WATER REPLENISHMENT DISTRICT
OF SOUTHERN CALIFORNIA

Updated Five Year Capital Improvement Program Fiscal Years 2018/19 – 2022/23

Approved by WRD Board of Directors

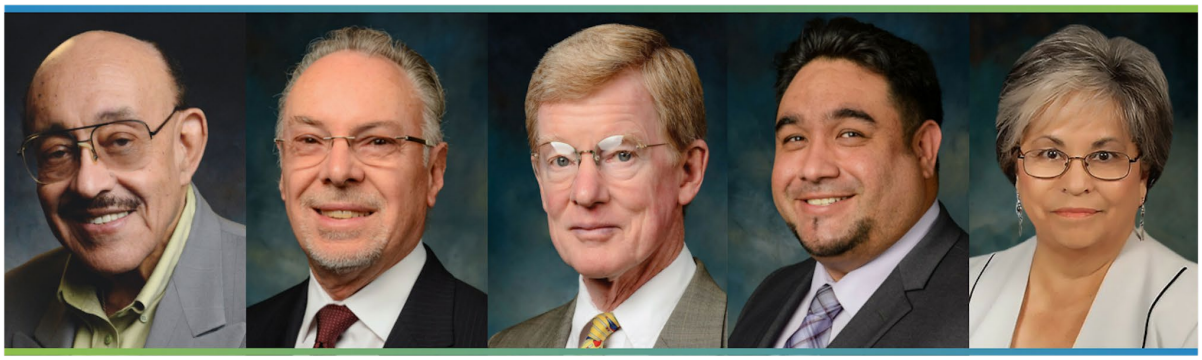
October 2018

Water Replenishment District of Southern California

UPDATED FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM, 2018

Approved by Board of Directors on October 17, 2018

WRD BOARD OF DIRECTORS



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WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA

MEMORANDUM

DATE: October 17, 2018

TO: INTERESTED STAKEHOLDERS

FROM: ROBB WHITAKER, GENERAL MANAGER

SUBJECT: UPDATED CAPITAL IMPROVEMENT PROGRAM 2018/19 THROUGH 2022/23

The Water Replenishment District of Southern California (WRD) is pleased to submit a copy of the proposed Updated Five-Year Capital Improvement Program (CIP) 2018/19 through 2022/23. As part of the annual budget process, staff reviewed and updated WRD's CIP. The Updated CIP is a short-range plan, which summarizes capital projects and equipment purchases and provides a planning schedule. Essentially, the plan provides a link between proposed capital improvement projects, master plans, strategic plans and WRD's annual budget. The Updated CIP reflects WRD's dedication to continued fiscal responsibility, stakeholder sensitivity and organizational efficiency.

A CIP provides many benefits including:

- A systematic evaluation of all potential projects
- Identify the most economical means of financing capital improvements
- A communication tool for public relations and stakeholder

The CIP is also an effective tool to ensure planning and implementation of capital improvements are tied to realistic, predictable sources of income. Furthermore, the CIP is used to define desired projects and follow an adequate timeline for the review of preliminary planning and design by the WRD Board of Directors prior to establishing a construction schedule. The Updated Five-Year CIP also includes projects from prior years that are ongoing.

This update to WRD's previous five-year plan provides information to the public regarding the upcoming capital priorities and allows for multi-year financial planning to support these priorities. The District's capital improvements focus on completing projects identified under the Water Independence Now (WIN) initiative, such as the Albert Robles Center (ARC) for Water Recycling & Environmental Learning (formerly known as the Groundwater Reliability Improvement Project (GRIP)) and water infrastructure management projects, such as the Asset Management Program.

Our needs for future five-year capital funding will peak over the next capital improvement planning horizon as WRD's ARC-related projects transition from advanced planning, design and construction into project expansion and in-house operations. The CIP includes a total of $218.5 million in capital improvement projects.

The CIP reflects grant funding in excess of $16.2 million and a $35 million one-percent loan from the Clean Water State Revolving Fund (CWSRF) Water Recycling Program for the construction of the GRIP Advanced Water Treatment Facility (AWTF). In November of 2018 WRD will be going out to bond $73.1M in projects for a two year bond issuance. In addition, the CIP describes "other" and "new funding" categories, which may be fulfilled via partnerships, grants, and/or low-interest loans.

For ease of use and review, the CIP was re-organized into six general project categories:

- Water Independence Now (WIN)
- Regional Water Independence Program
- Basin Management Projects
- WRD Water Infrastructure Management Projects
- Groundwater Quality Protection and Remediation
- Facilities Management, Maintenance, and Repair

There is one new category, in-lieu of the former "Groundwater Management Projects" category that is the "Regional Water Independence Program." This new category includes initiatives that will provide a sustainable water future for the region. In addition, there are various new projects:

- New Water Development in lieu of a Connection Fee at the Albert Robles Center
- Additional Injection & Spreading for the Albert Robles Center
- Direct connection to Los Coyotes Water Reclamation Plant and the Leo J. Vander Lans AWTF
- Dominguez Gap Seawater Intrusion Barrier – Inland Injection Well Field
- Hyperion Replenishment Master Plan
- Regional Replenishment Resource Development
- Well Construction and Loan Program
- Recycled Water Compliance Monitoring Wells at Montebello Forebay Spreading Grounds
- An Energy Management Plan Study & Implementation for WRD's Facilities
- SCADA Implementation
- Contaminated Site Investigations, Cleanup and Monitoring Wells
- Upgrades to existing Robert W. Goldsworthy Desalter & Leo J. Vander Lans AWTF
- Improvements to the Rio Hondo and San Gabriel Spreading Grounds

The draft CIP was presented and reviewed at the Technical Advisory Committee (TAC) on Wednesday, October 10, 2018. Following a detailed review and discussion of the Updated CIP, the TAC made the following recommendation to the Capital Improvement Projects Committee and subsequently the Board of Directors:

Adopt the Updated Five-Year Capital Improvement Program for Fiscal Years 2018-19 through Fiscal Years 2022-2023 as submitted and authorize staff to file a Notice of Exemption from CEQA.

The Updated CIP was introduced to the Capital Improvement Projects Committee on October 10, 2018 and subsequently submitted to the Board of Directors on October 17, 2018 for review, approval and formal adoption.

ABOUT WRD

The Water Replenishment District of Southern California (WRD) was established by a vote of the people in 1959 pursuant to the Water Replenishment District Act of 1955 to counteract the effects of over-pumping in the Central and West Coast Groundwater Basins (collectively, the "Basins"). Prior to the formation of WRD, over-pumping caused wells to go dry and seawater to intrude into potable water aquifers. The WRD is responsible for protecting the Basins, which are two of the most utilized urban groundwater basins in the nation, and serves as the groundwater manager in accordance with the adjudications of the Basins. The WRD protects and manages the Basins through groundwater replenishment, sea water intrusion deterrence and the removal of contaminants from the groundwater. Since its inception, WRD has worked to seek new water resources for groundwater replenishment, manage existing water resources, develop regional infrastructure to improve groundwater management and promote conservation.

The WRD continues to respond to the ongoing drought with the implementation of its Water Independence Now (WIN) Program to completely eliminate the demand for imported water to replenish the Basins. The WIN program is a series of capital improvement projects that fully utilize stormwater and recycled water sources to replenish the groundwater, resulting in a locally sustainable groundwater supply for WRD's stakeholders.

OVERVIEW

The Updated Capital Improvement Program (CIP) plan serves as a comprehensive planning document which identifies capital project expenditures in conjunction with anticipated revenue sources, such as grant funding. The Updated CIP is a working document and should be reviewed and updated annually to reflect stakeholder needs, priorities and funding opportunities.

For ease of use, the CIP is organized into six (6) general project categories. The project categories are as follows:

- Water Independence Now (WIN)
- Regional Water Independence Program
- Basin Management Projects
- WRD Water Infrastructure Management Projects
- Groundwater Quality Protection and Remediation
- Facilities Management, Maintenance, and Repair

Each proposed capital improvement project was assigned to a specific category. The capital improvement program projects are shown by category in Table 1. In addition, each project is exclusively summarized in a dedicated worksheet within the CIP. The project worksheets include a project description, operating impacts discussion, prior year project highlights, projected five-year capital improvement project cost information (separated by project phase) and estimated project schedule.

The CIP accounts for all capital projects that generally meet one or more of the following criteria:

- Typically non-recurring, one-time expenditures
- Expenditures spanning over two fiscal years or longer
- Total project cost exceeding $10,000

CAPITAL IMPROVEMENT PROGRAM

BUDGET OVERVIEW

Capital Improvement Program Budget Overview

The Updated CIP budget includes a total of $218.5 million in capital improvement projects. The CIP reflects approximately $16.2 million in grant funding. In addition, funding sources include an $35 million in Loans for ARC, $73.1 million from the 2018 bonds, and $5.6 million of other funding through partnerships and $ 30.2 million in additional funding, which may include funding from another line item in the CIP, general reserves and capital reserve accounts. This is summarized below:

Table 1 (new projects in yellow)

TOTAL CIP BUDGET	All Previous Expenditures Start of Project through 6/30/2018	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total 5-Year CIP Budget	Secured Grants	Secured Loans	Other (Multi-party/ Partnerships)	Additional Funding	2018 Bond Issuance
Total	$ 128,500,000	$ 97,900,000	$ 60,500,000	$ 10,000,000	$ 34,600,000	$ 21,300,000	$ 218,500,000	$ 16,200,000	$ 35,000,000	$ 5,600,000	$ 30,150,000	$ 73,100,000

Water Independence Now (WIN)	All Previous Expenditures Start of Project through 6/30/2018	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total 5-Year CIP Budget	Secured Grants	Secured Loans	Other (Multi-party/ Partnerships)	Additional Funding	2018 Bond Issuance
ARC: Advanced Water Treatment Facility (AWTF)	$ 115,640,875	$ 73,250,000	$ -	$ -	$ -	$ -	$ 73,250,000	$ 9,000,000	$ 35,000,000	$ 4,100,000		$ 25,150,000
ARC: New Water Development in lieu of Connection Fee	$ -		$ 15,000,000				$ 15,000,000				$ 15,000,000	$ -
ARC: Advanced Water Treatment Facility (AWTF) Expansion	$ -	$ -	$ -				$ -			$ -		$ -
ARC: Advanced Water Treatment Facility (AWTF) Injection Well Expansion	$ -	$ -	$ -				$ -					$ -
ARC: Whittier Parcel (Additional Injection, Spreading and/or Energy Management)	$ -	$ -	$ 200,000				$ 200,000					$ 200,000
Leo J. Vander Lans Facility: Cerritos Interconnect Pipeline (includes preliminary design)	$ 653,882	$ 2,700,000	$ 9,000,000	$ -	$ -	$ -	$ 11,700,000			$ -	$ -	$ 11,700,000
Leo J Vander Lans Facility: Los Coyotes Direct Connect	$ -	$ 700,000	$ 1,000,000	$ 900,000	$ 15,800,000	$ 15,200,000	$ 33,600,000					$ 1,700,000
Leo J. Vander Lans Facility: Onsite injection Well Storage/Replenishment	$ -	$ 600,000	$ 5,400,000				$ 6,000,000			$ -		$ 6,000,000
Leo J. Vander Lans Facility: Offsite injection Well Storage/Replenishment	$ -						$ -					$ -
Total	$ 116,294,757	$ 77,250,000	$ 30,600,000	$ 900,000	$ 15,800,000	$ 15,200,000	$ 139,750,000	$ 9,000,000	$ 35,000,000	$ 4,100,000	$ 15,000,000	$ 44,750,000

