain Pumping Plant Renovation of Houses 74, 125, and 126	Shipley Construction and Plumbing	\$619,000	\$496,561	10/18/18	4/19	80%
26.	1940	Second Lower Feeder PCCP Rehabilitation - Reach 4	J. F. Shea Construction, Inc.	\$14,536,130	\$1,605,956	11/29/18	10/19	11%
Total contract value for active construction contracts:				\$265,668,282				

The following table lists the 15 ongoing procurement contracts through the end of the 3rd Quarter.

Table 10: Active Procurement Contracts

	Cont. No.	Contract	Contractor	Contract Amount ¹²	Earnings Through March 2019	Start Date	Est. Delivery Completion Date	Est. Percent Complete ¹³
1	1831	Colorado River Aqueduct-Furnishing Spillway Gate for Eagle Mountain Pumping Plant	Whipps, Inc.	\$204,188	\$199,958	3/17/16	8/17	98%
2	1846	Furnishing Fixed Cone Valves for Copper Basin and Gene Wash Reservoirs	Integrated 8A Solutions, Inc.	\$599,730	\$589,680	2/6/17	1/19	99%
3	1851	Furnishing Horizontal Axially Split Centrifugal Pumps for the Greg Avenue Pump Station	Xylem Water Solutions U.S. A., Inc.	\$1,492,290	\$178,182	5/16/17	7/19	12%
4	1861	Furnishing Lubricated Plug Valves for Second Lower Feeder	Southwest Valve & Equipment, Inc.	\$2,364,724	\$242,554	9/11/17	8/19	10%
5	1863	Furnishing Lubricated Plug Valves for the Orange County Feeder	Southwest Valve & Equipment, Inc.	\$556,944	\$534,584	10/9/17	2/19	96%
6	1865	Furnishing Valve Actuators for the Diemer Water Treatment Plant	Flowserve Corporation	\$5,961,003	\$5,924,242	10/16/16	7/18	99%
7	1867	Furnishing Butterfly Valves for the Weymouth Water Treatment Plant - Schedule 1	Crispin Valve LLC	\$4,866,067	\$0	12/18/17	4/20	0%
8	1868	Furnishing Butterfly Valves for the Weymouth Water Treatment Plant - Schedule 2	DeZurick, Inc.	\$771,984	\$0	12/18/17	4/20	0%

¹² The Contract Amount may differ from the original bid amount due to periodic change orders approved by the General Manager or, if required, by the Board.

¹³ Estimated Percent Complete is based on contract payments and may not reflect actual progress of fabrication. The contract will be 100% complete upon delivery of fabricated items.

Capital Investment Plan Quarterly Report

January–March 2019

	Cont. No.	Contract	Contractor	Contract Amount ¹²	Earnings Through March 2019	Start Date	Est. Delivery Completion Date	Est. Percent Complete ¹³
9	1873	Furnishing One Hydraulic Shear System for the La Verne Maintenance Shops	Landmark Solutions, LLC	\$146,925	\$0	3/21/18	12/18	0%
10	1874	Furnishing One Waterjet Cutting System for the La Verne Maintenance Shops	Flow International Corp.	\$374,359	\$357,159	3/8/18	1/19	95%
11	1875	Furnishing One Hydraulic Press Brake for the La Verne Maintenance Shops	North South Machinery	\$332,939	\$328,181	2/6/18	1/19	99%
12	1912	Furnishing Large-Diameter Conical Plug Valves	Ebara Corporation	\$23,750,060	\$0	12/24/18	6/23	0%
13	1922	Furnishing One Double Column Vertical Machining Center for the La Verne Maintenance Shops	Gosiger Machine Tools, LLC (Gosiger West)	\$2,169,716	\$205,610	9/17/18	1/20	9%
14	1925	Furnishing Steel Pipe for the Second Lower Feeder PCCP Rehabilitation - Reaches 2 and 4	Ameron Water Transmission Group, LLC	\$12,068,635	\$3,431,510	2/6/18	6/20	28%
15	1948	Refurbishing Valve Actuators for the Diemer Water Treatment Plant	Flowserve Limatorque	\$3,532,700	\$310,927	2/16/19	3/21	9%
Total contract value for active procurement contracts:				\$59,192,265				

PERFORMANCE METRICS

In order to measure project performance efficiency and to identify areas for continuous improvements, Metropolitan’s Engineering Services Group has established two primary performance metrics for projects that will result in construction activities. These metrics established performance targets for Metropolitan staff for both final design and inspection activities. Inspection includes fabrication and construction inspection, as well as construction management services. Separate performance targets have been established for two categories of project sizes; those with projected construction costs less than \$3 million, and those with projected construction costs greater than \$3 million.

