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## All Facilities - Security Systems Improvement 15295

Total Program Estimate	\$13,743,000	Total Projected Through June 30, 2016	\$12,707,900
Appropriated Amount	\$19,600,000	Estimated Percent Complete	92%
Biennial Estimate	\$275,900	Estimated Completion Date	2018

### Scope

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

### Purpose

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

### Accomplishments Through FY 2015/16

### Objectives for 2016/17 and 2017/18

Implement security enhancements at Metropolitan facilities based on the emerging requirements for critical infrastructure protection being imposed and inspected by agencies including the Environmental Protection Agency, the Department of Homeland Security, the California Department of Public Health, the Federal Regulatory Commission, and the Transportation Security Administration. Complete the security enhancements at Weymouth Electric Upgrade and Switchgear projects. Complete security system installations at the Diemer plant projects including ORP, North Access Road, and Potable Water and Fire Systems. Continue oversight of Security installations at all facilities to consistently and effectively integrate required security systems into all new construction and facility modifications.

Physical Security Improvements At All Facilities Continue construction

Project	Total Project Estimate	Estimated Completion	Planned Activity
Physical Security Improvements At All Facilities	759,000	2018	

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## Allen McColloch Pipeline PCCP Rehab

16705

Total Program Estimate	\$305,199,900	Total Projected Through June 30, 2016	\$ 0
Appropriated Amount		Estimated Percent Complete	0%
Biennial Estimate	\$ 0	Estimated Completion Date	2034

### Scope

This appropriation was established to plan and implement PCCP Rehabilitation on the Allen McColloch Pipeline. The common driver for the projects in this appropriation is infrastructure reliability.

### Purpose

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

### Accomplishments Through FY 2015/16

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

### Objectives for 2016/17 and 2017/18

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## Assess the Condition of Metropolitan's Prestressed Concrete Cylinder Pipe

15297

Total Program Estimate	\$418,500	Total Projected Through June 30, 2016	\$ 0
Appropriated Amount	\$7,870,000	Estimated Percent Complete	0%
Biennial Estimate	\$119,300	Estimated Completion Date	2018

### Scope

This appropriation was established to perform pre-stressed concrete cylinder-pipe (PCCP) inspection on Metropolitan's 163 miles of PCCP line, perform soil studies and geotechnical investigations and to perform structural risk analysis.

### Purpose

To identify areas of potential PCCP failures which could result in major property damage, personal injury, and disruption to essential services.

### Accomplishments Through FY 2015/16

PCCP inspections, soil studies and geotechnical investigations authorized by this appropriation have been completed.

### Objectives for 2016/17 and 2017/18

<b>Project</b>	<b>Total Project Estimate</b>	<b>Estimated Completion</b>	<b>Planned Activity</b>
Structural Risk Analysis of PCCP	299,100	2018	

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## Business Operations Improvement

15484

Total Program Estimate	\$7,936,900	Total Projected Through June 30, 2016	\$ 0
Appropriated Amount		Estimated Percent Complete	0%
Biennial Estimate	\$3,109,800	Estimated Completion Date	2019

### Scope

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

### Purpose

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

### Accomplishments Through FY 2015/16

### Objectives for 2016/17 and 2017/18

<b>Project</b>	<b>Total Project Estimate</b>	<b>Estimated Completion</b>	<b>Planned Activity</b>
Budget System Replacement	1,355,800	2019	
Enterprise Content Management - Phase I	1,986,300	2019	
Peoplesoft Upgrade	1,140,900	2019	

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## Cabazon Radial Gate Facility Improvements 15320

Total Program Estimate	\$4,954,500	Total Projected Through June 30, 2016	\$450,300
Appropriated Amount	\$456,000	Estimated Percent Complete	9%
Biennial Estimate	\$80,500	Estimated Completion Date	2022

### Scope

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

### Purpose

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

### Accomplishments Through FY 2015/16

### Objectives for 2016/17 and 2017/18

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## Calabasas Feeder PCCP Rehab

16703

Total Program Estimate	\$133,400,000	Total Projected Through June 30, 2016	\$ 0
Appropriated Amount		Estimated Percent Complete	0%
Biennial Estimate	\$ 0	Estimated Completion Date	2037

### Scope

This appropriation was established to plan and implement PCCP Rehabilitation on the Calabasas Feeder. The common driver for the projects in this appropriation is infrastructure reliability.