Regional Water Independence Program	All Previous Expenditures Start of Project through 6/30/2018	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total 5-Year CIP Budget	Secured Grants	Secured Loans	Other (Multi-party/ Partnerships)	Additional Funding	2018 Bond Issuance
Regional Brackish Water Reclamation Program	$ -	$ 1,500,000	$ 1,300,000				$ 2,800,000	$ 700,000		$ -		$ 2,100,000
Dominguez Gap Seawater Intrusion Barrier- Inland Injection Well Field	$ -	$ -	$ 500,000	$ 1,900,000	$ 10,000,000	$ -	$ 12,400,000					$ 500,000
Hyperion Replenishment Master Plan	$ -	$ 1,500,000	$ 1,500,000	$ -	$ -	$ -	$ 3,000,000			$ 1,500,000	$ 1,500,000	$ -
Regional Replenishment Resource Development	$ -	$ -	$ 1,000,000				$ 1,000,000				$ 1,000,000	$ -
Well Construction and Loan Program	$ -	$ 5,200,000	$ 5,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 13,200,000				$ 10,200,000	$ -
Total	**$ -**	**$ 6,700,000**	**$ 8,000,000**	**$ 2,900,000**	**$ 11,000,000**	**$ 1,000,000**	**$ 29,600,000**	**$ -**	**$ -**	**$ 1,500,000**	**$ 12,700,000**	**$ 2,600,000**

Basin Management Projects	All Previous Expenditures Start of Project through 6/30/2018	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget	Secured Grants	Secured Loans	Other (Multi-party/ Partnerships)	Additional Funding	2018 Bond Issuance
Regional Groundwater Monitoring Program - Wells	$ 10,591,337	900000	900000	$ 900,000	$ 900,000	$ -	$ 3,600,000			$ -		$ 1,800,000
Regional Groundwater Monitoring Program - Telemetry	$ -			$ 400,000	$ 400,000	$ 300,000	$ 1,100,000					$ -
Montebello Forebay Recharge Enhancement Study - Phase 2	$ 719,182			$ 200,000	$ 200,000	$ 200,000	$ 600,000			$ -		$ -
Recycled Water Compliance Monitoring Wells at MFSG	$ -	$ 100,000	$ 400,000				$ 500,000					$ 500,000
Total	**$ 11,310,519**	**$ 1,000,000**	**$ 1,300,000**	**$ 1,500,000**	**$ 1,500,000**	**$ 500,000**	**$ 5,800,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 2,300,000**

WRD Infrastructure Management Projects	All Previous Expenditures Start of Project through 6/30/2018	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total 5-Year CIP Budget	Secured Grants	Secured Loans	Other (Multi-party/ Partnerships)	Additional Funding	2018 Bond Issuance
Asset Management Program	$ 1,425,748	$ 600,000	$ 300,000				$ 900,000			$ -		$ 900,000
Energy Management Plan Study and Implementation	$ -	$ 300,000	$ 2,000,000				$ 2,300,000					$ 2,300,000
Monitoring Wells: SCADA Implementation	$ 2,548,149				$ 1,000,000	$ 1,000,000	$ 2,000,000					$ -
Leo J. Vander Lans: SCADA Upgrades	$ -	$ 1,700,000	$ 900,000				$ 2,600,000					$ 2,600,000
Goldsworthy : SCADA Upgrades	$ -	$ 800,000	$ 500,000				$ 1,300,000					$ 1,300,000
Total	**$ 3,973,897**	**$ 3,400,000**	**$ 3,700,000**	**$ -**	**$ 1,000,000**	**$ 1,000,000**	**$ 9,100,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 7,100,000**

Groundwater Quality Protection & Remediation	All Previous Expenditures Start of Project through 6/30/2018	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total 5-Year CIP Budget	Secured Grants	Secured Loans	Other (Multi-party/ Partnerships)	Additional Funding	2018 Bond Issuance
Perchlorate Remediation Project	$ -	$ 300,000	$ 5,100,000	$ 1,500,000	$ 2,000,000	$ 200,000	$ 9,100,000	$ 7,200,000		$ -		$ -
Contaminated Site Investigations, Cleanup and Monitoring Wells	$ -	$ 500,000	$ 500,000				$ 1,000,000					$ 1,000,000
SDWP (DAC only)	$ -						$ -					$ -
SDWP Program - Primary Contaminants (Grants)	$ 4,153,860	$ 3,200,000	$ 1,600,000				$ 4,800,000	$ -	$ -	$ -		$ 4,800,000
SDWP Program - Secondary Contaminants (Loans)	$ -			$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 4,500,000					$ -
Total	**$ 4,153,860**	**$ 4,000,000**	**$ 7,200,000**	**$ 1,500,000**	**$ 2,000,000**	**$ 200,000**	**$ 14,900,000**	**$ 7,200,000**	**$ -**	**$ -**	$ -	**$ 5,800,000**

Facilities Management, Maintenance, and Repair	All Previous Expenditures Start of Project through 6/30/2018	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total 5-Year CIP Budget	Secured Grants	Secured Loans	Other (Multi-party/ Partnerships)	Additional Funding	2018 Bond Issuance
WRD Office Building- Roof Replacement	$ -	$ 50,000	$ 50,000		$ -	$ -	$ 100,000			$ -	$ 100,000	$ -
WRD Office Building- HVAC Improvements Project	$ -		$ 2,350,000				$ 2,350,000			$ -	$ 2,350,000	$ -
Operations and Storage Annex Facility Project	$ 4,079,373	$ 1,000,000	$ 2,000,000				$ 3,000,000			$ -		$ 3,000,000
Goldsworthy Desalter Upgrades	$ -	$ 250,000	$ 250,000				$ 500,000				$ 500,000	$ -
Leo J Vander Lans Upgrades	$ -	$ 1,000,000	$ 750,000				$ 1,750,000				$ 1,750,000	$ -
Rio Hondo and San Gabriel Spreading Grounds Improvements	$ -	$ 250,000	$ 1,250,000				$ 1,500,000					$ 1,500,000
General Engineering (Labor, overhead, legislative, legal)	$ -	$ 3,000,000	$ 3,090,000	$ 3,182,700	$ 3,278,181	$ 3,376,526	$ 15,927,407					$ 6,090,000
Total	**$ 4,079,373**	**$ 5,550,000**	**$ 9,740,000**	**$ 3,182,700**	**$ 3,278,181**	**$ 3,376,526**	**$ 25,127,407**	**$ -**	**$ -**	**$ -**	$ 2,450,000	**$ 10,590,000**

CAPITAL IMPROVEMENT PROGRAM ACCOMPLISHMENTS

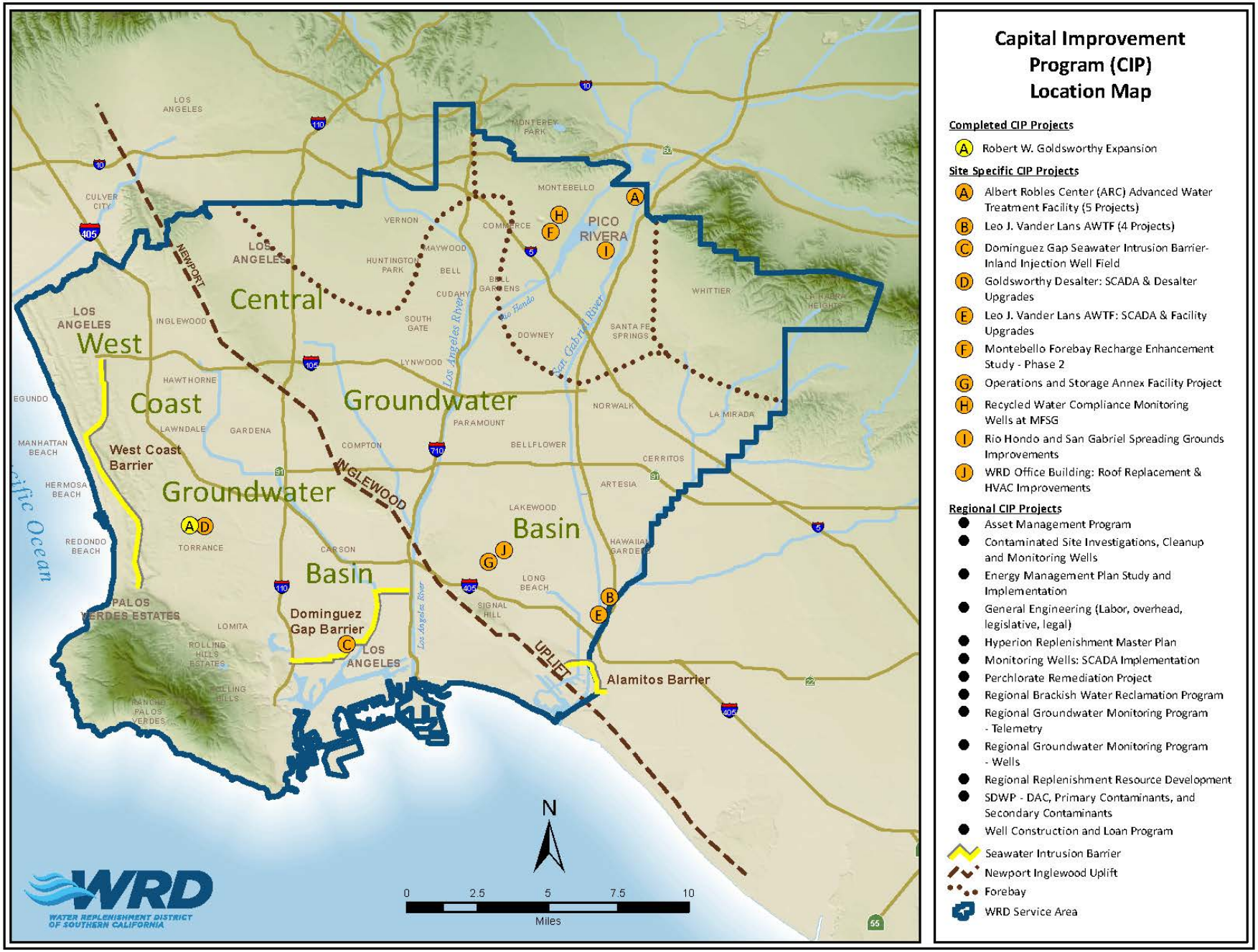
✓ Robert W. Goldsworthy Expansion

The Water Replenishment District (WRD) of Southern California began operating the Goldsworthy facility in 2002 as a pilot project to cleanup billions of gallons of brackish groundwater that remains from past seawater intrusion into groundwater-bearing aquifers that underlie the coastal areas of south Los Angeles County. The Silverado aquifer, and other primary aquifers historically used for local water supply, were affected by this seawater intrusion. In total, about 650,000 acre feet of groundwater (1 acre foot equals 325,851 gallons) is brackish in the coastal aquifers managed by WRD. Without the Goldsworthy facility, this water would not be drinkable. In an effort to expand use of this local resource, the WRD Board of Directors several years ago approved the plan to double Goldsworthy's capacity, from 2.5 million to 5 million gallons per day. State drought funding of $7 million has paid for more than a third of the facility's $18 million cost for expansion. The success of the Goldsworthy Groundwater Desalter has spurred plans for additional local area partnerships to expand brackish water remediation in the West Coast Basin. The Goldsworthy expansion project and future remediation projects will increase local sustainability and overall resiliency to counter the impacts of drought and assist local public agencies in meeting long-term water supply needs.

