WESTERN MUNICIPAL WATER DISTRICT

CAPITAL IMPROVEMENT AND FACILITIES PLAN

Fiscal Years 2020–2025

Acknowledgments

The following contributors are acknowledged for the support, energy and contributions it took to develop Western's first two-year comprehensive report for the Capital Improvement and Facilities Plan.

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Gracie Torres, *Division 2*

Brenda Dennstedt, *Division 3*

Donald D. Galleano, *Division 4*

S.R. "Al" Lopez, *Division 5*

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WESTERN MUNICIPAL WATER DISTRICT

Capital Improvement and Facilities Plan

Comprehensive Report

Western Water Recycling Facility

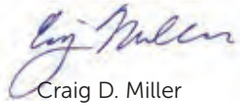
Letter from the General Manager

Dear valued customers,

As one of the largest public agencies in Riverside County, our commitment is to consistently and transparently share Western's process for setting the course of future investments. We see ourselves more as a business than a bureaucracy, which is why we work tirelessly to plan for the future and enhance all customer services. We recognize the value of the customer's hard-earned dollar and want to demonstrate how investments are being prioritized to bring you safe, reliable, and quality service. On behalf of the Board, we would like to thank you for trusting in Western and our ability to serve you.

As the world navigates the unprecedented COVID-19 pandemic, the Western team is committed to providing reliable service. Because we view our customers as essential partners in ensuring long-term water security for our region, this document is designed to keep you informed about the plans for maintaining and enhancing the facilities and systems that keep your water and wastewater (sewer) services flowing. We've weighed the pros and cons of each project in this plan to bring forward those that are most critical and timely. Western's Board challenges our team to make sure we have considered all options and delivered on the most important goals. As we look ahead to the future, we promise to continue being a leader in water and sewer services, upholding the highest level of stakeholder trust, and delivering a best-in-class customer experience.

This would not be possible without our dynamic team who invests their time and energy in this organization. Their dedication and commitment in doing elite work does not go unnoticed. To our Western team, I am honored to work with highly trained professionals dedicated to public service. The Board, our Executive Management team, and I recognize your efforts. I am humbled to stand side-by-side with you to bring the best results to our community.



Craig D. Miller

CHAPTER 1:

Overview

Introduction

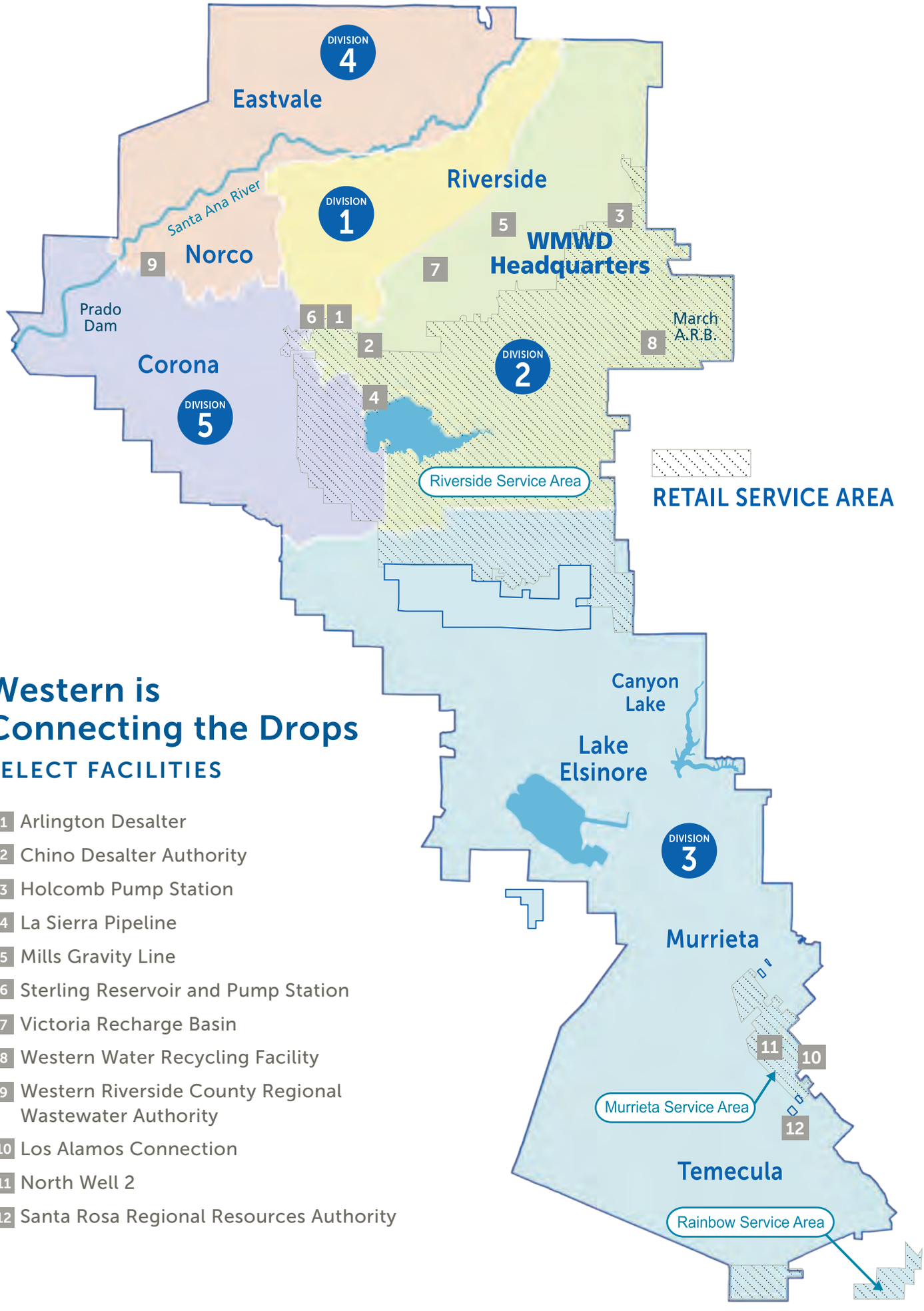
In Western's second Capital Improvement and Facilities Plan (CIFP) Comprehensive Report, our goal has been to build upon last year's inaugural report. This year, you'll notice we expanded from a one-year report to a two-year report. We have implemented two new programs; the Pipeline Replacement (Linear Asset Management) Program and the Minor Capital Projects Program. These programs streamline staff efforts and focus on facility longevity. A thorough evaluation process for capital projects has been established to enhance transparency and to better serve our customers, staff, and stakeholders. This CIFP is Western's two-year look ahead for prioritized projects that are needed in order to maintain and/or enhance the systems that provide water and sewer services to nearly a million people across one of California's most populous regions.

This year, the Board of Directors approved Western's first two-year CIFP. The innovative blueprint guides the work of Western's employees. The plan sets immediate capital priorities for the two-year period, while forecasting project needs over a five-year span. The capital projects listed within will create, maintain, and improve the systems that serve customers.

The effort combines teamwork and service-minded planning through our CIFP Committee. Projects were prioritized through a collaborative, multi-departmental process where the committee considered factors in safety, asset conditions, risk of equipment failure, funding availability, and regulatory requirements. Overall, workload impacts were assessed to ensure feasibility and timely completion of the project commitments.

This CIFP report is designed to make it easier to learn about Western's upcoming capital and facility improvement projects.

For more information, visit https://www.wmwd.com/528/Western-Infrastructure-Updates



Western is Connecting the Drops

SELECT FACILITIES

1. Arlington Desalter
2. Chino Desalter Authority
3. Holcomb Pump Station
4. La Sierra Pipeline
5. Mills Gravity Line
6. Sterling Reservoir and Pump Station
7. Victoria Recharge Basin
8. Western Water Recycling Facility
9. Western Riverside County Regional Wastewater Authority
10. Los Alamos Connection
11. North Well 2
12. Santa Rosa Regional Resources Authority

Board of Directors

Western's five-member Board of Directors (Board) are responsible to the members of the public and for the proper conduct of Western affairs. Each member represents their respective division within the Western service area (see map on page 8).

The Board's clear direction and policy decisions enable staff to develop the recommended initiatives within the CIFP. Western's CIFP process demonstrates the value of each project to support Western's Board during important decision-making.

Ultimately, adoption of this CIFP authorizes projects that will ensure our imported water supply is diversified with local water sources. By increasing our local water supplies, Western's objective is to reduce reliance on more costly imported water.

Board of Directors:

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Our Values

Service Excellence
Exceeding the expectations of all customers and stakeholders.

Efficiency
Ensuring that our dedication to efficiency standards extends across Western and beyond water resources, providing guidance to all financial and operational decisions.

Water Supply Reliability
Securing a safe and stable water supply through diverse source strategies and innovative water resource management.

Fiscal Responsibility and Value
Ensuring the financial stability of Western and value to the customer through sound fiscal management and disciplined decision making.

Public Trust, Accountability, and Transparency
Maintaining a standard of exceptional integrity, honor, and respect through open communication and accessibility.

Environmental Stewardship
Promoting responsible and sustainable practices in water and other natural resources.

Employee Empowerment
Fostering an environment where organizational effectiveness is valued, mutual respect is paramount, and employee support and development is fundamental to our core culture.

Innovation
Continuously seeking and introducing new ideas, services, and opportunities in all that we do. We thrive on our ability to find solutions and possibilities through the ingenuity and creativity of our team.

Our Mission

Western Municipal Water District provides water supply, wastewater disposal, and water resource management to the public in a safe, reliable, environmentally sensitive, and financially responsible manner.

Our Vision

To enhance Western Municipal Water District's leadership role by integrating the best-in-business processes and business systems while developing a leading-edge workforce that continuously creates greater efficiency and value for our customers.

Purpose of the Plan

Western recognizes the ever-changing environment of water reliability. To confront modern challenges and continue delivering safe, reliable, high quality services, Western is committed to cost-effective and innovative solutions to ensure long-term water supply for our region. Studying and understanding drought conditions, advanced preparation for natural disasters, and anticipating fluctuating demands helped to create this well-rounded plan. Western works tirelessly to secure a variety of water sources that not only increase local reliability, but also ensures our operations are efficient.

The following projects highlight a portion of the time, effort, and cost it takes to have a diverse selection of regional local resources. Our goal is to continue to evaluate our resource needs and bring forth the best options to secure our water supply.

Pipeline Replacement: this annual replacement program for aging infrastructure costs $5M each year.

Cajalco Switchgear: replacement of the motor control center originally built in the 1960's will be completed due to age and condition, costing $6.4M over two years.

Meter Replacement and Retrofit Project (Phase II): enhance meter accuracy and customer equity by replacing or retrofitting meters in the Riverside Service Area that are 7 years or older with AMI-compatible meters; costing $3.6M over two years (partially grant funded).

PIPELINE REPLACEMENT

CAJALCO SWITCHGEAR

METER REPLACEMENT AND RETROFIT PROJECT (PHASE II)

Top 10

PIPELINE REPLACEMENT

$25 Million
Lead Team: Engineering

CAJALCO SWITCHGEAR

$6.4 Million
Lead Team: Engineering

SCADA MASTER PLAN IMPLEMENTATION

$2 Million
Lead Team: Operations

POTABLE TANK REFURBISHMENT PROGRAM

$2.2 Million
Lead Team: Engineering

1269 LIFT STATION

$2.7 Million
Lead Team: Engineering

SARCCUP NON-POTABLE WELL

$5 Million
Lead Team: Engineering

CANNON PUMP STATION/RIVERSIDE PUBLIC UTILITIES INTERTIE

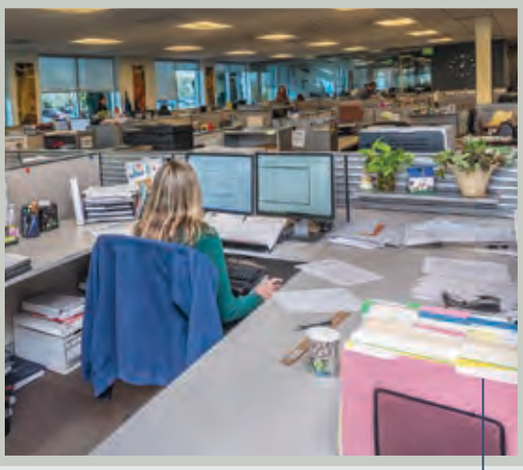
$4.7 Million
Lead Team: Engineering

FISCAL YEARS 20/21 – 24/25
ESTIMATED EXPENDITURES

Projects

MINOR CAPITAL PROJECTS PROGRAM

$3.8 Million
Lead Team: Management



ENTERPRISE RESOURCE PLANNING (ERP) IMPROVEMENTS

$3.5 Million
Lead Team:
Information Technology

METER REPLACEMENT AND RETROFIT PROJECT (PHASE II)

$3.7 Million
Lead Team:
Finance

Solar Panels at Operations Facility

CHAPTER 2:

Financial Considerations

Connecting to Western's operating budget process

Western's CIFP is developed in parallel with the biennial operating budget. Preparation of the CIFP budget is handled by the general manager's office with input and collaboration from all Western departments.

CIFP planning begins in fall, following the operating budget data collection. This synchronized effort allows for adjustments to either capital or operating funds based on needs. Linking the financial planning processes efficiently aligns timelines and labor resources to develop these important documents.

Western's Finance department conducts critical affordability and funding availability assessments for each CIFP project. This effort guides the discussion about projects based on financial impact.


DR-18
NOT FOR POTABLE USE

New Capital Plan Initiatives

① Pipeline Replacement Program:

The Pipeline Replacement Program is an annual program to maintain Western's pipelines and to systematically fund timely replacement based on asset life cycle in advance of major emergencies and costly or potentially high-risk repairs.

This annual replacement program will focus on buried assets, in the Murrieta, MARB, March JPA, and Riverside systems. Upgrading the aging pipeline infrastructure will ensure Western continues to deliver reliable water and wastewater services.

② Minor Capital Projects Program:

Staff believes there are more efficient and cost-conscience ways to complete routine asset replacements without compromising fiscal integrity. In previous years, regardless of size, staff presented all capital projects individually under the general CIFP project category. This included smaller purchases such as valve, pump, and motor replacements. In all cases, the costs of these items are within the general manager's Board-approved purchasing authority.

Beginning in Fiscal Year 2020-21, staff proposed $750,000 per fiscal year, approximately 3.4 percent of the total CIFP spending plan, be purposefully allocated to the reoccurring replacement, refurbishment, or upgrade of Western's assets. This is an effective capital budget strategy, especially for Western's many routine projects. These smaller, but important projects will be prioritized based upon on-going condition assessment protocols. In cases where an asset fails in advance of its expected lifetime, immediate need will escalate priority of a minor project. Establishing a limited Minor Capital Projects fund will allow smaller, recurring projects to be performed quickly and efficiently based on business need and as prioritized by Western's trained professionals.

Minor capital projects are defined as efforts that will refurbish, replace, or upgrade infrastructure less than or equal to $100,000 on a project-by-project basis. A significant number of these projects are small assets required to keep the systems operational, safe, and well maintained.

Examples of projects include, but are not limited to:

- Replacement or refurbishment of various pumps and motors
- Re-coating or replacement of the asphalt at reservoirs and pump station sites
- Valve replacements
- Vault-hatch lid replacements
- Variable frequency drive (VFD) replacements
- Water quality analyzer replacements

Individual projects meeting the criteria may be authorized under Western's current purchasing policy. Staff will provide an update to the Finance Committee twice each year for expenditures made under the Minor Capital Projects Program.

The following activities would be excluded from the program:

- Planning activities, research, or studies
- Design activities that would lead to additional expenses
- Land or facility acquisition
- Movable operating equipment
- Software not dedicated to control of a specialized system

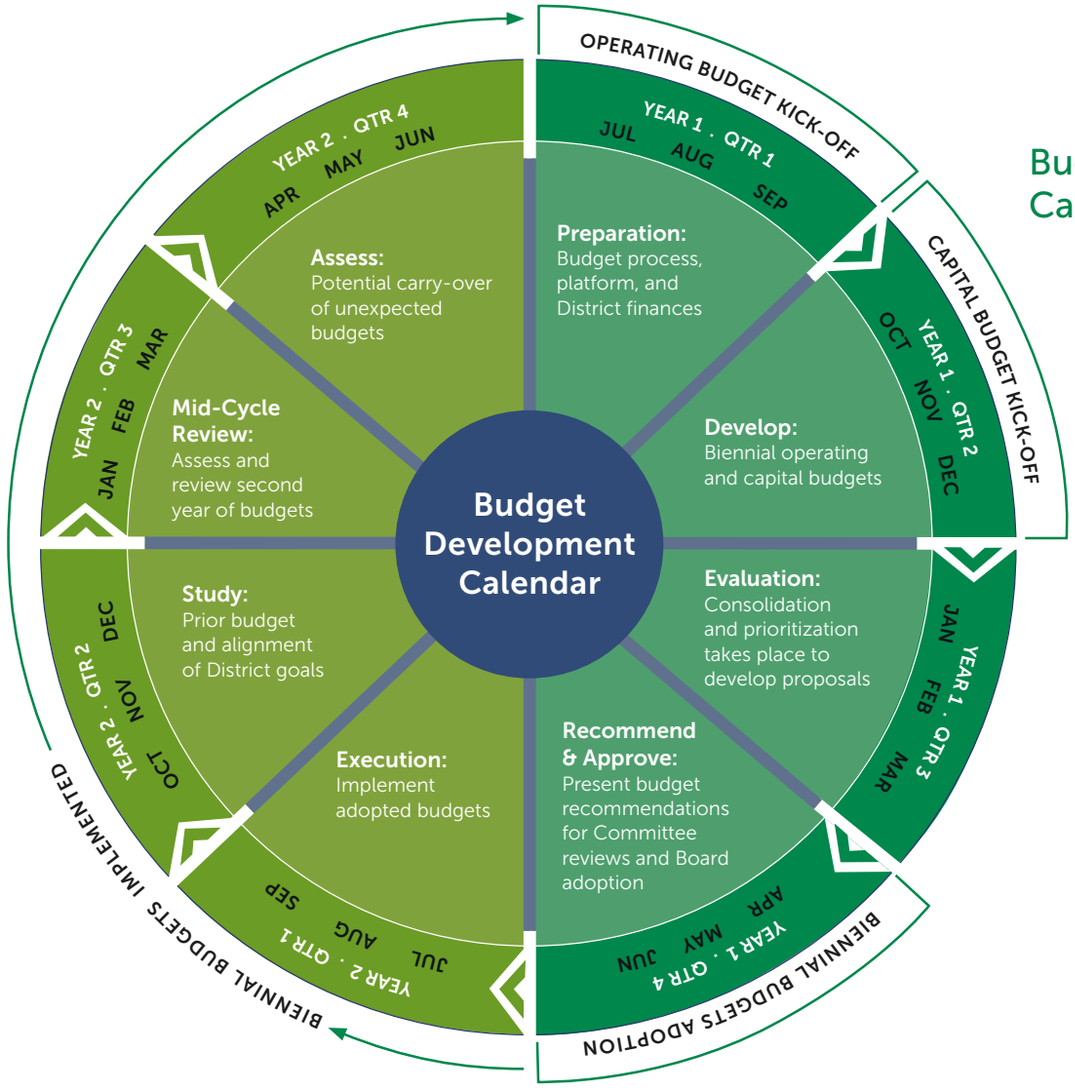
Plan Adoption

The adoption of the Fiscal Years' 2020/2021 and 2021/2022 CIFP provides staff with spending authority for budgeted projects with a total cost of less than $100,000 in each year. It also provides the general manager with an annual discretionary fund of $300,000 for unplanned projects to be used in accordance with the requirements and authority levels established by the Board of Directors. All projects with a total cost of more than $100,000 will be subsequently presented to the Board individually for approval.

Western CIFP projects follow the rules and guidelines of the adopted District Paid Capital Project Budget Approval Procedure. According to the procedure, a capital project listed in the CIFP is one that results in acquiring, repairing, or constructing an asset that equals or exceeds $10,000 in value and has a useful life of more than two years. The CIFP is the Board's approval to spend the cumulative total amount for all projects in the first two years only (with subsequent years' information presented for informational purposes) and does not constitute Board approval of individual projects.

This year, the Committee recommended the implementation of a limited Minor Capital Projects fund to allow recurring smaller projects to be performed quickly and efficiently based on business need and as prioritized by Western's subject matter experts. Minor capital projects are defined as efforts that will refurbish, replace, or upgrade infrastructure less than or equal to $100,000 on an individualized basis. This is an effective capital budget strategy approved by the Board, especially for Western's many routine projects.

Budget Development Calendar



YEAR 1 | QUARTER 1

Preparation: Budget process, platform, and Western finances

July – Review prior budget process and finances

August – Prepare budget platform and review CIFP Comprehensive Report

September – Prior capital budget is reviewed, and operating budget collection kicks off

YEAR 1 | QUARTER 2

Develop: Biennial operating and capital budgets

October – Operating budget data collection continues and capital budget process begins

November – Staff input of operating budget concludes and capital budget platform is prepared

December – CIFP Committee and data collection kick-off; operating budget review and consolidation begins

YEAR 1 | QUARTER 3

Evaluation: Consolidation and prioritization takes place to develop recommendations

January – Capital budget data collection concludes; evaluation and ranking begins

February – Operating and capital budget recommendations reviewed by management

March – Finance and general manager assessment of operating and capital budgets

YEAR 1 | QUARTER 4

Recommend & Approve: Present budget recommendations for Committee reviews and Board adoption

April – Operating and capital budget presentation to Committees

May – Operating and capital budget presentation to Board

June – Preparation of Operating and CIFP Comprehensive Budget Reports

YEAR 2 | QUARTER 1

Execution: Implement adopted budgets

July – Execution of approved operating and capital budgets. Issue Comprehensive Reports

August – General manager considers carry-over of unexpended budgets and reports changes to the Board

September – Review of water purchases, power, waste disposal costs and contract services

YEAR 2 | QUARTER 2

Study: Evaluate alignment of Western goals to budgets

YEAR 2 | QUARTERS 3 AND 4

Mid-Cycle Review & Assessment: Begin discussions to prepare for next biennial budget cycle

Graeber Pipeline Replacement at March Air Reserve Base

CHAPTER 3:

Planning Objectives

CIFP Committee Responsibilities

Western's collaborative approach to long-term initiative planning is led by a multi-department and cross functional Committee. Members include executive management, department directors, project managers, and senior analysts.

The team is responsible for:

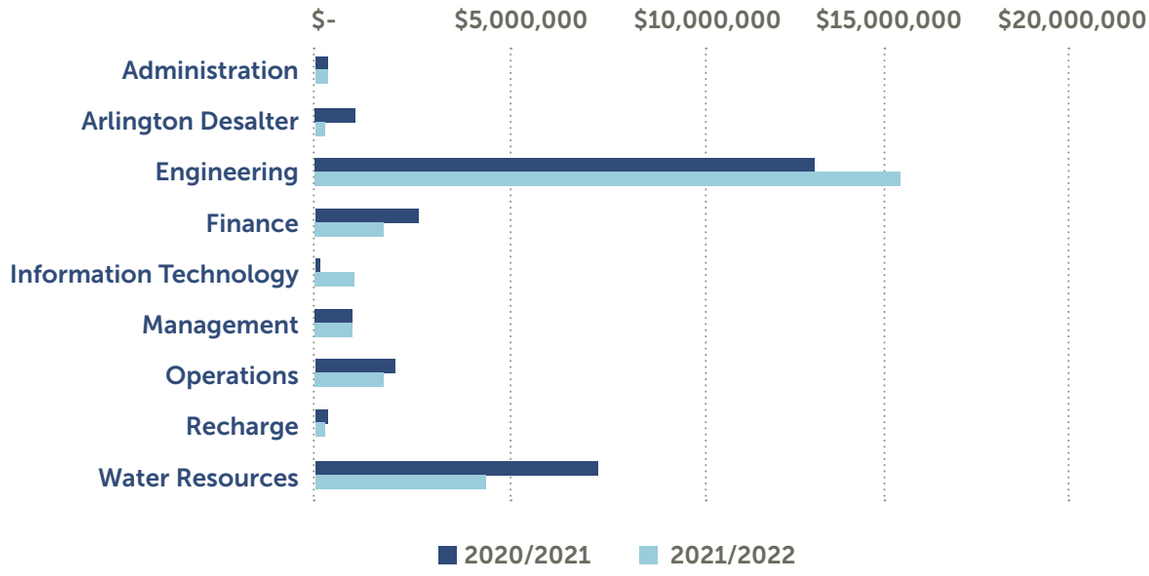
- Serving as the advisory group to the general manager and Board
- Reviewing projects for opportunities to combine programs and projects, streamline costs, and determine the necessity for proposed new projects
- Ranking and prioritizing projects based on knowledge of long-term department plans and Western needs
- Analyzing and confirming adequacy of Western resources to complete projects
- Evaluating proposed project costs
- Reviewing progress of the CIFP projects regularly

The Committee, through consistent evaluation, implements improvements and adjustments to the CIFP process. Using the collective knowledge of the team, leads to a solid recommendation the Board of Directors can endorse confidently.

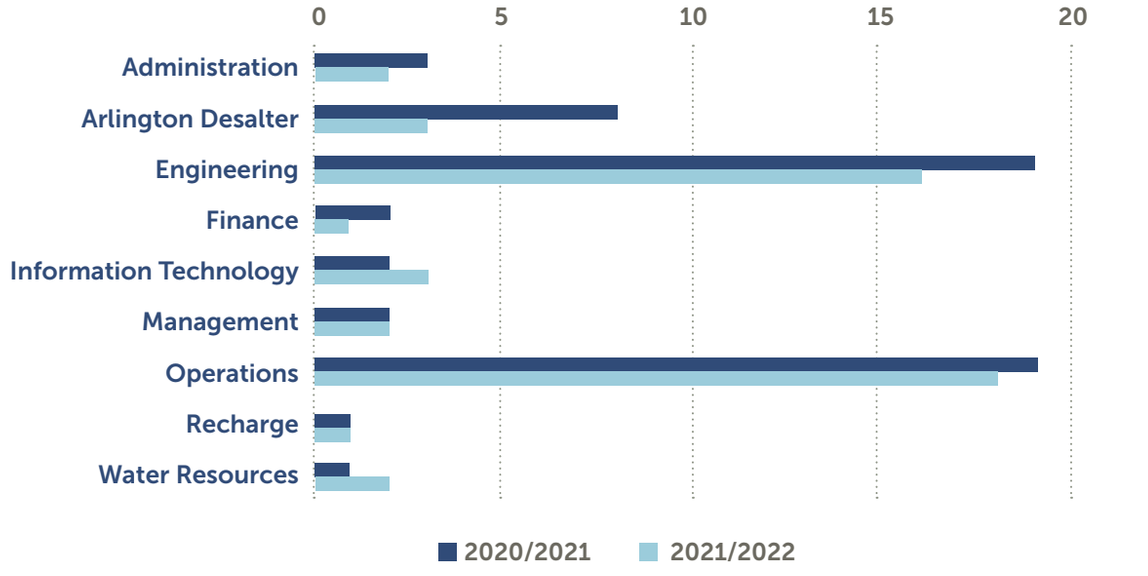
Project Evaluation Process

As the CIFP process kicks off, data collection is paramount. Committee members gather their department's capital project requests and submit them for an initial review. A round table, rapid-fire assessment of each item is conducted. Members come prepared to support their projects. Project requests are weighed against available budgets and funding. During this time, communication with the Finance team is key. After several rounds of evaluation and discussion, final recommendations are made to the general manager. Following general manager review, public workshops are conducted prior to Board approval.

PROJECT COST BY DEPARTMENT



NUMBER OF PROJECTS BY DEPARTMENT



Rating Capital Improvement and Facilities Plan Projects

step 1: Identify all projects to be considered. Projects are collected from all Western departments.

step 2: Determine the project's tiered rating based on the criteria below.

Bracket A

Projects that have or will receive Board approval within 60 days of the start of the following fiscal year. Partnership projects with significant partner funding. Approved for construction projects.

Bracket B

If project is initiated due to an immediate safety, health, regulatory issue, is essential to enable Western activities to continue **OR** the asset is at risk of immediate failure **OR** is a project funded by grants/agency partnership may be considered. Bracket B projects with overall ratings of less than 2 may be downgraded at the discretion of the CIFP Committee or executive management.

Bracket C

Asset replacement or an item that was previously scheduled for action.

Bracket D

If project is not initiated due to the factors in Bracket A, B, or C.

step 3: Assess each project using the criteria below, which is then used to calculate the **Overall Rating** based on an average of the ratings assigned.

	3 RATING	2 RATING	1 RATING
ASSET CONDITION	Poor	Marginal	Good
IMPACT	Western operations or daily activities cannot take place without this	Not essential to Western operations **BUT** will impact daily activities	**DOES NOT** impact basic Western operations but could improve efficiency, workload, or reliability
FINANCIAL BENEFIT	Cost saved by improving today **AND** operating costs decrease in the future	Cost saved by improving today **OR** operating costs decrease in future	No significant financial benefit now or in the future
DISTRICT STRATEGIC PRIORITIES	Specifically identified in the plan	Strong linkage established with the plan	Not a strategic priority
CHANGING STATE/REGULATORY REQUIREMENTS	Yes, changes within the next fiscal year	Yes, changes within 3 to 5 fiscal years	No requirements
STATUS OF FUNDING	Project is Board authorized and work order opened	Work order opened/Board approval not required	New project/request
SAFETY ELEMENT	Critical danger	Moderate–low danger	No safety danger
CONSEQUENCE OF ASSET FAILURE	Critical	Moderate	Low
PROJECT READINESS	**WILL** be completed within next fiscal year	**MAY** be complete in next fiscal year	Multi-year project
DEPARTMENT COLLABORATION	Lead team only	1 additional team only	2+ additional teams

step 4: After each project receives an overall rating, they are reviewed and ranked highest to lowest within each bracket.

step 5: Workload impact assessment – Once all projects have been ranked and prioritized, the CIFP Committee will review the workload impact on each department and Western overall.

step 6: Review of available funding, impact on day's cash on hand, and potential impact on bond rating. Final determination of project ranking is assessed by executive management.

CHAPTER 4:

Planning

Project Narratives

After careful consideration and evaluation, the Board-approved CIFP includes projects planned to be completed over the next five years. To supplement the list, narratives have been created to describe each project identified in years 1 and 2.

Projects have been sorted into 4 main categories:

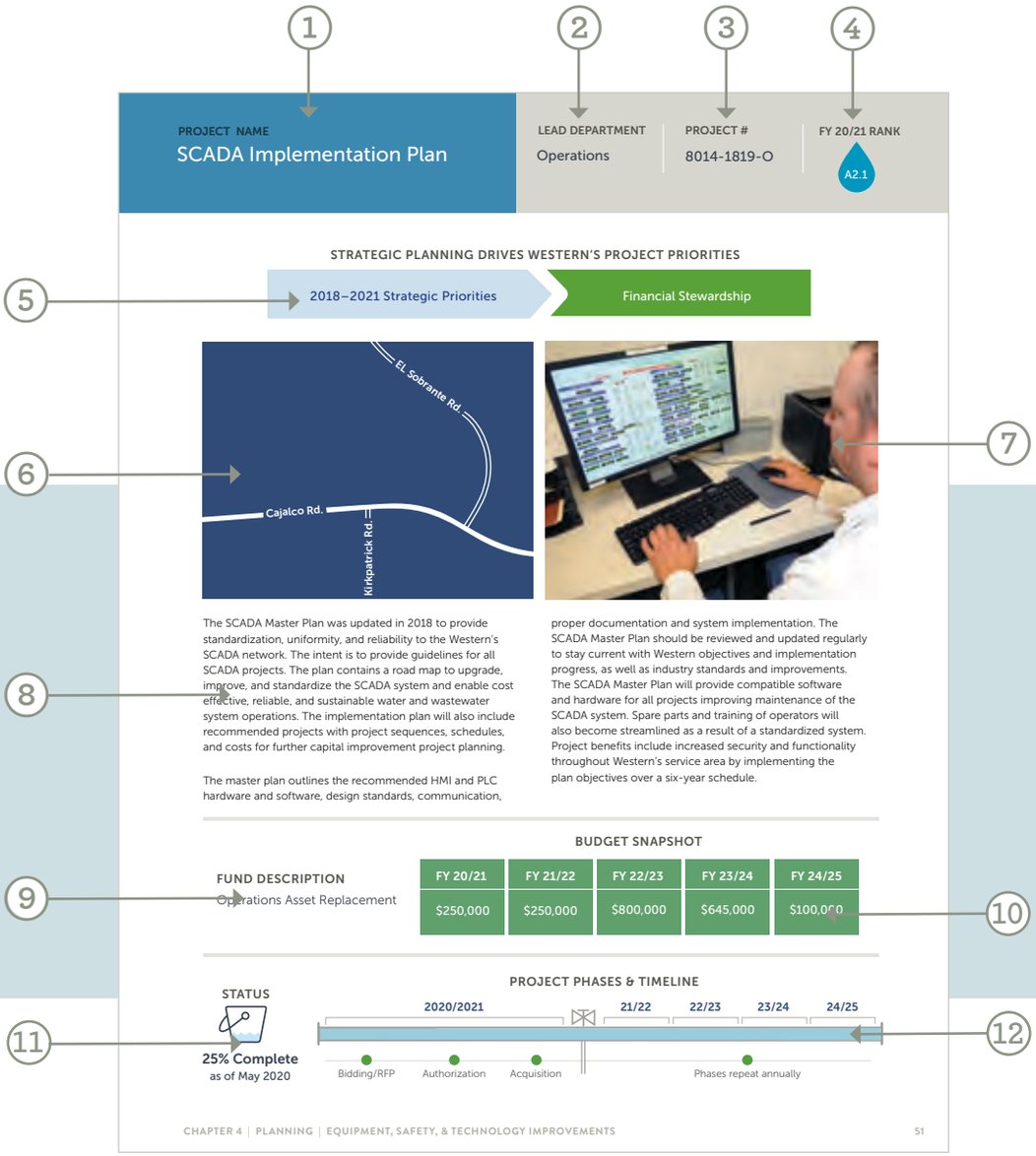
- **Asset Replacement** – Replacing all or a portion of an existing structure or business process.
- **Equipment, Safety, and Technology Improvements** – A new tool, instrument, or appliance, in addition to modifications made to existing assets.
- **System Improvements and Maintenance** – Enhancing an existing structure or business process.
- **Water Supply and Infrastructure Additions** – Adding a new physical structure or business process that will become a new component in the organization's assets.