Metropolitan’s **performance metric targets** for the two categories of construction projects are listed below:

Project Category	Final Design, % of Construction	Inspection % of Construction
Projects with Construction Costs < \$3 Million	9% to 15%	9% to 15%
Projects with Construction Costs > \$3 Million	9% to 12%	9% to 12%

Prior to proceeding with final design or construction, budgets are established for design and inspection that best provide a quality and timely product. Efforts are made to optimize staff and consultant hours based on project complexity and location. The calculated values for the design and inspection costs, as a percentage of total construction costs, become the project-specific metric goals, and in almost all cases lie within or below the metric target ranges. In rare cases, metric goals may be established which exceed the metric target ranges. In these cases, explanations for the variance are provided.

The tables that follow summarize the performance metric goals that were established for projects that were authorized to proceed with final design and construction in the current reporting period under each project category (projected construction costs less than and greater than \$3 million). For this reporting period, one project, CRA 6.9 kV Power Cable Replacement, established a metric goal for inspection that exceeded the metric target range.

Table 11: Performance Metric Goals, Projects < \$3 Million

Project	Metric	Est. Cost ¹⁴	Est. Construction Cost	Goal % (Target max. =15%)
Foothill Feeder - Castaic Valley Blow-Off Valves Replacement	Final Design	\$60,000	\$425,000	14.1%
Ozone Generator Open Loop Cooling Water System Improvements	Final Design	\$47,000	\$331,000	14.2%
San Jacinto Diversion Structure Slide Gate V-03 Replacement	Final Design	\$54,000	\$464,000	14.8%

¹⁴ Cost of the metric being measured: design or construction

Table 12: Performance Metric Goals, Projects > \$3 Million

Project	Metric	Est. Cost ¹³	Est. Construction Cost	Goal % (Target max. =12%)
CRA Pump Plant Sump System Rehabilitation	Inspection	\$3,474,000	\$28,830,000	12.0%
Greg Avenue Pump Station Rehabilitation	Inspection	\$2,841,000	\$23,647,000	12.0%
CRA 6.9 kV Power Cable Replacement	Inspection	\$2,857,000	\$18,412,832	15.5% ¹⁵

Once a project phase is complete, either final design or construction, staff's performance against these metrics is then calculated and compared to the original goal. Table 13 and Table 14 below summarize the comparison between the original goal and the actual performance metrics for each project category for the current reporting period. In some cases, the actual performance metric at the completion of the phase may exceed the original performance metric goal but not the overall target.

Table 13: Actuals, Projects < \$3 Million

Project	Metric	Cost ¹³	Construction Cost	Goal %	Actual %
Garvey Reservoir Drainage and Erosion Improvements	Inspection	\$65,000	\$349,076	15.0%	18.6% ¹⁶
Sepulveda Feeder PCCP Del Amo Blvd. Urgent Relining	Inspection	\$167,310	\$2,006,312	12.4%	8.3%

Table 14: Actuals, Projects > \$3 Million

Project	Metric	Cost ¹³	Construction Cost	Goal %	Actual %
CRA 6.9 kV Power Cables Replacement	Final Design	\$1,194,583	\$18,412,832	8.1%	6.5%
Greg Avenue Pump Rehabilitation	Final Design	\$2,750,000	\$23,650,000	10.3%	11.6%

¹⁵ Inspection costs for the CRA 6.9 kV Power Cable Replacement project are projected to exceed the performance metric target due to the around-the-clock concurrent inspection required during the two replacement work periods necessary to install the cables, and due to the multiple remote locations and long travel time between sites.

¹⁶ Inspection costs for the Garvey Reservoir Drainage and Erosion Improvements project were higher than expected due to urgent extra work required of contractor when heavy rains occurred during the contract timeframe.

SERVICE CONNECTIONS AND RELOCATIONS

Service Connections

No new agreements for service connections were approved by the General Manager pursuant to Sections 4700-4708 during the reporting period.