✓ Initiating the Regional Brackish Water Reclamation Program

Within the West Coast Basin a significant plume (approx. 600,000 acre feet) of high Total Dissolved Solids (TDS) has been trapped due to seawater intrusion and the implementation of the West Coast Seawater Intrusion Barrier. WRD began the Regional Brackish Water Reclamation Program (Program) through the Groundwater Basin's Master Plan to evaluate ways to remediate the basin.

WRD has now initiated a regional planning effort to evaluate the feasibility of remediating the high TDS plume with seven additional stakeholders (Stakeholder Group) who pump and wholesale potable water within the basin. A Feasibility Study has been identified and initiated as the first step to determining how to remediate this plume to allow for future groundwater use within the basin.


Capital Improvement Program (CIP) Location Map
Completed CIP Projects
A Robert W. Goldsworthy Expansion
Site Specific CIP Projects
A Albert Robles Center (ARC) Advanced Water Treatment Facility (5 Projects)
B Leo J. Vander Lans AWTF (4 Projects)
C Dominguez Gap Seawater Intrusion Barrier-Inland Injection Well Field
D Goldsworthy Desalter: SCADA & Desalter Upgrades
E Leo J. Vander Lans AWTF: SCADA & Facility Upgrades
F Montebello Forebay Recharge Enhancement Study - Phase 2
G Operations and Storage Annex Facility Project
H Recycled Water Compliance Monitoring Wells at MFSG
I Rio Hondo and San Gabriel Spreading Grounds Improvements
J WRD Office Building: Roof Replacement & HVAC Improvements
Regional CIP Projects
Asset Management Program
Contaminated Site Investigations, Cleanup and Monitoring Wells
Energy Management Plan Study and Implementation
General Engineering (Labor, overhead, legislative, legal)
Hyperion Replenishment Master Plan
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Regional Brackish Water Reclamation Program
Regional Groundwater Monitoring Program - Telemetry
Regional Groundwater Monitoring Program - Wells
Regional Replenishment Resource Development
SDWP - DAC, Primary Contaminants, and Secondary Contaminants
Well Construction and Loan Program
Seawater Intrusion Barrier
Newport Inglewood Uplift
Forebay
WRD Service Area
Central Basin
West Coast Barrier Groundwater
Dominguez Gap Barrier
Alamitos Barrier
NEWPORT
INGLEWOOD
UPLIFT
Los Angeles River
San Gabriel River
Rio Hondo
Pacific Ocean
LOS ANGELES
WEST LOS ANGELES
CENTRAL LOS ANGELES
MONTEREY PARK
MONTEBELLO
PICO RIVERA
WHITTIER
LA HABRA HEIGHTS
VERNON
COMMERCE
HUNTINGTON PARK
MAYWOOD
BELL
BELL GARDENS
CUDAHY
SOUTH GATE
DOWNEY
SANTA FE SPRINGS
NORWALK
LA MIRADA
LYNWOOD
PARAMOUNT
BELLFLOWER
CERRITOS
ARTESIA
LAKEWOOD
HAWAIIAN GARDENS
LONG BEACH
SIGNAL HILL
CARSON
COMPTON
GARDENA
LAWNDALE
HAWTHORNE
INGLEWOOD
CULVER CITY
EGUNDO
MANHATTAN BEACH
HERMOSA BEACH
REDONDO BEACH
TORRANCE
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LOMITA
ROLLING HILLS ESTATES
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WRD
WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA

WATER INDEPENDENCE NOW

PROJECTS AND PROGRAMS

ALBERT ROBLES CENTER (ARC): ADVANCED WATER TREATMENT FACILITY (AWTF)

PROJECT DESCRIPTION

The Albert Robles Center (ARC), formerly referred to as the Groundwater Reliability Improvement Project (GRIP), will offset the current use of imported water by providing up to 21,000 acre-feet per year (AFY) with the construction of an advanced water treatment facility (AWTF), supplemental recharge wells, a brine pipeline, and Recycled Water Turnout Structures. Approximately 11,000 AFY of additional tertiary-treated recycled water will be purchased from the Sanitation Districts of Los Angeles County (LACSD) and 10,000 AFY of advanced treated water will be generated at the proposed AWTF. The tertiary-treated recycled water would be conveyed in the existing outfall pipeline to the Montebello Forebay Spreading Grounds (MFSG). Below is a description of the various project components:

Advanced Water Treatment Facility (AWTF) – *In Progress*
The District is constructing the AWTF for advanced treatment of 10,000 AFY of tertiary-treated water from the LACSD. A new influent diversion structure will be constructed to transfer tertiary-treated recycled water from the existing outfall pipeline into the proposed AWTF for further treatment. An effluent diversion structure will be constructed to transfer advanced-treated water back to the existing outfall pipeline to allow blending of advanced-treated water with the tertiary-treated recycled water prior to spreading at the Montebello Forebay Spreading Grounds.

Supplemental Recharge Wells – *Completed*
Three supplemental recharge wells and three nested groundwater monitoring wells were constructed at and near the AWTF site. The three on-site supplemental recharge wells are able to store up to 4.5 million gallons per day (mgd) of fully advanced-treated recycled water in the underlying aquifers for groundwater replenishment. Under normal operating conditions for the AWTF, the recycled water from the AWTF will be discharged to the existing MFSG for infiltration into the groundwater basin. However, when the spreading basins are unavailable, the advanced-treated recycled water will be directed to the three supplemental recharge wells. The supplemental recharge wells will allow the AWTF to operate at a constant minimum rate by providing alternate means to recharge the advanced-treated recycled water. The construction of the wells was completed in June 2017.

Brine Pipeline & Off-Site Improvements – *Completed*
Off-site improvements were required as part of the AWTF project, including the construction of a 16-inch diameter pipeline for disposal of brine concentrate that will be generated by the new treatment facility. This 16-inch diameter brine pipeline connects to an existing LACSD 63-inch diameter sewer pipeline that is located approximately 1,600 feet from the ARC site. Other necessary off-site improvements included street modifications that were requested by the City of Pico Rivera, including a redesign of traffic lanes and signals at the intersection of San Gabriel River Parkway and Beverly Boulevard in the City of Pico Rivera. The construction of the brine line was completed in February 2017.

Recycled Water Turnout Structures – *Completed*
Two reinforced concrete turnout structures were constructed on the existing recycled water outfall pipeline that extends from the LACSD San Jose Creek Water Reclamation Plant (SJCWRP) to the Montebello Forebay Spreading Grounds. These Turnout Structures will facilitate the delivery of 11,000 AFY of recycled water. The construction of the Turnout Structures were completed in June 2016.

FUNDING

The Capital Improvement Program budget for Fiscal Year 2018-19 is $73,250,000.

OPERATING IMPACTS

There are no operating impacts at this time. Operation of the proposed AWTF is expected to commence in early 2019.

PRIOR YEAR HIGHLIGHTS

In 2017, the on-site temporary pilot treatment system completed its study to determine the final design of the advanced water treatment process. In addition, construction of the on-site, underground 3-millon gallon equalization basin was

completed, as well as the erection of the on-site Process Building and the Administration and Learning Center. Construction of the on-site diversion structure, product water tank, brine tank discharge system, and chemical storage area has begun and is expected to be completed by the end of 2018.

PROJECTED 5-YEAR CIP

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning		$ -	$ -	$ -	$ -	$ -
Design	$ -	$ -	$ -	$ -	$ -	$ -
Construction	$ 73,250,000	$ -	$ -	$ -	$ -	$ 73,250,000
Post Construction	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ 73,250,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 73,250,000**
Grants	$ 9,000,000	$ -	$ -	$ -	$ -	$ 9,000,000
Loans	$ 35,000,000					$ 35,000,000
Additional Funding	$ -					$ -
Other (Partnerships)	$ 4,100,000	$ -	$ -	$ -	$ -	$ 4,100,000
2018 Bonds	$ 25,150,000	$ -	$ -	$ -	$ -	$ 25,150,000
Total	**$ 73,250,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 73,250,000**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

ALBERT ROBLES CENTER (ARC): NEW WATER DEVLEOPMENT IN LIEU OF CONNECTION FEE

PROJECT DESCRIPTION

Brine concentrate that will be generated by the Albert Robles Center (ARC) Advanced Water Treatment Facility (AWTF) will be disposed via a 16-inch diameter pipeline that was constructed in 2017 to connect to the Sanitation Districts of Los Angeles County's (LACSD) 63-inch diameter sewer pipeline that is located approximately 1,600 feet from the ARC site. In lieu of the sewer connection fee that was required by LACSD, the District currently is negotiating with LACSD to partner on future mutually beneficial new water development projects in the region.

FUNDING

Planning and expenditures will begin in Fiscal Year 2019-20. The funding for this item is included in 2018 bond for the ARC: Albert Robles Center: Advanced Water Treatment Facility (AWTF) but is broken out here to show the money is being put to a beneficial use.

OPERATING IMPACTS

There are no operating impacts at this time.

PRIOR YEAR HIGHLIGHTS

The District is in the process of negotiating with LACSD to partner on future mutually beneficial new water development projects in the region.

PROJECTED 5-YEAR CIP

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ -	$ 15,000,000	$ -	$ -	$ -	$ 15,000,000
Design	$ -	$ -	$ -	$ -	$ -	$ -
Construction	$ -	$ -	$ -	$ -	$ -	$ -
Post Construction	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ -**	**$ 15,000,000**	**$ -**	**$ -**	**$ -**	**$ 15,000,000**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -					$ -
Additional Funding	$ -	$ 15,000,000				$ 15,000,000
Other (Partnerships)	$ -		$ -	$ -	$ -	$ -
2018 Bonds	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ -**	**$ 15,000,000**	**$ -**	**$ -**	**$ -**	**$ 15,000,000**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

ALBERT ROBLES CENTER (ARC): ADVANCED WATER TREATEMENT FACILITY (AWTF) EXPANSION

PROJECT DESCRIPTION

The Albert Robles Center (ARC) Advanced Water Treatment Facility (AWTF) currently is under construction and is expected to be completed by the end of 2018. Planning for the plant expansion will is an option for WRD's consideration and will be revaluated upon completion of the AWTF construction for consideration in next year's CIP budget.

FUNDING

No funding is accounted for in the Fiscal Year 2018-19 CIP budget.

OPERATING IMPACTS

There are no operating impacts at this time.

PRIOR YEAR HIGHLIGHTS

The District is in the process of constructing the ARC AWTF.