Looking for a specific project? Use the project navigation index on page 27 to find the corresponding page for each project.

Project Narrative Guide

Goal of the Project Narratives

The following one-page narratives provide project summaries for the work planned in the next two fiscal years. Our goal is to keep you, our customers, informed through transparent, proactive, engaging, and clear communication.



How to read the Project Narrative

1. **PROJECT NAME** Identifies the project approved by the Board in the CIFP Budget
2. **LEAD DEPARTMENT** Primary team leading this effort
3. **PROJECT NUMBER** Unique number used to identify each project by year approved and lead department
4. **FY RANK** Budget year the project was approved in
5. **STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES** Illustrates how this project supports and enhances the Western strategies and initiatives
6. **MAP** View of area affected by this project
7. **PHOTO** Visual image of the project
8. **DESCRIPTION** Summary demonstrating the value and goals of the project
9. **FUND DESCRIPTION** Identifies funding source
10. **BUDGET SNAPSHOT** Overview of approved funds
11. **STATUS** Percentage of the project or purchase completed
12. **PROJECT PHASES & TIMELINE** Outlines project stages and identifies projected timeline

Project Navigation Index

Summary of projects in alphabetical order

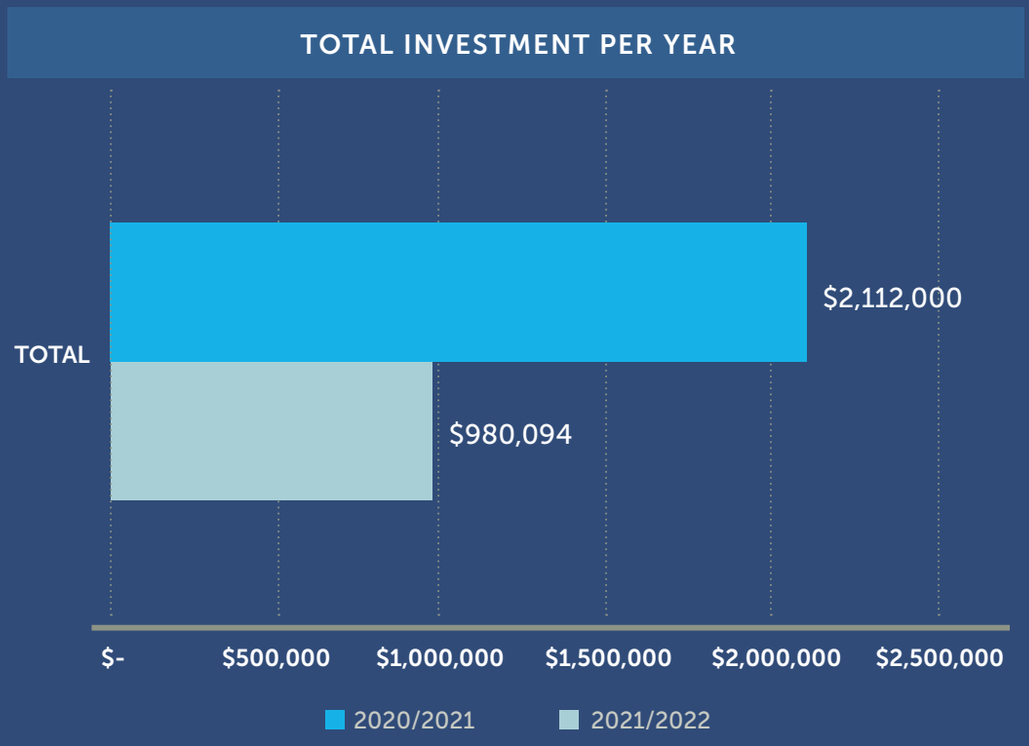
Use this guide to quickly find the project you are looking for

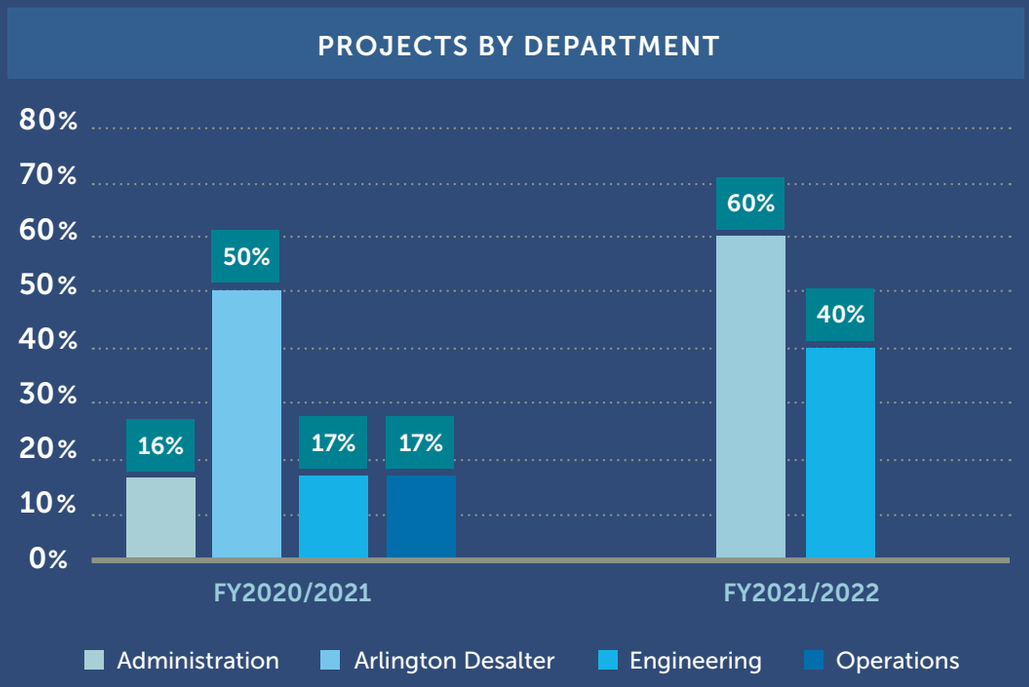
This table shows the projects Western has planned for Fiscal Years' 2020/2021 and 2021/2022.

Western Water Recycling Facility

Asset Replacement

- Replacing all or a portion of an existing structure or business process.





PROJECT NAME

Arlington Desalter System (ADS) Well Rehab

LEAD DEPARTMENT

Engineering

PROJECT #

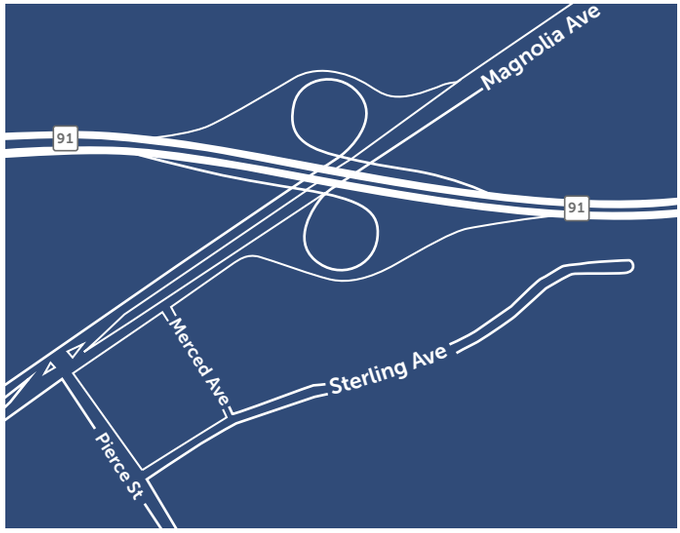
6004-1819-E

FY 20/21 RANK

A2.5

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



Due to the reduced production of the ADS wells, timely rehabilitation of pumps and casings will optimize efficiencies and increase water production to acceptable levels. Well rehabilitation may include cleaning of casings via brush and bail, the use of chemicals, and other methods to remove restrictions in the wells. Pumps may need to be reset to levels based on groundwater elevations and installation of new impellers to restore efficiency, etc., depending on each well's condition.

There are five ADS wells. One well was rehabilitated in Fiscal Year 2018/2019. This project will rehabilitate one well per year for the next three years. This well rehabilitation work will be performed during low-flow demand periods (between November and February) to minimize impact on water delivery.

BUDGET SNAPSHOT

FUND DESCRIPTION

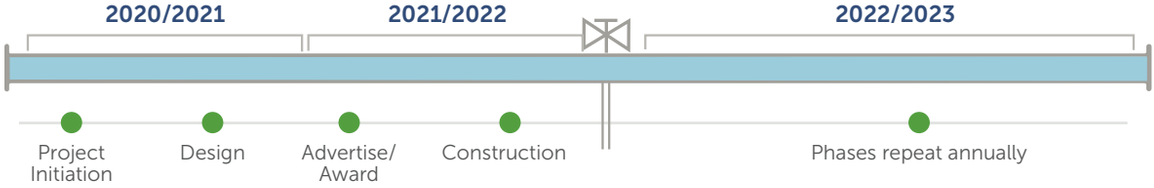
Arlington Desalter Asset Replacement

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
$415,000	$415,000	$415,000		

PROJECT PHASES & TIMELINE

STATUS

25% Complete
as of May 2020



PROJECT NAME

Nandina Manhole Rehab/ Replacement

LEAD DEPARTMENT

Engineering

PROJECT #

6020-1920-E

FY 20/21 RANK

A2.4

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management

During a condition assessment evaluation performed in 2018, 17 manholes were identified as needing replacement or rehabilitation due to hydrogen sulfide (H_2S) corrosion. H_2S converts to sulfuric acid which corrodes concrete and steel within wastewater environments. This requires rehabilitation and lining or replacement of the 17 sewer manholes along Nandina Avenue. Failure of the existing manholes could lead to Sewer System Overflows (SSOs) which in turn leads to non-compliance.

Replacing or rehabilitating these manholes will allow Western to meet its Sewer System Management Plan (SSMP) mandate and reduce risk exposure to SSOs from infrastructure failure. Based on the initial assessment, it was determined that further investigation was needed to determine the appropriate rehabilitation method and estimated cost for each of the manholes. Western engaged the services of IEC to complete a field investigation of each manhole and provide recommendations for the replacement or appropriate rehabilitation method. Design began in spring 2019 and construction is scheduled to begin in spring 2020.

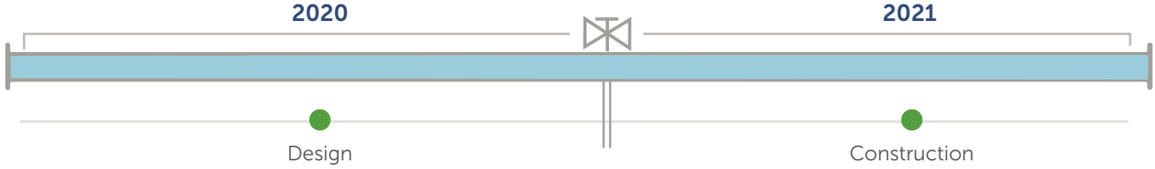
BUDGET SNAPSHOT

FUND DESCRIPTION	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
WWRF Conveyance West Asset Replacement	$550,000				

PROJECT PHASES & TIMELINE

STATUS

75% Complete
as of May 2020



PROJECT NAME

ADS Automation Upgrade

LEAD DEPARTMENT

Operations

PROJECT #

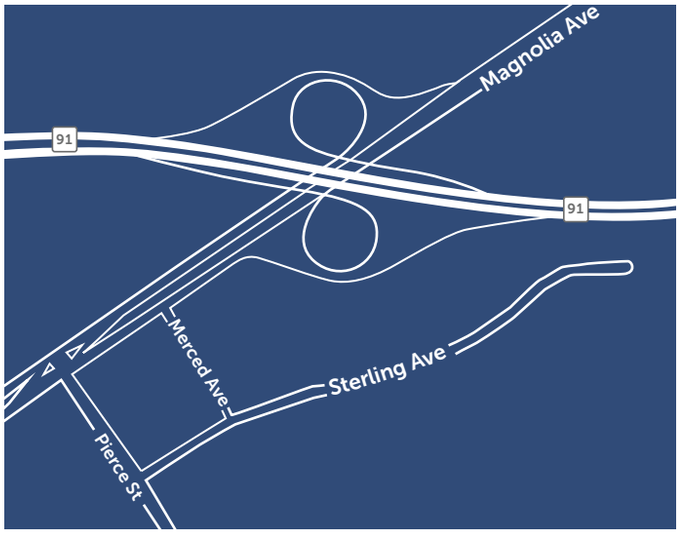
8015-1819-S

FY 20/21 RANK

A2.1

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



Reliability/Safety Control system failures continue to be a challenge for the Human-machine interfaces (HMI), Programmable logic controllers (PLC), turnouts and Pump Stations at the ADS. Finding supported hardware to maintain the existing system has become costly and difficult. The ability to obtain the control system hardware in a timely manner has become difficult, leading to extended downtimes. The control system is outdated and is no longer compatible with many of the newer control systems. Communication between the Supervisory Control and Data Acquisition (SCADA) interface with the HMIs and PLCs is done through third-party software, rather than directly, which leads to loss of process data and slow operation of the system. In a continued effort to sustain service reliability, superior service and to take advantage of today's technology, it is imperative to complete an automation upgrade.

The 2018 SCADA Master Plan outlines the recommended HMI and PLC hardware and software, design standards, communication, proper documentation, and system implementation. The design phase for the Automation Upgrade is underway and will be completed March 2019. The next phase of the project will be the construction of new automation control systems and HMI upgrades.

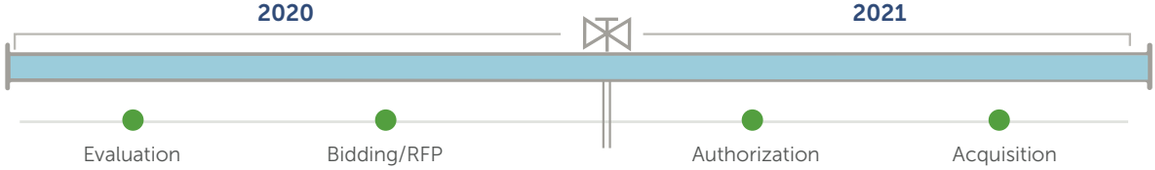
BUDGET SNAPSHOT

FUND DESCRIPTION	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Arlington Desalter Asset Replacement	$350,000				

STATUS

50% Complete
as of May 2020

PROJECT PHASES & TIMELINE



PROJECT NAME

ADS RO Membrane Replacement

LEAD DEPARTMENT

Operations

PROJECT #

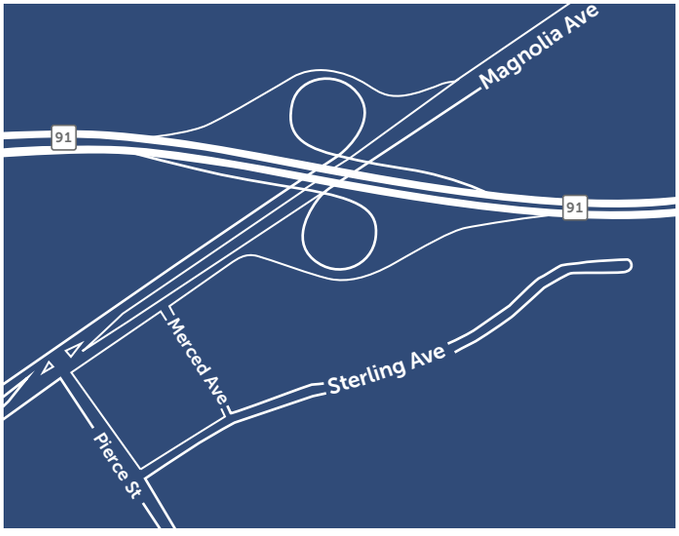
8016-2021-S

FY 20/21 RANK

A2

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



The ADS was built more than 20 years ago and was the first of its kind in Southern California. The facility provides the region billions of gallons of drinking water annually, currently serving the people in the city of Norco and portions of Riverside. Desalted water is a local, secure water supply reducing our reliance on water from far-off sources, like the Colorado River or Northern California. Water is treated through a process called reverse osmosis (RO), which takes out salt and other matter to create clean, local drinking water. In order to keep the ADS plant functioning at optimal levels,

RO membrane trains need to be replaced. This will extend the life expectancy, which is seven years for membranes. The recommendation is to replace each train on a year-over-year basis until all have been replaced. The first year will include contracting professional services to assess and review existing technology and identify possible upgrades prior to membrane replacement. Overall, the project will take three years beginning in Fiscal Year 2019/2020 and continuing through Fiscal Year 2021/2022.

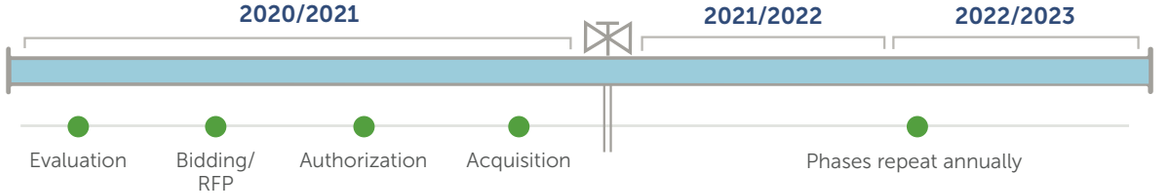
BUDGET SNAPSHOT

FUND DESCRIPTION	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Arlington Desalter Asset Replacement	$200,000	$200,000	$200,000		

STATUS

25% Complete
as of May 2020

PROJECT PHASES & TIMELINE



PROJECT NAME

WWRF Bleach Tank

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Operations	8041-2021-O	A2

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management

There are two bleach tanks at the Western Water Recycling Facility (WWRF). The bleach tanks are a part of the tertiary process of the wastewater treatment plant. The bleach stored in the tanks is used to disinfect the recycled water after filtering and before transferring to the recycled water system. The disinfection process is mandatory based on regulatory permits issued to the treatment plant. Staff previously repaired and replaced the first of the two tanks and is now prepared to replace the second tank. The second tank appears to have visible cracking and a minor leak. This project will replace the second of the two tanks. The tanks have an estimated 7–10 year life expectancy.

FUND DESCRIPTION

WWRF Treatment Asset Replacement

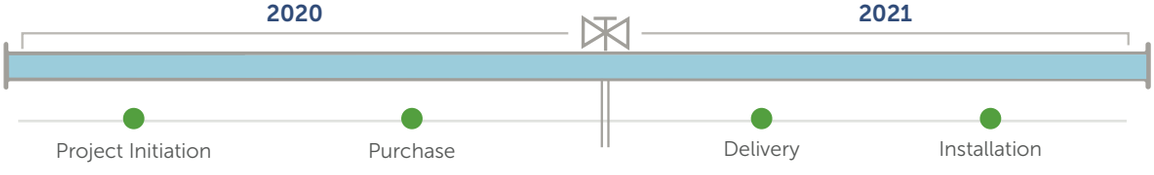
BUDGET SNAPSHOT

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
$30,000				

STATUS

Future Project
not yet started

PROJECT PHASES & TIMELINE



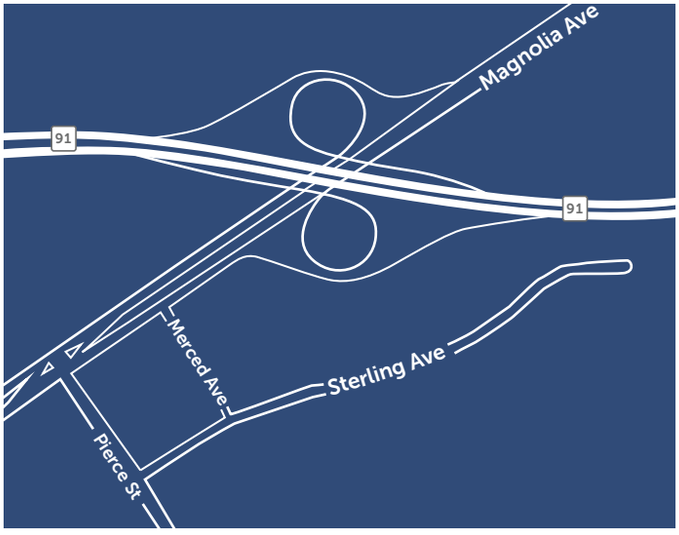
PROJECT NAME

ADS RO Feed Pump Replacement

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Operations	8019-1920-S	B2.5

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



The ADS was built more than 20 years ago, and was the first of its kind in southern California. The facility provides billions of gallons of drinking water to Norco and portions of Riverside. Desalted water is a local, secure water supply reducing our reliance from far-off sources, like the Colorado River or northern California. Water is treated through a process called reverse osmosis (RO), which takes out salt and other matter to create clean, drinking water. Critical failure of the RO feed pumps would cause extensive operational downtime and expense. Having a replacement on hand will create a reliable and steady operation in conjunction with Western's proactive approach to maintaining infrastructure. RO feed pumps have a lead time of six months and cost approximately $100,000 each to replace. Scheduling downtime to coincide with planned shut downs will minimize service interruption to our customers and increase efficiency in labor hours.

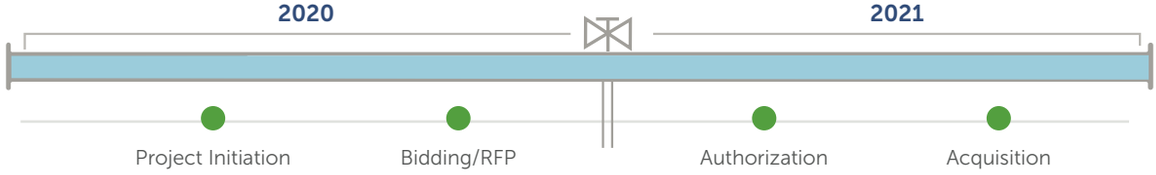
BUDGET SNAPSHOT

FUND DESCRIPTION	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Arlington Desalter Asset Replacement	$100,000				

STATUS

Future project
not yet started

PROJECT PHASES & TIMELINE



PROJECT NAME

ADS Train Valve Replacement

LEAD DEPARTMENT

Operations

PROJECT #

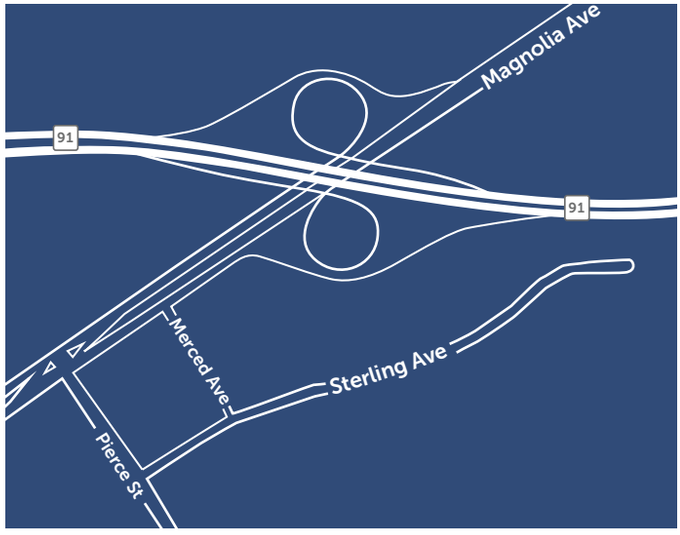
8004-1920-S

FY 20/21 RANK

B2.5

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



The ADS was built more than 20 years ago, and it was the first of its kind in Southern California. The facility provides the region with billions of gallons of drinking water annually, currently serving the people in the city of Norco and portions of Riverside. Desalted water is a local, secure water supply, reducing our reliance on water from far-off sources, like the Colorado River or Northern California. Water is treated through a process called reverse osmosis, which takes out salt and other matter, to create clean, local drinking water. The valves connecting the Clean-In-Place (CIP) system to each of the trains are leaking which dilutes the cleaning solution. This means staff needs to add more chemicals and therefore, operational costs increase. If the Clean-In-Place System does not properly clean the membranes, it will result in a shorter life span of the membranes. The objective of this program is to install a new valve at each train year-over-year until all of the valves have been replaced. By addressing these concerns now, staff will reduce chemical costs and increase the life expectancy of the membranes. In turn, this updated cleaning system will mitigate cost increases to the overall cost of water production and provide a positive financial benefit to the end-users.

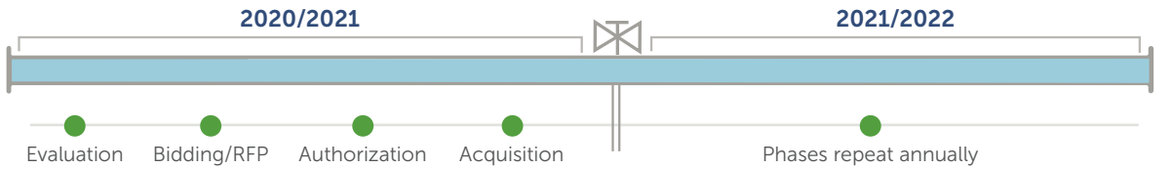
BUDGET SNAPSHOT

FUND DESCRIPTION	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Arlington Desalter Asset Replacement	$70,000	$40,000			

STATUS

75% Complete
as of May 2020

PROJECT PHASES & TIMELINE



PROJECT NAME

1269 Submersible Pump Replacement – WWRF Collections

LEAD DEPARTMENT

Operations

PROJECT #

8010-1819-O

FY 20/21 RANK

B2.3

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management

Aging infrastructure at the 1269 lift-station continues to present challenges in providing reliable conveyance to the MARB area. 1269 lift station is a critical component of the Western's waste water collections system that provides conveyance from the MARB cantonment and non-cantonment areas. Wet weather conditions and future development are a concern regarding increased customer connections and infiltration. This increases the chance of a Sanitary Sewer Overflow. This replacement is in alignment with Western's Sewer System Management Program goals. Beginning in FY 21/22, Engineering will begin condition assessment and design for the 1269 lift station.

Efficiency testing shows all three of the submersible pumps at 1269 lift station are running well below the intended flow curve, which will ultimately lead to equipment failure. The pumps in use now are running between 25–50 percent of their projected efficiency, far below Western standards which are targeted at 65 percent. Decreased efficiency in pump operations have negative effects on waste water conveyance capability and energy usage. Replacement of the pumps will increase service reliability and increase pumping efficiency. Staff will utilize compiled pump data along with vendor recommendations to determine the optimal pumping equipment for site specific conditions. In addition, long-term assessment will be conducted for lift station re-design based on current and projected needs.

BUDGET SNAPSHOT

FUND DESCRIPTION

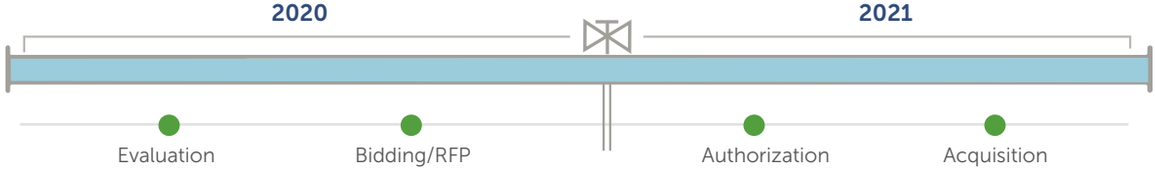
WWRF Conveyance East Asset Replacement

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
$80,000				

STATUS

25% Complete
as of May 2020

PROJECT PHASES & TIMELINE



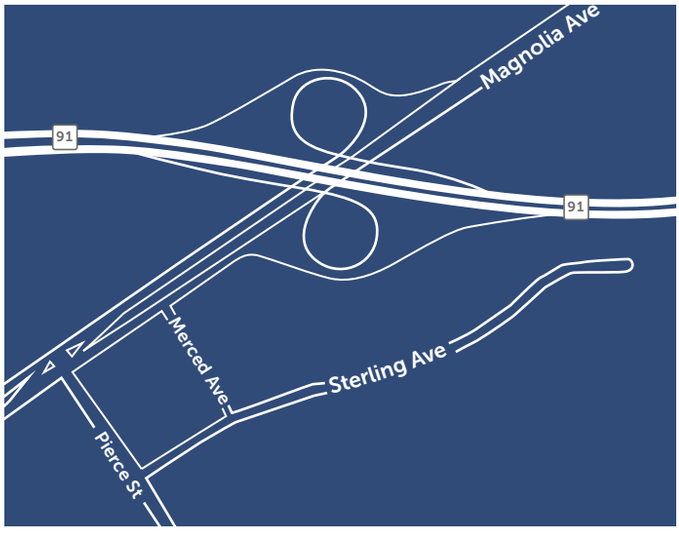
PROJECT NAME

ADS Distribution Pumps 1–4 Replacement

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Operations	8022-1819-S	B2.3

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



The distribution pumps for ADS are critical to the infrastructure to efficiently and reliably distributing water to our customers in Corona and Norco. Failure of a distribution pump could lead to an interruption in service due to long lead times (16 weeks) and high costs could prolong efforts to restore service and return to full operation of the plant.

The scope of this project is to purchase and have a mission-critical distribution pump for the ADS readily available in the event of failure. In accordance with Western's Reliability Centered Maintenance program, staff monitor the efficiency of pump equipment through a third-party vendor which provides potential fail point indicators. Monitoring this equipment affords Western predictive insight to pull and replace a failing unit at a moment's notice. Subsequent to this, any unit removed from service may be rebuilt at a much lower cost. In addition, Western maintains a spare pump as a precautionary measure.

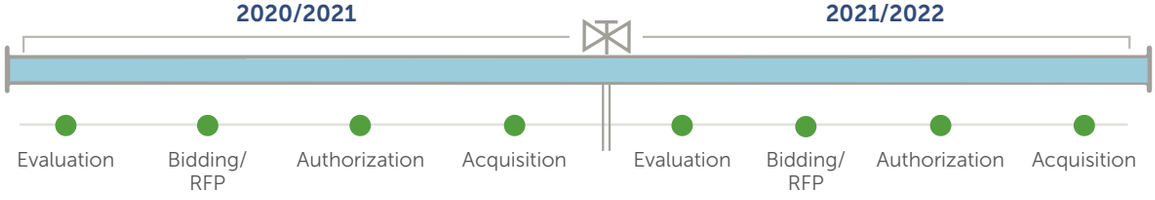
BUDGET SNAPSHOT

FUND DESCRIPTION	FY 20/21	FY 21/22	FY 22/23	FY 22/23	FY 24/25
Arlington Desalter Asset Replacement	$100,000	$100,000			

STATUS

25% Complete
as of May 2020

PROJECT PHASES & TIMELINE



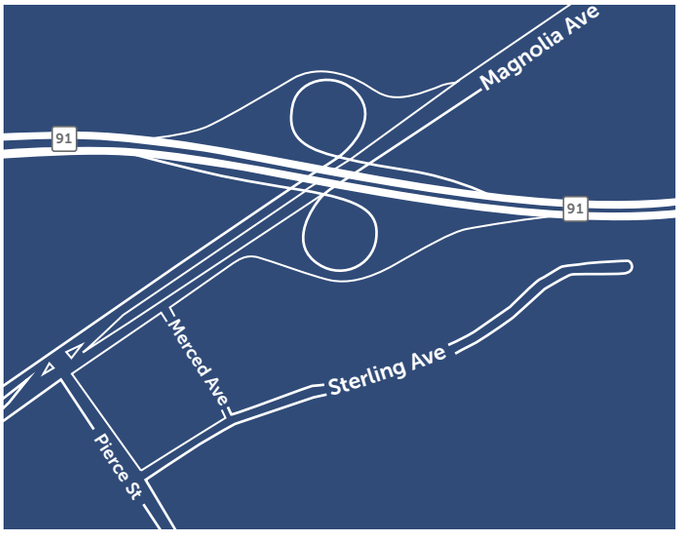
PROJECT NAME

ADS MOV Replacement

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Operations	8024-1819-S	B2.2

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



Western strives to meet regulatory requirements, protection of public health, and protection of the environment, reliability within the ADS is paramount. ADS was built more than 20 years ago, the facility provides the region billions of gallons of drinking water annually, currently serving the city of Norco and portions of Riverside. The ADS plant has numerous motor-operated valves (MOV) throughout the system for various processes. Failure of these valves could result in significant down time for the treatment plant. The ADS treatment system contains multiple motor-operated valves and failure could cause a loss of concentrate valve leading to a train shut down. This project would allow for replacing or rebuilding MOVs to ensure that equipment and processes will continue to work as designed. Staff seek to maintain the ADS as a reliable and efficient source of water to our customers.