### Purpose

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

### Accomplishments Through FY 2015/16

### Objectives for 2016/17 and 2017/18

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**Capital Program for Projects Costing Less Than \$250,000 for FY2012/13 through FY2013/14** **15476**

Total Program Estimate	\$9,267,200	Total Projected Through June 30, 2016	\$3,963,600
Appropriated Amount		Estimated Percent Complete	43%
Biennial Estimate	\$3,852,400	Estimated Completion Date	2017

**Scope**

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

**Purpose**

**Accomplishments Through FY 2015/16**

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

**Objectives for 2016/17 and 2017/18**

<b>Project</b>	<b>Total Project Estimate</b>	<b>Estimated Completion</b>	<b>Planned Activity</b>
Minor Cap FY 2012/13	1,451,100	2017	

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**Capital Program for Projects Costing Less Than \$250,000 for FY2014/15 through FY2015/16** **15489**

Total Program Estimate	\$6,956,600	Total Projected Through June 30, 2016	\$ 0
Appropriated Amount		Estimated Percent Complete	0%
Biennial Estimate	\$1,233,600	Estimated Completion Date	2019

Scope

Purpose

Accomplishments Through FY 2015/16

Objectives for 2016/17 and 2017/18

Project	Total Project Estimate	Estimated Completion	Planned Activity
Minor Cap FY 2014/16	3,830,400	2019	



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**Capital Program for Projects Costing Less Than \$250,000 for FY2016/17 through FY2017/18** **16810**

Total Program Estimate \$9,133,100 Total Projected Through June 30, 2016 \$ 0  
 Appropriated Amount Estimated Percent Complete 0%  
 Biennial Estimate \$ 0 Estimated Completion Date 2021

Scope

Purpose

Accomplishments Through FY 2015/16

Objectives for 2016/17 and 2017/18

Project	Total Project Estimate	Estimated Completion	Planned Activity
Minor Cap Appn. FY 2016/18	3,441,400	2021	

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## Chlorine Containment and Handling Facilities

15346

Total Program Estimate	\$72,353,000	Total Projected Through June 30, 2016	\$37,737,400
Appropriated Amount	\$129,873,000	Estimated Percent Complete	52%
Biennial Estimate	\$27,653,300	Estimated Completion Date	2018

### Scope

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

### Purpose

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

### Accomplishments Through FY 2015/16

Through FY 2015/16, seventeen projects have been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

### Objectives for 2016/17 and 2017/18

Subsequent to Board authorization and funding, complete design and award a construction contract for the Chlorine Containment facility at CUF. Complete construction of post-ORP chlorine system modifications at Jensen, Diemer, and Weymouth.

- Chemical Unloading Facility Chlorine Containment
- Jensen Filter Effluent Chlorination Capacity Increase
- Weymouth WTP - Filter Effluent Chlorination Capacity Increase

<b>Project</b>	<b>Total Project Estimate</b>	<b>Estimated Completion</b>	<b>Planned Activity</b>
CUF Chlorination Containment Facility	6,882,300	2018	

## Conveyance and Distribution System - Rehabilitation

15377

Total Program Estimate	\$56,009,700	Total Projected Through June 30, 2016	\$4,289,700
Appropriated Amount	\$68,895,700	Estimated Percent Complete	8%
Biennial Estimate	\$3,206,100	Estimated Completion Date	2024

### Scope

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

### Purpose

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

### Accomplishments Through FY 2015/16

Through FY 2015/16, forty-three projects have been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

### Objectives for 2016/17 and 2017/18

Complete preliminary design and environmental documentation for the Orange County Feeder Lining, and final design for the Valve Structure on the West Valley Feeder No. 1.

Box Springs Feeder Section Replacement Phase 3 and Phase 4	
Lake Skinner West Bypass Screening Structure Rehabilitation	
Orange County Feeder Lining Repair	Complete preliminary design
Upper Newport Bay Blow-off Structure Rehab	
West Valley Feeder No. 1 Access Roads and Structures Improvements	Complete final design

Project	Total Project Estimate	Estimated Completion	Planned Activity
Orange County Feeder Lining Repair	2,879,400	2020	
Upper Newport Bay Blow-off Structure Rehab	736,300	2018	
West Valley Feeder #1 Stage 2 Valve Structure Modification - Construction	1,037,600	2019	
West Valley Feeder No. 1 Access Roads and Structures Improvements	1,037,600	2019	