PROJECTED 5-YEAR CIP

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ -	$ -	$ -	$ -	$ -	$ -
Design	$ -	$ -	$ -	$ -	$ -	$ -
Construction	$ -	$ -	$ -	$ -	$ -	$ -
Post Construction	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding	$ -	$ -	$ -	$ -	$ -	$ -
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

ALBERT ROBLES CENTER (ARC): ADVANCED WATER TREATEMENT FACILITY (AWTF) INJECTION WELL EXPANSION

PROJECT DESCRIPTION

Three on-site supplemental recharge wells are currently located at the Albert Robles Center (ARC) Advanced Water Treatment Facility (AWTF) and have the ability to store up to 4.5 million gallons per day (mgd) of fully advanced-treated recycled water in the underlying aquifers for groundwater replenishment. Planning for the injection well expansion will is an option for WRD's consideration and will be revaluated upon completion of the AWTF construction for consideration in next year's CIP budget.

FUNDING

No funding is accounted for in the Fiscal Year 2018-19 CIP budget.

OPERATING IMPACTS

There are no operating impacts at this time.

PRIOR YEAR HIGHLIGHTS

The District is in the process of constructing the ARC Advanced Water Treatment Facility (AWTF).

PROJECTED 5-YEAR CIP

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ -	$ -	$ -	$ -	$ -	$ -
Design	$ -	$ -	$ -	$ -	$ -	$ -
Construction	$ -	$ -	$ -	$ -	$ -	$ -
Post Construction	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding	$ -	$ -	$ -	$ -	$ -	$ -
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

ALBERT ROBLES CENTER (ARC):
WHITTIER PARCEL (ADDITIONAL INJECTION, SPREADING, AND/OR ENERGY MANAGEMENT)

PROJECT DESCRIPTION

The property directly north of the Albert Robles Center (ARC) is owned by the City of Whittier. The District is currently evaluating options to establish a long-term lease with the City Whittier to use their property to implement projects for additional injection, spreading grounds, and/or energy management. Once these plans are finalize, the District will begin negotiations with the City of Whitter to establish a long-term lease for these projects.

FUNDING

Planning and expenditures will begin in Fiscal Year 2019-20.

OPERATING IMPACTS

There are no operating impacts at this time.

PRIOR YEAR HIGHLIGHTS

The District is in the process of constructing the ARC Advanced Water Treatment Facility (AWTF).

PROJECTED 5-YEAR CIP

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning		$ -	$ -	$ -	$ -	$ -
Design	$ -	$ -	$ -	$ -	$ -	$ -
Construction		$ -	$ -	$ -	$ -	$ -
Post Construction	$ -	$ 200,000	$ -	$ -	$ -	$ 200,000
Total	**$ -**	**$ 200,000**	**$ -**	**$ -**	**$ -**	**$ 200,000**
Grants		$ -	$ -	$ -	$ -	$ -
Loans						$ -
Additional Funding						$ -
Other (Partnerships)		$ -	$ -	$ -	$ -	$ -
2018 Bonds		$ 200,000	$ -	$ -	$ -	$ 200,000
Total	**$ -**	**$ 200,000**	**$ -**	**$ -**	**$ -**	**$ 200,000**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

LEO J. VANDER LANS (LVL) FACILITY PROJECTS

The LVL provides advanced treated recycled water to the Alamitos Seawater Intrusion Barrier (Barrier). Built in 2003, LVL receives tertiary-treated wastewater from the Sanitation Districts of Los Angeles County's (LACSD) Long Beach Water Reclamation Plant (LBWRP) and provides multi-barrier treatment including microfiltration (MF), reverse osmosis (RO) and advanced oxidation process (AOP) with ultraviolet light (UV). In 2014, the expansion of LVL increased its capacity from 3 million gallons per day (MGD) to 8 MGD. LVL is operated and maintained by the Long Beach Water Department (LBWD) under contract with WRD.

SUMMARY OF PROJECTS

- Cerritos Interconnect Pipeline (includes preliminary design)

This project would analyze a potential connection between LBWD and the City of Cerritos recycled water distribution system. As LBWRP will be shut down for extended periods during the next year, LVL will not receive any source water due to a lack of backup supply.

- Direct Connection to Los Coyotes Water Reclamation Plant

This project would analyze a potential connection between the Los Coyotes Water Reclamation Plant to the influent of the Leo J Vander Lans Facility via the Cerritos interconnection pipe. As LBWRP will be shut down for extended periods during the next year, LVL will not receive any source water due to a lack of backup supply.

- Injection Wells (Onsite injection Well Storage/Replenishment)

As LVL expands production capacity, additional demands downstream from LVL must be accommodated above and beyond the Barrier injection wells. This project would install new injection wells that are operated by LBWD to recharge the underlying Central Basin, from which LBWD pumps their groundwater. The first phase would install one or two injection wells on LVL property; the second phase would install multiple wells in the adjacent El Dorado Park Golf Course

FUNDING

The Capital Improvement Program budget for Fiscal Year 2018-19 for each project is as follows:

Cerritos Interconnect Pipeline: $2,700,000

Los Coyotes Direct Connection: $700,000

Injection Wells (Onsite): $600,000

OPERATING IMPACTS

The LVL will be offline for extended periods of time (five to six months) for the next three years as LACSD shuts down half of LBWRP for major replacements and repairs.

PRIOR YEAR HIGHLIGHTS

Preliminary design will be completed for the Cerritos Interconnect Pipeline project in October 2018. A study was completed in 2017 for the Injection Wells project.

PROJECTED 5-YEAR CIP

LVL AWTF: Cerritos Interconnect Pipeline

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ 450,000	$ 250,000	$ -	$ -	$ -	$ 700,000
Design	$ 1,000,000	$ 500,000	$ -	$ -	$ -	$ 1,500,000
Construction	$ 1,250,000	$ 8,250,000	$ -	$ -	$ -	$ 9,500,000
Post Construction	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ 2,700,000**	**$ 9,000,000**	**$ -**	**$ -**	**$ -**	**$ 11,700,000**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding			$ -	$ -	$ -	$ -
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds	$ 2,700,000	$ 9,000,000	$ -	$ -	$ -	$ 11,700,000
Total	**$ 2,700,000**	**$ 9,000,000**	**$ -**	**$ -**	**$ -**	**$ 11,700,000**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

LVL AWTF: Los Coyotes Direct Connect

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ 700,000	$ 1,000,000	$ -	$ -	$ -	$ 1,700,000
Design	$ -	$ -	$ -	$ -	$ -	$ -
Construction	$ -	$ -	$ -	$ -	$ -	$ -
Post Construction	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ 700,000**	**$ 1,000,000**	**$ -**	**$ -**	**$ -**	**$ 1,700,000**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding	$ -	$ -	$ -	$ -	$ -	$ -
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds	$ 700,000	$ 1,000,000	$ -	$ -	$ -	$ 1,700,000
Total	**$ 700,000**	**$ 1,000,000**	**$ -**	**$ -**	**$ -**	**$ 1,700,000**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

LVL AWTF: Onsite Injection Well Storage/Replenishment

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ 200,000	$ 200,000	$ -	$ -	$ -	$ 400,000
Design	$ 400,000	$ 200,000	$ -	$ -	$ -	$ 600,000
Construction	$ -	$ 5,000,000	$ -	$ -	$ -	$ 5,000,000
Post Construction	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ 600,000**	**$ 5,400,000**	**$ -**	**$ -**	**$ -**	**$ 6,000,000**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding	$ -	$ -	$ -	$ -	$ -	$ -
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds	$ 600,000	$ 5,400,000	$ -	$ -	$ -	$ 6,000,000
Total	**$ 600,000**	**$ 5,400,000**	**$ -**	**$ -**	**$ -**	**$ 6,000,000**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

REGIONAL WATER INDEPENDENCE PROGRAM PROJECTS

REGIONAL BRACKISH WATER RECLAMATION PROGRAM

PROJECT DESCRIPTION

Within the West Coast Basin a significant plume (approx. 600,000 acre feet) of high Total Dissolved Solids (TDS) has been trapped due to seawater intrusion and the implementation of the West Coast Seawater Intrusion Barrier. WRD began the Regional Brackish Water Reclamation Program (Program) through the Groundwater Basin's Master Plan to evaluate ways to remediate the basin.

WRD has now initiated a regional planning effort to evaluate the feasibility of remediating the high TDS plume with six additional stakeholders (Stakeholder Group) who pump and wholesale potable water within the basin. A Feasibility Study has been identified as the first step to determining how to remediate this plume to allow for future groundwater use within the basin.

The Feasibility Study will evaluate potential siting and technologies for brackish water reclamation facilities within the plume with maximum remediation benefit and the most efficient life cycle cost. At the end of this Feasibility Study WRD and the Stakeholder Group anticipate proceeding forward with partnership agreements determining project specific responsibility followed by CEQA and permitting for the recommended project(s).

FUNDING

The Capital Improvement Program budget for Fiscal Year 2018-19 is $1,500,000.

OPERATING IMPACTS

There are no operating impacts at this time.

PRIOR YEAR HIGHLIGHTS

WRD began the Feasibility Study for this project

PROJECTED 5-YEAR CIP

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ 1,500,000	$ 1,300,000	$ -	$ -	$ -	$ 2,800,000
Design	$ -	$ -	$ -	$ -	$ -	$ -
Construction	$ -	$ -	$ -	$ -	$ -	$ -
Post Construction	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ 1,500,000**	**$ 1,300,000**	**$ -**	**$ -**	**$ -**	**$ 2,800,000**
Grants	$ 700,000	$ -	$ -	$ -	$ -	$ 700,000
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding	$ -	$ -	$ -	$ -	$ -	$ -
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds	$ 800,000	$ 1,300,000	$ -	$ -	$ -	$ 2,100,000
Total	**$ 1,500,000**	**$ 1,300,000**	**$ -**	**$ -**	**$ -**	**$ 2,800,000**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

DOMINGUEZ GAP SEAWATER BARRIER INLAND INJECTION WELL FIELD

PROJECT DESCRIPTION

This project increases water replenishment within the West Coast Basin through the installation of a new injection well system inland from the existing Dominguez Gap Seawater Barrier. The system will be supplied with local recycled water produced at the Terminal Island Advanced Water Treatment Plant (TIAWTP), which can produce up to 12 MGD of advanced-treated water. WRD's recent agreement with City of Los Angeles Department of Water and Power (LADWP) to provide advanced treated recycled water and the right to capacity ensures sufficient supply to the Dominguez Gap Seawater Barrier of 7.5 MGD, which is expandable to a maximum of 9.5 MGD. Recent Dominguez Gap Seawater Barrier demands have fluctuated between 4,000 and 9,500 AFY or approximately 4 to 9.5 MGD and therefore surplus advanced treated recycled water may be available for replenishment. The proposed project will require construction of up to 4 new injection wells and new pipelines in order to replenish advanced-treated water in excess of the Dominguez Gap Seawater Barrier demands.

FUNDING

Planning and expenditures will begin in Fiscal Year 2019-20.

OPERATING IMPACTS

Increased advanced-treated water capacity at the TIAWTP and WRD's new agreement guaranteeing the right to capacity of up to 9.5 MGD decreases WRD's dependence on expensive and unreliable imported water. This project allows for an alternative location for the replenishment of the advanced-treated water during barrier maintenance and other barrier outages thus securing the WRD's ability to purchase advanced-treated water at the most cost-effective rate available.

PRIOR YEAR HIGHLIGHTS

This project is in its planning stages; hence, there are no highlights at this time.