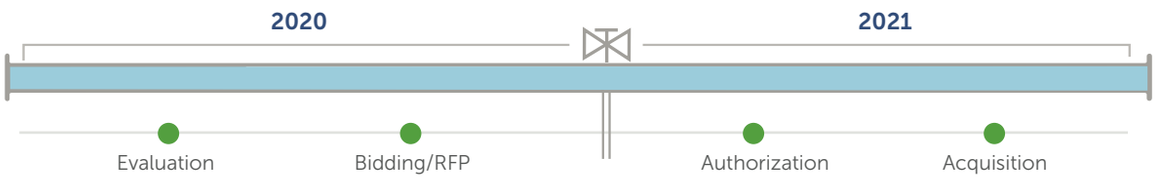
BUDGET SNAPSHOT

FUND DESCRIPTION	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Arlington Desalter Asset Replacement	$20,000				

STATUS

Future Project
not yet started

PROJECT PHASES & TIMELINE



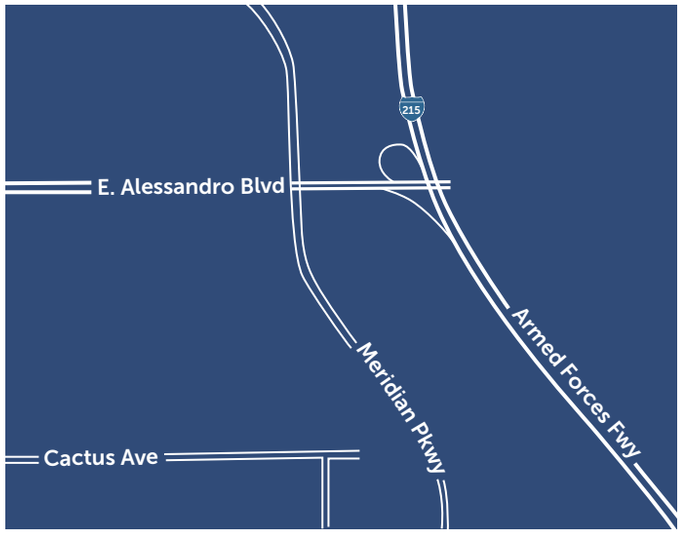
PROJECT NAME

Meridian Facility Improvements

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Administration	1001-1920-AD	B2

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Superior Service



The Meridian Parkway Administrative facility has had numerous electrical issues since it was built, and requires some other repairs/improvements. The greatest challenge is that during high peak energy usage from Southern California Edison, the Meridian facility experiences periodic power outages. It was identified that the connection to the Air Conditioning units is backwards which opens us up to power outages when energy spikes occur. This project also includes some other improvements including installation of LED lighting in certain locations, which will save on future energy costs. The goal is to correct our electrical connection to the Air Conditioning units and aid in preventing future power outages to the Meridian facility. A contractor will replace the 4,250 amp circuit breakers on the Meridian A/C units with an adjustable magnetic trip unit for short circuit protection. Doing this will help prevent the shorts from flowing back down to the main electrical panel and shorting out the facility.

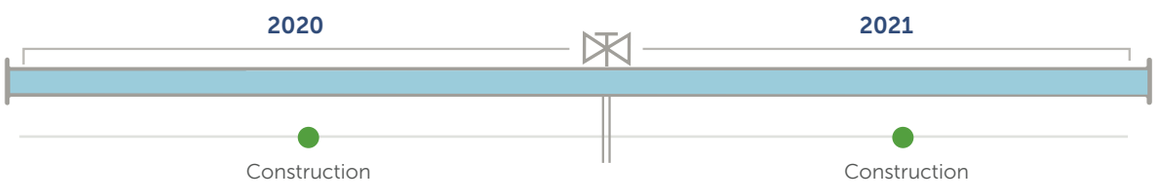
BUDGET SNAPSHOT

FUND DESCRIPTION	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Headquarter Asset Replacement	$85,000				

STATUS

33% Complete
as of May 2020

PROJECT PHASES & TIMELINE



PROJECT NAME

1269 Lift Station – WWRF Collections

LEAD DEPARTMENT

Engineering

PROJECT #

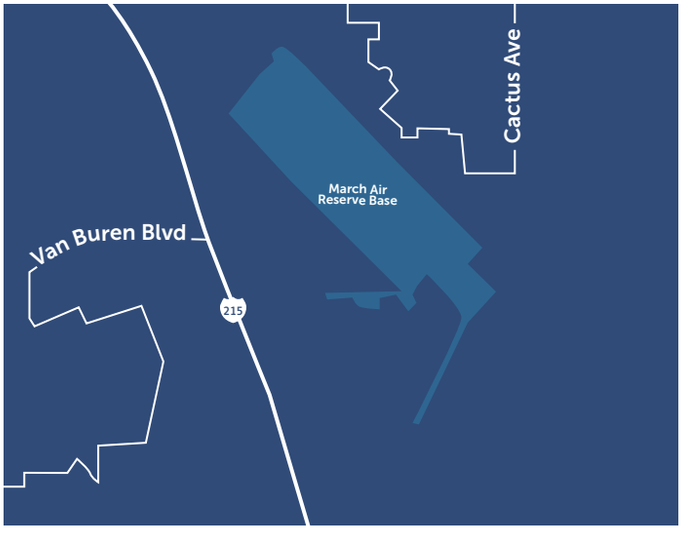
6018-1819-E

FY 20/21 RANK

C1.9

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Financial Stewardship



The 1269 Lift Station is subject to flooding during rains, which pumps sewage from the MARB base and other areas east of the I-215. The electrical equipment requires updating and replacement. The wet well is undersized and the on-site piping needs replacement. The project would entail two phases:

1) Elimination of the open channel sewage flow, covering the old clarifier, and replacing the existing sump pump and control panel. Then, using it as emergency storage and flood protection around the electrical equipment.

2) Remove existing wet well, dry well, and unit piping. Construct a larger-sized wet well, install above-ground unit piping, and rebuild electrical control systems. The project will also include larger-sized standby genset. The proposed facilities will be raised three fee to be flood-proof from 100-year storm events.

The ultimate goal, is to rebuild the lift station protecting it from flooding and up-sizing the wet well to accommodate heavy rain inflows.

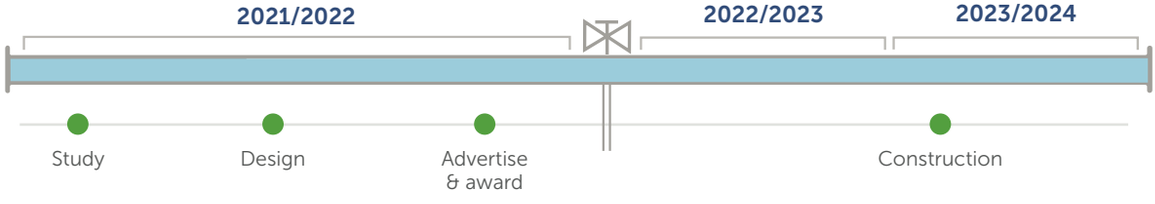
BUDGET SNAPSHOT

FUND DESCRIPTION	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
WWRF Conveyance East Asset Replacement		$225,094	$675,282	$1,775,743	

STATUS

30% Complete
as of May 2020

PROJECT PHASES & TIMELINE



PROJECT NAME

IT Server Room Air Conditioner Replacement

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Administration	1006-2021-AD	C1.8

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management

The Information Technology server room must maintain a constant temperature to protect our servers from over heating. The two existing 2-ton units at the Meridian location have failed on several occasions during summer months, which has caused the server room to overheat and put the servers at risk of failure. Existing units are too small and unable to maintain appropriate temperatures during hot summer months. This project will replace the current equipment with two 6-ton split systems with multi-stage condensing units. The new units will be set up as a lead lag system with 100 percent redundancy and, as our heat load increases, the system will be set up for multi-staging to handle the increased load. Also included will be two new Pelican thermostats with WIFI modem for email and text message alerts to staff in the event the room should overheat.

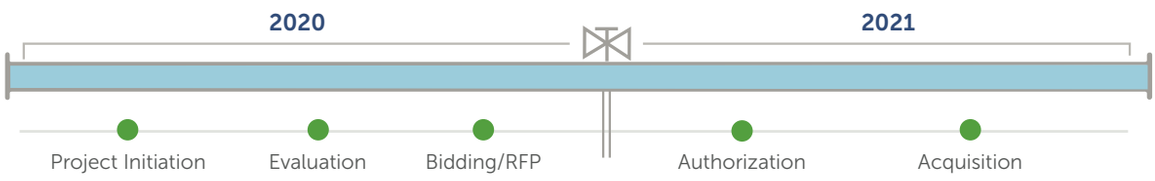
BUDGET SNAPSHOT

FUND DESCRIPTION	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Headquarters Asset Replacement Project	$112,000				

STATUS

20% Complete
as of May 2020

PROJECT PHASES & TIMELINE

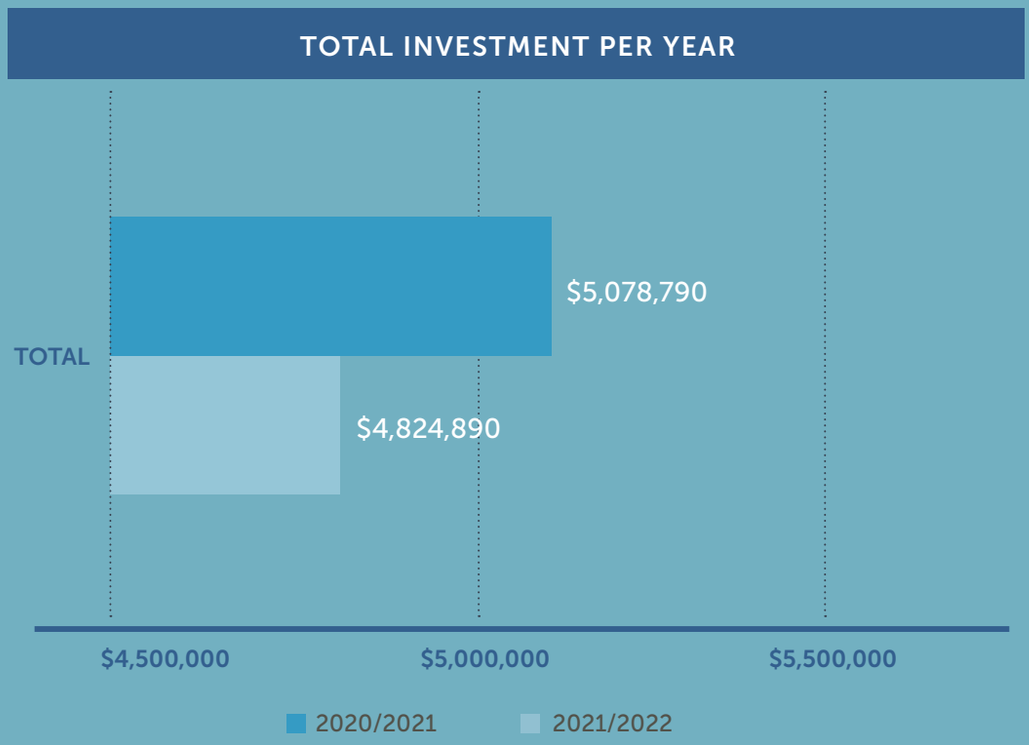


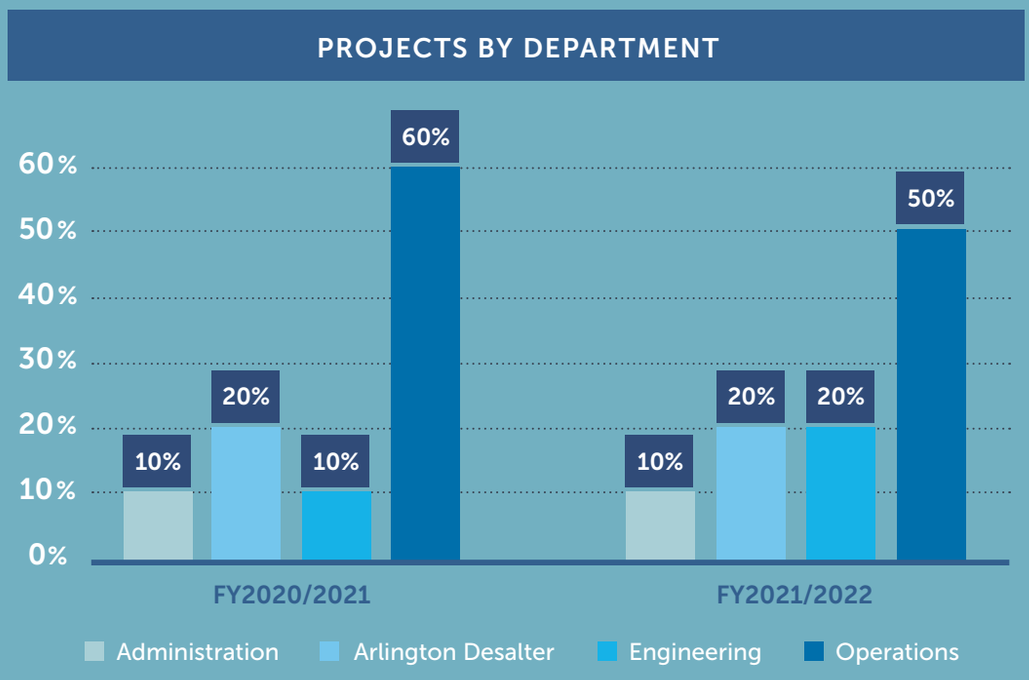
Graeber Pipeline Replacement at March Air Reserve Base

Markham Lift Station

Equipment, Safety, & Technology Improvements

- A new tool, instrument, or appliance, in addition to modifications made to existing assets.





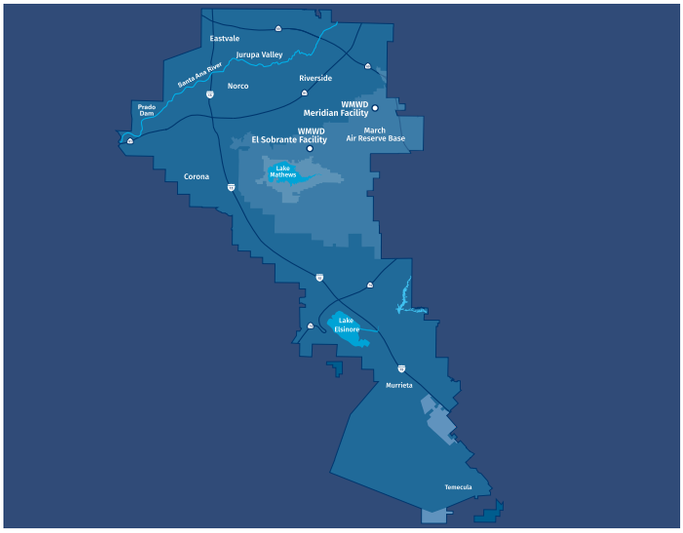
PROJECT NAME

CCTV Inspection Vehicle Lease

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Operations	8001-1819-O	A

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Financial Stewardship



Robotic Closed Circuit TV (CCTV) inspections are the most frequently used, cost efficient, and most effective method to inspect the internal condition of a wastewater collection system. In the past, staff was limited to contracted services for CCTV inspections of pipelines. This service is costly, inefficient, and does not meet the Sewer System Management Plan SSMP intent. CCTV inspections produce a video record of the inspection used for compliance reporting.

In 2018, the CCTV Inspection Vehicle was Board-approved and procured through a leasing option that will allow Western to spread the cost over the course of five years. Documentation of inspections are a critical component to a successful collection system and operation and maintenance (O&M) program.

An additional benefit of the CCTV program is the ability to immediately inspect collection systems post Sanitary Sewer Overflow (SSO) events.

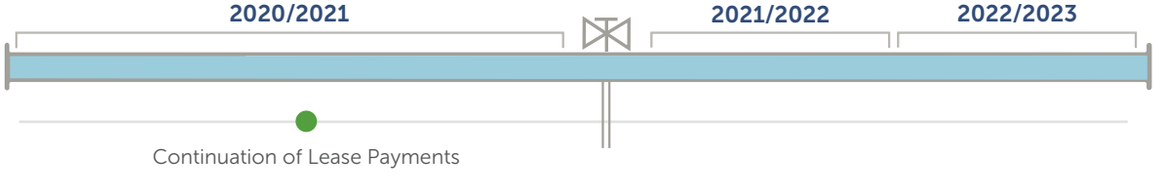
BUDGET SNAPSHOT

FUND DESCRIPTION	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Fleet Expansion	$46,768	$46,768	$46,768		

STATUS

40% Complete
as of May 2020

PROJECT PHASES & TIMELINE



PROJECT NAME

Hydro Excavator Vehicle Lease

LEAD DEPARTMENT

Operations

PROJECT #

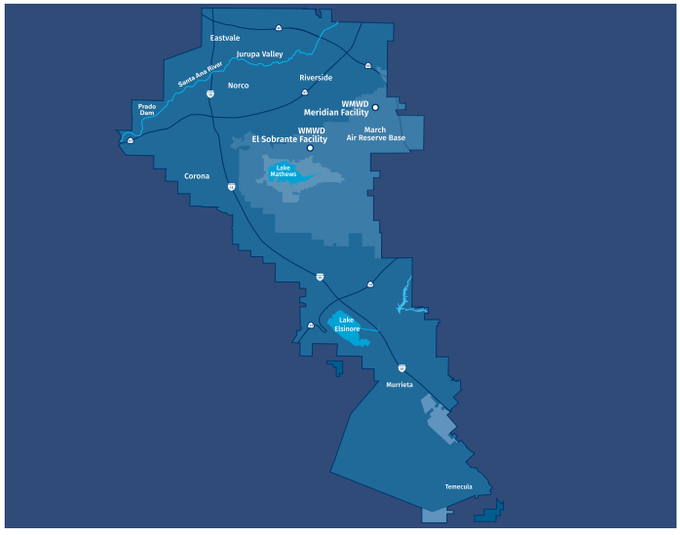
8000-1819-O

FY 20/21 RANK

A

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Financial Stewardship



Due to the network of underground utility lines encountered while excavating, the GapVax Hydro Excavator increases work site safety. Hydro excavating is a less invasive method of excavation that reduces surface damage compared to traditional excavation methods. Traditional heavy-equipment excavation is a specialty skill which requires many years of experience to perfect. This hydro excavation unit provides staff safe and efficient vacuum digging options beyond traditional heavy digging equipment.

In 2018, the Hydro Excavator was Board-approved and procured through a leasing option that will allow Western to spread the cost over the course of five years. This is a multipurpose machine that provides both dry and wet vacuum excavation options. The addition of this equipment to the Western's fleet will improve excavation safety practices as well as response time to water leaks and Sanitary Sewer Overflow (SSO) events.

BUDGET SNAPSHOT

FUND DESCRIPTION

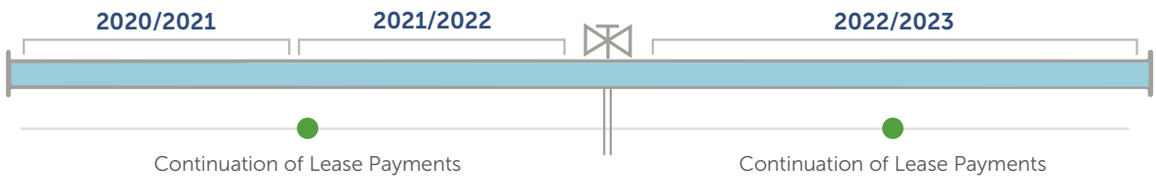
Fleet Expansion

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
$108,122	$108,122	$108,122		

STATUS

40% Complete
as of May 2020

PROJECT PHASES & TIMELINE



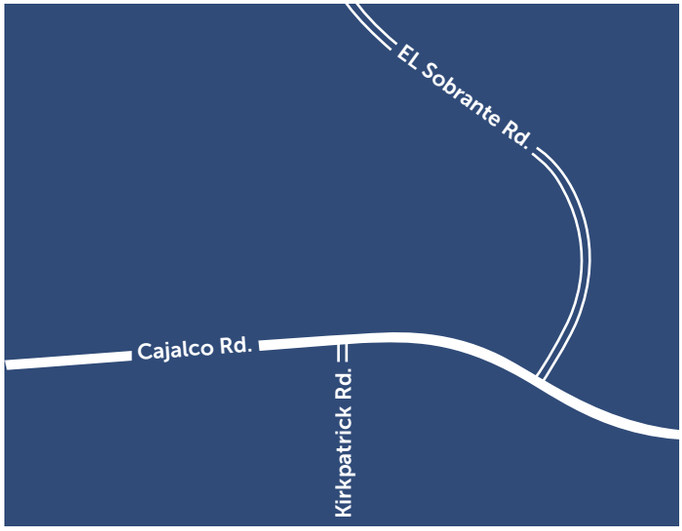
PROJECT NAME

Operations Building G

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Engineering	6040-1920-E	A

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



The project includes the construction of a manufactured metal building purchased by Operations to store the generators. The metal building will be installed at Western's Operation Center on El Sobrante Road. The Project requires permitting from the County of Riverside, the Economic and Development Agency (EDA), and the Riverside Fire Department. Western hired IDS to provide engineering consulting services to obtain Plan Check approval from the County of Riverside. Engineering services provided by IDS included architectural, electrical civil, and geotechnical consulting services. Civil consulting included a field survey of the project site to gather topographic data that used to prepare civil site plans. The survey shows topographic features of the site such as gutter and drainage systems. IDS also prepared a precise grading plan to facilitate the development and construction of the new building.

The Riverside County EDA has approved the Plan as well as Riverside Fire Department.

BUDGET SNAPSHOT

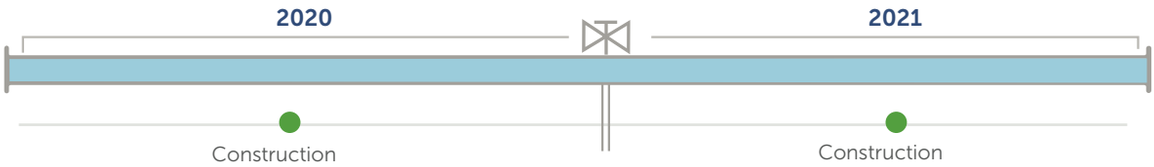
FUND DESCRIPTION
Ops Facility Improvement

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
$48,900				

STATUS

25% Complete
as of May 2020

PROJECT PHASES & TIMELINE



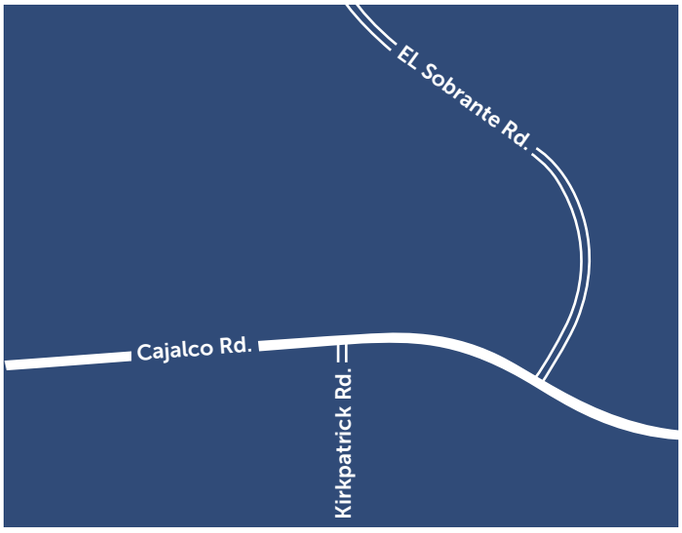
PROJECT NAME

Cajalco Intake Switchgear & Motor Control Center Replacement

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Engineering	6044-2021-E	A2.5

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



The existing Cajalco Pump Plant consists of a potable water Booster Station and a nonpotable water Intake Pump Station. The Cajalco Pump Plant is served with 4160 volt power feed by Southern California Edison (SCE) and is interconnected to the solar photovoltaic system to utilize green energy that is generated. An existing Western-owned overhead power line connects the 4160 volt power feed to the Hillside Tank and Booster Station.

The electric facilities at the Cajalco Pump Station are beyond their useful lives. This project will replace and retrofit major components at the pump station by: converting the local power source to a 480 volt feed; replacing associated electrical equipment including the switchgear (power isolation), MCC, transformer (voltage conversion), electrical conduits, and programmable logic control (PLC); integrating system controls into Western's SCADA system; and studying feasibility of converting the Hillside Booster Station power feed from 4160 volt to 480 volt and making provisions to futureconnections, if feasible.

BUDGET SNAPSHOT

FUND DESCRIPTION

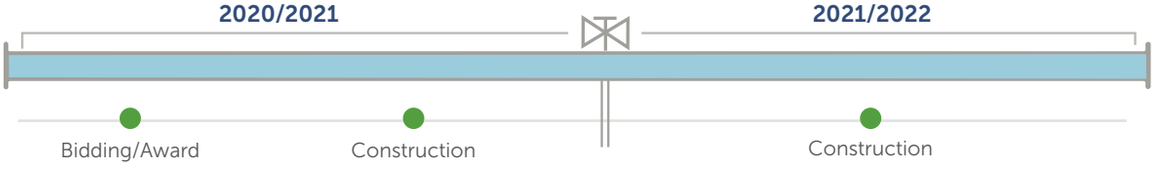
Riverside Potable Water Asset Replacement

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
$3,500,000	$2,900,000			

STATUS

35% Complete
as of May 2020

PROJECT PHASES & TIMELINE



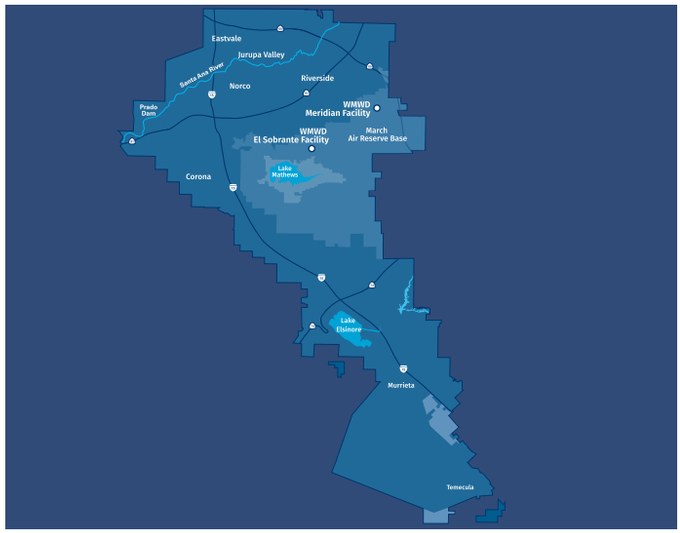
PROJECT NAME

Purchase Emergency Generators

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Operations	8037-2021-O	A2.3

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



Western seeks to purchase generators to improve recovery response and adequately maintain water delivery, wastewater collection, and wastewater treatment services in the event of a power outage. Western has historically experienced power outages at various locations as a result of natural disasters and other events. Recent consideration has also been given to the increased potential for Public Safety Power Shutoffs (PSPS) and their impact on Western's systems as indicated by the California Public Utilities Commission's Fire-Threat Map.

Although Western has a limited number of portable generators on hand, Western seeks to add permanent generators at critical facilities to ensure reliable response recovery. Staff have applied for the Cal OES Hazard Mitigation Grant Program and may receive federal funding up to 75 percent of the total project costs. Proposed sites for permanent generators include, but are not limited to: Steel Valley Pump Station, Mockingbird Pump Station, and Hillside Pump Station. Additional sites will be considered in future years.

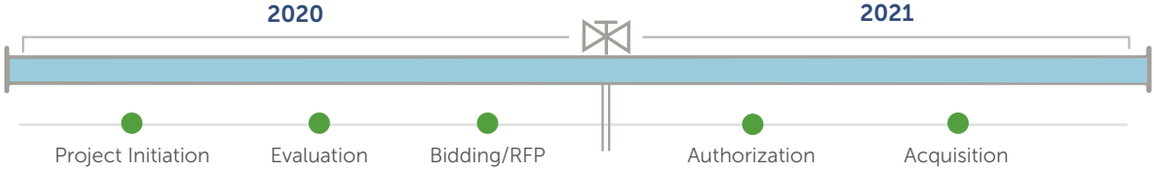
BUDGET SNAPSHOT

FUND DESCRIPTION	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Operations Equipment Acquisition	$750,000				

STATUS

90% Complete
as of May 2020

PROJECT PHASES & TIMELINE



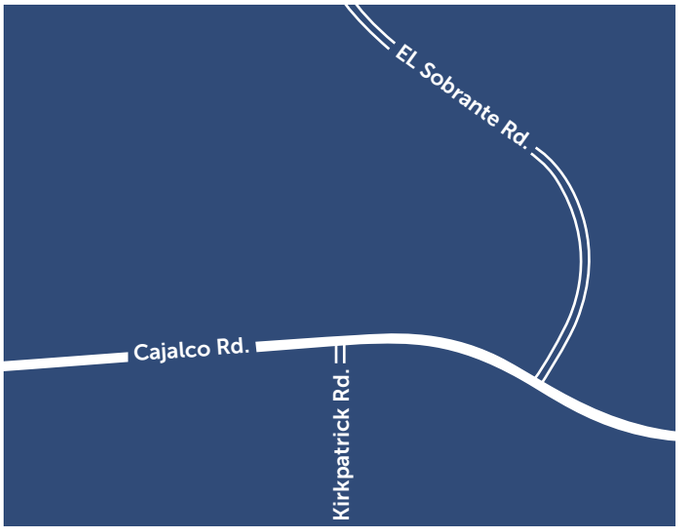
PROJECT NAME

SCADA Master Plan Implementation

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Operations	8014-1819-O	A2.1

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Financial Stewardship



The SCADA Master Plan was updated in 2018 to provide standardization, uniformity, and reliability to the Western's SCADA network. The intent is to provide guidelines for all SCADA projects. The plan contains a road map to upgrade, improve, and standardize the SCADA system and enable cost effective, reliable, and sustainable water and wastewater system operations. The implementation plan will also include recommended projects with project sequences, schedules, and costs for further capital improvement project planning.

The master plan outlines the recommended HMI and PLC hardware and software, design standards, communication, proper documentation and system implementation. The SCADA Master Plan should be reviewed and updated regularly to stay current with Western objectives and implementation progress, as well as industry standards and improvements. The SCADA Master Plan will provide compatible software and hardware for all projects improving maintenance of the SCADA system. Spare parts and training of operators will also become streamlined as a result of a standardized system. Project benefits include increased security and functionality throughout Western's service area by implementing the plan objectives over a six-year schedule.

BUDGET SNAPSHOT

FUND DESCRIPTION

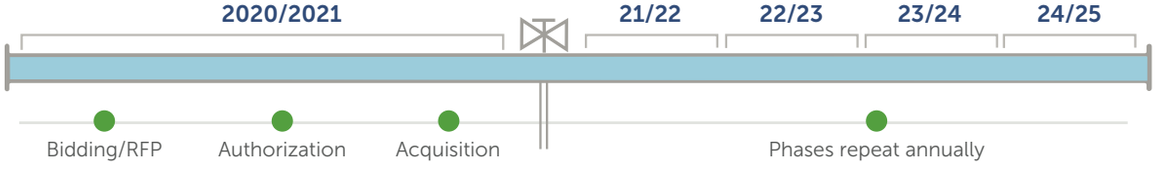
Operations Asset Replacement

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
$250,000	$250,000	$800,000	$645,000	$100,000

STATUS

25% Complete
as of May 2020

PROJECT PHASES & TIMELINE



PROJECT NAME

Scissor Lift

LEAD DEPARTMENT

Operations

PROJECT #

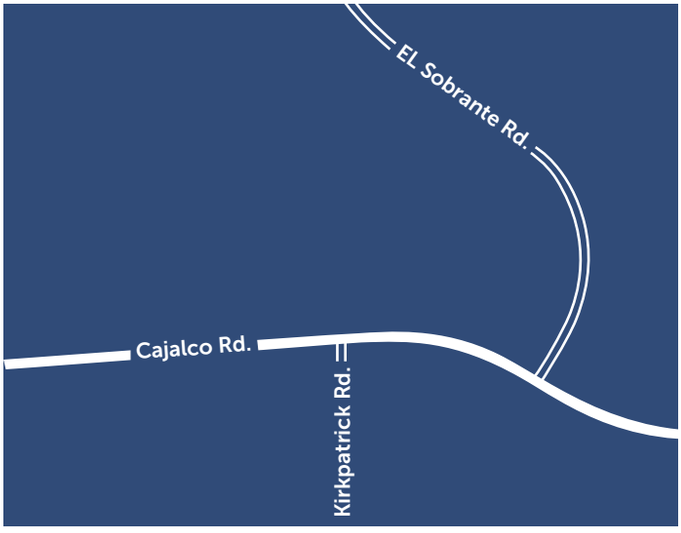
8046-2021-O

FY 20/21 RANK

A2.1

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



The purchase of a scissor lift will help Western complete our quarterly tank inspections as required by the DDW. Western has 19 potable and 6 non-potable tanks that require periodic inspections. Historically, Western has rented a lift to complete these inspections. The purchase will allow Western to complete inspections more frequently and stay in compliance. Plus, having our own equipment allows more flexibility in scheduling the inspections based on our staff's workload versus relying on a rental company to have the equipment available as needed. By purchasing the equipment versus the past practice of renting equipment, staff is able to be more efficient and Western is financially responsible in the long-term.