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

15441

Total Program Estimate	\$141,697,200	Total Projected Through June 30, 2016	\$6,678,400
Appropriated Amount	\$38,539,000	Estimated Percent Complete	5%
Biennial Estimate	\$18,080,900	Estimated Completion Date	2022

### Scope

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

### Purpose

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

### Accomplishments Through FY 2015/16

Through FY 2015/16, four projects have been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

### Objectives for 2016/17 and 2017/18

Complete construction for Garvey Reservoir Automated Data Acquisition System Replacement, OC-44 Service Connection Road Improvements, Temescal Power Plant Road Improvements, and Santiago Control Tower Road Improvements, Eagle Rock Tower and Puddingstone Gates Rehabilitation, Corona Power Plant Emergency Generator Replacement, and Temescal Power Plant Emergency Generator Replacement. Also complete final design for Upper Feeder's Santa Ana River Bridge seismic retrofit, Allen McColloch Pipeline Corrosion Interference Mitigation, Palos Verdes Reservoir Hypochlorite Pump and Piping System Replacement, Sepulveda Canyon Control Facility Water Storage Tanks Seismic Retrofit, and Sepulveda Feeder Sta 2002+02 to 2273+28 Stray Current Interference Mitigation.

- Allen McColloch Pipeline Stray Current Drain Station
- Eagle Rock Tower and Puddingstone Spillway Gates Rehabilitation
- Etiwanda Pipeline Lining Replacement
- Facility Cathodic Protection Remote Monitoring
- OC Distribution System Electrical Improvements
- OC-88 Pump Plant Air Compressor Replacement
- San Gabriel Tower Seismic Retrofit
- Santa Ana River Bridge Seismic Retrofit
- Santiago Lateral Sta 216+40 Butterfly Valve Replacement
- Second Lower Feeder Stray Current Drain Station
- Sepulveda Canyon Control Facility Water Storage Tanks Seismic Retrofit
- Sepulveda Feeder South Cathodic Protection System
- Sepulveda Feeder Stray Current Drain Station
- Service Connection G-01 Rehabilitation and Upgrade
- Temescal Power Plant Replace Emergency Generator Replacement
- Upper Feeder Cathodic Protection System

<b>Project</b>	<b>Total Project Estimate</b>	<b>Estimated Completion</b>	<b>Planned Activity</b>
Allen Mccolloch Pipeline Cathodic Protection	1,725,500	2018	
Collis St. Valve Replacement and Repair By-Pass at station 0256+23 on the Palos Verdes Feeder	2,028,300	2017	
DVL Inlet / Outlet Tower Debris Screen Rehabilittation	2,313,600	2018	
Etiwanda Pipeline Lining Replacement	12,096,700	2021	
OC-88 Pump Station Upgrades	3,692,500	2019	
Orange County Feeder Cathodic Protection System Rehabilitation	574,000	2018	
Palos Verdes Reservoir Sodium Hypochlorite Pump and Piping Replacement	2,306,100	2018	
Santiago Lateral Sta 216+40 Butterfly Valve Replacement	1,600,500	2018	

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## Conveyance and Distribution System - Rehabilitation for FY2012/13 through FY2017/18 15480

Total Program Estimate	\$317,023,800	Total Projected Through June 30, 2016	\$1,830,800
Appropriated Amount		Estimated Percent Complete	1%
Biennial Estimate	\$7,999,400	Estimated Completion Date	2025

### Scope

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

### Purpose

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

### Accomplishments Through FY 2015/16

Through FY 2015/16, no projects have been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

### Objectives for 2016/17 and 2017/18

<b>Project</b>	<b>Total Project Estimate</b>	<b>Estimated Completion</b>	<b>Planned Activity</b>
A-6 Venturi Meter Replacement	906,000	2018	
Cajalco Creek Detention Dam Spillway Access Road	253,500	2018	
Conveyance and Distribution System Electrical Structures Rehabilitation	3,190,700	2025	
DVL East Dam Power Line Realignment	3,760,000	2018	
EOCF2 Sta. 1239+29 OC-44B Valve Replacement	345,000	2018	
Lake Mathews Discharge Facility Upgrades	1,027,400	2021	
Lake Skinner Area Distribution System Valve Replacement	426,100	2019	
OC-76 Turnout Relocation at the Allen-McColloch Pipeline	534,200	2018	
Orange County Area Distribution System Valve Replacement	835,000	2018	
Orange County C&D Team Support Facility	860,400	2020	
Orange County Distribution System - Conduit Replacement at 9 Structures	685,500	2019	
Red Mountain Hydro Electric Plant Emergency Generator Replacement	299,100	2019	
Santa Monica Feeder Cathodic Protection	266,500	2020	
Sepulveda Canyon Control Facility Bypass Project	7,277,500	2019	
Service Connections CB-12 & CB-16 Turnout Valve Replacement and Electrical Upgrade	1,244,000	2018	
Skinner Bypass #1, Bypass #3, and Effluent Conduit #1 Cathodic Protection	316,600	2020	
Skinner Dam Remediation	702,000	2020	
Wadsworth Pumping Plant Stop Logs	868,900	2019	
West OC Feeder Valve Replacement	428,400	2018	
West Orange County Feeder Cathodic Protection	516,500	2020	