PROJECTED 5-YEAR CIP

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ -	$ 100,000	$ -	$ -	$ -	$ 100,000
Design	$ -	$ 400,000	$ 1,900,000	$ -	$ -	$ 2,300,000
Construction	$ -	$ -	$ -	$ 10,000,000	$ -	$ 10,000,000
Post Construction	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ -**	**$ 500,000**	**$ 1,900,000**	**$ 10,000,000**	**$ -**	**$ 12,400,000**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding	$ -	$ -	$ -	$ -	$ -	$ -
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds	$ -	$ 500,000	$ -	$ -	$ -	$ 500,000
Future Funding Sources	$ -	$ -	$ 1,900,000	$ 10,000,000	$ -	$ 11,900,000
Total	**$ -**	**$ 500,000**	**$ 1,900,000**	**$ 10,000,000**	**$ -**	**$ 12,400,000**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

HYPERION REPLENISHMENT MASTER PLAN

PROJECT DESCRIPTION

WRD and LADWP are investigating the potential to collaborate on ways to replenish and pump both the West and Central Groundwater Basins. LADWP has access to the Hyperion Water Reclamation Plant (WRP) as a potential source of replenishment water and is looking to partner with WRD to find reasonable locations to get this water into the Basins. By utilizing the recycled water supply at the Hyperion WRP, which are currently reaching upwards of 200 million gallons per day (MGD), this could be a key component to developing a sustainable groundwater strategy. In order to develop the specific strategy LADWP and WRD must develop and evaluate a comprehensive list of potential project opportunities to meet these sustainable goals.

FUNDING

The Capital Improvement Program budget for Fiscal Year 2018-19 is $1,500,000.

OPERATING IMPACTS

There are no operating impacts at this time.

PRIOR YEAR HIGHLIGHTS

This is a new project

PROJECTED 5-YEAR CIP

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ 1,500,000	$ 1,500,000	$ -	$ -	$ -	$ 3,000,000
Design	$ -	$ -	$ -	$ -	$ -	$ -
Construction	$ -	$ -	$ -	$ -	$ -	$ -
Post Construction	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ 1,500,000**	**$ 1,500,000**	**$ -**	**$ -**	**$ -**	**$ 3,000,000**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding	$ 750,000	$ 750,000	$ -	$ -	$ -	$ 1,500,000
Other (Partnerships)	$ 750,000	$ 750,000	$ -	$ -	$ -	$ 1,500,000
2018 Bonds			$ -	$ -	$ -	$ -
Total	**$ 1,500,000**	**$ 1,500,000**	**$ -**	**$ -**	**$ -**	**$ 3,000,000**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

REGIONAL REPLENISHMENT RESOURCE DEVELOPMENT

PROJECT DESCRIPTION

As WRD continues to develop a partnership with LADWP and investigates new ways to get replenishment water into the ground additional analysis may be needed to further refine or vet the feasibility of certain potential projects and options. Additional work to be done for replenishment development could be, but is not limited to: groundwater modeling, additional design analysis, permit preparation, CEQA analysis, etc. These details and analysis will help WRD to identify and secure additional replenishment to develop more sustainable groundwater basins.

FUNDING

Planning and expenditures will begin in Fiscal Year 2019-20.

OPERATING IMPACTS

There are no operating impacts at this time.

PRIOR YEAR HIGHLIGHTS

This is a new project.

PROJECTED 5-YEAR CIP

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ -	$ 1,000,000	$ -	$ -	$ -	$ 1,000,000
Design	$ -	$ -	$ -	$ -	$ -	$ -
Construction	$ -	$ -	$ -	$ -	$ -	$ -
Post Construction	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ -**	**$ 1,000,000**	**$ -**	**$ -**	**$ -**	**$ 1,000,000**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding	$ -	$ 1,000,000	$ -	$ -	$ -	$ 1,000,000
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds	$ -		$ -	$ -	$ -	$ -
Total	**$ -**	**$ 1,000,000**	**$ -**	**$ -**	**$ -**	**$ 1,000,000**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

WELL CONSTRUCTION AND LOAN PROGRAM

PROJECT DESCRIPTION

The Water Replenishment District of Southern California ("WRD" or "District") has developed a Well Construction and Rehabilitation Loan Program (Program) to assist groundwater producers within its service area maintain or increase their groundwater pumping capabilities. This Program can improve the producers' ability to optimize their groundwater rights and reduce their reliance on any imported water that they may purchase instead of producing groundwater. Nearly a half million acre feet of allowable extraction has not been produced over the last 10 years, partially due to problems with wells, well capacity, and water quality. The District currently administers the Safe Drinking Water Program (SDWP) to assist groundwater producers resolve water quality problems, but to date a program has not existed to assist them with drilling and installing new wells, or repairing or rehabilitating existing wells. The purpose of this Program is to assist groundwater producers to reach their total extraction rights, to reduce the need for imported water, and to ensure system reliability, and to better utilize the storage capability of the basins.

FUNDING

The Capital Improvement Program budget for Fiscal Year 2018-19 is $5,200,000.

OPERATING IMPACTS

There are no operating impacts at this time.

PRIOR YEAR HIGHLIGHTS

This is a new program.

PROJECTED 5-YEAR CIP

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ -	$ -	$ -	$ -	$ -	$ -
Design	$ -	$ -	$ -	$ -	$ -	$ -
Construction	$ 5,200,000	$ 5,000,000	$ -	$ -	$ -	$ 10,200,000
Post Construction	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ 5,200,000**	**$ 5,000,000**	**$ -**	**$ -**	**$ -**	**$ 10,200,000**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding	$ 5,200,000	$ 5,000,000	$ -	$ -	$ -	$ 10,200,000
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds			$ -	$ -	$ -	$ -
Future Funding Sources	$ -	$ -	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 3,000,000
Total	**$ 5,200,000**	**$ 5,000,000**	**$ -**	**$ -**	**$ -**	**$ 13,200,000**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

BASIN MANAGEMENT PROJECTS

REGIONAL GROUNDWATER MONITORING PROGRAM - WELLS

PROJECT DESCRIPTION

The Regional Groundwater Monitoring Program (RGMP) collects groundwater level and groundwater quality data used for groundwater basin management for the Central Basin and West Coast Basin, two of the most utilized urban groundwater basins in the nation. This is achieved through groundwater monitoring, modeling and planning, which provides the basis to understanding the dynamic changes in the basins. The RGMP currently consists of a network of 324 specialized monitoring wells at 58 locations throughout the District to a maximum depth of nearly 3,000 feet, and WRD staff, comprised of hydrogeologists and engineers, provide the expertise to collect, analyze and report on the groundwater data. WRD uses the data generated by the RGMP to address current and potential water quality issues and groundwater replenishment within the basins. In addition, the RGMP provides flexible management practices to adjust groundwater resources planning as circumstances or conditions warrant. The RGMP has proved valuable as WRD works to implement its Water Independence Now program, maximizing local water sources to replenish, preserve and protect the basins and eliminating its dependence on imported water. To fill in data gap areas, four additional wells are planned over the 5 year CIP with the first two wells in FY18-19 and/or FY19-20.

FUNDING

The Capital Improvement Program budget for Fiscal Year 2018-19 is $900,000.

OPERATING IMPACTS

Wells are monitored by WRD staff. The new wells will be folded into the current operations plan which consists of deployment of data loggers, quarterly visits to download the data loggers and collect water levels, and semi-annual visits to collect groundwater samples. In addition, equipment maintenance, repairs, and calibrations are performed.

PRIOR YEAR HIGHLIGHTS

The annual 2016-17 Regional Groundwater Monitoring Report was completed, and the 6-week long sampling programs were completed in fall 2017 and spring 2018.

PROJECTED 5-YEAR CIP

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ -	$ -	$ -	$ -	$ -	$ -
Design	$ -	$ -	$ -	$ -	$ -	$ -
Construction	$ 900,000	$ 900,000	$ 900,000	$ 900,000	$ -	$ 3,600,000
Post Construction	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ 900,000**	**$ 900,000**	**$ 900,000**	**$ 900,000**	**$ -**	**$ 3,600,000**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding	$ -	$ -	$ -	$ -	$ -	$ -
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds	$ 900,000	$ 900,000	$ -	$ -	$ -	$ 1,800,000
Total	**$ 900,000**	**$ 900,000**	**$ -**	**$ -**	**$ -**	**$ 1,800,000**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

REGIONAL GROUNDWATER MONITORING PROGRAM - TELEMETRY

PROJECT DESCRIPTION

The Regional Groundwater Monitoring Program (RGWMP) deploys automated data loggers in each of its 324 monitoring wells to collect, record, and store water levels in the wells every 6 hours so that the District can have accurate information on long-term and short-term water level trends. Water quality data are also collected in many of the data loggers. Obtaining the information is currently laborious, involving field staff to visit each well quarterly, connect the data loggers to hand held devices to download the information, bring the hand held devices back to the office to connect to desktop computers to view and check the information, and then uploaded to the District's sequel server databases. This is a time consuming task which only provides the data to managers once per quarter although the data are collected 4 times daily. The process also jeopardizes data integrity with all the various handlings by staff and devices. This work will be optimized by connecting the data loggers to a telemetry system so that the recorded data are automatically transmitted to the District daily (versus quarterly) and in one step directly to the sequel servers for rapid access by managers and staff. A feasibility study will be performed to evaluate the most appropriate system for the District, followed by purchase, deployment, and implementation of the system.

FUNDING

Planning and expenditures will begin in Fiscal Year 2020-21.

OPERATING IMPACTS

Installation of the telemetry system will significantly reduce manual labor efforts by automating the data downloading, processing, and incorporating into sequel servers freeing up staff for other duties. It will allow access to the data much more frequently (daily vs quarterly) proving WRD with near real-time groundwater levels and quality throughout the District for better basin management.

PRIOR YEAR HIGHLIGHTS

This is a new program.

PROJECTED 5-YEAR CIP

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ -	$ -	$ 80,000	$ -	$ -	$ 80,000
Design	$ -	$ -	$ -	$ -	$ -	$ -
Construction	$ -	$ -	$ 320,000	$ 400,000	$ 300,000	$ 1,020,000
Post Construction	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ -**	**$ -**	**$ 400,000**	**$ 400,000**	**$ 300,000**	**$ 1,100,000**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding	$ -	$ -	$ -	$ -	$ -	$ -
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

ENHANCED-MONTEBELLO FOREBAY RECHARGE ENHANCEMENT STUDY (E-MFRES)

PROJECT DESCRIPTION

The Enhanced-Montebello Forebay Recharge Enhancement Study (E-MFRES) will review and update the findings of the Montebello Forebay Recharge Enhancement Study (MFRES). The Project will update and enhance the previously developed Montebello Forebay Spreading Grounds Operation Model (MFSGOM) that will help the District plan and optimize its operations by reflecting recent changes in operations, additional data collected, water reclamation production uncertainties, and various operational scenarios.

FUNDING

Planning and expenditures will begin in Fiscal Year 2020-21.

OPERATING IMPACTS

There are no operating impacts at this time.

PRIOR YEAR HIGHLIGHTS

This project has not commenced; hence, there are no highlights at this time.