Relocations

No new relocation agreements involving an amount in excess of \$100,000 were approved under the authority of Section 8122(c) during the reporting period.

PROJECTS EXPENSED TO OVERHEAD

There are no expensed projects to report during the third quarter of fiscal year 2018/19 (January through March 2019).

PROGRAM/APPROPRIATION STATUS

The following table provides the program and appropriation level budget versus cost-to-date and fiscal year 2018/19 planned expenditures¹⁷ versus actuals-to-date.

Table 15: Program and Appropriation Budget vs. Cost and Planned Expenditures vs. Actuals

Capital Programs/Appropriations	Appn. No.	Total to Date		Fiscal Year to Date	
		Appn. Amount (\$1,000's)	Costs thru March 2019 (\$1,000's)	FY 2018/19 Planned Expenditures (\$1,000's)	FY 2018/19 Actual Expenditures (\$1,000's)
Cost Efficiency & Productivity Program	Total	\$196,389	\$165,175	\$4,870	\$2,506
DVL Recreation Facilities	15334	\$87,064	\$63,977	\$297	-\$14
Power Reliability and Energy Conservation	15391	\$54,892	\$52,673	\$21	\$472
Information Technology System - Business, Finance, and HR	15411	\$22,468	\$22,112	\$567	\$504
Yorba Linda Power Plant Modifications	15446	\$17,125	\$16,996	\$0	\$4
Business Operations Improvement	15484	\$6,500	\$6,238	\$829	\$324
Project Controls and Reporting System	15490	\$6,440	\$2,569	\$2,233	\$901
Enterprise Content Management	15500	\$1,900	\$611	\$924	\$316
Colorado River Aqueduct Reliability Program	Total	\$284,409	\$236,787	\$33,625	\$14,790
Cabazon Radial Gate Facility Improvements	15320	\$456	\$454	\$0	\$0
White Water Siphon Protection	15341	\$10,585	\$9,893	\$2,873	\$539
CRA - Conveyance Reliability	15373	\$105,428	\$104,460	\$4,675	\$3,482
CRA - Electrical/Power Systems Reliability	15384	\$26,565	\$23,745	\$6,297	\$1,219
CRA - Reliability for FY2006/07 through FY2011/12	15438	\$105,845	\$81,063	\$9,264	\$4,581
CRA Main Pump Reliability	15481	\$12,090	\$4,996	\$2,562	\$1,900
CRA Reliability for FY2012/13 through FY2017/18	15483	\$23,070	\$12,134	\$7,240	\$3,027
CRA Reliability for FY2018/19 through FY2023/24	15507	\$370	\$42	\$714	\$42

¹⁷ \$0 under Planned Expenditures indicate that while no expenditures are planned during the reporting period, expenditures may be planned during upcoming periods.