BUDGET SNAPSHOT

FUND DESCRIPTION

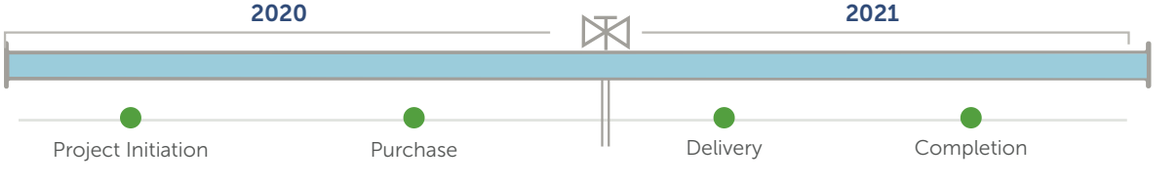
Ops Equipment Acquisition

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
$100,000				

STATUS

25% Complete
as of May 2020

PROJECT PHASES & TIMELINE



PROJECT NAME

Content Management System

LEAD DEPARTMENT

Administration

PROJECT #

1000-1819-AD

FY 20/21 RANK

A1.8

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Superior Service

Western, as a public agency, is required to manage documents and records in accordance with the California Public Records Act and Western's adopted Records Retention Resolution. This project was approved by the Board on April 5, 2017 with the objective to improve accuracy, efficiency, reliability, and availability of document-based information throughout Western. In addition, developing a web portal for self-service by the public for certain records as a means for increased transparency.

By implementing the Electronic Content Management System (ECMS), lifecycles of Western records will be managed in a standardized, fully searchable way. One that will also allow for creating workflows that support review and approval processes, document routing automation, storing and retrieval of records, among other efficient business processes.

BUDGET SNAPSHOT

FUND DESCRIPTION

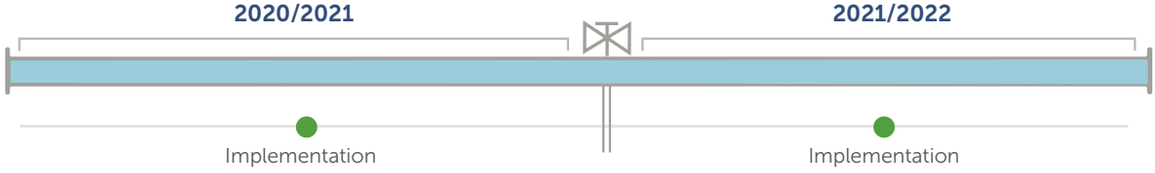
Information Technology Project

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
$125,000	$125,000			

STATUS

25% Complete
as of May 2020

PROJECT PHASES & TIMELINE



PROJECT NAME

Meeting Room Technology Upgrade

LEAD DEPARTMENT

Information Technology

PROJECT #

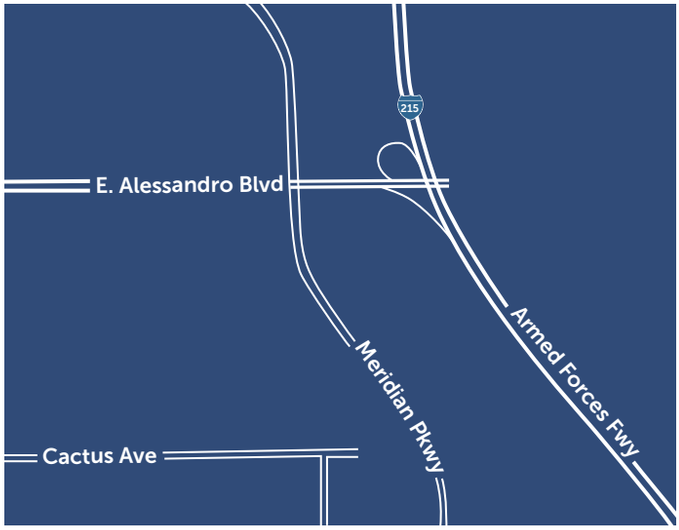
3003-2223-I

FY 20/21 RANK

A1.8

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Superior Service



At the Meridian Headquarters building, Western utilizes an automated meeting room management system. This system is a very convenient and effective tool for managing and scheduling the meeting and conference rooms in the building. While this system is easy to use and very popular among Western staff, it is past the end of its useful life and experiencing regular failures. This project will update the system with current generation components as well as complete an expansion to conference rooms at the Operations building. The project includes installing new communications equipment, replacing end of life devices at HQ offices and installing new devices at Operations. This includes replacing existing room devices, installing new devices at new locations, installing needed communications equipment, and completing programing and setup.

BUDGET SNAPSHOT

FUND DESCRIPTION

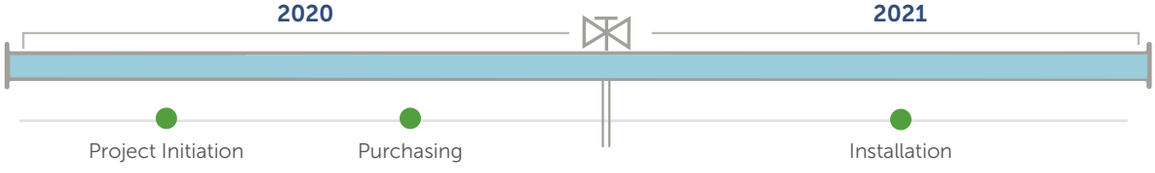
Information Technology Project

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
$100,000				

STATUS

Future Project
not yet started

PROJECT PHASES & TIMELINE



PROJECT NAME

Boom Truck

LEAD DEPARTMENT

Operations

PROJECT #

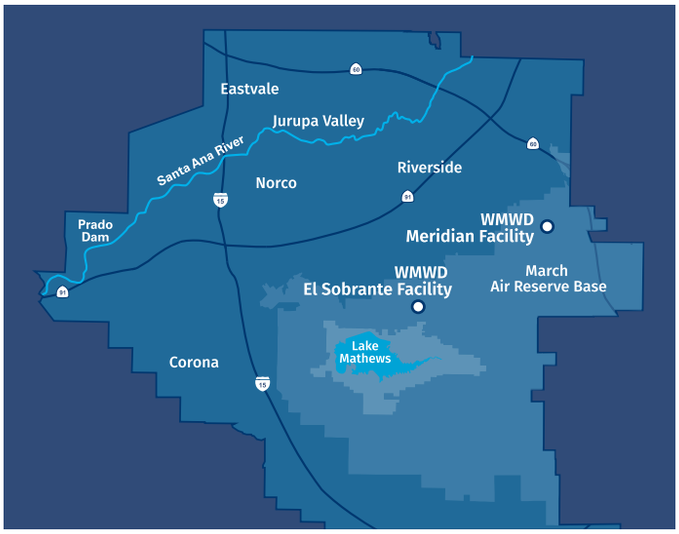
8047-2223-O

FY 20/21 RANK

B2.6

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Superior Service



The purchase of a boom truck will increase Western's fleet allowing for specialized use at multiple facilities. The use of a boom truck will increase staff's ability to perform work in-house and narrow the reliance on equipment rental companies. The following list of tasks is a sample of the routine or emergency maintenance procedures staff will be able to conduct with the use of a boom truck:

- Access SCADA and power lines associated with Western facilities
- Access some reservoirs for inspection, and chemical dosing
- Access exterior lighting at Western facilities

BUDGET SNAPSHOT

FUND DESCRIPTION

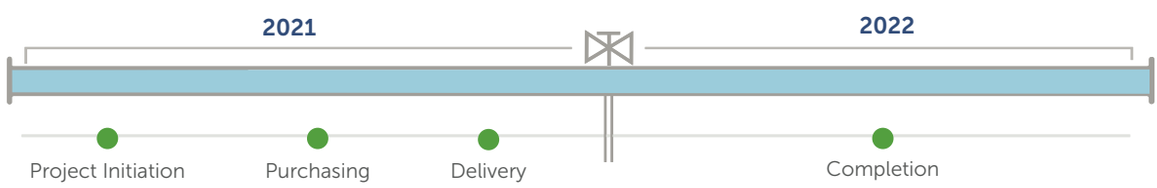
Riverside Potable Water System Improvement

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
	$175,000			

PROJECT PHASES & TIMELINE

STATUS

Future Project
as of May 2020



PROJECT NAME

WWRF Cleaning Room

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Engineering	6035-2223-E	B1.9

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Superior Service

Western's wastewater Source Control Program is a pollution control program federally mandated under the Clean Water Act to regulate the discharges of industrial and commercial facilities to the sanitary sewer system. Source Control Program staff collect water samples from regulated facilities and sample them for pollutants that could affect the operation of Western's wastewater treatment plants.

The preparation and storage area is located at the Western Water Recycling Facility, which is a wastewater treatment plant situated on a largely unpaved property. As such, there is potential for the source control sampling equipment to be compromised with contaminants such as coliform or dust. Adding a room inside the existing Maintenance building and filtering the air through an air conditioner will prevent cross-contamination of the equipment.

Staff will use the cleaning/storage room to set up sampling equipment, to store equipment and materials, prepare for sampling, and clean equipment after use. The detection limit for the analyzed parameters are extremely low, therefore measures are needed to prevent materials, such as dirt, which could contain coliforms or metals, from contaminating the sampling equipment and materials.

BUDGET SNAPSHOT

FUND DESCRIPTION

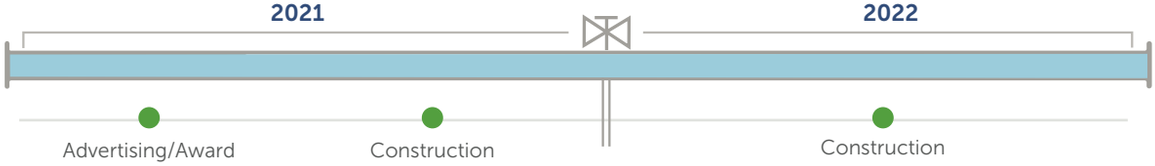
WWRF Treatment System Improvement

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
	$120,000			

STATUS

Future Project
not yet started

PROJECT PHASES & TIMELINE



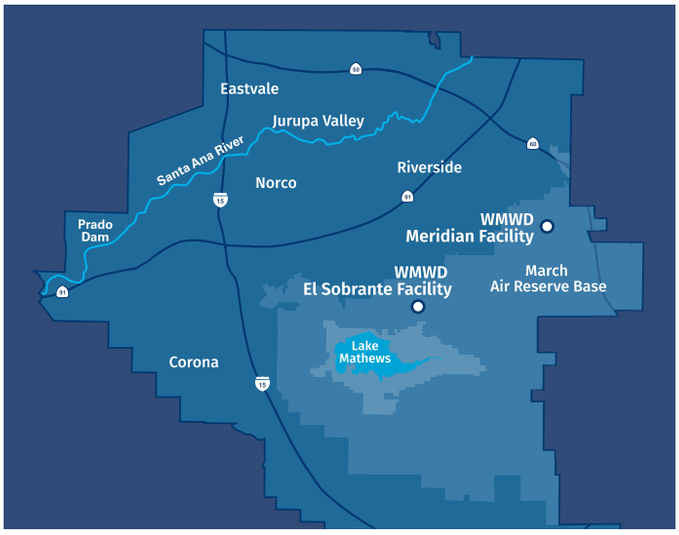
PROJECT NAME

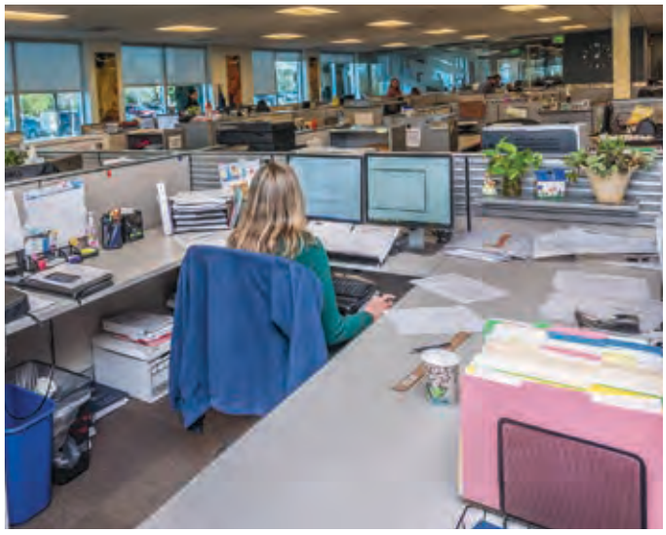
ERP Improvements

LEAD DEPARTMENT	PROJECT #	FY20/21 RANK
Information Technology	3005-2122-I	D2.3

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Superior Service





Western implemented the Lawson Enterprise Resources Planning (ERP) system in 2010. The Lawson software version currently in use was released in 2011 and is nearing the end of its useful life as well as the end of being supported by Lawson. It is also lacking many capabilities of a modern ERP system. An ERP Advisory and Planning Group has been formed to determine whether it's best for Western to upgrade to a newer onsite version of Lawson, migrate the system to cloud services, or replace the system with new technology. Regardless of the determination, this capital project will involve multiple departments to address technology and process improvements, and improved efficiency and system utilization. The project will focus on aligning Western's systems and processes with industry standards and technology best practices.

BUDGET SNAPSHOT

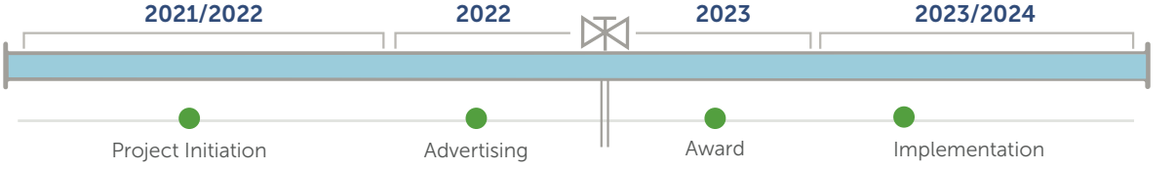
FUND DESCRIPTION
Information Technology Project

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
	$750,000	$1,750,000	$1,000,000	

STATUS

Future Project
as of May 2020

PROJECT PHASES & TIMELINE



PROJECT NAME

Machine Shop Equipment Assessment and Development

LEAD DEPARTMENT

Operations

PROJECT #

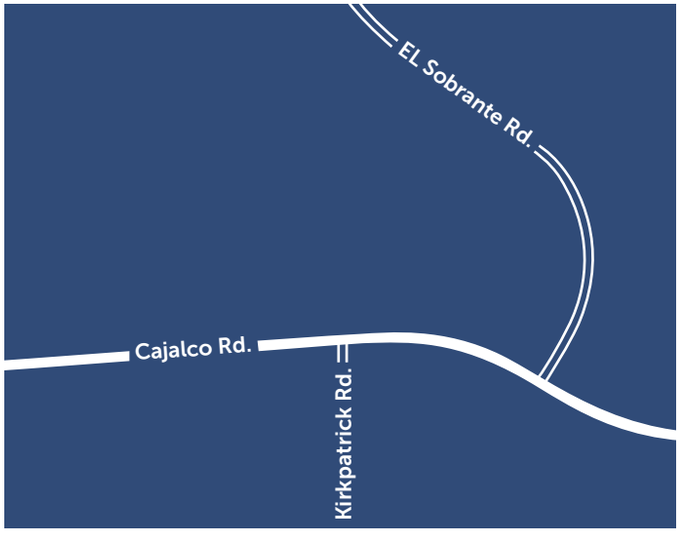
8038-1920-O

FY 20/21 RANK

C1.9

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Elite Workforce



This project is to re-purpose existing building space to house a machine shop and to procure the necessary associated equipment. The project will include the acquisition of various equipment such as the following: vertical mill, auto-feed band saw, lathes, cold saw, mandrel bender, hydraulic press, punch press, air shear, hydraulic brake, shaft straightener, and any additional tooling. Minor renovations may also be required for the building to support the proposed equipment footprint and overall shop layout. This includes any electrical upgrades required to power the machines. The goal of this effort is to leverage our in-house talent to expand internal repair and replacement of manufactured parts and custom parts fabrication capabilities. Although this facility will be used for many different repair and replacement projects, one primary objective of the proposed machine shop is the capacity to rebuild pumps. Overall, this effort will improve equipment repair quality assurance and quality control, decrease overall equipment downtime, as well as reduce urgent response recovery time.

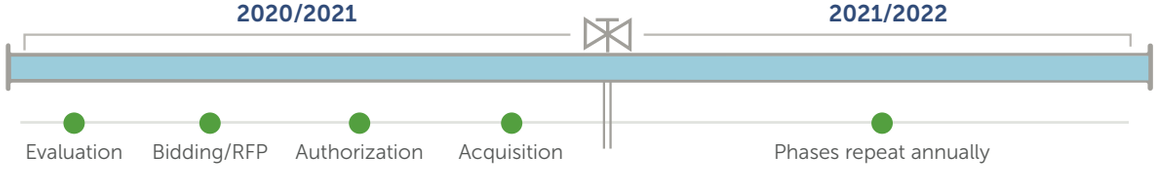
BUDGET SNAPSHOT

FUND DESCRIPTION	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Operations Equipment Acquisition	$50,000	$50,000			

STATUS

Future Project
not yet started

PROJECT PHASES & TIMELINE



PROJECT NAME

District Facilities Audio/ Visual Upgrade

LEAD DEPARTMENT

Information Technology

PROJECT #

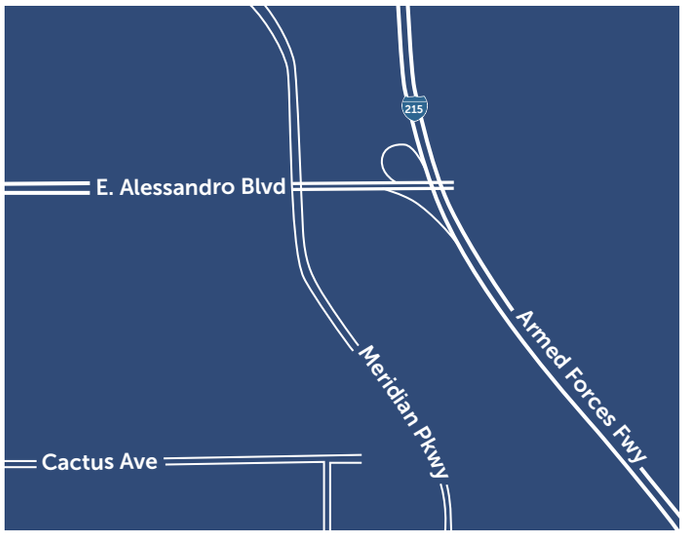
3007-2122-I

FY 20/21 RANK

C1.6

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Superior Service



The current Audio Visual systems in Western's Board Room and conference rooms is approaching ten years old, and some of the associated technology is older based on being somewhat dated when installed. Supporting and maintaining these systems is becoming unfeasible as replacement equipment, spare parts, and qualified and knowledgeable vendors are less available. Upgrading the A/V capabilities is important to maintain functionality and mitigate against the likelihood of a failure of the systems that would impact Western's business.

This project is to complete an upgrade of the A/V systems in Western's Board room and conference rooms with dedicated A/V equipment. It will include replacing outdated and end of life equipment and upgrading capabilities to utilize current technologies. Adding capabilities for future needs will also be considered. In fiscal year 2024/25 funding has been added to update Western's Board Meeting streaming capabilities.

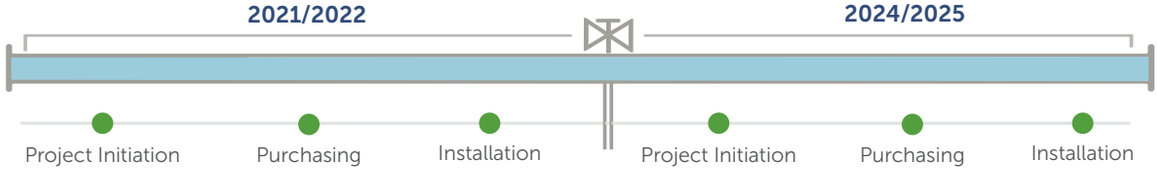
BUDGET SNAPSHOT

FUND DESCRIPTION	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
HQ Facility Improvement		$300,000			$75,000

STATUS

Future Project
as of May 2020

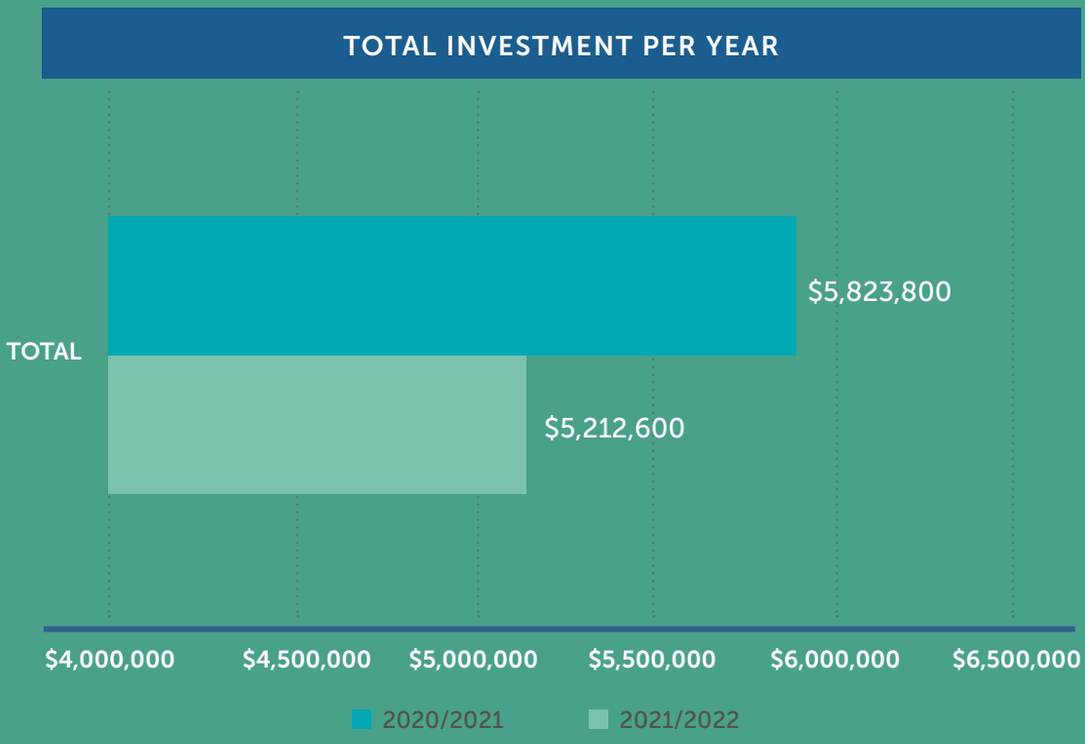
PROJECT PHASES & TIMELINE

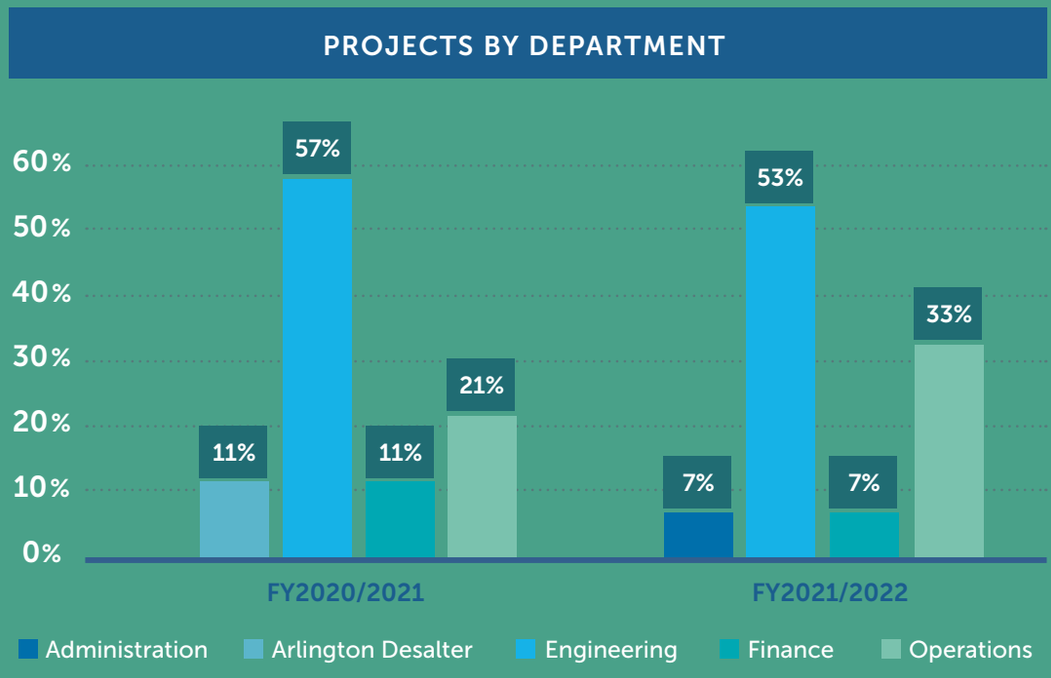


La Sierra Line Flushing

System Improvements and Maintenance

- Enhancing an existing structure or business process that is within its useful life.





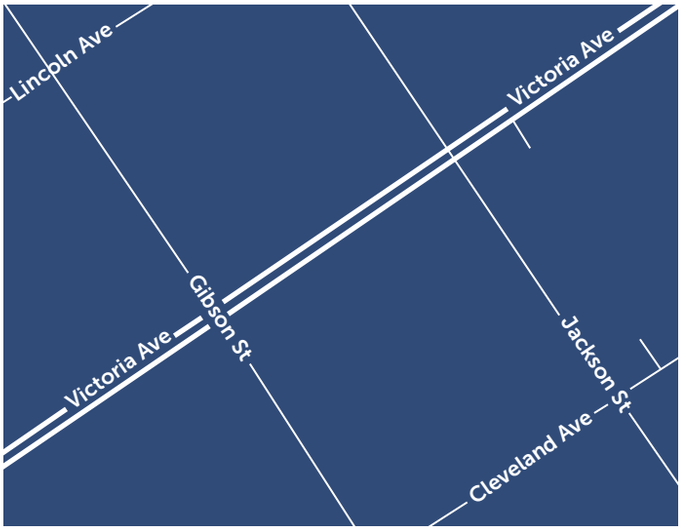
PROJECT NAME

Victoria Basin Landscaping

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Engineering	6033-2021-E	A

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



The Victoria Recharge Facility as originally envisioned, included landscaping elements both inside the walled perimeter of the site, and outside along the public street frontages of both Victoria Avenue and Jackson Street. However, during construction, the Valencia Orange trees originally planned to be inside were relocated to the street frontage areas outside to strengthen visual screening along both frontages. Areas inside were left natural. The current construction at the Victoria Recharge Facility will further contribute to visual screening by adding two new rows of medium height, highly ornamental shrubs inside the perimeter wall for the full length of the site along Victoria Avenue. Additionally, the project is placing a modern erosion protection material in the landscaped areas that will eliminate unsightly slope erosion and curtail weed growth while allowing natural infiltration of rainwater. This will reduce Western's maintenance costs of the site. The current work also includes full coverage, low-water consumption, drip irrigation for the new landscape elements, and safety improvements to the perimeter fencing found necessary following completion of the original basin facilities. When completed and grown to near maturity, the visual screening along Victoria Avenue will be a natural addition to the community.

BUDGET SNAPSHOT

FUND DESCRIPTION

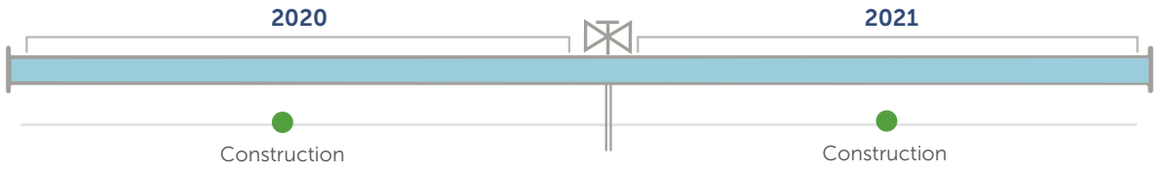
Arlington Desalter System Improvement

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
$190,000				

STATUS

15% Complete
as of May 2020

PROJECT PHASES & TIMELINE



PROJECT NAME

MGL – WR-24 & WR-24DT Service Connection Modifications

LEAD DEPARTMENT

Finance

PROJECT #

2003-2021-F

FY 20/21 RANK

A0

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management

Western's modeling of current and future water demand and supply needs has resulted in two requests to the Metropolitan Water District of Southern California (MWD). MWD is the major provider of imported water to Western and operates water "turnouts" located at their Henry J. Mills Filtration plant near Western's headquarters in Riverside. These turnouts are called WR-24D and WR-24DT and both are metered in order to measure water deliveries to Western for billing purposes.

Specifically, Western is requesting to adjust the range of the existing WR-24D meter from 12-120 cubic feet per second (cfs) to 8-80 cfs in order to more accurately measure lower flows resulting from a reduced dependency on imported water over time by Western's retail and wholesale customers. Second, Western is requesting the conversion of WR-24DT (a temporary bypass meter) into a permanent billable service connection with a range of 0.8 to 8 cfs. This comparatively low measurement range will allow for period of time in which demand is at its lowest, such as during winter months. Both of these modifications will allow for more accurate billing of water deliveries, benefiting Western's retail and wholesale customers.

BUDGET SNAPSHOT

FUND DESCRIPTION

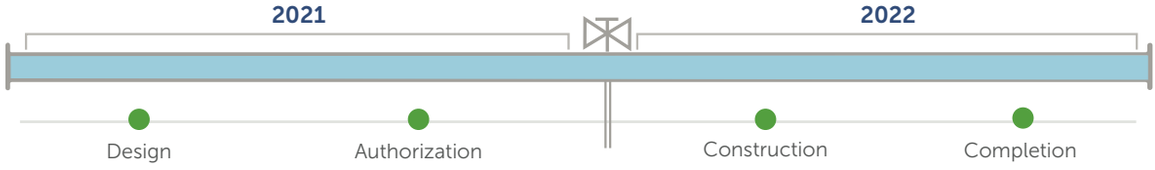
MGL Major Maintenance

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
$906,000				

STATUS

Future Project
not yet started

PROJECT PHASES & TIMELINE



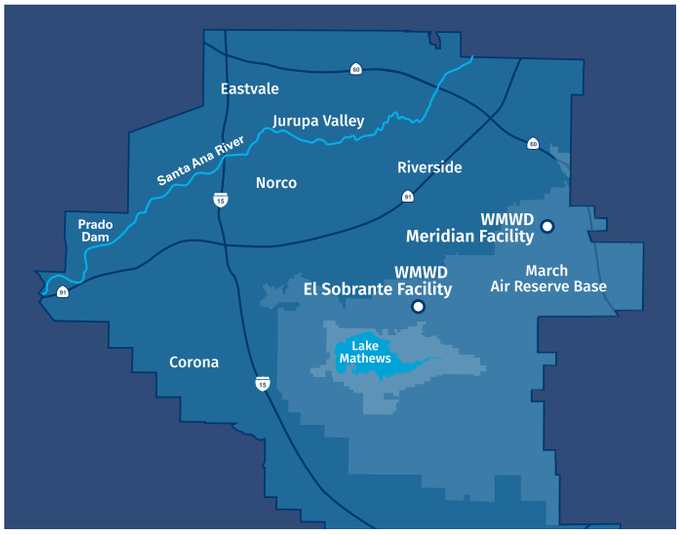
PROJECT NAME

Chlorine Analyzers at Reservoirs

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Operations	8002-1920-O	A2.6

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



Western currently sells approximately 85,000 acre-feet of water annually. One-quarter of that water serves approximately 25,000 residential and business customers in Riverside, Orangecrest, Mission Grove, El Sobrante, Eagle Valley, Woodcrest, Lake Mathews, portions of Mead Valley and Perris, March Air Reserve Base, Murrieta and Rainbow. The remaining three-quarters are sold to wholesale agencies. Western operates and maintains 31 potable reservoirs throughout the service areas. The reservoirs are currently cycled (partially emptied and then refilled) on a daily or semi-weekly basis in order to provide sufficient flow, pressure, and storage within the system. This cycling ensures high water quality and avoids formation of disinfection byproducts. Western seeks to install chlorine analyzers ateach reservoir providing operators constant monitoring water quality trends and reservoir residuals throughout the potable water system. These analyzers will assist staff in determining if any action is needed to correct potential issues and will improve overall water quality and operations efficiency. In addition, as new source water supplies come on-line in 2020, the new water quality analyzers will allow production operators to select the optimum water for use, while balancing water quality and cost efficiency.