PROJECTED 5-YEAR CIP

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ -	$ -	$ 200,000	$ 200,000	$ 200,000	$ 600,000
Design	$ -	$ -	$ -	$ -	$ -	$ -
Construction	$ -	$ -	$ -	$ -	$ -	$ -
Post Construction	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ -**	**$ -**	**$ 200,000**	**$ 200,000**	**$ 200,000**	**$ 600,000**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding	$ -	$ -	$ -	$ -	$ -	$ -
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

RECYCLED WATER COMPLIANCE MONITORING WELLS AT THE MONTEBELLO FOREBAY SPREADING GROUNDS

PROJECT DESCRIPTION

The Montebello Forebay Spreading Grounds (MFSG) are a County of Los Angeles owned and operated facility in the City of Pico Rivera which the WRD has used since 1959 as a major groundwater recharge facility. Beginning in 1962, the WRD initiated groundwater recharge using treated wastewater, today known as tertiary treated water or simply recycled water. Recycled water has proven to be a reliable, safe, and cost effective groundwater recharge source. However, because it originated as waste water prior to extensive treatment to make it usable again, regulatory agencies including the State Water Resources Control Board – Division of Drinking Water (DDW) and the Los Angeles Regional Water Quality Control Board (RWQCB) require strict permit requirements to ensure its safety. Part of these requirements include monitoring of the groundwater by collecting samples from wells. Due to upcoming new permit requirements, it is anticipated that additional monitoring wells will be needed to comply with modern regulations. Also, 2 of the 6 monitoring wells that WRD currently utilizes have proven to be too shallow in the sense that due to continuing drought conditions, the water table has dropped below the bottom of the wells and they are now dry and cannot be sampled as required. Therefore deeper replacement wells will be necessary. The planning, design, and construction of the new monitoring wells are included in this CIP.

FUNDING

The Capital Improvement Program budget for Fiscal Year 2018-19 is $100,000.

OPERATING IMPACTS

Installation of the new wells will require monitoring and sampling by WRD staff in addition to analyzing and reporting on the data collected from the wells.

PRIOR YEAR HIGHLIGHTS

This is a new program.

PROJECTED 5-YEAR CIP

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ 50,000	$ -	$ -	$ -	$ -	$ 50,000
Design	$ -	$ -	$ -	$ -	$ -	$ -
Construction	$ 50,000	$ 400,000	$ -	$ -	$ -	$ 450,000
Post Construction	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ 100,000**	**$ 400,000**	**$ -**	**$ -**	**$ -**	**$ 500,000**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding	$ -	$ -	$ -	$ -	$ -	$ -
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds	$ 100,000	$ 400,000	$ -	$ -	$ -	$ 500,000
Total	**$ 100,000**	**$ 400,000**	**$ -**	**$ -**	**$ -**	**$ 500,000**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

WRD INFRASTRUCTURE MANAGEMENT PROJECTS

ASSET MANAGEMENT PROGRAM

PROJECT DESCRIPTION

As the District continues to grow and amass assets through its capital improvement projects, it is critical that they be managed and maintained to ensure optimal usage over their life. Recognizing this, the Board of Directors initiated the development of an Asset Management (AM) Program. The AM plan was completed in FY 15-16 and outlines a priority list of recommended actions and projects using factors such as level of effort, business drivers, cost, staff involvement and alignment to the District's strategic direction. Initiatives that support the AM program are categorized into the following elements:

- Planning: Develop an AM strategy and framework
- Core Service Delivery: Implementation of a enterprise AM program
- Performance Management: Develop levels of service framework
    - Support Services: Implementation of tools that support the enterprise AM program, such as the Computerized Maintenance Management System (CMMS) software, Assetic asset predictor software, Geographic Information System (GIS) software updates, OnBase electronic agenda process, etc.

FUNDING

The Capital Improvement Program budget for Fiscal Year 2018-19 is $600,000.

OPERATING IMPACTS

There are no operating impacts at this time.

PRIOR YEAR HIGHLIGHTS

- Planning:
    - AM strategy and framework was developed and includes the core Governance model that encompasses all District assets – infrastructure and staff. This comprehensive model consists of five teams: Asset Management, People, Digital, Communications, Quality Assurance/Quality Control and Executive Management and are all staffed by WRD employees
- Core Service Delivery
    - Enterprise AM Governance teams have assembled and have developed their respective charters, mission statements and program measures of success
- Performance Management
    - CMMS implementation has been completed at the Leo J. Vander Lans (LVL) facility
    - Efforts have begun toward implementation of the Assetic predictor software at LVL
    - Centralized Information System (CIS) has been completed at the District headquarters in Lakewood, and serves as the master SCADA system control center as well as the repository of all treatment plant data
        - SCADA standards have been developed to provide uniformity and consistency across all District facilities
    - OnBase automated agenda process has been developed and is in operation
    - WRD Portal framework has been developed and continues to evolve. The push toward centralized information will facilitate the development of reports that simplify administrative tasks, improve security, make data management more efficient and maintain the integrity of all District data

PROJECTED 5-YEAR CIP

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning/Implementation	$ 600,000	$ 300,000	$ -	$ -	$ -	$ 900,000
Design	$ -	$ -	$ -	$ -	$ -	$ -
Construction	$ -	$ -	$ -	$ -	$ -	$ -
Post Construction	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ 600,000**	**$ 300,000**	**$ -**	**$ -**	**$ -**	**$ 900,000**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding	$ -	$ -	$ -	$ -	$ -	$ -
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds	$ 600,000	$ 300,000	$ -	$ -	$ -	$ 900,000
Total	**$ 600,000**	**$ 300,000**	**$ -**	**$ -**	**$ -**	**$ 900,000**
Project Schedule						
Planning/Implementation						
Design						
Construction						
Post Construction						

ENERGY MANAGEMENT PLAN STUDY AND IMPLEMENTATION

PROJECT DESCRIPTION

WRD has taken the initiative to develop a strategic approach to identifying and minimizing the District's Green House Gas (GHG) footprint. This effort will entail identifying all of WRD's existing electrical demands and potential optimization efforts. New projects to implement are going to be identified and then implemented starting in 2019-2020.

FUNDING

The Capital Improvement Program budget for Fiscal Year 2018-19 is $300,000.

OPERATING IMPACTS

None at this time.

PRIOR YEAR HIGHLIGHTS

This is a new project.

PROJECTED 5-YEAR CIP

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ 300,000	$ -	$ -	$ -	$ -	$ 300,000
Design	$ -	$ 200,000	$ -	$ -	$ -	$ 200,000
Construction	$ -	$ 1,800,000	$ -	$ -	$ -	$ 1,800,000
Post Construction	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ 300,000**	**$ 2,000,000**	**$ -**	**$ -**	**$ -**	**$ 2,300,000**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding	$ -	$ -	$ -	$ -	$ -	$ -
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds	$ 300,000	$ 2,000,000	$ -	$ -	$ -	$ 2,300,000
Total	**$ 300,000**	**$ 2,000,000**	**$ -**	**$ -**	**$ -**	**$ 2,300,000**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) SYSTEM: GROUNDWATER MONITORING WELLS

PROJECT DESCRIPTION

WRD completed a Supervisory Control and Data Acquisition (SCADA) System Master Plan in May 2016. This Master Plan specified projects and estimated costs for establishing a standardized master SCADA system that will integrate all of the District's operating facilities, including the District's nested groundwater monitoring well sites that are located throughout the Central Basin and West Coast Basin. In 2017, WRD established a Central Information System (CIS) at the WRD Headquarters building in Lakewood, California, where all the SCADA screens at the District's operating facilities are displayed and have the ability to be controlled remotely. Ultimately, all the nested groundwater monitoring well sites (currently, 58 total) will be integrated to the CIS. A pilot study with six of the well sites must be completed prior to finalizing the integration/communications method required for all the well sites.

FUNDING

Planning and expenditures will begin in Fiscal Year 2011-22.

OPERATING IMPACTS

There are no operating impacts at this time.

PRIOR YEAR HIGHLIGHTS

Integration of the SCADA system for the Robert W. Goldsworthy Desalter Expansion Project was completed in 2017. Integration of the Albert Robles Center (ARC) SCADA system is expected to be completed by the end of 2018.

PROJECTED 5-YEAR CIP

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ -	$ -	$ -	$ -	$ -	$ -
Design	$ -	$ -	$ -	$ -	$ -	$ -
Construction	$ -	$ -	$ -	$ 1,000,000	$ 1,000,000	$ 2,000,000
Post Construction	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ -**	**$ -**	**$ -**	**$ 1,000,000**	**$ 1,000,000**	**$ 2,000,000**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding	$ -	$ -	$ -	$ -	$ -	$ -
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds	$ -	$ -	$ -	$ -	$ -	$ -
Future Funding Sources	$ -	$ -	$ -	$ 1,000,000	$ 1,000,000	$ 2,000,000
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) SYSTEM: LEO J. VANDER LANS ADVANCED WATER TREATMENT FACILITY UPGRADES

PROJECT DESCRIPTION

WRD completed a Supervisory Control and Data Acquisition (SCADA) System Master Plan in May 2016. This Master Plan specified projects and estimated costs for establishing a standardized master SCADA system that will integrate all of the District's operating facilities. As part of the Master Planning efforts, SCADA standards were created in 2017, including screen templates, a graphics library, programming codes and functional descriptions, alarms and trends displays, etc. The SCADA system at the Leo J. Vander Lans Advanced Water Treatment Facility (LVL AWTF) was installed prior to the completion of these new WRD SCADA standards. Hence, the entire SCADA system at the LVL AWTF must be replaced with one that meets all the new SCADA standards.

FUNDING

The Capital Improvement Program budget for Fiscal Year 2018-19 is $1,700,000.

OPERATING IMPACTS

There are no operating impacts at this time.

PRIOR YEAR HIGHLIGHTS

The scope of work for the upgrades of the SCADA system at the Leo J. Vander Lans Advanced Water Treatment Facility is being developed and work is expected to commence in early 2019.

PROJECTED 5-YEAR CIP

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ -	$ -	$ -	$ -	$ -	$ -
Design	$ -	$ -	$ -	$ -	$ -	$ -
Construction	$ 1,700,000	$ 900,000	$ -	$ -	$ -	$ 2,600,000
Post Construction	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ 1,700,000**	**$ 900,000**	**$ -**	**$ -**	**$ -**	**$ 2,600,000**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding	$ -	$ -	$ -	$ -	$ -	$ -
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds	$ 1,700,000	$ 900,000	$ -	$ -	$ -	$ 2,600,000
Total	**$ 1,700,000**	**$ 900,000**	**$ -**	**$ -**	**$ -**	**$ 2,600,000**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) SYSTEM: ROBERT W. GOLDSWORTHY DESALTER UPGRADES

PROJECT DESCRIPTION

WRD completed a Supervisory Control and Data Acquisition (SCADA) System Master Plan in May 2016. This Master Plan specified projects and estimated costs for establishing a standardized master SCADA system that will integrate all of the District's operating facilities. As part of the Master Planning efforts, SCADA standards were created in 2017, including screen templates, a graphics library, programming codes and functional descriptions, alarms and trends displays,etc. The SCADA system at the Robert W. Goldsworthy Desalter (Goldsworthy Desalter) was installed prior to the completion of these new WRD SCADA standards, in particular the functional descriptions. Hence, upgrades are required for the SCADA system at the Goldsworthy Desalter to meet the new SCADA standards.

FUNDING

The Capital Improvement Program budget for Fiscal Year 2018-19 is $800,000.