Capital Programs/Appropriations	Appn. No.	Total to Date		Fiscal Year to Date	
		Appn. Amount (\$1,000's)	Costs thru March 2019 (\$1,000's)	FY 2018/19 Planned Expenditures (\$1,000's)	FY 2018/19 Actual Expenditures (\$1,000's)
Distribution System Reliability Program	Total	\$367,661	\$302,416	\$42,476	\$37,646
Conveyance and Distribution System - Rehabilitation	15377	\$95,146	\$82,239	\$5,429	\$2,303
Reservoir Cover and Replacement	15417	\$48,794	\$48,737	\$12,671	\$10,491
Dam Rehabilitation & Safety Improvements	15419	\$10,310	\$7,983	\$5,896	\$1,583
Conveyance and Distribution System - Rehabilitation for FY2006/07 through FY2011/12	15441	\$107,829	\$99,725	\$1,976	\$4,765
Hydroelectric Power Plant Improvements	15458	\$17,577	\$9,424	\$2,922	\$1,878
Conveyance and Distribution System - Rehabilitation for FY2012/13 through FY2017/18	15480	\$83,080	\$53,060	\$12,627	\$15,378
Pipeline Rehabilitation and Replacement	15482	\$0	\$0	\$0	\$0
Conveyance and Distribution System - Rehabilitation for FY2018/19 through FY2023/24	15503	\$4,925	\$1,248	\$955	\$1,248
Minor Capital Projects Program	Total	\$41,500	\$24,303	\$3,424	\$2,724
Capital Program for Projects Costing Less Than \$250,000 for FY2010/11	15468	\$3,500	\$3,002	\$0	\$29
Capital Program for Projects Costing Less Than \$250,000 for FY2012/13 through FY2013/14	15476	\$10,000	\$8,432	\$0	-\$26
Capital Program for Projects Costing Less Than \$250,000 for FY2014/15 through FY2015/16	15489	\$8,000	\$6,310	\$911	\$217
Capital Program for Projects Costing Less Than \$250,000 for FY2016/17 through FY2017/18	15498	\$10,000	\$5,528	\$1,716	\$1,473
Capital Program for Projects Costing Less Than \$400,000 for FY2018/19 through FY2019/20	15504	\$10,000	\$1,031	\$797	\$1,031
Prestressed Concrete Cylinder Pipe Rehabilitation Program	Total	\$206,954	\$122,950	\$26,681	\$16,496
Assess Condition Of Metropolitan's Prestressed Concrete Cylinder Pipe	15297	\$7,870	\$7,757	\$0	\$84
PCCP Rehabilitation and Replacement	15471	\$24,243	\$19,056	\$1,451	\$971
Sepulveda Feeder PCCP Rehab	15496	\$26,310	\$18,532	\$1,279	\$3,334
Second Lower Feeder PCCP Rehab	15497	\$137,901	\$76,648	\$19,749	\$11,150
Allen-McColloch Pipeline, Calabasas Feeder, and Rialto Pipeline PCCP Rehabilitation	15502	\$10,630	\$957	\$4,202	\$957

Capital Programs/Appropriations	Appn. No.	Total to Date		Fiscal Year to Date	
		Appn. Amount (\$1,000's)	Costs thru March 2019 (\$1,000's)	FY 2018/19 Planned Expenditures (\$1,000's)	FY 2018/19 Actual Expenditures (\$1,000's)
Regional Recycled Water Supply Program	Total	\$17,947	\$16,685	\$4,192	\$8,263
Joint Water Purification Study	15462	\$947	\$686	\$0	-\$11
Demonstration-Scale Recycled Water Treatment Plant	15493	\$17,000	\$15,999	\$4,192	\$8,274
Regulatory Compliance Program	Total	\$170,234	\$167,325	\$538	\$295
Chlorine Containment and Handling Facilities	15346	\$162,370	\$159,765	\$0	\$134
CRA - Discharge Containment	15385	\$7,864	\$7,560	\$538	\$161
Right of Way & Infrastructure Protection Program	Total	\$23,830	\$22,333	\$4,376	\$726
Right of Way & Infrastructure Protection	15474	\$23,830	\$22,333	\$4,376	\$726
System Flexibility/Supply Reliability Program	Total	\$672,464	\$601,205	\$4,478	\$4,665
Hayfield and Lake Perris Groundwater Recovery	15402	\$29,215	\$7,360	\$424	\$174
Perris Valley Pipeline	15425	\$129,100	\$126,592	\$236	\$1,122
Water Delivery System Improvements	15488	\$54,149	\$30,904	\$1,503	\$2,450
Verbena Property Acquisition	15492	\$264,000	\$259,371	\$1,282	\$873
Delta Wetlands Properties (Delta Islands)	15494	\$196,000	\$176,978	\$1,033	\$46

Capital Programs/Appropriations	Appn. No.	Total to Date		Fiscal Year to Date	
		Appn. Amount (\$1,000's)	Costs thru March 2019 (\$1,000's)	FY 2018/19 Planned Expenditures (\$1,000's)	FY 2018/19 Actual Expenditures (\$1,000's)
System Reliability Program	Total	\$258,182	\$181,224	\$26,188	\$19,657
Information Technology System - Infrastructure	15376	\$50,321	\$45,065	\$13	\$521
Information Technology System - Security	15378	\$9,621	\$6,691	\$495	\$333
La Verne Shop Facilities Upgrade	15395	\$45,010	\$42,389	\$1,822	\$1,205
Quagga Mussel Control Program	15447	\$12,280	\$10,596	\$0	-\$195
Water Operation Control	15467	\$51,414	\$29,951	\$9,990	\$6,726
Union Station Headquarters Improvements	15473	\$45,683	\$15,666	\$1,596	\$4,686
IT Infrastructure Reliability	15487	\$19,940	\$13,056	\$2,614	\$1,017
Operations Support Facilities Improvement	15495	\$16,428	\$15,221	\$4,976	\$4,159
Metropolitan Security System Enhancements	15499	\$4,271	\$1,914	\$872	\$581
Infrastructure Reliability Information System	15501	\$3,214	\$675	\$2,633	\$624
System-Wide Paving & Roof Replacements for FY 2018/19 through FY 2019/20	18909	\$0	\$0	\$145	\$0
Enterprise Data Analytics	18910	\$0	\$0	\$1,032	\$0