BUDGET SNAPSHOT

FUND DESCRIPTION

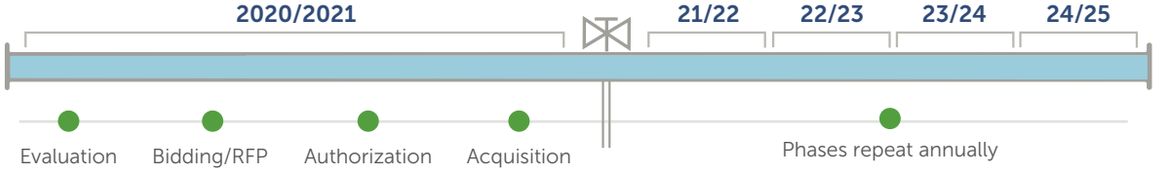
Riverside Potable Water System Improvement

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
$50,000	$30,000	$30,000	$30,000	$30,000

STATUS

25% Complete
as of May 2020

PROJECT PHASES & TIMELINE



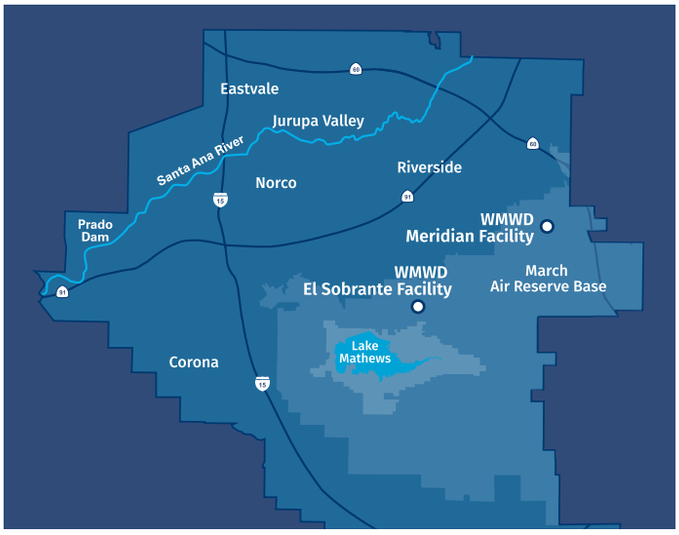
PROJECT NAME

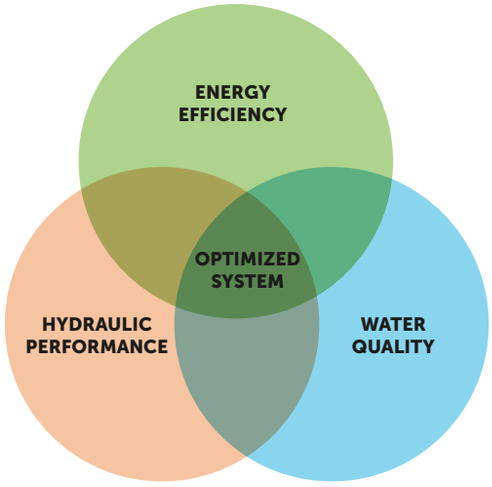
Water Systems Operations Plan Implementation

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Operations	8009-1819-O	A2.5

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management





Western recently completed Phase 1 of a water system evaluation and optimization plan to improve efficiency and reduce O&M costs. Western desires to now continue its efforts to align water quality, hydraulic performance, and energy efficiency. Staff seek to hire consultant(s) to further assist in the development and implementation of an operational plan for the potable water production and distribution system. Phase 2 of the optimization study will develop an integrated operations plan and efficiency analysis. The benefits of this plan will focus on reducing electrical consumption and water loss. Phase 3 will include implementation of final recommendations to achieve optimization of the water system. These recommendations will include identifying District-Metered Areas (DMAs) and install new water meters in selected locations to help us monitor and determine water loss. Improved pressure regulation through the use of reducing valves (PRVs) can also improve efficiency. The goal of this project is to achieve improved operating efficiency in a relatively short period with minimum capital investment. This project is consistent with Western's mission to supply water "in a safe, reliable, environmentally sensitive, and fiscally responsible manner." The aforementioned phases build on the initial efforts from Phase I and provide more in-depth modeling and guidance for implementation.

BUDGET SNAPSHOT

FUND DESCRIPTION

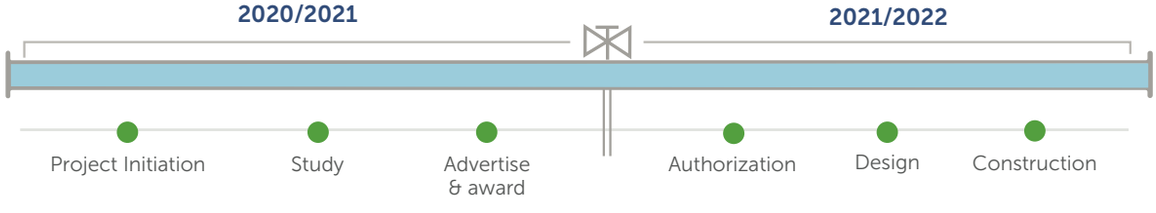
Riverside Potable Water System Improvement

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
$150,000				

STATUS

50% Complete
as of May 2020

PROJECT PHASES & TIMELINE



PROJECT NAME

Murrieta Inverted Siphon Max Capacity

LEAD DEPARTMENT

Engineering

PROJECT #

6021-1920-E

FY 20/21 RANK

A2.4

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management

The existing inverted siphon on Lemon Street is currently inadequate to handle required flows within Western's Murrieta Division. This siphon is not shown on WMWD GIS maps. It was only discovered following an Sanitary Sewer Overflow (SSO) event, which caused property damage to a school. Since the time of the SSO event, the siphon has been added to the Collections team maintenance schedule and is maintained on a quarterly basis.

The Lemon Street inverted siphon is currently of concern to operations staff due to observed surcharging. Additional development has occurred upstream of the siphon adding more burden on this section of pipe which will increase the loading on the siphon. The objective is to upgrade the Lemon Street 8-inch diameter, single barrel inverted sewer siphon to a larger diameter or add an additional parallel line of equal size in a "double barrel" configuration. This system improvement is necessary to improve collection system reliability and avoid increased risk of an SSO.

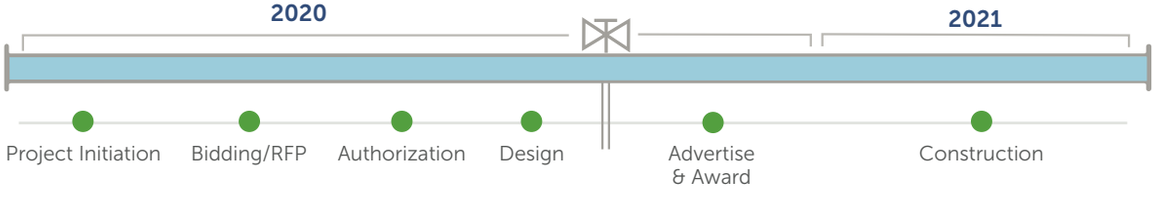
BUDGET SNAPSHOT

FUND DESCRIPTION	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Murrieta Wastewater System Improvement	$500,000				

STATUS

10% Complete
as of May 2020

PROJECT PHASES & TIMELINE



PROJECT NAME

MGL - Relocation within streambed due to Erosion

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Engineering	6032-2021-E	A2.2

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Superior Service

A portion of the Mills Gravity Line (MGL) transmission main (60-inch diameter), located in an existing streambed was exposed due to severe erosion of the surrounding slopes adjacent to the pipeline and streambed. The recent heavy rains have further exasperated the erosion issue and exposure of the pipeline. Immediate stabilization to the pipeline and surrounding area, an interim repair, is required in order to prevent further undermining of the pipeline and arrest the erosion to avoid rupture to the MGL.

An interim repair was designed and incorporated to help protect and stabilize the MGL from further erosion and avoid a rupture to the pipeline and protect the pipeline and to ensure water delivery services to the public. This interim repair included the installation of gabions and rock. The interim repair will be monitored over the next year and then evaluated if additional work needs to be done to the MGL to relocate it, or if the interim repair is the ultimate solution.

BUDGET SNAPSHOT

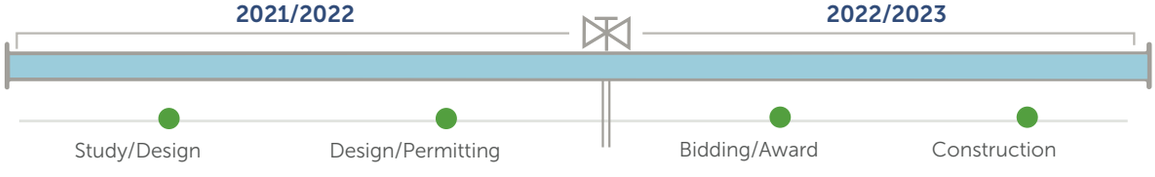
FUND DESCRIPTION
MGL Major Maintenance

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
	$200,000	$1,300,000		

STATUS

Future Project
not yet started

PROJECT PHASES & TIMELINE



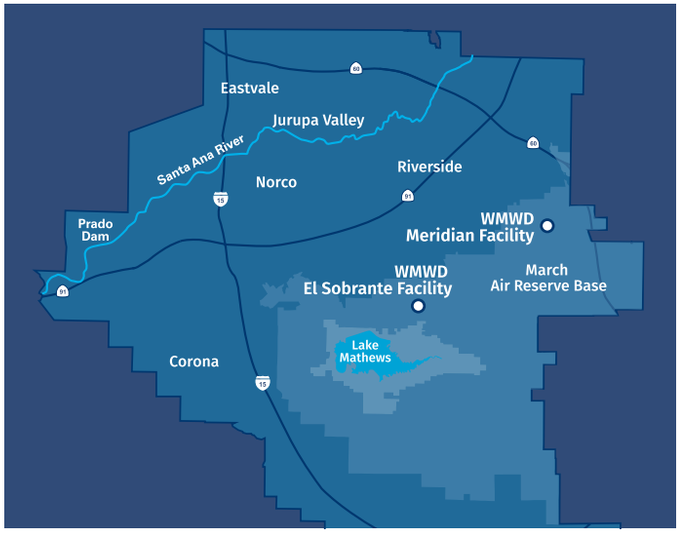
PROJECT NAME

Sampling Station Upgrade

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Operations	8026-2021-O	A2.1

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



Western is committed to providing a high quality, safe and reliable water supply to its customers. Routine water analysis samples are collected throughout Western to ensure its water measures up to state, federal, and local purity standards. Routine water analysis samples are collected once per week using a routine system. Sample sites are identified by an assigned number that is used by Western and laboratory for identification purposes. The sampling procedure is the same for all routine sample stations. A chain of custody is completed on all samples taken. The sample notification for positive resampling is stated in Title 22, California Code of Regulations. Outdated sample cans may cause false positive readings for water quality samples. Upgrading the older cans with newer cans will provide more coverage from the elements that could result in false positive samples. This project would replace sample cans at all testing stations each year until all cans have been updated.

FUND DESCRIPTION

Riverside Potable Water System Improvement

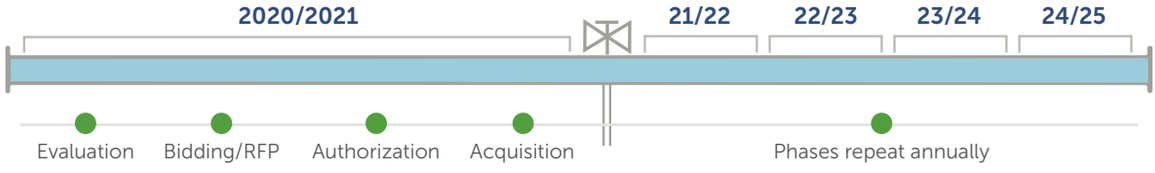
BUDGET SNAPSHOT

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
$20,000	$20,000	$20,000	$20,000	$20,000

STATUS

Future Project
not yet started

PROJECT PHASES & TIMELINE



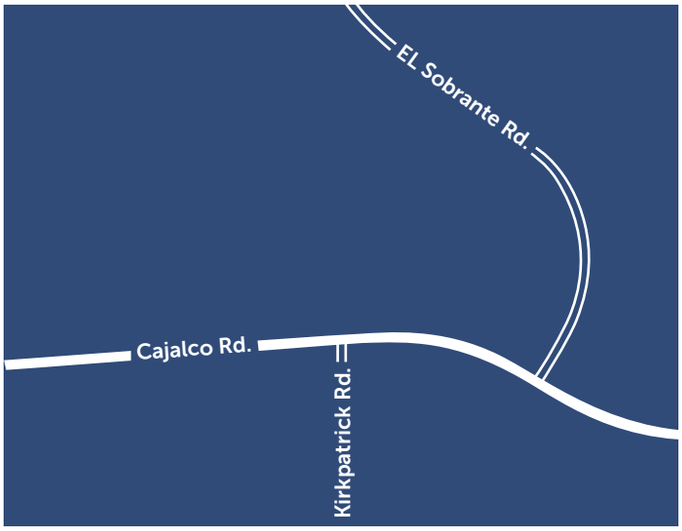
PROJECT NAME

Operations Control Room

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Operations	8039-2021-O	A1.8

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Elite Workforce



The purpose of the control space is for system operations staff to perform monitoring and control of Western's water systems. Current Western system operations staff are divided among two separate rooms located in the Operations Building. The goal is to create a more collaborative environment to improve efficiency and optimize operator performance. A new centralized area is proposed to house the new control space.

The control space layout shall be designed with operator priority. Western operations staff determined that the control spaces must house two senior operator workstations, three operator workstations, six operations staff desks. The control space is divided into two control zones using the existing wall and connected by a new secure door. Control Zone 1 is here on referred to as the Operator Workstation Room, and Control Zone 2 is referred to as the Operations Staff Room.

BUDGET SNAPSHOT

FUND DESCRIPTION

Ops Facility Improvement

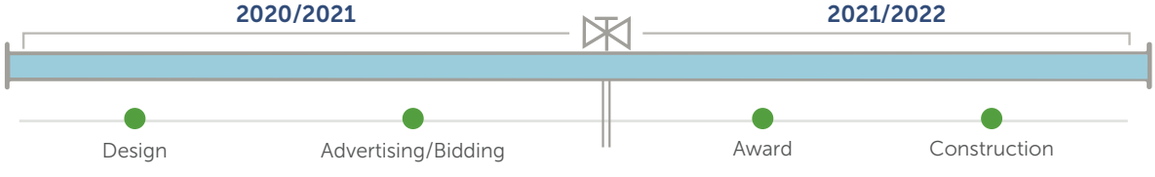
FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
$100,000	$100, 000			

STATUS

Future Project

not yet started

PROJECT PHASES & TIMELINE



PROJECT NAME

SAWPA Parking Lot

LEAD DEPARTMENT

Engineering

PROJECT #

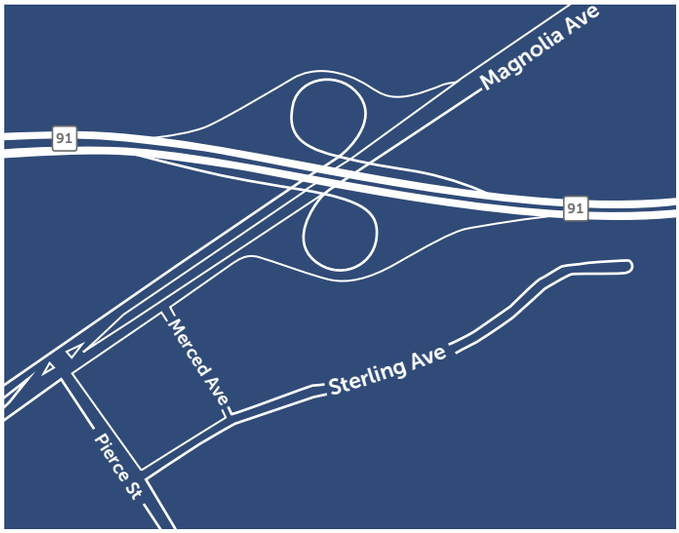
6034-2021-E

FY 20/21 RANK

A1.8

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Superior Service



The project includes improving SAWPA Parking Lot, installing a conduit between Sterling Pump Station and the ADS, installing three parking slots and American Disable Act (ADA) access ramps. A portion of the La Sierra Pipeline project was installed through the SAWPA parking lot and Western's contractor was required to grind and overlay the parking lot. The parking lot restoration project was modified to include the addition of three parking stalls. SAWPA will be responsible for 100 percent of costs related to the relocation of ADA compliant parking stalls, the improvement associated with adding three parking stalls, and installation of ADA compliant signs, striping and various improvements consistent with ADA requirements. The asphalt resurfacing will be shared by Western and SAWPA at a 67.3 percent and 32.7 percent proportion, respectively. This cost allocation was based on direct impacts to the parking lot as a result of Western's project and SAWPA's request for additional improvements.

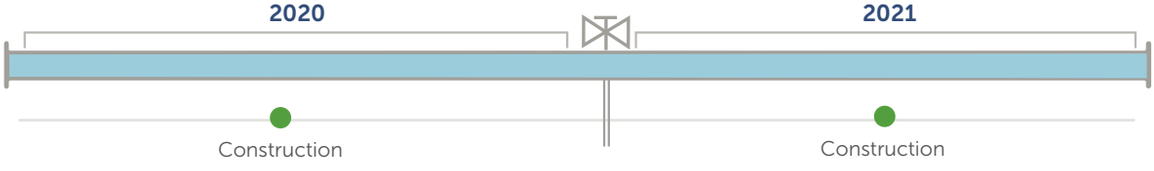
BUDGET SNAPSHOT

FUND DESCRIPTION	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
La Sierra Pipeline/Sterling Pump Station System Improvement	$120,000				

STATUS

15% Complete
as of May 2020

PROJECT PHASES & TIMELINE



PROJECT NAME

WWRF Solids Handling

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Engineering	6013-1819-E	A1.7

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management

As Western Water Recycling Facility (WWRF) flows increase to the plant, the solids-handling capacity will be exceeded during wet weather. This is because the drying beds are exposed and rely on direct sun for drying. This project will consider options to address wet-weather solids handling including the option to construct an enclosed solar drying facility similar to that installed at Western Riverside County Recycled Water Authority (WRCRWA).

The increase in flow will force this issue to be addressed soon. This project will increase sewer treatment capacity reliability by enhancing the wet weather solids handling capacity at WWRF.

BUDGET SNAPSHOT

FUND DESCRIPTION

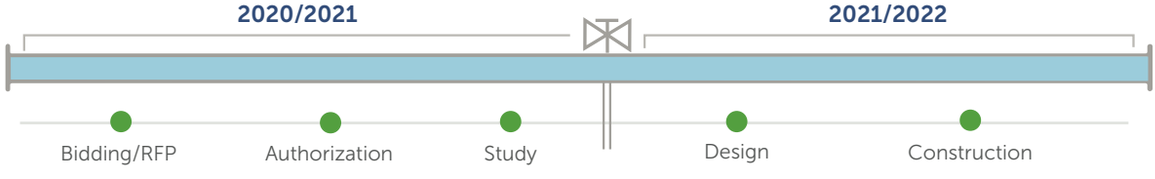
WWRF Treatment System Improvement

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
$50,000	$250,000			

STATUS

5% Complete
as of May 2020

PROJECT PHASES & TIMELINE



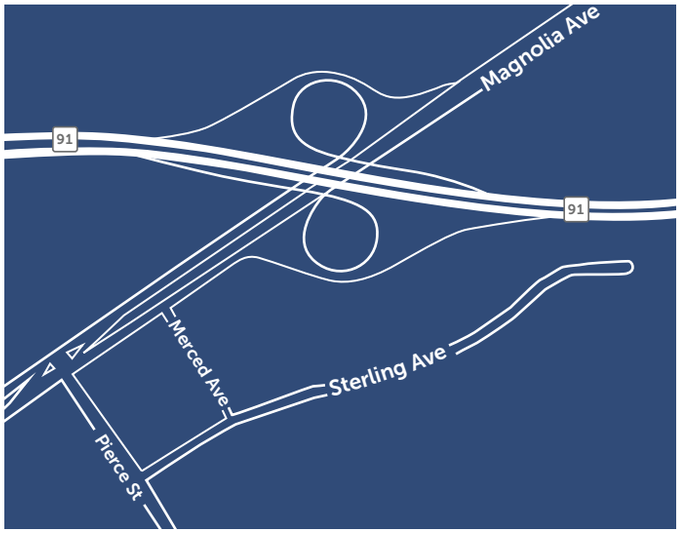
PROJECT NAME

ADS Clean-in-Place Pump Replacement

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Operations	8020-1920-S	B2.5

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



The ADS was built more than 20 years ago and provides the region with billions of gallons of drinking water annually. Currently serving the people in the city of Norco and portions of Riverside. Desalted water is a local, secure water supply, reducing our reliance on water from far-off sources, like the Colorado River or northern California. Water is treated through a process called reverse osmosis (RO), which takes out salt and other matter, to create clean, local drinking water. The

Clean-In-Place Pump is a pressurized pump needed to properly clean the reverse osmosis membranes of the ADS water treatment plant. The existing Clean-In-Place pump needs to be replaced due to decline in pressure. As the Clean-In-Place pump declines and becomes less efficient, it will shorten the life span of the reverse osmosis membranes. Staff intends to replace the Clean-In-Place pump during a regularly scheduled shut-down and in conjunction with the reverse osmosis membrane replacement.

BUDGET SNAPSHOT

FUND DESCRIPTION

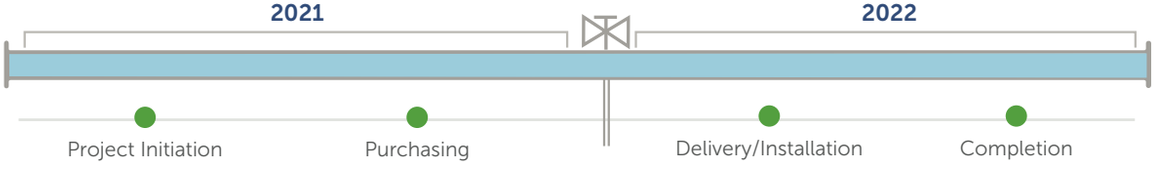
Arlington Desalter Asset Replacement

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
$50,000				

STATUS

Future Project
not yet started

PROJECT PHASES & TIMELINE



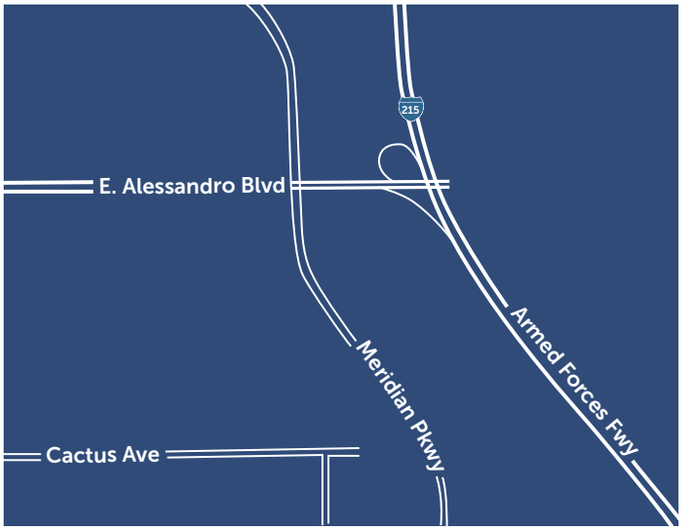
PROJECT NAME

Meridian Landscape Signage

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Administration	1010-2122-AD	B2.3

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Superior Service



The project to update the landscaping at Western Headquarters with more water-wise solutions has been completed. The second project phase will be to develop new signage and information to promote water efficiency and native landscaping. Installing these signs will provide an educational opportunity for Western customers to learn more about the types of plants best suited for southern California climates. This will include exterior signage in the landscaping itself, as well as refreshing select portions of the interior public spaces inside the building, such as the lobby. This project includes developing the overall messaging strategy, design of the physical portions, manufacture, and installation.

FUND DESCRIPTION

HQ Asset Replacement

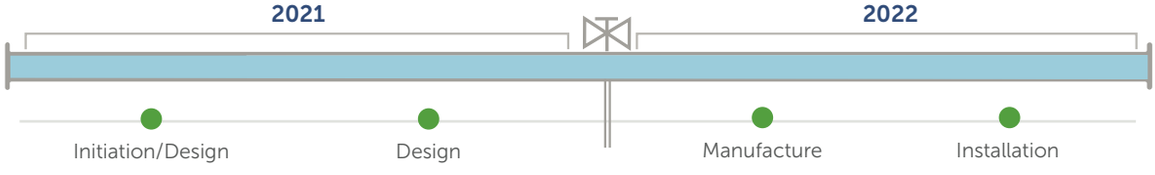
BUDGET SNAPSHOT

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
	$75,000			

STATUS

Future Project
not yet started

PROJECT PHASES & TIMELINE



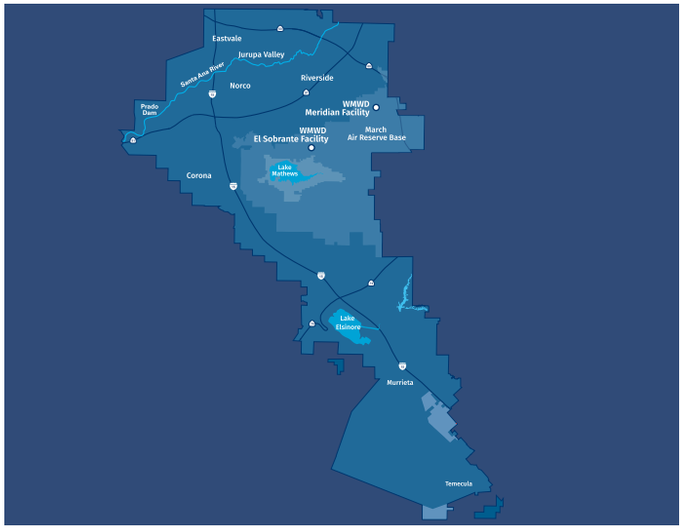
PROJECT NAME

Meter Replacement and Retrofit Project (Phase II)

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Finance	2002-2021-F	B2.1

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Superior Service



Water meters can slow down over time resulting in under-billed water deliveries to customers. Failure to provide accurate water delivery information inhibits customers from understanding their true water use and making efficiency-motivated adjustments, if appropriate. To date this project has replaced or retrofitted approximately 14,000 of Western's 25,000 water meters with Advanced Metering Infrastructure (AMI) "smart meters" (Phase 1). These meters collect and transmit meter reads and other alerts daily to data collection antennas. The continuance of this project (Phase 2) will consist of the following three efforts.

(1) Replace about 7,000 more meters in Western's Riverside Service Area. The completed Phase 1 and upcoming Phase 2 will essentially result in the replacement of most residential and commercial meters in this service area.

(2) Install five antennas in Western's Murrieta Service Area that will allow the collection of radio reads from all of the existing meters in that area (about 2,600).

(3) Implement an online "customer portal" which will integrate, analyze, and present data from the smart meters to customers in near-real time. The customer portal will empower customers with tools to monitor usage in order to stay within their water budget, identify leaks, sign up for alert notifications, and enhance their efficient use of water.

This $3.7 million project was awarded a $1 million WaterSMART Water and Energy Efficiency Grant from the U.S. Bureau of Reclamation.

FUND DESCRIPTION

Riverside Potable Water System Improvement

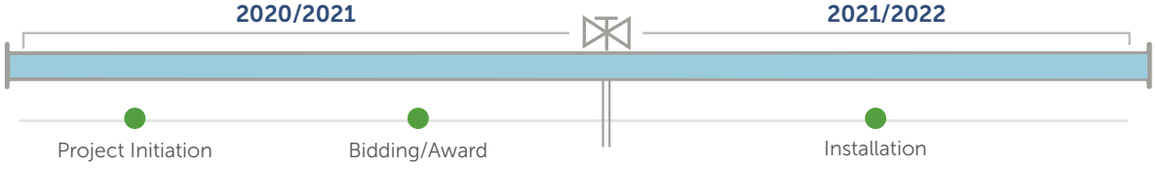
BUDGET SNAPSHOT

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
$1,840,000	$1,840,000			

STATUS

Future Project
not yet started

PROJECT PHASES & TIMELINE



PROJECT NAME

Flow Based Pump Station at Lockwood

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Engineering	6030-2021-E	B2

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management

Areas of potential low system pressure and locations that might not be able to achieve adequate fire flow within Western's existing velocity and pressure requirements have been identified in the vicinity of the Lockwood Tank in Western's 1650 pressure zone. In order to mitigate potential low system pressures at existing services a new hydropneumatic booster station associated pipeline is to be constructed. Homes built near Lockwood Tank are at approximately the same elevation as the bottom of the tank which results in service pressures less than 20 psi to the existing meters with the tank full.

The improvements consist of a 2,000-gallon hydropneumatic tank, two pumps rated for approximately 200 gpm, one high flow pump to provide fire protection of approximately 1,000 gpm, and approximately 8,900 LF of pipeline to connect to existing residential meters and existing fire. The new hydraulic grade line provided by these improvements would be approximately 1755'.

BUDGET SNAPSHOT

FUND DESCRIPTION

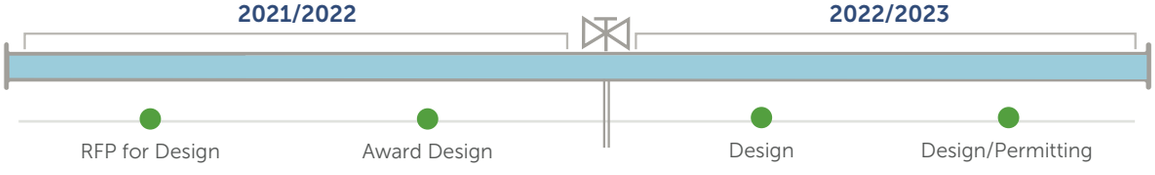
Riverside Potable Water System Improvement

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
	$100,000	$600,000		

PROJECT PHASES & TIMELINE

STATUS

Future Project
not yet started



PROJECT NAME

Riverside Reservoir Management System

LEAD DEPARTMENT

Engineering

PROJECT #

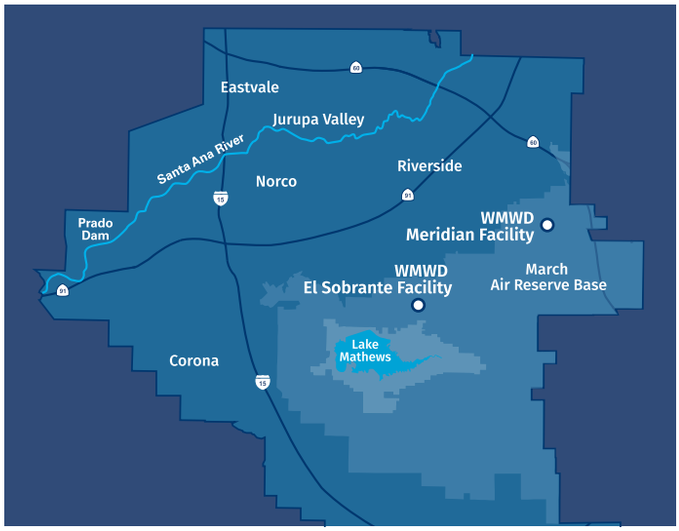
6007-1819-E

FY 20/21 RANK

B2

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



Installation of a Reservoir Management System (RMS) will decrease the amount of flushing necessary to maintain water quality. Overall system water quality will improve and public health protection will be increased. Improved chlorine residuals will improve downstream water quality at other locations and have a positive impact throughout our system.

The RMS system will provide for tank dosing, nitrification elimination, and promote emergency preparedness with higher reservoir water levels, increased water conservation with less flushing, and consistent water quality. Engineering will review, design, and select a vendor for the RMS system including, but not limited to, tank mixer selection, mixer installation, and chemical feed system tie-in to SCADA systems. Sites to be considered to receive RMS in priority order will be La Sierra, Orangecrest, and Markham. Future sites may also be considered.