## CRA - Conveyance Reliability

15373

Total Program Estimate	\$111,601,600	Total Projected Through June 30, 2016	\$10,866,300
Appropriated Amount	\$74,508,000	Estimated Percent Complete	10%
Biennial Estimate	\$4,310,500	Estimated Completion Date	2025

### Scope

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

### Purpose

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

### Accomplishments Through FY 2015/16

Through FY 2015/16, twelve projects have been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

### Objectives for 2016/17 and 2017/18

Major Project Milestones for FY 2012/13

CRA - Access Structure, Transition Structure and Manhole Cover Replacement	Complete construction
CRA - Copper Basin and Gene Dam Outlet and Copper Basin Gates Rehab	Complete construction
CRA - Iron Mountain Tunnel Rehabilitation	Begin final design
CRA - Reservoir and Discharge Line Isolation Gates	Begin construction
CRA - Sand Trap Equipment Upgrades	Begin construction
CRA San Jacinto Tunnel East Entrance Adit Rehab	Begin construction

Project	Total Project Estimate	Estimated Completion	Planned Activity
CRA - Sand Trap Equipment & Traveling Crane Rehab	8,567,200	2018	
Copper Basin and Gene Dam Outlet Works Rehab & Copper Basin Reservoir Outlet Gates Rehab	3,530,900	2020	



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## CRA - Discharge Containment

15385

Total Program Estimate	\$18,823,200	Total Projected Through June 30, 2016	\$2,701,600
Appropriated Amount	\$2,384,000	Estimated Percent Complete	14%
Biennial Estimate	\$2,790,400	Estimated Completion Date	2021

### Scope

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

### Purpose

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

### Accomplishments Through FY 2015/16

Through FY 2015/16, four projects have been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

### Objectives for 2016/17 and 2017/18

Major Project Milestones for FY 2012/13

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

Project	Total Project Estimate	Estimated Completion	Planned Activity
CRA - Desert Sewer System Rehabilitation	1,537,400	2019	
CRA Pumping Plant Wastewater System - Gene & Iron	5,162,300	2019	
CRA Pumping Plant Wastewater System - Intake	864,300	2019	

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## CRA - Electrical/Power Systems Reliability

15384

Total Program Estimate	\$30,007,200	Total Projected Through June 30, 2016	\$98,300
Appropriated Amount	\$18,875,000	Estimated Percent Complete	0%
Biennial Estimate	\$1,547,700	Estimated Completion Date	2023

### Scope

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

### Purpose

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

### Accomplishments Through FY 2015/16

Through FY 2015/16, nine projects have been completed.

### Objectives for 2016/17 and 2017/18

#### Major Project Milestones for FY 2012/13

CRA Main Transformer Replacement/Rehab.	Complete preliminary design
CRA Pumping Plant - Auxiliary Power System Rehabilitate/Upgrades	Complete preliminary design

<b>Project</b>	<b>Total Project Estimate</b>	<b>Estimated Completion</b>	<b>Planned Activity</b>
CRA Bank Transformer Reliability	556,200	2023	
CRA Over-Current Relay Replacement	275,200	2017	
CRA Pumping Plant - Auxiliary Power System Rehabilitate/Upgrades	517,900	2020	
CRA- 6.9 kV Lead Jacketed Cables	7,516,800	2019	

## CRA - Pumping Plant Reliability

15374

Total Program Estimate	\$2,779,600	Total Projected Through June 30, 2016	\$1,032,800
Appropriated Amount	\$21,867,000	Estimated Percent Complete	37%
Biennial Estimate	\$-123,100	Estimated Completion Date	2019