Capital Programs/Appropriations	Appn. No.	Total to Date		Fiscal Year to Date	
		Appn. Amount (\$1,000's)	Costs thru March 2019 (\$1,000's)	FY 2018/19 Planned Expenditures (\$1,000's)	FY 2018/19 Actual Expenditures (\$1,000's)
Treatment Plant Reliability Program	Total	\$864,306	\$755,411	\$29,441	\$27,854
Skinner Water Treatment Plant Improvements	15365	\$155,019	\$150,951	\$0	\$108
Weymouth Water Treatment Plant Improvements	15369	\$190,910	\$179,029	\$6,306	\$2,446
Jensen Water Treatment Plant Improvements	15371	\$47,352	\$46,819	\$1,241	\$218
Diemer Water Treatment Plant Improvements	15380	\$213,657	\$164,991	\$3,804	\$9,319
Mills Water Treatment Plant Improvements	15381	\$5,695	\$5,277	\$0	-\$41
Skinner Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15435	\$3,860	\$1,719	\$133	\$110
Diemer Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15436	\$70,939	\$59,208	\$7,001	\$6,594
Weymouth Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15440	\$17,438	\$16,787	\$187	\$32
Jensen Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15442	\$53,476	\$51,656	\$1,484	\$3,019
Mills Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15452	\$20,599	\$17,130	\$1,720	\$1,700
Weymouth Water Treatment Plant Improvements for FY2012/13 through FY2017/18	15477	\$70,627	\$52,219	\$3,531	\$2,503
Diemer Water Treatment Plant Improvements for FY2012/13 through FY2017/18	15478	\$1,345	\$468	\$128	\$97
Mills Water Treatment Plant Improvements for FY2012/13 through FY2017/18	15479	\$3,400	\$2,618	\$933	\$145
Skinner Water Treatment Plant Improvements for FY 2012/13 Through FY 2017/18	15485	\$1,990	\$1,702	\$0	\$2
Jensen Water Treatment Plant Improvements for FY2012/13 through FY2017/18	15486	\$7,449	\$4,773	\$987	\$1,538
Weymouth Water Treatment Plant Improvements for FY2018/19 through FY2023/24	15505	\$200	\$57	\$63	\$57
Jensen Water Treatment Plant Improvements for FY2018/19 through FY2023/24	15508	\$225	\$4	\$257	\$4
Diemer Water Treatment Plant Improvements for FY2018/19 through FY2023/24	18903	\$125	\$3	\$211	\$3
Mills Water Treatment Plant Improvements for FY2018/19 through FY2023/24	18905	\$0	\$0	\$1,051	\$0
Skinner Water Treatment Plant Improvements for FY2018/19 through FY2023/24	18906	\$0	\$0	\$404	\$0

Capital Programs/Appropriations	Appn. No.	Total to Date		Fiscal Year to Date	
		Appn. Amount (\$1,000's)	Costs thru March 2019 (\$1,000's)	FY 2018/19 Planned Expenditures (\$1,000's)	FY 2018/19 Actual Expenditures (\$1,000's)
Water Quality/Oxidation Retrofit Program	Total	\$877,069	\$870,983	\$2,385	\$1,539
Skinner Filtration Plant, Oxidation Retrofit	15388	\$245,155	\$244,794	\$0	\$49
Diemer Water Treatment Plant Oxidation Retrofit	15389	\$370,192	\$370,013	\$943	\$208
Weymouth Water Treatment Plant Oxidation Retrofit	15392	\$251,482	\$247,189	\$1,325	\$818
Enhanced Bromate Control	15472	\$10,240	\$8,987	\$117	\$464
Total CIP		\$3,980,945	\$3,466,798	\$182,675	\$137,162

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