BUDGET SNAPSHOT

FUND DESCRIPTION

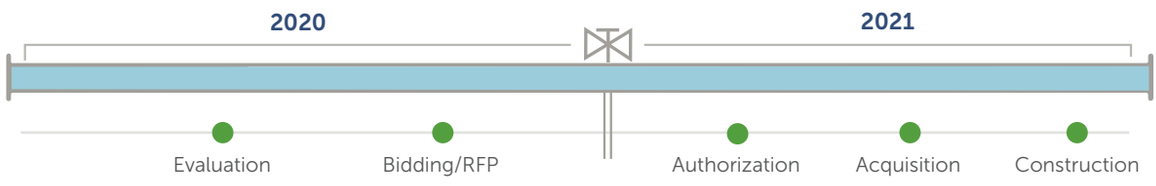
Riverside Potable Water System Improvement

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
$600,000				

PROJECT PHASES & TIMELINE

STATUS

5% Complete
as of May 2020



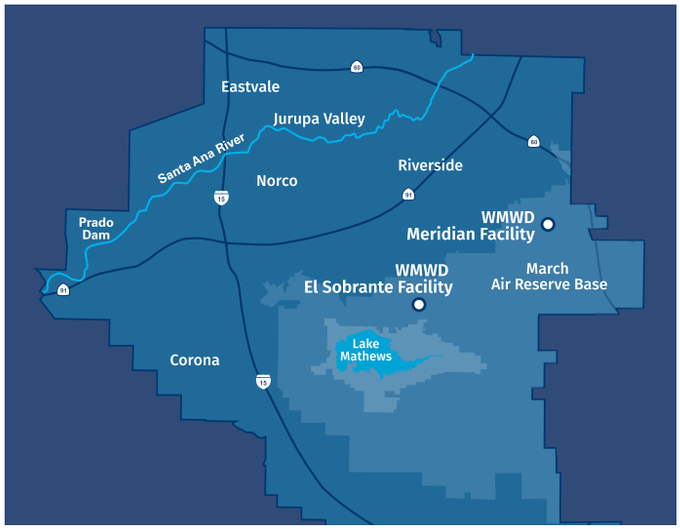
PROJECT NAME

Non-Potable – Recycled Tank Refurbishment Program

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Engineering	6011-1819-E	B1.9

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



The recycled water system tanks require regular maintenance to ensure that the coating and corrosion control system is working properly. If the tanks are not maintained, corrosion can cause permanent damage and greatly reduce the service life of the tanks. Tanks should be emptied for inspection and repaired at least every five years.

Staff recommend that at least two tanks be taken out of service per year to meet the goal of dry inspection every five years. At the time of inspection, repairs to appurtenances and the coating should be expected. Every ten years, on average, the tanks will require a complete re-coat and the cost will depend on the size of the tank and degree of damage. Western's Riverside retail service area has five active tanks.

BUDGET SNAPSHOT

FUND DESCRIPTION

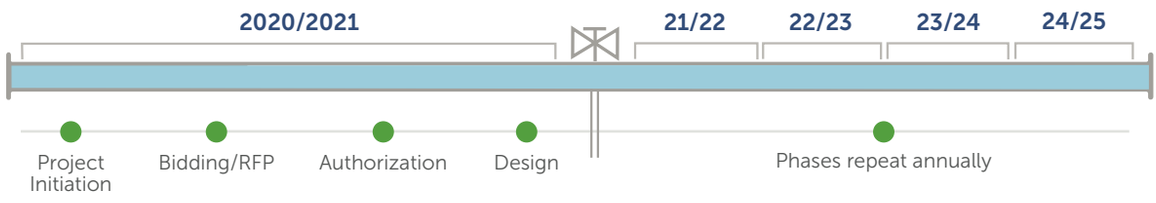
Riverside Non-Potable Water Asset Replacement

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
$75,000	$100,000	$700,000	$250,000	$700,000

STATUS

25% Complete
as of May 2020

PROJECT PHASES & TIMELINE



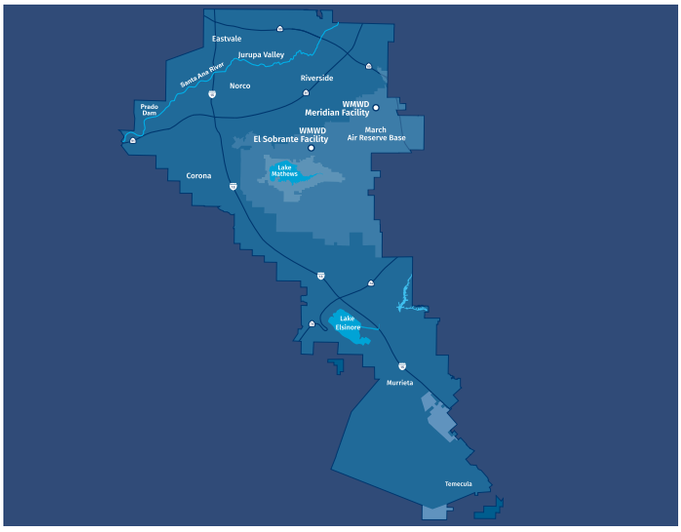
PROJECT NAME

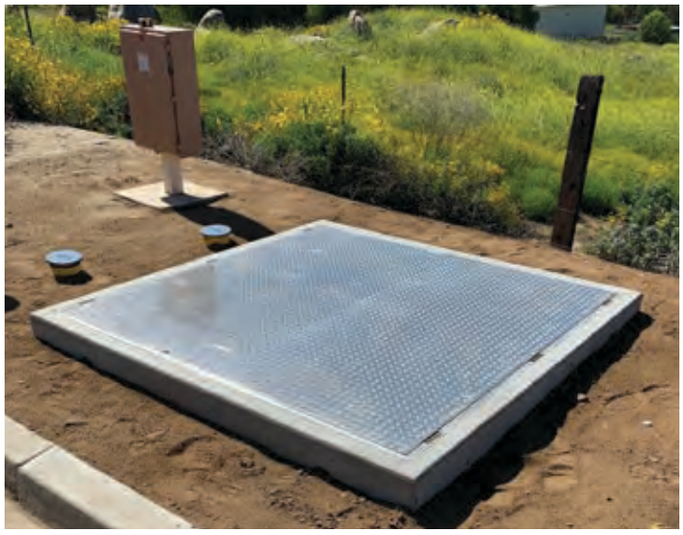
PRVs for PZ1515 to Achieve Compliance

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Engineering	6029-2021-E	B1.9

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management





Areas of potential low system pressure and locations that might not be able to achieve adequate fire flow within Western's existing velocity and pressure requirements have been identified in Western's 1650 pressure zone. One of the most critical system deficiencies are those which result in service pressures less than 20 psi in Western's system, because this would violate California Regulations Related to Drinking Water (Drinking Water Regulations).

Homes built near Lockwood Tank are at approximately the same elevation as the bottom of the tank which results in service pressures less than 20 psi to the existing meters with the tank full. This is a critical area within Western's system with less than 20 psi at the connection point to the mainline.

In order to alleviate the low pressure in El Sobrante Road and provide partial redundancy in supply sources to the 1515W PZ. It is recommended to construct two PRV stations where the normally closed valves (NCVs) are located between the 1547± PZ and 1515W PZ. Each PRV station would consist of 2" primary and 4" secondary PRVs.

BUDGET SNAPSHOT

FUND DESCRIPTION

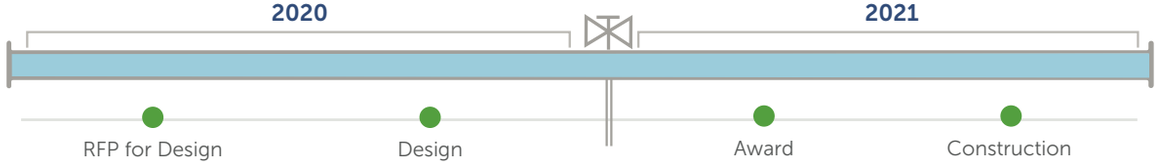
Riverside Potable Water System Improvement

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
$200,000				

STATUS

Future Project
not yet started

PROJECT PHASES & TIMELINE



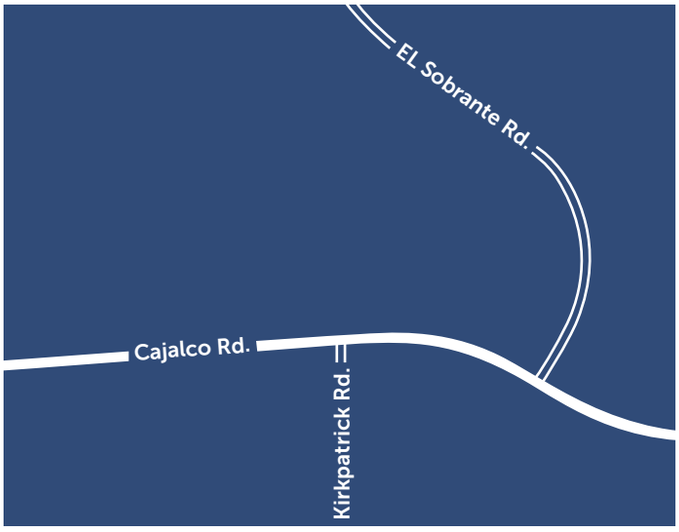
PROJECT NAME

Solar Site Erosion Damage Repair

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Engineering	6022-1920-E	B1.9

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → System Improvement



Repair erosion damage from runoff of solar panel site at Operations near Metropolitan Water District channel. Initial assessment by a design consultant consisted of a review of surficial field conditions, documents, and site history. Recommendations consist of a combination of site stabilization and flow reduction improvements that will require further geotechnical investigation and engineering design. This project will be to hire an engineer to design the required improvements to stabilize the area and minimize future erosion. An engineering consultant was hired during Fiscal Year 2018/2019 to perform research and provide a preliminary report to Western regarding potential causes and solutions to the erosion. The next step is to hire a consultant to prepare construction documents for the required improvements.

BUDGET SNAPSHOT

FUND DESCRIPTION

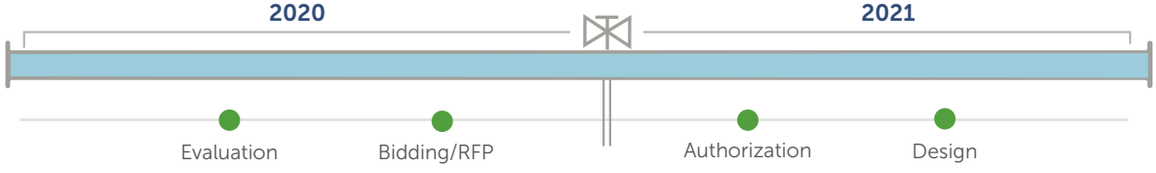
Operations Facility Improvement Project

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
$80,000				

STATUS

Future Project
not yet started

PROJECT PHASES & TIMELINE



PROJECT NAME

Reservoir Management – Murrieta

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Engineering	6012-1819-E	B1.8

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management

This project will place an active reservoir water quality management system in key reservoirs in the system. Such a system allows reservoirs to be kept full rather than to be purposefully cycled one-half (or more) full to maintain water quality.

Currently, tanks are drawn down periodically to ensure water quality. This requirement is in tension with the requirement to keep reserve storage in the tanks to meet maximum day demands and fire flow volume. This also limits when operations can run pumps in response to changes in energy costs. This project will ensure high quality water in the system, increase available storage, and reduce energy costs.

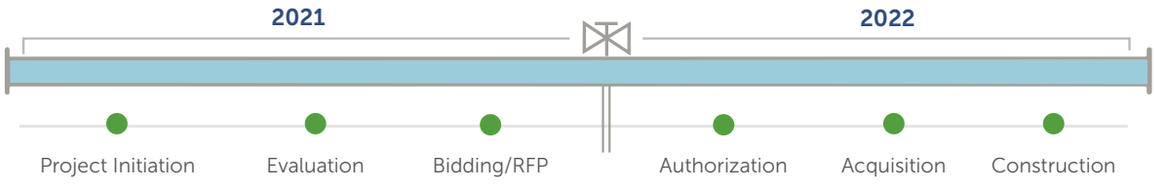
BUDGET SNAPSHOT

FUND DESCRIPTION	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Murrieta System Improvement		$450,000			

STATUS

Future Project
Not yet started

PROJECT PHASES & TIMELINE



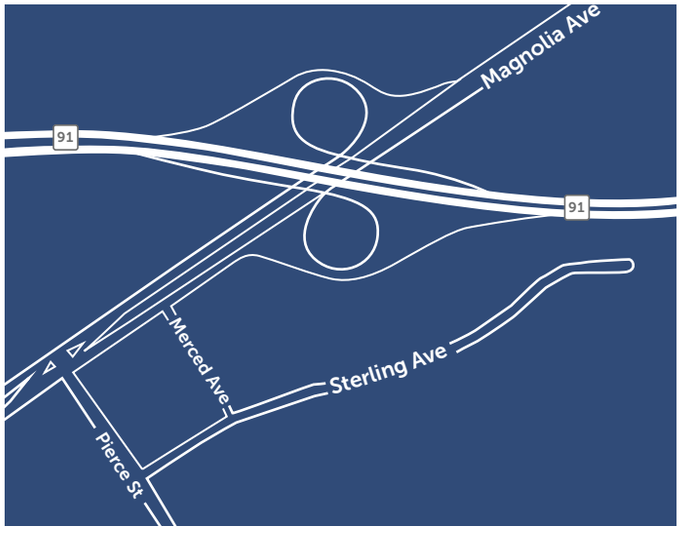
PROJECT NAME

ADS Delivery Isolation Valves

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Operations	8034-1920-S	C2.5

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



Norco's groundwater supply has nitrate and Total Dissolved Solids (TDS) problems. Norco intends to purchase at least 4,400 af/yr of ADS to accommodate blending requirements with existing sources and future growth. Western and IEUA are obligated to provide this water to Norco through the ADS and the Chino Desalter (CDA). It is necessary for Western to install isolation valves at the ADS to allow for such functionality between the two systems. An isolation valve is a valve in a distribution system that stops the flow of water to a given location, usually for maintenance or safety purposes. Isolation valves can also beused to provide flow logic (selecting one flow path versus another), and to connect external equipment to a system. Specifically, addition of the isolation valves will allow operators to ensure that CDA water can travel through the Norco system to the Sterling Pump Station. The isolation valves will also ensure Western's ability to operate the Modified Integrated Chino-Arlington Desalters System (MICADS) efficiently.

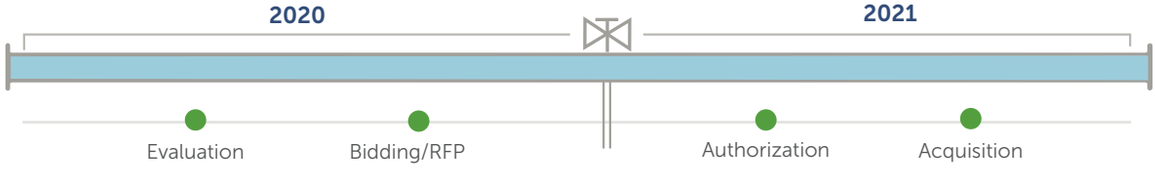
BUDGET SNAPSHOT

FUND DESCRIPTION	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Arlington Desalter System Improvement	$250,000				

STATUS

Future Project
not yet started

PROJECT PHASES & TIMELINE



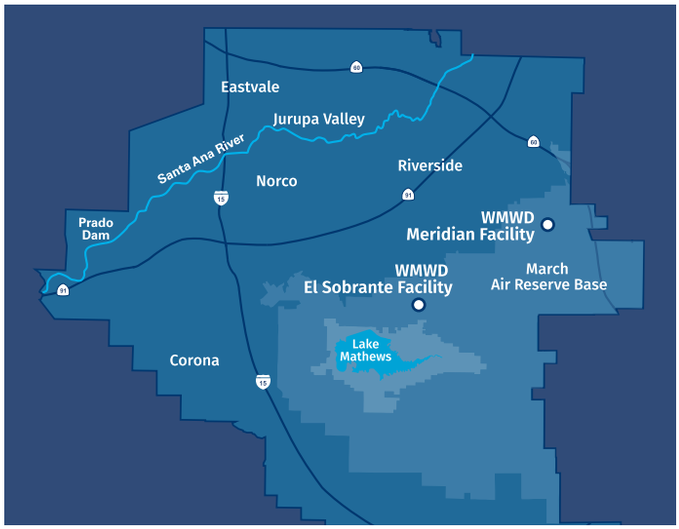
PROJECT NAME

Potable Distribution System Rehabilitation

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Operations	8033-1819-O	D2.5

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Financial Stewardship



Planned maintenance and inspections should occur on a regular basis for all assets within the distribution system. Assessment of Western potable water storage and pump station facilities is necessary to extend asset life expectancy and maintain operational efficiency. Inspections should include, but are not limited to: instrumentation reads, equipment observations, chemical levels, and site cleanliness. During monthly site inspections, staff identify any necessary rehabilitation, recommend necessary repairs, and prioritize facilities based on need. At this time, staff anticipate Holcomb and Bergamont pump stations to be within the first group of facilities needing rehabilitation. Additional sites will also be assessed and prioritized. Facilities needing rehabilitation may require painting, other repairs, and refurbishments. Adherence to maintenance and inspection schedules with regular rehabilitation ensures potential hazards are mitigated and equipment necessary to maintain reliable service levels operates at optimum performance. Staff request funding for the recommended site rehabilitations and will propose future facilities based on criticality and need.

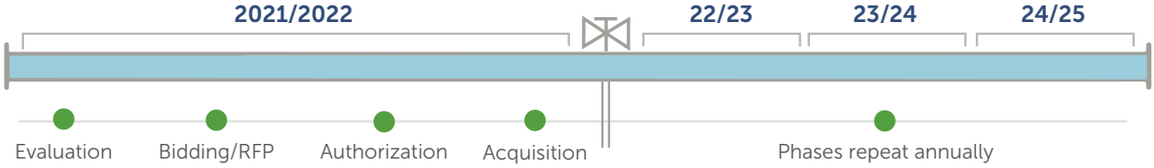
BUDGET SNAPSHOT

FUND DESCRIPTION	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Riverside Potable Water System Improvement		$100,000	$100,000	$100,000	$100,000

STATUS

Future Project
not yet started

PROJECT PHASES & TIMELINE



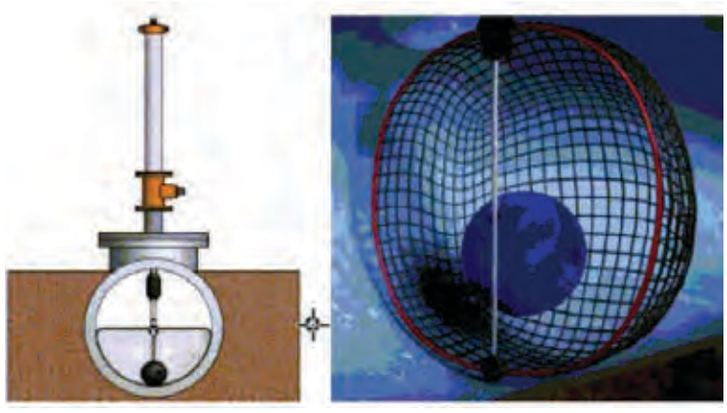
PROJECT NAME

MGL Blow-off Repairs and Isolation Valve Replacement

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Engineering	6016-1819-E	C2

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



During a review of the Mills Gravity Line, the blow offs were identified as having a design flaw that caused premature failure and significant leaks. One existing leak was identified. Another was previously repaired as an emergency action.

This project will replace two blow offs per year. This involves de-watering the MGL at the area of repair, excavating down to the blow off that typically lies ten to 20 feet below ground surface, removing the blow off assembly and replacing it with the re-designed assembly. This project will increase water reliability by maintaining the infrastructure.

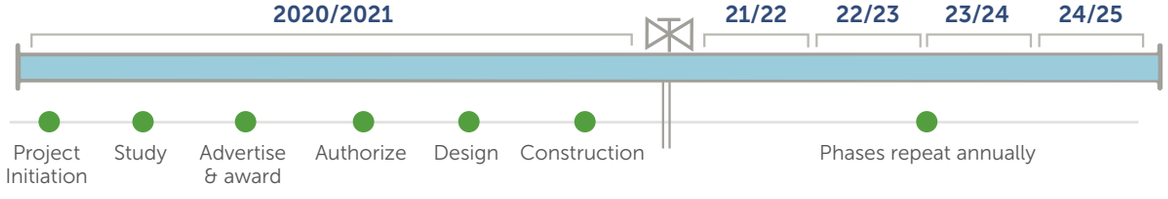
BUDGET SNAPSHOT

FUND DESCRIPTION	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Mills Gravity Line Major Maintenance	$317,800	$847,600	$337,400	$348,600	$179,200

STATUS

Future project
not yet started

PROJECT PHASES & TIMELINE



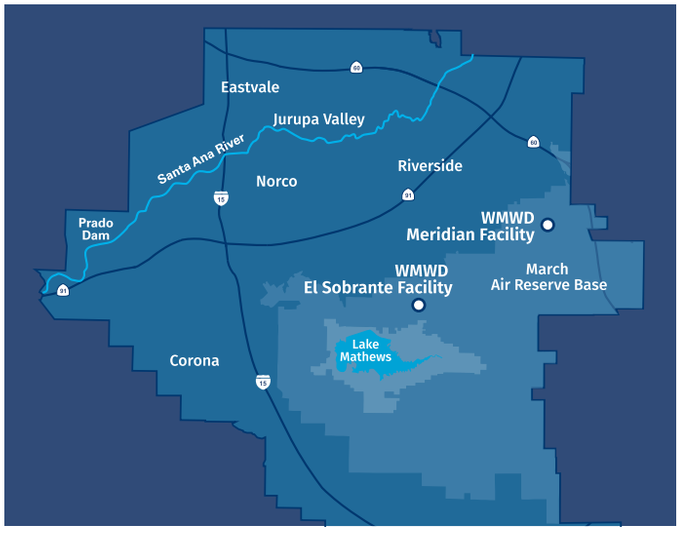
PROJECT NAME

Potable Tank Refurbishment Program

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Engineering	6017-1819-E	C1.9

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



The water system's tanks require regular maintenance to ensure that the coating and corrosion control systems are working properly. If the tanks are not maintained, corrosion can cause permanent damage and greatly reduce the service life of the tanks. Tanks should be emptied for inspection and repaired at least every five years.

Staff recommend that at least two tanks be taken out of service per year to meet the goal of dry inspection every five years. At the time of inspection, repairs to appurtenances and the coating should be expected. Every ten years, on average, the tank will require a complete re-coat and the cost will depend on the size of the tank and degree of damage. Western's Riverside retail service area has five active tanks.

BUDGET SNAPSHOT

FUND DESCRIPTION

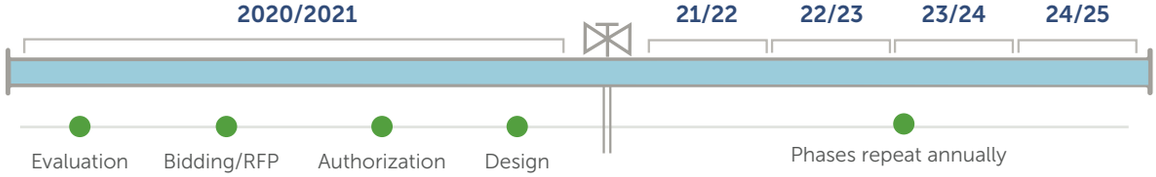
Riverside Potable Water Asset Replacement

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
$175,000	$800,000	$280,000	$655,000	$280,000

STATUS

Future Project
not yet started

PROJECT PHASES & TIMELINE



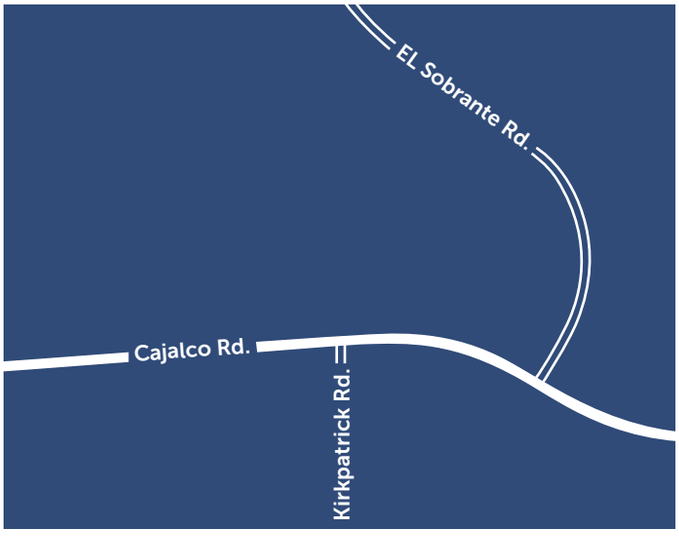
PROJECT NAME

Warehouse Assessment

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Operations	8032-1920-O	C1.6

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



An effective warehouse ensures, among many things, that parts and materials are kept in good condition and able to flow in and out of the warehouse safely and efficiently. To assist in this endeavor, a warehouse assessment should be conducted. Staff seek to hire a consultant to develop a technical memorandum evaluating safety methods, strategies, storage capacity, accountability, layout design, optimization, as well as, existing and industry best practices for inventory methods.

The consultant will be hired through Request for Proposal process with the following scope of work: Consultant will conduct an onsite evaluation of the warehouse, including any areas outside of the warehouse serving as storage, in an effort to improve design and maximize capacity. Consultant shall perform interviews with Western staff to understand current needs and processes. Consultant shall investigate storage methods to best meet Western's needs and make recommendations as required. Staff will present recommendations to the CIFP committee in future years.

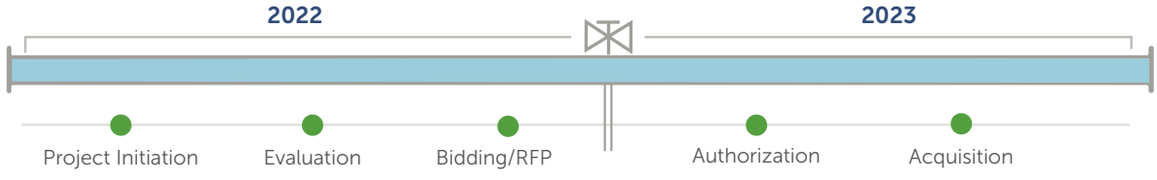
BUDGET SNAPSHOT

FUND DESCRIPTION	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Operations Asset Replacement			$100,000		

STATUS

Future Project
not yet started

PROJECT PHASES & TIMELINE



PROJECT NAME

Pump Station Improvements @ WWRF Pond

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Engineering	6036-2021-E	C1.5

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management

The Western Water Recycling Facility (WWRF) treats domestic wastewater from the north central portion of Western's retail service area. This facility currently treats wastewater and provides the resulting recycled water to Western's northern Recycled Water Service Area through the recycled water distribution system.

The Riverside National Cemetery and Archie J. Old Golf Course have large irrigation requirements, and on-site ponds to store irrigation water for peak demands. Even with this storage for peak demand flow equalization, the current Legacy WWRF Recycled Water Pump Station has insufficient capacity to supply the required irrigation water for Cemetery and Golf Course. Western must provide irrigation water from the recycled water system to meet demands, and when water is provided from the recycled water system, pressures drop for other customers in the vicinity.

The purpose of this project is to upgrade the Legacy WWRF Recycled Water Pump Station to be able to supply adequate flows to the Cemetery and Golf Course.

BUDGET SNAPSHOT

FUND DESCRIPTION

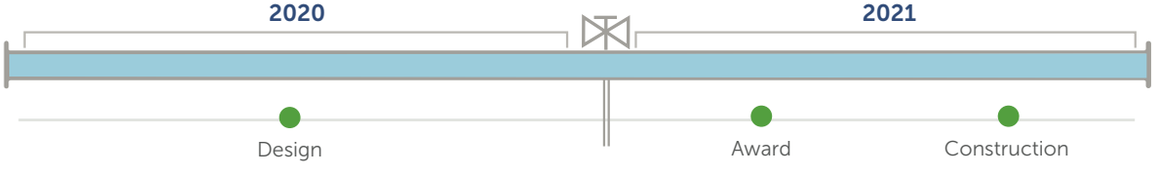
WWRF Treatment System Improvement

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
$150,000				

STATUS

Future Project
not yet started

PROJECT PHASES & TIMELINE



PROJECT NAME

Electrical Run for Operation's Main Generator

LEAD DEPARTMENT

Operations

PROJECT #

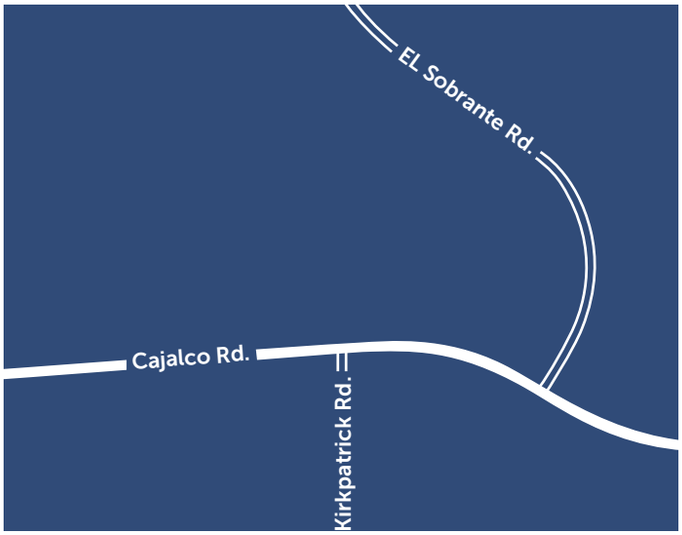
8045-2021-O

FY 20/21 RANK

D2.3

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Superior Service



Western's Operations facility sits on approximately one acre and houses Western's fleet, maintenance shop, radio shack, various equipment and more than half of the staff. The main administrative building on site is powered by a large generator to ensure continued operations in the event of an emergency. Unfortunately, the maintenance shop and radio shack are currently supported by a small, outdated non-compliant generator. Staff proposes to connect the two locations to the large main generator on site. As identified in Western's Risk and Resilience Assessment, connecting these facilities to the main generator will improve service and reliability. This is also an industry best practice.

BUDGET SNAPSHOT

FUND DESCRIPTION

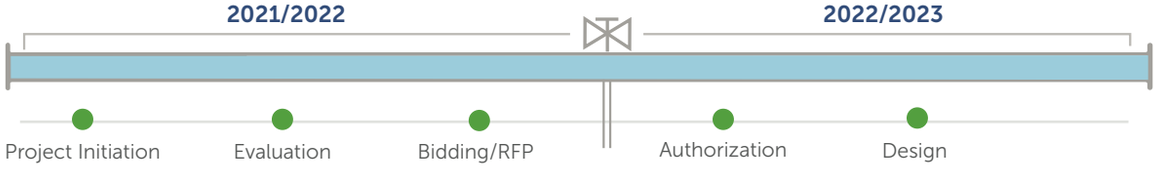
Ops Facility Improvement

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
	$100,000	$100,000		

STATUS

Future Project
not yet started

PROJECT PHASES & TIMELINE



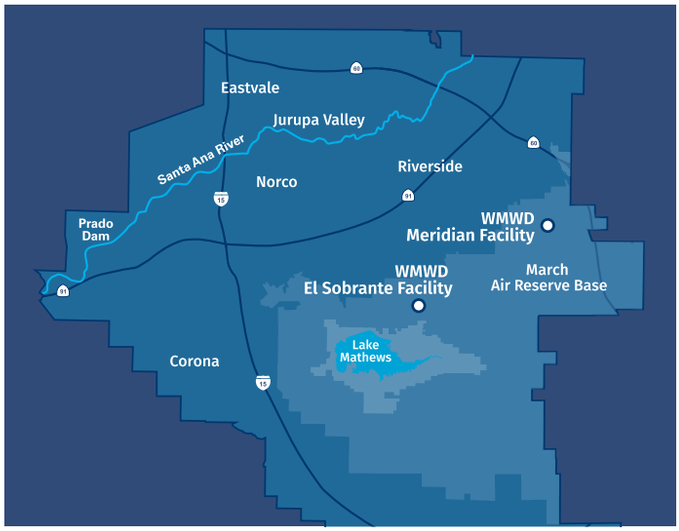
PROJECT NAME

PRVs within PZ1515 for System Improvement

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Engineering	6031-2122-E	D1.8

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



Areas of potential low system pressure and locations that might not be able to achieve adequate fire flow within Western's existing velocity and pressure requirements have been identified in Western's 1650 pressure zone. Previous fire flow requests for El Sobrante Road have identified simulations of 500 gpm fire flows on El Sobrante Road result in system pressures and velocities that do not meet Western's standards. Western's 1547± pressure zone does not have a redundant supply. For areas that are served only by PRVs (i.e. pressure zones without service level storage), having a backup supply from neighboring pressure zones can provide an alternative source of supply during an outage of the PRV that is intended to serve the zone. The 1547± PZ is supplied through the Mockingbird PRV station which consists of a 3" PRV and an 8" PRV. There are normally closed valves on Mockingbird Canyon Road and Pennington Place separating the 1571± PZ from the 1547± PZ.

This project consists of constructing two PRV stations, consisting of one PRV station at each of the normally closed valve locations resulting in the ability to supply the MDD for the 1547± PZ, and would also help to provide partial redundancy to the 1515W PZ.