### Scope

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

### Purpose

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

### Accomplishments Through FY 2015/16

Through FY 2015/16, fifteen projects have been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

### Objectives for 2016/17 and 2017/18

Major Project Milestones for FY 2012/13

CRA Main Pump Motor Exciters Rehab.	Begin construction
CRA Main Pump Suction and Discharge Lines Expansion Joint Repairs	Complete final design
Hinds Pumping Plant Delivery Pipe Expansion Joint Replacement	Complete construction

Project	Total Project Estimate	Estimated Completion	Planned Activity
CRA Delivery Line Expansion Joint Refurbishment	1,613,300	2019	

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## CRA - Reliability for FY2006/07 through FY2011/12

15438

Total Program Estimate	\$81,934,700	Total Projected Through June 30, 2016	\$5,138,300
Appropriated Amount	\$28,611,000	Estimated Percent Complete	6%
Biennial Estimate	\$22,976,400	Estimated Completion Date	2022

### Scope

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

### Purpose

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

### Accomplishments Through FY 2015/16

Through FY 2015/16, one project has been completed

Major project milestones in FY 2014/15 and FY 2015/16:

### Objectives for 2016/17 and 2017/18

Major Project Milestones for FY 2012/13

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

<b>Project</b>	<b>Total Project Estimate</b>	<b>Estimated Completion</b>	<b>Planned Activity</b>
CRA Canal Improvements	3,063,600	2017	
CRA Intake Plant - Power & Communication Line Replacement	1,208,500	2018	
CRA Mile 12 Flow and Chlorine Monitoring Station Upgrades	342,500	2018	
CRA Pump Plant Flow Meter Replacement	407,900	2017	
CRA Pump Plant Sump System Rehabilitation	9,464,800	2020	
CRA Seismic Upgrade of 6.9kV Switch House Seismic Retrofit	978,200	2020	
Eagle Pump Plant Reservoir Spillway Gate Rehab	1,411,300	2017	
Gene Pumping Plant - 2.4 kV Standby Diesel Engine Generator Replacement	416,600	2020	
Intake Pumping Plant - 2.4 kV Standby Diesel Engine Generator Replacement	277,700	2020	
Iron Mountain - 2.4 kV Standby Diesel Engine Generator Replacement	2,087,900	2019	

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## CRA - Reliability for FY2012/13 through FY2017/18

15483

Total Program Estimate	\$68,150,200	Total Projected Through June 30, 2016	\$427,000
Appropriated Amount		Estimated Percent Complete	1%
Biennial Estimate	\$1,912,300	Estimated Completion Date	2025

### Scope

### Purpose

### Accomplishments Through FY 2015/16

### Objectives for 2016/17 and 2017/18

<b>Project</b>	<b>Total Project Estimate</b>	<b>Estimated Completion</b>	<b>Planned Activity</b>
CRA Cut and Cover Erosion Control Upgrade	957,700	2019	
CRA Delivery Line At-Risk Expansion Joint Repairs	1,414,800	2017	
CRA Domestic Water Main Distribution Replacement	1,040,600	2023	
CRA Protective Slabs	1,852,200	2019	
CRA Pumping Plant Delivery Line Re-Lining	737,300	2020	
CRA Pumping Plant Storage Buildings at Hinds, Eagle Mountain and Iron Mountain	929,000	2021	
CRA Pumping Plants Water Treatment Systems Replacement	1,042,900	2020	
Whitewater Tunnel No. 2 Seismic Upgrade	984,700	2020	

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## CRA Main Pump Reliability

15481

Total Program Estimate	\$176,804,400	Total Projected Through June 30, 2016	\$265,700
Appropriated Amount		Estimated Percent Complete	0%
Biennial Estimate	\$1,064,600	Estimated Completion Date	2033

### Scope

### Purpose

### Accomplishments Through FY 2015/16

### Objectives for 2016/17 and 2017/18

<b>Project</b>	<b>Total Project Estimate</b>	<b>Estimated Completion</b>	<b>Planned Activity</b>
CRA Main Pump & Motor Refurishment	1,710,000	2033	
CRA Main Pump Discharge Valve Refurbishment	960,000	2028	
CRA Main Pumping Plant Discharge Line Isolation Bulkhead Coupling	3,103,700	2021	
CRA Pump Plants Circulation Water Systems	366,600	2027	
CRA Pumping Plants Crane Improvements	5,739,100	2019	