OPERATING IMPACTS

There are no operating impacts at this time.

PRIOR YEAR HIGHLIGHTS

The scope of work for the upgrades of the SCADA system at the Robert W. Goldsworthy Desalter is being developed and work is expected to commence in early 2019.

PROJECTED 5-YEAR CIP

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ -	$ -	$ -	$ -	$ -	$ -
Design	$ -	$ -	$ -	$ -	$ -	$ -
Construction	$ 800,000	$ 500,000	$ -	$ -	$ -	$ 1,300,000
Post Construction	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ 800,000**	**$ 500,000**	**$ -**	**$ -**	**$ -**	**$ 1,300,000**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding	$ -	$ -	$ -	$ -	$ -	$ -
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds	$ 800,000	$ 500,000	$ -	$ -	$ -	$ 1,300,000
Total	**$ 800,000**	**$ 500,000**	**$ -**	**$ -**	**$ -**	**$ 1,300,000**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

GROUNDWATER QUALITY PROTECTION & REMEDIATION

PERCHLORATE REMEDIATION IN THE LOS ANGELES FOREBAY PROJECT

PROJECT DESCRIPTION

The District has been investigating a perchlorate groundwater plume with the assistance of various regulatory agencies in association with our Los Angeles Forebay Task Force. The groundwater impacts are located in a disadvantaged community within a deep regional aquifer system currently utilized by various water purveyors in the Los Angeles Forebay. The perchlorate concentrations are among the highest in California. The WRD has identified a "hot spot" that represents a substantial threat to the Central Groundwater Basin and will require treatment to reduce the threat to a local groundwater source within the Los Angeles Forebay region of the Central Groundwater Basin. A responsible party (RP) has not been identified by either the Department of Toxic Substances Control (DTSC) or the Los Angeles Regional Water Quality Control Board (LARWQCB).

FUNDING

The Capital Improvement Program budget for Fiscal Year 2018-19 is $300,000.

In March 2017, WRD was successful in securing a preliminary grant award in the amount of $7,275,675 from the Proposition 1 Groundwater Grant being administered by the State Water Resources Control Board (SWRCB). The anticipated budget is projected for five years through FY 22-23. The current award includes treatment system design, construction, and two years of functional testing with the state paying up to 80% (WRD's portion will be approximately 20%). WRD's board also approved $1,500,000 for two additional years of remediation (if needed) that will not be eligible for grant funds as the state does not reimburse applicants for treatment system operation and maintenance (O&M). The grant award also provides funding for additional assessment to identify a responsible party and will be implemented in collaboration with our regulatory partners DTSC and LARWQCB. WRD is currently negotiating the contract terms, conditions, and final funding amount with the SWRCB.

OPERATING IMPACTS

There are no operating impacts at this time.

PRIOR YEAR HIGHLIGHTS

This project is in its planning stages; hence, there are no highlights at this time.

PROJECTED 5-YEAR CIP

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ 300,000	$ 500,000	$ -	$ -	$ -	$ 800,000
Design	$ -	$ 750,000	$ -	$ -	$ -	$ 750,000
Construction	$ -	$ 3,850,000	$ 1,500,000	$ 2,000,000	$ -	$ 7,350,000
Post Construction	$ -	$ -	$ -	$ -	$ 200,000	$ 200,000
Total	**$ 300,000**	**$ 5,100,000**	**$ 1,500,000**	**$ 2,000,000**	**$ 200,000**	**$ 9,100,000**
Grants	$ 300,000	$ 5,100,000	$ 1,500,000	$ 100,000	$ 200,000	$ 7,200,000
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding	$ -	$ -	$ -	$ -	$ -	$ -
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds	$ -	$ -	$ -	$ -	$ -	$ -
Future Funding Sources	$ -	$ -	$ -	$ 1,900,000	$ -	$ 1,900,000
Total	**$ 300,000**	**$ 5,100,000**	**$ 1,500,000**	**$ 2,000,000**	**$ 200,000**	**$ 7,200,000**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

CONTAMINATED SITE INVESTIGATIONS, CLEANUP AND MONITORING WELLS

PROJECT DESCRIPTION

WRD's service area contains a large and diverse industrial and commercial base. Consequently, many potential groundwater contamination sources exist within District boundaries. Examples of potential contamination sources include leaking underground storage tanks, petroleum pipeline leaks at refineries and petrochemical plants, and discharges from dry cleaning facilities, auto repair shops, metal works facilities, and others. Such contamination sources already pose or may pose a threat to the drinking water aquifers. Accordingly, WRD established its Groundwater Contamination Prevention Program in an effort to minimize or eliminate threats to groundwater supplies.

Over the past few years, WRD has installed groundwater monitoring wells in areas of suspected or known contamination to collect more data to provide regulatory agencies to assist them in targeting responsible parties and develop remediation action plans. Many of these areas do not have funding available for investigations which is why WRD, under its jurisdiction and responsibilities for water quality projection, installs these wells. Three well locations in Vernon related to perchlorate in groundwater lead to the state granting WRD over $7 million to investigate and cleanup this contamination (see previous CIP project on Perchlorate Remediate Project). Similar wells in Santa Fe Springs have assisted the U.S. Environmental Protection Agency in their oversight of the Omega Superfund Site. For the current CIP, the WRD has identified other areas in the basin that need additional monitoring wells to evaluate the nature and extent of threatening contaminants, including solvents in groundwater related to the Anadite site in South Gate, deep hexavalent chromium in Los Angeles, and other areas. Funding for this program will allow installation of wells in key locations with the intent of eventually finding the responsible parties to clean up their contamination,

FUNDING

The Capital Improvement Program budget for Fiscal Year 2018-19 is $500,000.

OPERATING IMPACTS

Installation of the wells will require routine sampling, laboratory analysis, evaluation of the data, and reporting.

PRIOR YEAR HIGHLIGHTS

The installation of wells related to the Vernon perchlorate contamination led to the winning of a $7 million grant from the State to further investigate and eventually remediate the pollution from deep groundwater.

PROJECTED 5-YEAR CIP

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ 125,000	$ -	$ -	$ -	$ -	$ 125,000
Design	$ -	$ -	$ -	$ -	$ -	$ -
Construction	$ 375,000	$ 500,000	$ -	$ -	$ -	$ 875,000
Post Construction	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ 500,000**	**$ 500,000**	**$ -**	**$ -**	**$ -**	**$ 1,000,000**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding	$ -	$ -	$ -	$ -	$ -	$ -
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds	$ 500,000	$ 500,000	$ -	$ -	$ -	$ 1,000,000
Total	**$ 500,000**	**$ 500,000**	**$ -**	**$ -**	**$ -**	**$ 1,000,000**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

SAFE DRINKING WATER PROGRAM

(Lynwood, Huntington Park, CA American Water Arlington Well & Maywood No.2 May Avenue Well)

PROJECT DESCRIPTION

The Safe Drinking Water Program (Program) provides incentives to groundwater producers to pump and treat contaminated groundwater rather than abandoning affected wells. The Program offers two options: grant assistance and loan assistance to basin pumpers for wellhead treatment to remove contaminants and improve water quality. The grant assistance program provides treatment for removing groundwater contaminants from man-made sources (e.g. Volatile Organic Compounds). The loan assistance program provides ten-year, zero-interest loans for water treatment to remove or reduce to compliance standards groundwater contaminants from natural sources (e.g. iron, manganese, and arsenic). Since the Program's inception, the District has funded 13 grants, four loans and one demonstration project. This CIP project is intended to cover the costs associated with Grant Funded Projects only.

The District Board approved three wellhead treatment system projects for FY 16-17, including *Lynwood*, *Huntington Park,* and *CA American Water Arlington Well*. The wellhead treatment system at all three wells will consist of a complete granular-activated filtration system built within the boundaries of the existing well sites owned and operated by the water systems. Granulated Activated Carbon filtration is a closed system that has long been recognized as an effective means for removing Volatile Organic Compounds (VOCs), including PCE and TCE, from groundwater wells. The treatment systems will have the capacity to treat the full flow of the wells. The three wells are affected by VOCs and qualify for a Priority "A" Treatment Grant which provides District fund for the cost of design and construction. In addition, as part of Assembly Bill No. 240, the District was designated to manage and implement a water quality improvement project in the City of Maywood. The appropriated funds were assigned to the Maywood Mutual Water Company No. 2 Maywood Avenue Wellhead treatment project for iron and manganese removal and the District will be reimbursed through the appropriated funds. The District will take the lead on procurement and installation of the treatment facilities. However, operation, maintenance and all permits remain the responsibility of the water system.

FUNDING

The Capital Improvement Program budget for Fiscal Year 2018-19 is $3,200,000 for the Grant Assistance Projects.

For Loan Assistance Projects, the District developed the Safe Drinking Water Program Revolving Loan Fund, which stabilizes funding and expands the loan assistance program's overall use.

For the Disadvantages Communities (DAC) program, WRD recuperates 100% of the expenditures from State funding.

OPERATING IMPACTS

There are no operating impacts at this time.

PRIOR YEAR HIGHLIGHTS

The District developed the Safe Drinking Water Program Revitalization Plan to maximize participation in the Program. As an extension of the Safe Drinking Water Program, the District approved the creation of the Safe Drinking Water Disadvantaged Communities (DAC) Program. The goal of the program is to provide technical assistance and outreach to water systems located in disadvantage communities within the District's service area with applying for state and federal funding to address issues related to their drinking water wells. Currently there are eight water systems participating in the program and receiving assistance and three systems have already received state funding. The District is reimburse for its assistance from the water systems through the funding awarded.

PROJECTED 5- YEAR CIP

Disadvantage Communities (DAC) Program

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ -	$ -	$ -	$ -	$ -	$ -
Design	$ -	$ -	$ -	$ -	$ -	$ -
Construction	$ -	$ -	$ -	$ -	$ -	$ -
Post Construction	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding	$ -	$ -	$ -	$ -	$ -	$ -
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

Program (GRANTS) Primary Contaminants

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ -	$ -	$ -	$ -	$ -	$ -
Design	$ -	$ -	$ -	$ -	$ -	$ -
Construction	$ 3,200,000	$ 1,600,000	$ -	$ -	$ -	$ 4,800,000
Post Construction	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ 3,200,000**	**$ 1,600,000**	**$ -**	**$ -**	**$ -**	**$ 4,800,000**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding	$ -	$ -	$ -	$ -	$ -	$ -
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds	$ 3,200,000	$ 1,600,000	$ -	$ -	$ -	$ 4,800,000
Total	**$ 3,200,000**	**$ 1,600,000**	**$ -**	**$ -**	**$ -**	**$ 4,800,000**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

Program (LOANS) Secondary Contaminants

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ -	$ -	$ -	$ -	$ -	$ -
Design	$ -	$ -	$ -	$ -	$ -	$ -
Construction	$ -	$ -	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 4,500,000
Post Construction	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ -**	**$ -**	**$ 1,500,000**	**$ 1,500,000**	**$ 1,500,000**	**$ 4,500,000**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding	$ -	$ -	$ -	$ -	$ -	$ -
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds	$ -	$ -	$ -	$ -	$ -	$ -
Future Furing Sources	$ -	$ -	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 4,500,000
Total	**$ -**	**$ -**	**$ 1,500,000**	**$ 1,500,000**	**$ 1,500,000**	**$ 4,500,000**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

FACILITIES MANAGEMENT, MAINTENANCE, AND REPAIR

HEADQUARTERS BUILDING IMPROVEMENTS PROJECTS

PROJECT DESCRIPTION

The District headquarters building, located at 4040 Paramount Blvd in the city of Lakewood, upkeep and maintenance needs are outlined in various phases and projects:

- Phase 1 and Phase 2 of Tenant Improvement Repair: includes the reconfiguration of office space, improvement and renovation of elements, such as walls, carpets, paint, etc. and other work space needs
- The Roof Replacement Project
- The HVAC Improvements Project: includes HVAC units replacements and automation upgrades
- Drought Tolerant Landscape Demonstration Garden Improvement

FUNDING

The Capital Improvement Program budget for Fiscal Year 2018-19 is $50,000 for the Roof Replacement Project. Planning and expenditures will begin in Fiscal Year 2019-20 for HVAC Improvements.