BUDGET SNAPSHOT

FUND DESCRIPTION

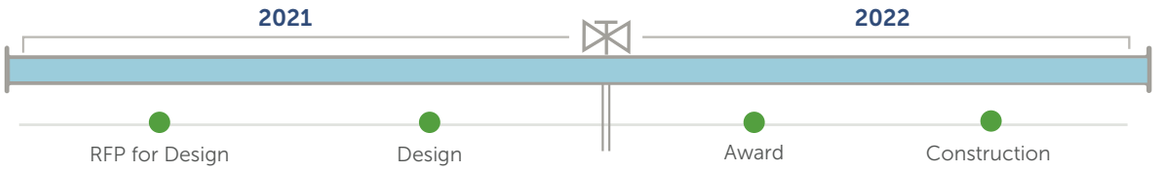
Riverside Potable Water System Improvement

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
	$200,000			

STATUS

Future Project
not yet started

PROJECT PHASES & TIMELINE

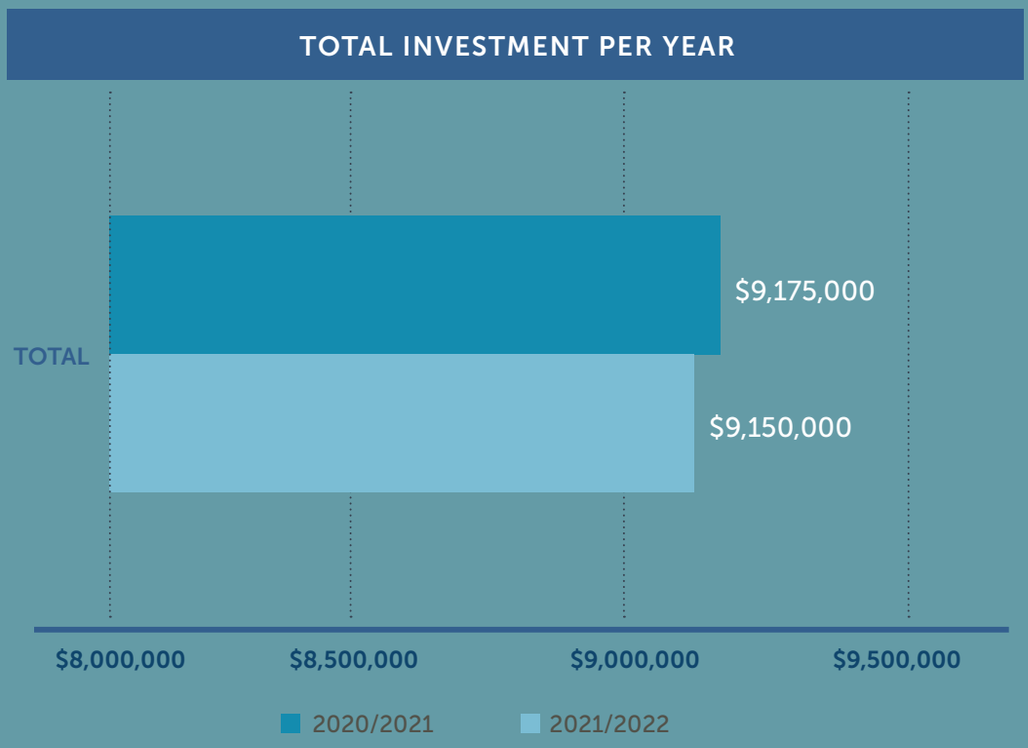


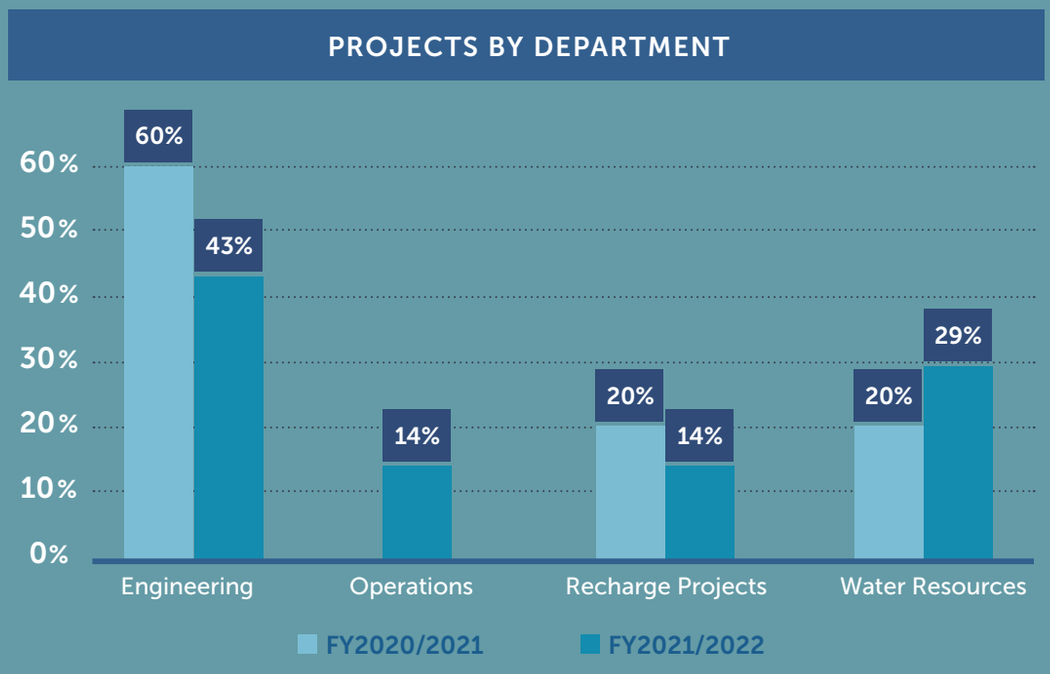
Alson Pump Station

Sterling Pump Station

Water Supply and Infrastructure Additions

- Adding a new physical structure or business process that will become a new component in the organization's assets.





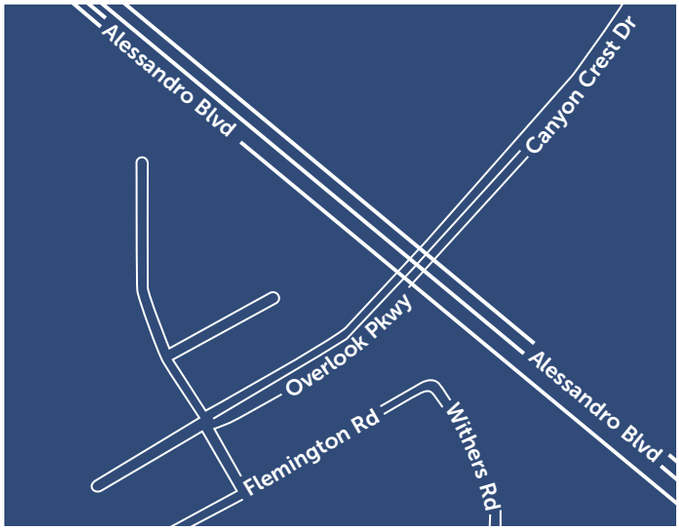
PROJECT NAME

Cannon Street Interconnection with Riverside Public Utilities (RPU)

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Engineering	6019-1920-E	A

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



Design and construct a new pump station and interconnection to RPU's system to improve water supply reliability by importing groundwater from the Bunker Hill and Riverside basins. This project will construct an interconnection (including metering and pressure-reducing valve) with the existing RPU pipeline from Campbell Reservoir (Reservoir) located near the intersection of Alessandro Blvd. and Cannon Rd. The interconnection will allow water to be conveyed from the Reservoir to a new pump station, with frontage also on Caulfield Court.

The new pump station, located on the northwest corner of Alessandro Blvd. and Overlook Parkway, will include chemical dosing for chloramine and could be connected directly to the 1637 Pressure Zone of the Mills Gravity Line. Costs include permits and California Environmental Quality Act, engineering design, and construction. This project is being funded through Santa Ana River Conservation and Conjunctive Use Program (SARCCUP) grant funds. Construction must be complete by end of calendar year 2021.

BUDGET SNAPSHOT

FUND DESCRIPTION

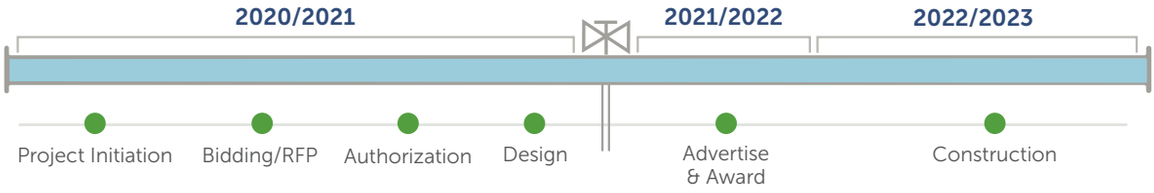
Riverside Potable Water System Improvement

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
$500,000	$2,000,000	$2,200,000		

STATUS

10% Complete
as of May 2020

PROJECT PHASES & TIMELINE



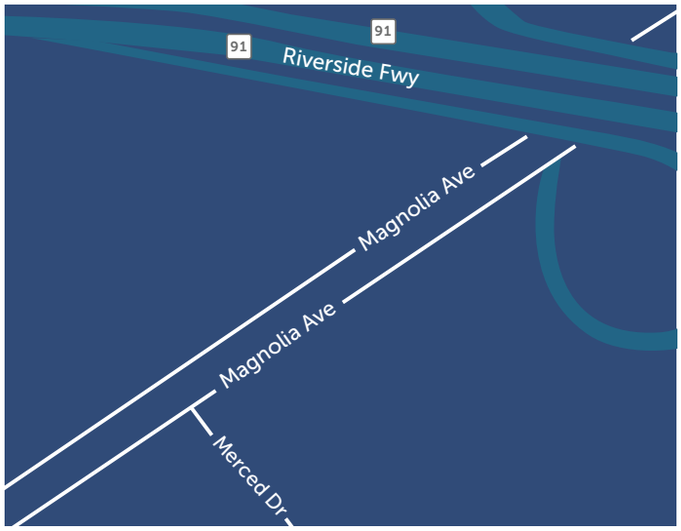
PROJECT NAME

Magnolia Avenue interconnection with Riverside Public Utilities (RPU)

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Engineering	6037-2021-E	A1.4

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



RPU owns a 27-in pipeline along Magnolia Ave. where a large enough volume of water could be available to Western at Sterling PS through a connection at the intersection of Magnolia Ave. and Merced St. where RPU's pressure zone is 950' at this location. RPU uses free chlorine as a disinfectant.

Western owns and operates the ADS uses local groundwater and pumps treated water to Corona and Norco via ADS's 30-inch pipeline, at pressure zone of 720'. The pressure zone of the discharge side of the Desalter is approximately 1010'.

The Sterling Pump Station (SPS) includes a 1.1 MG concrete reservoir, chemical building, and six pumps. The SPS will draw water from the existing water reservoir at the ADS, the 1.1 MG concrete reservoir at 720', and Chino Desalter at 1010'. The SPS will pump to either 1515' or 1637' elevation.

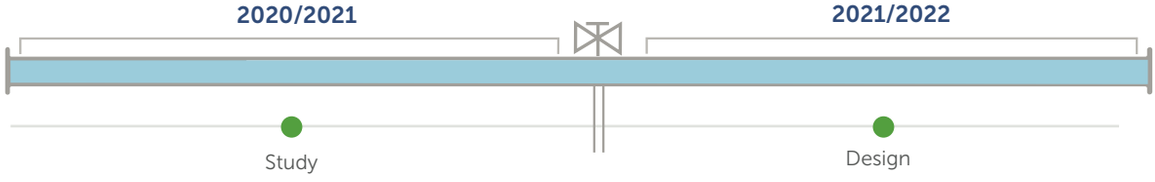
BUDGET SNAPSHOT

FUND DESCRIPTION	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Riverside Potable Water System Improvement	$175,000	$1,000,000			

STATUS

25% Complete
as of May 2020

PROJECT PHASES & TIMELINE



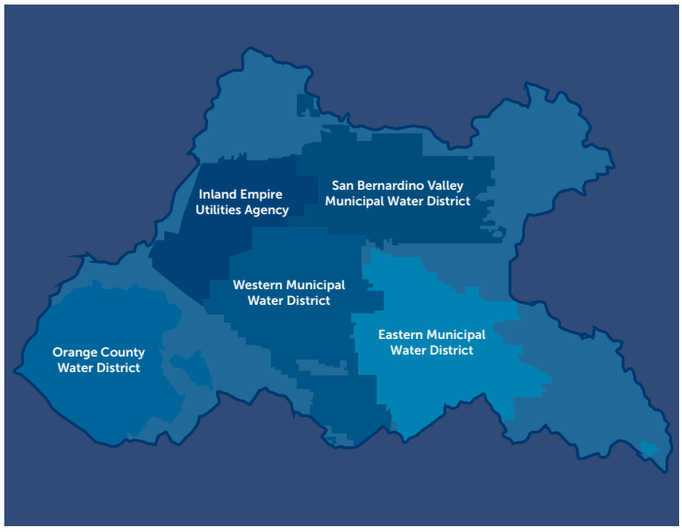
PROJECT NAME

SARCCUP Non-Potable Well (Well #7)

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Engineering	6043-2021-E	A1.4

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



The Santa Ana River Conservation and Conjunctive Use Program (SARCCUP) is a multi-agency watershed-scale program where Parties collaborate in the exploration, analysis and implementation of one or more projects concerning large-scale, regional water supply reliability projects that would provide benefits to the entire Santa Ana River Watershed. The Parties agreed to work together to secure grants and other funding including Prop 84 Integrated Regional Water Management to help pay for the projects and programs.

The purpose of the SARCCUP is to develop a regional conjunctive use program that would create storage capacity to provide new local water supplies during dry years for up to 3 years that would supplement imported water supplies during a drought.

Well sitting task is complete and sites were identifies in Riverside groundwater basin for SARRCUP Non-Potable Well (Well #7). The project will pump up to 2,000 acre-feet from Riverside groundwater basin during drought years.

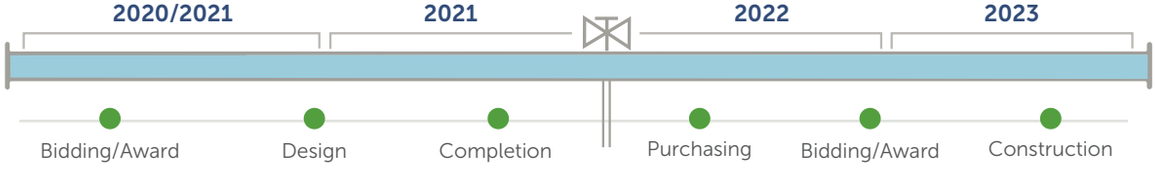
BUDGET SNAPSHOT

FUND DESCRIPTION	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Riverside Non-potable Water System Improvement	$600,000	$900,000	$3,500,000		

STATUS

Future Project
not yet started

PROJECT PHASES & TIMELINE



PROJECT NAME

Active Recharge Project – Santa Ana River Tributaries

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Water Resources	5003-1819-W	A1.3

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management

The Western-San Bernardino Watermaster identified access to additional water rights in the San Bernardino Basin Area (SBBA). This project is currently in the planning phase to consider the construction of new recharge basins along several existing creek channels in eastern San Bernardino Valley. The objective is to develop additional water rights through the capture of native storm water flows from existing stream or flood control channels for recharge back into the Bunker Hill Groundwater Basin. Approximately ten (10) potential recharge sites have been selected and prioritized.

This is a joint project between San Bernardino Valley Municipal Water District (Valley), the project manager, and Western Municipal Water District (Western) on behalf of the plaintiffs of the 1969 Judgment. Prior to proceeding with construction, Valley will solicit input from Western Entities. At that time Western Entities can decide whether or not to participate financially. Valley will invoice Western, and reimbursed by our plaintiff parties and not our customers. Financial participation entitles plaintiff parties to adjustments to their annual water rights. The projects are on hold until anticipated completion of the Santa Ana River HCP — completion in early 20/21. If approved by Western Entities with water rights, Valley will construct agreed-upon projects.

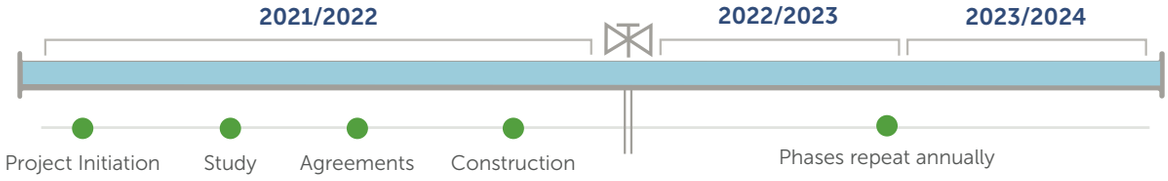
BUDGET SNAPSHOT

FUND DESCRIPTION	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Water Resources Development Project		$600,000	$600,000	$800,000	

STATUS

25% Complete
as of May 2020

PROJECT PHASES & TIMELINE



PROJECT NAME

Enhanced Recharge Project – Santa Ana River Spreading Basins

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Water Resources	5002-1819-W	A1.3

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management

An analysis performed as part of the Santa Ana River (SAR) Watershed Integrated Regional Water Management Plan, determined that an estimated 80,000 AFY of water can be recharged into the Bunker Hill Basin. This enables the capture of more water from the Seven Oaks Dam under existing water rights permits. This is a joint project between Western Municipal Water District (Western), San Bernardino Valley Municipal Water District (Valley), and the San Bernardino Valley Water Conservation District. Cost-sharing agreements were executed between Valley and Western, as well as, Western and the plaintiffs of the 1969 Western-San Bernardino Judgment. The intent of this effort is to perfect Seven Oaks water rights and capture "new conservation" as provided for in the 1969 Judgment.

The construction phase will result in facilities providing recharge into the SAR spreading basins up to 195 cfs. Future phases of the project, if/when implemented, will increase the capacity from existing capacity to 350 to 500 cfs. Constructed facilities will include diversion structures, a sedimentation basin, and pipeline to deliver flows to SAR spreading basins. Western will work with project partners to design and construct facilities to capture as much native water as possible. This project is linked to increased/adjusted water rights for the Judgment parties. One hundred percent of this project is paid for by entities with water rights.

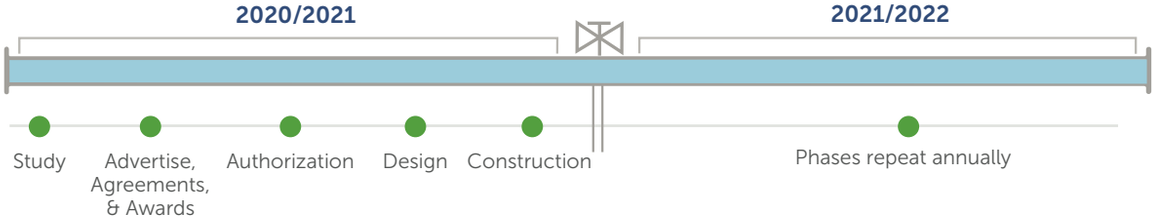
BUDGET SNAPSHOT

FUND DESCRIPTION	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Water Resources Development Project	$750,000	$4,000,000			

STATUS

25% Complete
as of May 2020

PROJECT PHASES & TIMELINE



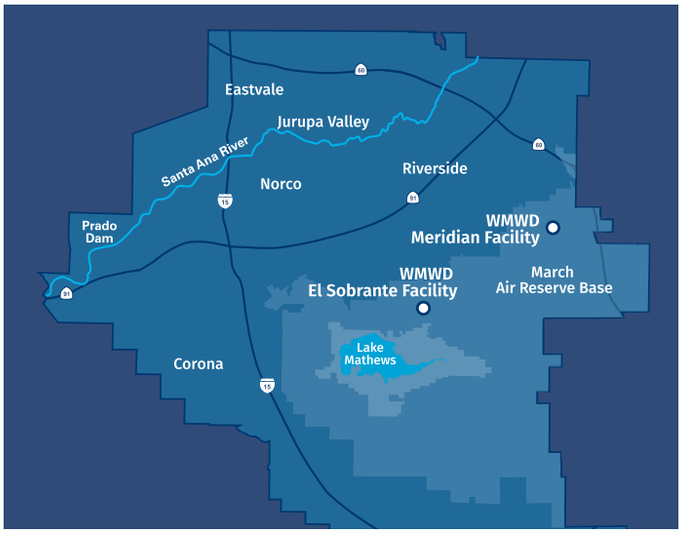
PROJECT NAME

Facilities Master Plan – Riverside Potable and Recycled/Non-Potable

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Water Resources	6008-1819-W	B2

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



Every five years, the current and projected water system demands are evaluated to determine what infrastructure is required to provide the necessary capacity of meeting current and future development demands. The project will update growth projections developed by the latest water supply demands and adopted Riverside City and County Land Use Plans. Hydraulic analyses have been performed to identify facilities required to meet the projected demands.

The Facilities Master Plan identifies additional major facilities needed to transport and deliver water. The capacity of the water system is met by tanks, pumps, pressure-reducing valves, and pipelines. This project will increase water system reliability by ensuring sufficient capacity in the system. Note that the north, south, and March Air Reserve Base areas were evaluated as part of this project. As well as potable, non-potable, and recycled water systems.

FUND DESCRIPTION

Riverside Potable Water AFC

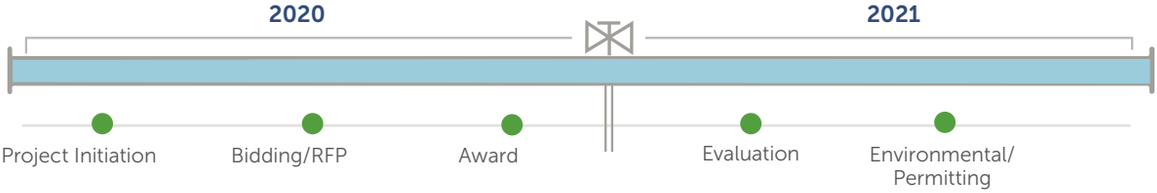
BUDGET SNAPSHOT

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Project approved in FY19/20				

STATUS

35% Complete
as of May 2020

PROJECT PHASES & TIMELINE



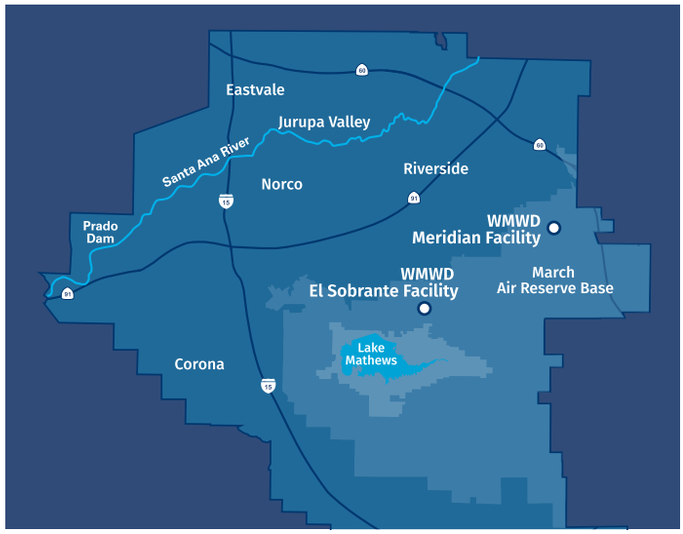
PROJECT NAME

Facilities Master Plan – Riverside Retail Sewer

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Water Resources	6009-1819-W	B2

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



Every five years, the current and projected sewer system demands are evaluated to determine what infrastructure is required to be built to provide the adequate capacity to meet current development demands. The Riverside Facilities Master Plan will provide projections of sewer system requirements based on anticipated area growth. The growth projections are developed by the Water Supply Management Plan and adopted by the City and County of Riverside Land Use plans. Hydraulic analyses will be performed to identify necessary facilities to support the projected sewer system needs.

The capacity of the sewer system is support by treatment plants, lift stations, pressure, and a collection system. This project will increase sewer collection reliability by ensuring sufficient capacity in the system. Note that the north, south, and MARB areas are all examined in this project.

BUDGET SNAPSHOT

FUND DESCRIPTION

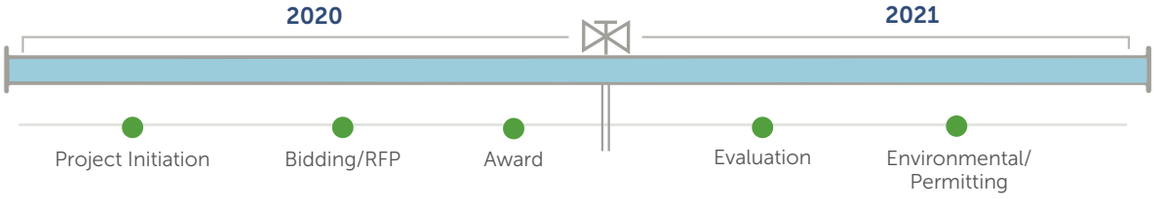
WWRF AFC Project

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Project approved in FY19/20				

STATUS

30% Complete
as of May 2020

PROJECT PHASES & TIMELINE



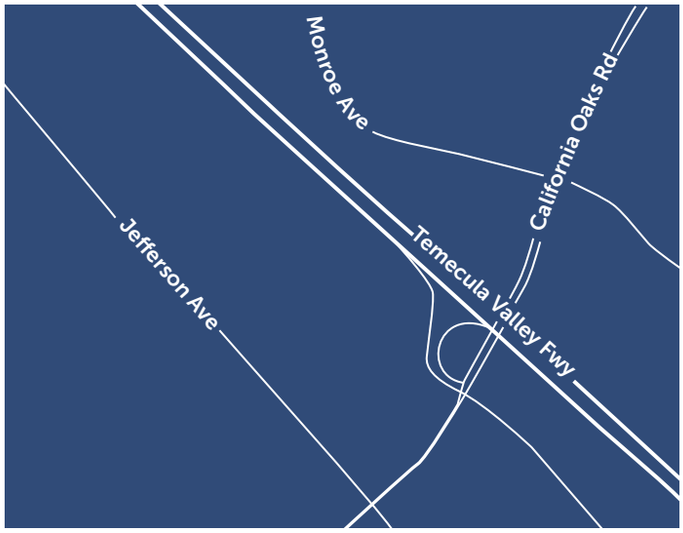
PROJECT NAME

Murrieta Sewer Master Plan

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Water Resources	6026-1819-W	B2

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



Facility Master Plan (Master Plan) updates are performed in five-year intervals to ensure consistent services and system upgrades are performed. The objective of this project is to prepare a master plan for the Murrieta area sewer system. The consultant will update Western's, 2014 Murrieta Sewer Master Plan to reflect the latest information for the service area. This will include: projected (ultimate) customer sewer flows, capacity recommendations within the Santa Rosa Regional Recycling Authority, updates in land use and zoning, and growth demographics to identify facility improvements.

The Master Plan will analyze the system and recommend capital improvements to address system reliability deficiencies, existing constraints, replacement of aging infrastructure, and additional infrastructure required to accommodate future growth. As a planning document, the Master Plan will also prioritize improvements, propose an implementation schedule, and calculate the corresponding service charges for the Murrieta sewer system. The effort will also include preparation of an environmental report in compliance with California Environmental Quality Act (CEQA) regulations for both the Murrieta sewer and water master plan updates.

BUDGET SNAPSHOT

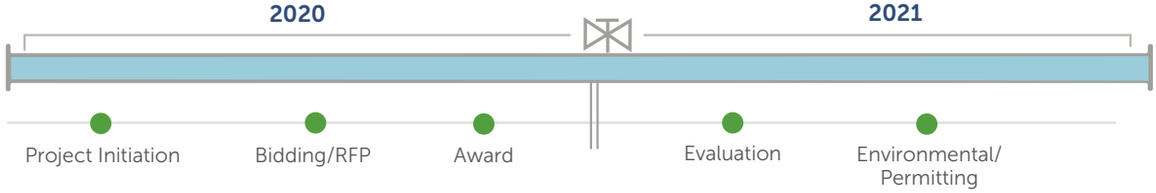
FUND DESCRIPTION
Murrieta Wastewater AFC

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Project approved in FY19/20				

STATUS

60% Complete
as of May 2020

PROJECT PHASES & TIMELINE



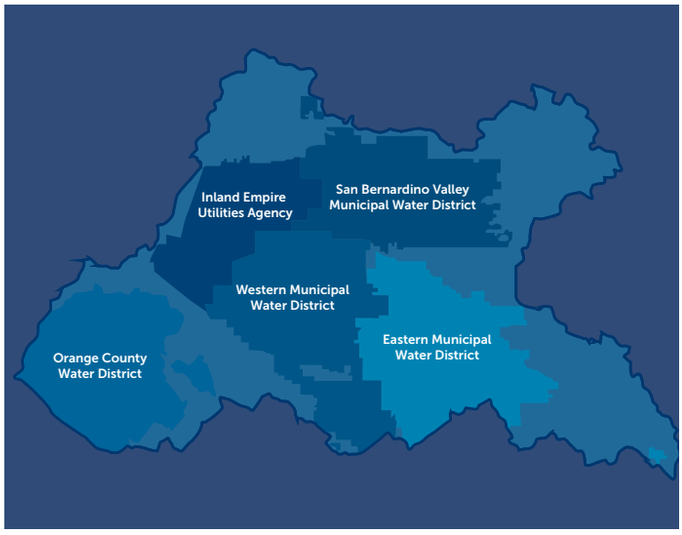
PROJECT NAME

SARCCUP Planning Activities

LEAD DEPARTMENT	PROJECT #	FY 20/21 RANK
Water Resources	5004-1819-R	B1.7

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



The Santa Ana River Conservation and Conjunctive Use Program (SARCCUP), as a multi-agency, watershed-wide program, will secure and deliver supplemental water supply into the region for use during dry or below average years. SARCCUP will create a groundwater bank, implement conservation measures, and create habitat enhancements and restoration. Efforts will include California Environmental Quality Act compliance activities, development of funding/operational agreements, preparation of feasibility studies, and groundwater well siting studies prior to commencing design.

Western's proposed SARCCUP capital projects include: groundwater storage banks in the Riverside-Arlington and Elsinore Basins, the La Sierra Pipeline and Sterling Reservoir and Pump Station, Riverside-Arlington Basin production wells, and the Cannon-Campbell Pump Station. Western is partnering with Elsinore Valley Municipal Water District as part of SARCCUP to construct a storage bank, groundwater wells, and a pipeline in the Elsinore Basin. The estimated capacity of the groundwater storage banks is 6,000 acre-feet (AF) in the Riverside-Arlington Basin and 4,500 AF in the Elsinore Basin. Western is also collaborating with Jurupa Community Services District and Riverside Public Utilities on alternative SARCCUP projects. This project is being funded by Proposition 84 Integrated Regional Water Management funding through California Department of Water Resources.

BUDGET SNAPSHOT

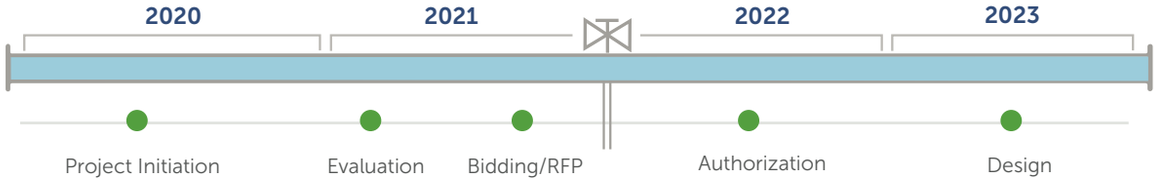
FUND DESCRIPTION
Water Resources Development

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
$400,000	$300,000	$200,000		

STATUS

35% Complete
as of May 2020

PROJECT PHASES & TIMELINE



PROJECT NAME

Portable Water Pumps

LEAD DEPARTMENT

Operations

PROJECT #

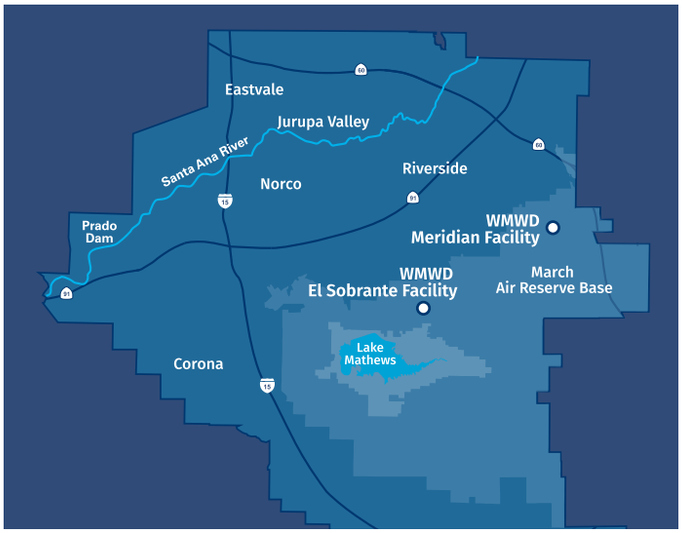
8044-2021-O

FY 20/21 RANK

D2

STRATEGIC PLANNING DRIVES WESTERN'S PROJECT PRIORITIES

2018–2021 Strategic Priorities → Resource Management



Western has more than twenty potable water pump stations serving approximately 25,000 retail customers. As identified in Western's Risk and Resilience Assessment and recommended as an industry best practice, it is highly recommended to stock portable water pumps for planned shutdowns or emergency events. Two portable water pumps will be purchased for the purpose of maintaining necessary water flows during such identified events. Having two portable water pumps in Western's inventory will increase water service sustainability and reduce reliability on potentially limited or unavailable rental equipment.