OPERATING IMPACTS

There are no operating impacts at this time.

PRIOR YEAR HIGHLIGHTS

Construction for Phase 1 and Phase 2 of Tenant Improvement Repair was completed.

PROJECTED 5-YEAR CIP

Roof Replacement Project

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ -	$ -	$ -	$ -	$ -	$ -
Design	$ -	$ -	$ -	$ -	$ -	$ -
Construction	$ 50,000	$ 50,000	$ -	$ -	$ -	$ 100,000
Post Construction	.	$ -	$ -	$ -	$ -	$ -
Total	**$ 50,000**	**$ 50,000**	**$ -**	**$ -**	**$ -**	**$ 100,000**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding	$ 50,000	$ 50,000	$ -	$ -	$ -	$ 100,000
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds			$ -	$ -	$ -	$ -
Total	**$ 50,000**	**$ 50,000**	**$ -**	**$ -**	**$ -**	**$ 100,000**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

HVAC Improvements Project

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ -	$ -	$ -	$ -	$ -	$ -
Design	$ -	$ 250,000	$ -	$ -	$ -	$ 250,000
Construction	$ -	$ 2,100,000	$ -	$ -	$ -	$ 2,100,000
Post Construction	.	$ -	$ -	$ -	$ -	$ -
Total	**$ -**	**$ 2,350,000**	**$ -**	**$ -**	**$ -**	**$ 2,350,000**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding	$ -	$ 2,350,000	$ -	$ -	$ -	$ 2,350,000
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds	$ -		$ -	$ -	$ -	$ -
Total	**$ -**	**$ 2,350,000**	**$ -**	**$ -**	**$ -**	**$ 2,350,000**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

FIELD OPERATIONS AND STORAGE ANNEX FACILITY PROJECT

PROJECT DESCRIPTION

The District purchased an available 2.3 acre parcel located at 3919 Paramount Blvd (Field Operations and Storage Annex Project) in the city of Lakewood for varying uses, including office space, storage of testing and sampling equipment, miscellaneous supplies and fleet parking. The District has previously leased off-site space for these uses since moving into 4040 Paramount Boulevard, Lakewood, CA. Due to its unique proximity to the District and ability to solve WRD's immediate need for additional storage space and future areas for growing inventory of spare and replacement parts for the District's existing facilities, the District purchased the property.

FUNDING

The Capital Improvement Program budget for Fiscal Year 2018-19 is $1,000,000.

OPERATING IMPACTS

This project is an important piece of the District's transitional operational plan.

PRIOR YEAR HIGHLIGHTS

Preliminary architectural renderings were prepared in 2017/2018.

PROJECTED 5-YEAR CIP

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ -	$ -	$ -	$ -	$ -	$ -
Design	$ 350,000	$ -	$ -	$ -	$ -	$ 350,000
Construction	$ 650,000	$ 2,000,000	$ -	$ -	$ -	$ 2,650,000
Post Construction	.	$ -	$ -	$ -	$ -	$ -
Total	**$ 1,000,000**	**$ 2,000,000**	**$ -**	**$ -**	**$ -**	**$ 3,000,000**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding	$ -	$ -	$ -	$ -	$ -	$ -
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds	$ 1,000,000	$ 2,000,000	$ -	$ -	$ -	$ 3,000,000
Total	**$ 1,000,000**	**$ 2,000,000**	**$ -**	**$ -**	**$ -**	**$ 3,000,000**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

ROBERT W. GOLDSWORTHY DESALTER UPGRADES

PROJECT DESCRIPTION

The expansion project was completed in 2018. While a majority of system components were replaced and/or upgraded, assets from the initial plant remained. Examples include critical infrastructure such as the reverse osmosis (RO) system high pressure pump, finish product water pumps and manifold piping, fiberglass FRP grating, etc. As many of these assets have a high consequence of failure, conducting a condition assessment and planning asset replacement will ensure the facility remains operational and not subject to shutdown associated with asset infrastructure failure.

FUNDING

The Capital Improvement Program budget for Fiscal Year 2018-19 is $250,000.

OPERATING IMPACTS

The City of Torrance will continue to operate the Desalter and work closely with WRD to monitor existing asset condition, performance and operations.

PRIOR YEAR HIGHLIGHTS

Expansion of the Torrance Desalter was completed and the facility commissioned in early 2018. The Permit Amendment was approved by the Regional Water Quality Control Board in August 2018.

PROJECTED 5-YEAR CIP

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ -	$ -	$ -	$ -	$ -	$ -
Design	$ -	$ -	$ -	$ -	$ -	$ -
Construction	$ 250,000	$ 250,000	$ -	$ -	$ -	$ 500,000
Post Construction	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ 250,000**	**$ 250,000**	**$ -**	**$ -**	**$ -**	**$ 500,000**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding (WRD Capital Fund)	$ 250,000	$ 250,000	$ -	$ -	$ -	$ 500,000
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ 250,000**	**$ 250,000**	**$ -**	**$ -**	**$ -**	**$ 500,000**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

LEO J. VANDER LANS AWTF UPGRADES

PROJECT DESCRIPTION

This project will address improvements associated with aging infrastructure at the treatment facility. Since the initial project completion in 2003, assets have begun to age through normal operational use over time. Through the use of the District's on-call Engineering Services, projects will be identified and corrective action taken in an effort to ensure consistent plant operations.

FUNDING

The Capital Improvement Program budget for Fiscal Year 2018-19 is $1,000,000.

OPERATING IMPACTS

LVL will be offline in the coming year due to lack of source water from the Long Beach Water Reclamation Plant for an estimated period of six months. This will be the third and final program shutdown scheduled by the Los Angeles County Sanitation District. During this shutdown, focus will center on making identified repairs and upgrades.

PRIOR YEAR HIGHLIGHTS

Previous year's operations were hampered by the second extended shutdown. However, this provided an opportunity for staff to identify critical action items for repair. This also provided an opportunity to continue efforts toward implementing a Computerized Maintenance Management System (CMMS) – an asset management tool that provides an electronic means of tracking and monitoring maintenance activities. This program was fully implemented in June 2018.

PROJECTED 5-YEAR CIP

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ -	$ -	$ -	$ -	$ -	$ -
Design	$ -	$ -	$ -	$ -	$ -	$ -
Construction	$ 1,000,000	$ 750,000	$ -	$ -	$ -	$ 1,750,000
Post Construction	.	$ -	$ -	$ -	$ -	$ -
Total	**$ 1,000,000**	**$ 750,000**	**$ -**	**$ -**	**$ -**	**$ 1,750,000**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding (WRD Capital Fund)	$ 1,000,000	$ 750,000	$ -	$ -	$ -	$ 1,750,000
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$ 1,000,000**	**$ 750,000**	**$ -**	**$ -**	**$ -**	**$ 1,750,000**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

RIO HONDO AND SAN GABRIEL SPREADING GROUNDS IMPROVEMENTS

PROJECT DESCRIPTION

This project evaluates various improvements at the interconnection pipeline and pump station located at the San Gabriel Spreading Grounds. The interconnection pipeline and pump station are utilized to send flow from the San Gabriel spreading grounds to the Rio Hondo spreading grounds.

FUNDING

The Capital Improvement Program budget for Fiscal Year 2018-19 is $250,000.

OPERATING IMPACTS

Project could lead to improved control to send flow through the various recharge basins.

PRIOR YEAR HIGHLIGHT

This is a new project.

PROJECTED 5-YEAR CIP

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Planning	$ 250,000	$ -	$ -	$ -	$ -	$ 250,000
Design	$ -	$ 200,000	$ -	$ -	$ -	$ 200,000
Construction	$ -	$ 1,050,000	$ -	$ -	$ -	$ 1,050,000
Post Construction	.	$ -	$ -	$ -	$ -	$ -
Total	**$ 250,000**	**$ 1,250,000**	**$ -**	**$ -**	**$ -**	**$ 1,500,000**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding	$ -	$ -	$ -	$ -	$ -	$ -
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds	$ 250,000	$ 1,250,000	$ -	$ -	$ -	$ 1,500,000
Total	**$ 250,000**	**$ 1,250,000**	**$ -**	**$ -**	**$ -**	**$ 1,500,000**
Project Schedule						
Planning						
Design						
Construction						
Post Construction						

GENERAL ENGINEERING (LABOR, OBERHEAD, LEGISLATIVE, LEGAL)

PROJECT DESCRIPTION

The General Engineering "project" is a way to capture all of the overhead/soft costs associated with completing projects within the CIP. Previously WRD has budgeted these expenses within the CIP projects themselves, but has now decided to make sure all time working on projects is being accurately accounted for within this line item. This CIP line item also accounts for specialty consultants that help WRD with grant reporting, legislative analysis and general support services that support numerous projects within the CIP.

FUNDING

The Capital Improvement Program budget for Fiscal Year 2018-19 is $3,000,000.

OPERATING IMPACTS

There are no operating impacts at this time.

PRIOR YEAR HIGHLIGHTS

This is a new project.

PROJECTED 5-YEAR CIP

Project Budget	FY 18-19 Projected Budget	FY 19-20 Projected Budget	FY 20-21 Projected Budget	FY 21-22 Projected Budget	FY 22-23 Projected Budget	Total CIP Budget
Labor (includes overhead, benefits)	$ 2,175,000	$ 2,240,250	$ -	$ -	$ -	$ 4,415,250
Legislative	$ 175,000	$ 180,250	$ -	$ -	$ -	$ 355,250
Legal	$ 250,000	$ 257,500	$ -	$ -	$ -	$ 507,500
Public Notification	$ 150,000	$ 154,500	$ -	$ -	$ -	$ 304,500
Support Services	$ 250,000	$ 257,500	$ -	$ -	$ -	$ 507,500
Total	**$ 3,000,000**	**$ 3,090,000**	**$ 3,182,700**	**$ 3,278,181**	**$ 3,376,526**	**$ 15,927,407**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Loans	$ -	$ -	$ -	$ -	$ -	$ -
Additional Funding	$ -	$ -	$ -	$ -	$ -	$ -
Other (Partnerships)	$ -	$ -	$ -	$ -	$ -	$ -
2018 Bonds	$ 3,000,000	$ 3,090,000	$ -	$ -	$ -	$ 6,090,000
Total	**$ 3,000,000**	**$ 3,090,000**	**$ -**	**$ -**	**$ -**	**$ 6,090,000**
Project Schedule						