FUND DESCRIPTION

Fleet Expansion

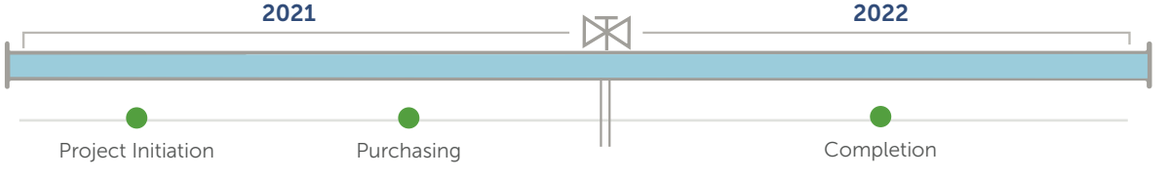
BUDGET SNAPSHOT

FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
	$350,000			

STATUS

Future Project
not yet started

PROJECT PHASES & TIMELINE



Final Remarks:

Project Monitoring

Using various tools, Western monitors project progress. The goal is for staff to periodically update the Board on the status of capital projects. Identifying and tracking these projects helps us develop a more predictive process. While the CIFP has provided sound planning, there is a need to expand the conversation to implement a more robust long-term asset management program.

Conclusion

Reliably serving the community has been Western's fundamental goal for over 65 years. To deliver on this promise, Western focuses on providing top-notch service through dedicated staff and encouraging innovative thinking. This plan ensures that operations are as cost-efficient as possible; our water supply diversified, including securing local water sources; and our regional water and wastewater service needs are met. The vision behind this report is to be transparent in Western's planning process. Western carefully considers each project's impact every step of the way to guide decisions.

Appendices

In June 2020, the Board adopted a comprehensive two-year capital spending plan for the first time for Fiscal Year 2020-2021 and Fiscal Year 2021-2022. The CIFP will match the timeline of Western's biennial operating budget. Implementation of this effort will increase efficiency and reduce labor costs associated with the budgeting process. The following appendices indicate the Committee and Board approval process, with the relevant documents.

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June 17, 2020

TO THE BOARD OF DIRECTORS:

Donald D. Galleano, President
S.R. Al Lopez, Vice President
Brenda Dennstedt, Secretary-Treasurer
Gracie Torres
Robert Stockton

FROM: Craig D. Miller, General Manager

CONSIDER ADOPTION OF RESOLUTION 3102 APPROVING THE GENERAL MANAGER'S OPERATING BUDGET FOR FISCAL YEARS 2020-2021 AND 2021-2022, APPROVAL OF THE JOB CLASSIFICATION PLAN AND SALARY GRADES TABLE, AND APPROVAL OF THE CAPITAL IMPROVEMENT AND FACILITIES PLAN FOR FISCAL YEARS 2020-2021 AND 2021-2022

RECOMMENDATION:
Staff recommends that the Board of Directors (Board):

1. Adopt Resolution 3102 approving the General Manager's Operating Budget for Fiscal Years 2020-2021 and 2021-2022, and authorize staff to spend budgeted amounts in accordance with the requirements and authority levels previously established by the Board;

2. Approve the amended Job Classification Plan and Salary Grades Table in accordance with Resolution 2902, Job Classification Plan and Salary Grades Table, Section 7, effective July 1, 2020; and

3. Approve the Capital Improvement and Facilities Plan for Fiscal Years 2020-2021 and 2021-2022.

EXECUTIVE SUMMARY:
This Board letter is presented in three sections: the operating budget, the Job Classification and Salary Grades table, and the Capital Improvement and Facilities Plan (CIFP).

Western Municipal Water District's (Western) Operating Budget is presented again in a

two-year format with adoption by resolution. The resolution formally establishes spending authority for each fiscal year and provides specific authority for the General Manager regarding labor, budget, carryovers, and demand-based exclusions to spending authority.

With regard to authorized positions, staff is not recommending any additions nor any significant restructuring changes. The proposed Job Classification Plan and Salary Grades table has been amended in accordance with the provisions stated in the Memorandum of Understanding (classified employees) and in the Confirmation of Understanding (non-classified employees). The amendments to the salary grade ranges reflect (1) a 3% cost of living adjustment (COLA) and (2) the final 2% transition of moving from Western paying the Employee portion of the CalPERS pension contribution to the employee paying this portion.

The objective of the CIFP process is to develop a forward-looking, comprehensive report that provides summary information about necessary capital project investments in the coming years. The CIFP highlights Western's projects by describing each project's linkage to Western's Strategic Priorities, the project's necessity, costs and funding source, as well as the implementation timeline.

Staff is proposing two changes to the capital planning process this year. First, staff desires to align the CIFP with Western's Operating Budget schedule by seeking Board approval for two consecutive fiscal years. Second, as a step forward in the development of a formal asset management plan, staff desires to create a Minor Capital Project program. Implementing both of these actions is intended to increase the efficiency of capital planning and reduce staff labor time associated with capital projects without compromising fiscal integrity or transparency.

The proposed Fiscal Year 2020-2021 CIFP spending includes projected **net total** expenditures of $9,339,720 in Western cash reserves in the first year. The proposed Fiscal Year 2021-2022 spending includes projected **net total** expenditures of $7,464,249 in Western cash reserves in the second year.

BUDGET IMPACT:
Adoption of the biennial operating budget provides the General Manager with $132.7 million in spending authority for Fiscal Year 2020-2021, and $136.8 million for Fiscal Year 2021-2022.

If the Board elects to adopt a two-year CIFP with Fiscal Year 2020-2021 projected spending of $30,494,720 (not including funding offsets), and Fiscal Year 2021-2022

spending of $28,219,343 (not including funding offsets), it will provide staff, under the General Manager's direction:

1. Spending authority for the projects listed in each of the two fiscal years with a total annual cost of less than $100,000 not requiring a public works contract;
2. Authority to implement a Minor Capital Projects Program up to $750,000 per fiscal year; and
3. A discretionary fund of $300,000 each fiscal year to be expended on unanticipated capital projects in accordance with the requirements and authority levels established through the District's purchasing policy.

All projects not part of the Minor Capital Program and outlined in the attached listing with a public works project in excess of $35,000 or a total cost of more than $100,000 will be presented to the Board of Directors for individual project approvals.

DETAIL:

SECTION I - FISCAL YEARS 2020-2021 and 2021-2022 OPERATING BUDGET

As with all of Western's initiatives, it is staff's responsibility and duty to scrutinize projects and processes to be as efficient and effective as possible. Staff continuously takes steps to reduce expenses and costs while addressing challenges such as drought and related water supply impacts, and economic conditions. Proactive planning enables Western to prudently manage resources and assets with accountability and transparency.

The Operating budget covers two separate fiscal years and is adopted by resolution. The resolution presents each fiscal year budget in an exhibit and indicates the total spending authority for each year. Since water demand, in particular, cannot be precisely forecasted due to uncontrollable variables such as customer demand and weather conditions, actual revenues and expenditures may vary significantly from the approved budget. The resolution excludes water purchases, power purchases, waste disposal cost paid to third party vendors, and contract services from the overall spending authority restrictions in order to meet uncontrollable variables.

The resolution requires that expenditures must be within the approved spending limit. Specific provisions regarding the use and transfer of budgeted funds enable the General Manager to carryover unexpended and uncommitted budgeted amounts from Fiscal Year 2020-2021 to Fiscal Year 2021-2022 and requires the General Manager to report any carryover amounts to the Board.

The two-year budget is a result of extensive work by the Finance Committee and staff. This budget supports the priorities and policies of the Board, and Western's Strategic Plan and Business Plan. The budget is a tool for estimating and planning sources and uses of revenue, and is used as a control tool for managing financial resources. If external factors materialize in greater fluctuations than what have been incorporated into this budget, the financial impacts will be communicated to the Board so that additional action on the budget can be taken accordingly.

The Fiscal Years 2020-2021 and 2021-2022 budgets continue the effort of management to reduce costs. The major drivers of the two-year Operating Budget include: anticipated water demand from wholesale and retail customers, the cost of imported water and associated energy cost, waste disposal cost, system operating and preventative maintenance cost, water loss (unbilled water) reduction due to the meter replacement project, debt service obligations, and costs for administration.

Exhibit A to the resolution presents the consolidated Fiscal Year 2020-2021 and Fiscal Year 2021-2022 Operating Budget listed by functional elements. The budget is divided into three main areas: Operating Funds, Non-Operating Funds, and Transfers. Operating Funds represent operating revenues and expenses (sources and uses), such as water sales, water purchases and wastewater disposal, and result from exchange transactions associated with the principal activities of Western. Management, administration and asset replacement funding are also considered operating expenses. Other revenues and expenses not included in the above categories are presented as non-operating revenues and expenses (sources and uses). Transfers represent allocations to or from funds for asset replacement and debt service funding.

Continued on next page.

The overall Operating Budget is summarized as follows *(in millions)*:

	FY 2020-2021	FY 2021-2022
Operating Funds		
Sources of Operating Funds	$ 109.7	$ 114.4
Less Uses of Operating Funds	119.3	123.6
Net Operating Uses	$ (9.6)	$ (9.2)
Non-Operating Funds		
Sources of Non-Operating Funds	$ 23.5	$ 24.0
Less Uses of Non-Operating Funds	6.5	6.4
Net Non-Operating Sources	$ 16.9	$ 17.6
Net Sources	$ 7.3	$ 8.4
Transfers To Reserves	$ 6.9	$ 6.8
Net Surplus/(Deficit)	$ 0.4	$ 1.6

Note: Amounts in the schedule above are rounded which can affect total calculations.

Adopted as well as proposed water and wastewater rate adjustments are incorporated in the budget projections for all the enterprise functions including retail water, wastewater, Inland Empire Brine Line, desalter water, and wholesale water. Recently adopted Metropolitan Water District rate increases are also incorporated in the budget projections.

The Fiscal Year 2021-2022 Operating Budget reflects an increase in revenue from rates necessary to pay for the cost of providing service. However, any actual adjustments to the rates are contingent upon Board approval. In compliance with Proposition 218, a public hearing will be requested to be set at a future date for the Board to receive input from the public, and consider proposed water and wastewater rate adjustments.

SECTION II - CONSIDER APPROVAL OF JOB CLASSIFICATION PLAN AND SALARY GRADES TABLE AMENDMENT

Staff is not recommending any additions to the number of authorized positions nor any significant restructuring changes. Recently, Western staff carefully analyzed the employee benefit plans and premiums for group life, voluntary supplemental life coverage, short and long term disability and Family and Medical Leave Act (FMLA) administrative services and determined the timing was appropriate to seek quotes for

similar or better plan coverages with optimism of lowering plan costs. Through the quote process, staff received figures from three vendors. The vendor with the best plan coverage and most significant savings is The Lincoln National Life Insurance Company (Lincoln) for the life and disability coverages and FMLA Source, Inc. for leave benefits administration and employee assistance program (EAP).

By moving our business lines to Lincoln and FMLA Source, Inc., Western realizes significant cost savings of 37% for FMLA plan administration; 29% premium decrease for the short term disability plan; 47% premium decrease for the long term disability plan; and employees will benefit from a 33% decrease to voluntary participation in the supplemental life insurance programs. In addition, by moving to FMLA Source, Inc., Western will eliminate the current standalone EAP program at an additional cost savings of $6,000 annually. Staff is confident that moving to these new carriers will not only provide high level exceptional service to our employees, it will provide a substantial cost savings to Western.

SECTION III - CONSIDER APPROVAL OF FISCAL YEARS 2020-2021 AND FISCAL YEARS 2021-2022 CAPITAL IMPROVEMENT AND FACILITIES PLAN

The CIFP includes proposed Fiscal Year 2020-2021 projected expenditures of $30,494,720, and funding offsets for select projects of $21,155,000, which results in a net Fiscal Year 2020-2021 total of $9,339,720 in Western cash reserve expenditures necessary to advance the identified projects. The CIFP also includes proposed Fiscal Year 2021-2022 projected expenditures of $28,219,343, and funding offsets for select projects of $20,755,094 which result in a net Fiscal Year 2021-2022 total of $7,464,249 in Western cash reserve expenditures necessary to advance the identified projects in the second year. Funding offsets are derived from Bond Financing being considered as a separate action at an upcoming Board meeting, Federal and State grant funding, and third party agreements with commitments for specific projects, such as the Enhanced and Active Recharge Projects in the San Bernardino Basin Area.

Staff thoroughly reviewed and prioritized the projects listed in the attached listing through a collaborative, multi-departmental process. Projects were prioritized following careful consideration of current asset condition, availability of funding, regulatory requirements, safety, and consequence of failure, just to list a few. The goal of the team's collaborative approach to project selection and ranking is to provide the Board with the confidence to approve the individual projects as they are both considered collectively and brought individually before the Board. In addition to a review of the need and timing of these specific projects, staff has reviewed the individual project workloads as well as the combined workload of the entire proposed plan to ensure that

we have the workforce to complete the projects listed in a timely manner.

The project listings for Fiscal Year 2020-2021 and 2021-2022 also include the projects and associated funding obligations related to Western's Joint Powers Authority partnerships in the Chino Desalter Authority (CDA), the Santa Rosa Regional Resources Authority (SRRRA) and the Western Riverside County Regional Wastewater Authority (WRCRWA). The complete listing also includes known projects in the three-years following Fiscal Year 2021-2022. Although these future year projects were evaluated in the current process, they will be reevaluated in advance of the next two-year CIFP cycle to ensure that Western remains focused on the most important projects.

In addition to the comprehensive listing attached to this letter, the planned two-year expenditures have been categorized below into Western's funding areas: Operating System Improvement and Asset Replacement projects.

Operating System Improvement Funds:	**Gross Total Amounts**	
Name (Fund #'s)	**FY 20-21**	**FY 21-22**
General District Activities (100, 106, 107, 108)	$9,335,000	$7,200,000
Fleet Expansion (144)	$154,890	$504,890
Operations Facilities Improvement and Equipment (166, 167)	$1,128,900	$250,000
Riverside Potable Water (200, 204, 220, 224)	$3,565,000	$5,545,000
Riverside Non-Potable Water (214)	$600,000	$900,000
Murrieta Potable Water (230, 234)	$0	$450,000
La Sierra Collections System Improvements (314) (flows to WRCRWA)	$990,929	$835,716
Western Water Recycling Facility (WWRF) (320, 324, 330, 334, 344)	$200,000	$370,000
Murrieta Wastewater (354)	$500,000	$0
Arlington Desalter (410,414)	$440,000	$0
La Sierra Pipeline/Sterling Pump Station (434)	$120,000	$0

Asset Replacement Funds:	**Gross Total Amount**	
Name (Fund #'s)	**FY 20-21**	**FY 21-22**
General District Asset Replacement (105)	$112,000	$75,000
Operations Asset Replacement (165)	$250,000	$250,000
Riverside Potable Asset Replacement (205)	$8,945,000	$9,100,000
Riverside Non-potable Asset Replacement (215)	$180,000	$175,000
La Sierra Collections Asset Replacement (315) (flows to WRCRWA)	$286,722	$256,722
WWRF Asset Replacement (325, 335, 345)	$660,000	$225,094
Murrieta Wastewater Asset Replacement (355)	$231,921	$25,811
Mills Gravity Line Major Maintenance (407)	$1,223,800	$1,047,600
Arlington Desalter Asset Replacement (415)	$1,305,000	$755,000
Chino Desalter Asset Replacement (425)	$265,558	$253,510

Two-year plan:
In May 2012, the Board adopted a two-year operating budget for the first time. The result was a gain in labor efficiency and a lowering of resource costs associated with the budgeting process. No loss of financial transparency has occurred in the process.

In another effort to increase efficiency and reduce labor costs associated with the budgeting process, staff is seeking Board approval of a comprehensive two-year capital spending plan. If adopted for Fiscal Year 2020-2021 and Fiscal Year 2021-2022 , the CIFP will match the timeline of Western's biennial operating budget.

Minor Capital Projects:
In previous years, regardless of size, staff presented all capital projects individually under the general CIFP project category. This included smaller purchases such as valve, pump, and motor replacements. Even the scheduled replacement of desktop computer equipment and office carpeting is listed on the CIFP. In all cases, the costs of these items are within the General Manager's Board-approved purchasing authority. Staff believes there is a more efficient and cost conscience way to complete routine asset replacements without compromising fiscal integrity or public transparency.

Staff is proposing that $750,000 per fiscal year, approximately 3.4% of the total CIFP spending plan, be purposefully allocated to the reoccurring replacement, refurbishment, or upgrade of Western's infrastructure. This is an effective capital budget strategy, especially for Western's many routine projects. These smaller, but no less important, projects would be prioritized based on on-going condition assessment

protocols and occasionally an immediate need, in cases where an asset fails to live up to its expected lifetime. Establishing a limited Minor Capital Projects fund would allow these recurring smaller projects to be performed quickly and efficiently based on business need and as prioritized by Western's subject matter experts. Minor capital projects are defined as efforts that will refurbish, replace, or upgrade infrastructure less than or equal to $100,000 on an individualized basis. Most of these projects are likely to occur on the significant number of the small assets under staff's responsibility that require attention to keep the systems operational, safe and well-maintained. Examples of projects include, but are not limited to:

- Replacement or refurbishment of various pumps and motors
- Re-coating or replacement of the asphalt at reservoirs and pump station sites
- Valve replacements
- Vault-hatch lid replacements
- Variable frequency drive (VFD) replacements
- Water quality analyzer replacements

Once the Minor Capital Projects Program has been approved by the Board, individual projects meeting the criteria may be authorized under Western's current purchasing policy. Staff will provide an update to the Finance Committee twice each year for expenditures taken under the Minor Capital Projects Program.

The following activities would be excluded from the program:

- Planning activities, research, or studies
- Design activities that would lead to additional expenses
- Land or facility acquisition
- Movable operating equipment
- Software not dedicated to control of a specialized system

Reason for Action

The biennial operating budget provides the General Manager with spending authority to carry out Western's mission to provide water supply, wastewater disposal and water resource management to the public in a safe, reliable, environmentally sensitive and financially responsible manner. The Capital Improvement and Facilities Plan identifies Western's capital project priorities for the next two years while also giving a current forecast of the capital projects planned through June of 2025. The CIFP provides Board guidance to Western staff for workload and project planning.

Solution
Adopt the General Manager's Operating Budget and Capital Improvement and Facilities Plan for Fiscal Years 2020-2021 and 2021-2022, and approve the Job Classification Plan and Salary Grades table

BUSINESS PLAN REFERENCE:
Board adoption of the biennial Operating Budget, the updated Job Classification Plan and Salary Grades table, and the two-year CIFP is in direct alignment with Western's 2018-2021 Strategic Priorities and 2025 Aspirational Targets. Timely adoption of these items is not only part of Western's routine business activities, it secures an elite workforce to ensure the delivery superior service, water resiliency, and wastewater dependability. Adoption also illustrates the District's sound financial stewardship in a very transparent manner.

LEGAL COUNSEL REVIEW:
Not Applicable.

CRAIG D. MILLER
General Manager

* Attachment(s):
    1. Budget Adoption Presentation
    2. Resolution 3102
    3. Fiscal Year 2020-2021 Consolidated Operating Budget
    4. Fiscal Year 2021-2022 Consolidated Operating Budget
    5. Job Classification Plan and Salary Grades Table Redlined Version

* Attachments not included in CIFP report. They can be found on Western's website at www.wmwd.com

May 18, 2020

TO THE FINANCE COMMITTEE:

Director Brenda Dennstedt
Director S.R. Al Lopez

FROM: Tim Barr, Deputy General Manager

REVIEW AND DISCUSS THE FIVE-YEAR CAPITAL IMPROVEMENT AND FACILITIES PLAN AND CONSIDER FORWARDING TO THE FULL BOARD OF DIRECTORS FOR ADOPTION OF THE SPENDING PLANS FOR FISCAL YEAR 2020-2021 AND FISCAL YEAR 2021-2022

RECOMMENDATION:
Staff requests that following a staff presentation and the Committee's review and discussion, the Finance Committee recommend that the Board of Directors approve a two-year Capital Improvement and Facilities Plan for Fiscal Year 2020-2021 and Fiscal Year 2021-2022.

EXECUTIVE SUMMARY:
The objective of the Capital Improvement and Facilities Plan (CIFP) process is to develop a forward-looking, comprehensive report that provides summary information about necessary capital project investments in the coming years. The CIFP highlights Western Municipal Water District's (Western) projects by describing each project's linkage to Western's Strategic Priorities, the project's necessity, costs and funding source, as well as the implementation timeline. The formal report, to be published following Board approval at an upcoming Board meeting, will also highlight the multiple factors considered by the District's multi-disciplinary CIFP team in prioritizing each project.

Staff is proposing two changes to the capital planning process this year. First, staff desires to align the CIFP with Western's Operating Budget schedule by seeking Board approval for two consecutive fiscal years. Second, as a step forward in the development of a formal asset management plan, staff desires to create a Minor Capital Project program. Implementing both of these actions is intended to increase the efficiency of capital planning and reduce staff labor time associated with capital projects without compromising fiscal integrity or transparency.

The proposed Fiscal Year 2020-2021 spending includes projected **net total** expenditures of $9,339,720 in Western cash reserves in the first year of the CIFP. The proposed Fiscal Year 2021-2022 spending includes **net total** expenditures of $7,464,249 in Western cash reserves in the second year of the CIFP.

It is important to note that if the Board approves the two-year CIFP spending plan, the Board is not summarily authorizing each project listed within the plan. All projects that require execution of a public works contract in excess of $35,000, or will result in a total expenditure for an individual project effort of more than $100,000, will be brought to the Board for individual project consideration. Those projects that are less than the public works threshold or are within the General Manager's spending authority will proceed as indicated. Projects classified as Minor Capital Projects are considered to be programmatic year-over-year actions and will proceed as necessary and as identified in the Detail section within this staff letter. At all times, staff will observe the approved purchasing policies of the District.

BUDGET IMPACT:

If the Board of Directors elects to adopt the two-year CIFP with Fiscal Year 2020-2021 projected spending of $30,494,720 (not including funding off sets), and Fiscal Year 2021-2022 spending of $28,219,343 (not including funding off sets), it will provide staff, under the General Manager's direction:

1. Spending authority for the projects listed in each of the two fiscal years with a total annual cost of less than $100,000 not requiring a public works contract;

2. Authority to implement Minor Capital Projects as required year-over-year; and

3. A discretionary fund of $300,000 each fiscal year to be expended on unanticipated capital projects in accordance with the requirements and authority levels established through the District's purchasing policy.

All projects not part of the Minor Capital Program and outlined in the attached listing with a public works contract in excess of $35,000 or a total cost of more than $100,000 will be presented to the Board of Directors for individual project approvals.

DETAIL:

Background:

The CIFP includes proposed Fiscal Year 2020-2021 projected expenditures of $30,494,720, and funding offsets for select projects of $21,155,000, which results in a net Fiscal Year 2020-2021 total of $9,339,720 in Western cash reserve expenditures necessary to advance the identified projects in the first year. The CIFP also includes proposed Fiscal Year 2021-2022 projected expenditures of $28,219,343, and funding offsets for select projects of $20,755,094, which result in a net Fiscal Year 2021-2022 total of $7,464,249 in Western cash reserve expenditures necessary to advance the identified projects in the second year. Funding offsets are derived from Bond Financing being considered as a separate action at an upcoming Board meeting, Federal and State

grant funding, and third party agreements with commitments for specific projects, such as the Enhanced and Active Recharge Projects in the San Bernardino Basin Area.

Staff thoroughly reviewed and prioritized the projects listed in the attached listing through a collaborative, multi-departmental process. Projects were prioritized following careful consideration of current asset condition, availability of funding, regulatory requirements, safety, and consequence of failure, just to list a few. The goal of the team's collaborative approach to project selection and ranking is to provide the Board with the confidence to approve the individual projects as they are both considered collectively and brought individually before the Board. In addition to a review of the need and timing of these specific projects, staff has reviewed the individual project workloads as well as the combined workload of the entire proposed plan to ensure that we have the workforce to complete the projects listed in a timely manner.

The project listings for Fiscal Year 2020-2021 and 2021-2022 also include the projects and associated funding obligations related to the District's Joint Powers Authority partnerships in the Chino Desalter Authority (CDA), the Santa Rosa Regional Resources Authority (SRRRA) and the Western Riverside County Regional Wastewater Authority (WRCRWA). The complete listing also includes known projects in the three-years following Fiscal Year 2021-2022. Although these future year projects were evaluated in the current process, they will be reevaluated in advance of the next two-year CIFP cycle to ensure that the District remains focused on the most important projects.

In addition to the comprehensive listing attached to this letter, the planned two-year expenditures have been categorized below into the District's funding areas:

Operating System Improvement and Asset Replacement projects.

Operating System Improvement Funds:	**Gross Total Amounts**	
Name (Fund #'s)	**FY 20-21**	**FY 21-22**
General District Activities (100, 106, 107, 108)	$9,335,000	$7,200,000
Fleet Expansion (144)	$154,890	$504,890
Operations Facilities Improvement and Equipment (166, 167)	$1,128,900	$250,000
Riverside Potable Water (200, 204, 220, 224)	$3,565,000	$5,545,000
Riverside Non-Potable Water (214)	$600,000	$900,000
Murrieta Potable Water (230, 234)	$0	$450,000
La Sierra Collections System Improvements (314) (flows to WRCRWA)	$990,929	$835,716
Western Water Recycling Facility (WWRF) (320, 324, 330, 334, 344)	$200,000	$370,000

Murrieta Wastewater (354)	$500,000	$0
Arlington Desalter (410, 414)	$440,000	$0
La Sierra Pipeline/Sterling Pump Station (434)	$120,000	$0

Asset Replacement Funds:

Name (Fund #'s)	**Gross Total Amount**	
	FY 20-21	**FY 21-22**
General District Asset Replacement (105)	$112,000	$75,000
Operations Asset Replacement (165)	$250,000	$250,000
Riverside Potable Asset Replacement (205)	$8,945,000	$9,100,000
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Mills Gravity Line Major Maintenance (407)	$1,223,800	$1,047,600
Arlington Desalter Asset Replacement (415)	$1,305,000	$755,000
Chino Desalter Asset Replacement (425)	$265,558	$253,510

Two-year plan:
In May 2012, the Board of Directors adopted a two-year operating budget for the first time. The result was a gain in labor efficiency and a lowering of resource costs associated with the budgeting process. No loss of financial transparency has occurred in the process. In June of 2020, Western's Board of Directors will consider adoption of the fifth consecutive biennial operating budget.

Last year, for the first time, staff developed a CIFP budget that clearly communicated the prioritization of capital projects. Staff also incorporated labor hours to ensure we had the resources to complete the projects. The entire comprehensive report, with the inclusion of complete project narratives, was published to the District web site. The capital program has evolved into a product that clearly communicates the District's determination to responsibly grow and maintain the facilities that will serve future generations.

In another effort to increase efficiency and reduce labor costs associated with the budgeting process, staff is seeking Board approval of a comprehensive two-year capital spending plan. If adopted for Fiscal Year 2020-2021 and Fiscal Year 2021-2022, the CIFP will match the timeline and cohesively come together with the District's biennial operating budget.

Minor Capital Projects:
In previous years, regardless of size, staff presented all capital projects individually under the general CIFP project category. This included smaller purchases such as valve, pump, and motor replacements. Even the scheduled replacement of desktop computer equipment and office carpeting is listed on the CIFP. In all cases, the costs of these items are within the general manager's Board-approved purchasing authority. Staff believes that there is a more efficient and cost conscience way to complete routine asset replacements without compromising the District's fiscal integrity or public transparency.

Staff is proposing that $750,000 per fiscal year, approximately 3.4% of the total CIFP spending plan, be purposefully allocated to the recurring replacement, refurbishment, or upgrade of District infrastructure. This is an effective capital budget strategy, especially for the District's many routine projects. These smaller, but no less important, projects would be prioritized based on on-going condition assessment protocols and occasionally an immediate need, in cases where an asset fails to live up to its expected lifetime. Establishing a limited Minor Capital Projects fund would allow these recurring smaller projects to be performed quickly and efficiently based on business need and as prioritized by the District's subject matter experts. Minor capital projects are defined as efforts that will refurbish, replace, or upgrade District infrastructure less than or equal to $100,000 on an individualized basis. Most of these projects are likely to occur on the significant number of the small assets under staff's responsibility that require attention to keep the systems operational, safe and well maintained. Examples of projects include, but are not limited to:

- Replacement or refurbishment of various pumps and motors
- Recoating or replacement of the asphalt at reservoirs and pump station sites
- Valve replacements
- Vault-hatch lid replacements
- Variable frequency drive (VFD) replacements
- Water quality analyzer replacements
- Water quality sampling station improvements

Once the Minor Capital Projects Program has been approved by the Board, individual projects meeting the criteria may be authorized under the District's current purchasing policy. Staff will provide an update to the Finance Committee twice each year for all expenditures taken under the Minor Capital Projects Program.

The following activities would be excluded from the program:

- Planning activities, research, or studies
- Design activities that would lead to additional expenses
- Land or facility acquisition
- Moveable operating equipment
- Software not dedicated to control of a specialized system

Reason for Action:
The Capital Improvement and Facilities Plan identifies the District's capital project priorities for Fiscal Year 2020-2021 and Fiscal Year 2021-2022 while also giving a current forecast of the capital projects planned through June of 2025. The CIFP also provides Board guidance to District staff for workload and project planning.

Solution:
Approve the two-year Capital Improvement and Facilities Plan for Fiscal Year 2020-2021 and Fiscal Year 2021-2022.

BUSINESS PLAN REFERENCE:
In addition to supporting Western's Strategic Priorities to provide superior service, water resiliency, and wastewater dependability, the CIFP illustrates the District's sound financial stewardship. This action is also part of Western's routine business activities.

LEGAL COUNSEL REVIEW:
Not Applicable.

TIM BARR
Deputy General Manager

Attachment(s):

1. Project Listing Handout
2. CIFP Workshop Presentation

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Appendix C

Western Municipal Water District

Proposed Fiscal Year 2020-2021 CIFP

Department Key:
X = JPA Projects (PROJ # 900)
AD = Administration (PROJ # 1,000)
F = Finance (PROJ # 2,000)
I = Information Technology (PROJ # 3,000)
W = Recharge Projects (PROJ # 5,000)

Department Key:
M = Management (PROJ # 4,000)
R = Water Resources (PROJ # 5,000)
E = Engineering (PROJ # 6,000)
O = Operations (PROJ # 8,000)
S = Arlington Desalter (PROJ #6,000 OR 8,000)

TOTAL

Net Totals

Project #	Rank	Activity #	Project Name	Project Manager	Project Description	YR 1 Project Hours	YR 1 Support Hours	YR 1 Total Hours	YR 2 Project Hours	YR 2 Support Hours	YR 2 Total Hours	Fund Description	Fund	Offset Explanation (Grants/Loans)
901-2021-X	A0	**Various**	**CDA Projects (Western's Portion)**	**Kawaii, Derek**	**Western's portion of projects approved by the CDA.**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**CDA Asset Replacement Fund**	**425**	
902-2021-X	A0	**Various**	**SRRRA Projects (Western's Portion)**	**Kawaii, Derek**	**Western's portion of projects approved by the SRRRA Board.**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**Murrieta Wastewater Asset Replacement Project**	**355**	
903-2021-X	A0	**Various**	**WRCRWA Projects - Asset Replacement (Western's Portion)**	**Pollak, Anthony**	**Western's portion of projects approved by the WRCRWA Board.**	**100**	**500**	**600**	**100**	**500**	**600**	**La Sierra Area Asset Replacement Project**	**315**	
904-2021-X	A0	**Various**	**WRCRWA Projects - System Improvements (Western's Portion)**	**Pollak, Anthony**	**Western's portion of projects approved by the WRCRWA Board.**	**970**	**832**	**1802**	**740**	**444**	**1184**	**La Sierra Area System Improvement Project**	**314**	
1000-1819-AD	A1.8	9162	Content Management System	Bohn, Cynthia	Continued implementation of an Electronic Content Management System (ECMS) that will be used to manage the lifecycle of District records in a standardized, searchable way.	300	180	480	300	160	460	IT Project	108	
1001-1920-A	B2	9226	Meridian Facility Improvements	Bohn, Cynthia	Miscellaneous electrical improvements to the Meridian facility to avoid power outages, to increase generator coverage, and installation of some LED lighting.	20	0	20		0	0	HQ Facility Improvement Project	106	
1005-2324-AD	C2.2	TBD	Installation of LED lighting at Meridian	Bohn, Cynthia	Replace discontinued fluorescent lighting ballasts with new more efficient LED ballasts.	0	0	0		0	0	HQ Asset Replacement Project	105	
1006-2021-AD	C1.8	TBD	IT Server Room Air Conditioner Replacement	Bohn, Cynthia	Replace existing A/C units with two 6-ton split systems with multi-stage condensing units.	100	16	116		0	0	HQ Asset Replacement Project	105	
1007-2324-AD	D1.8	TBD	Meridian Roof Repairs	Bohn, Cynthia	Remove all loose and damaged areas of roofing surface and install silicon roof restoration coating to entire roof surface.	0	0	0		0	0	HQ Facility Improvement Project	106	
1008-2223-AD	C2.4	TBD	Meridian HVAC Replacement	Bohn, Cynthia	Replace (4) HVAC Units at Meridian with like units.	0	0	0	20	6	26	HQ Asset Replacement Project	105	
1009-2324-AD	C1.5	TBD	Meridian Carpet Replacement	Bohn, Cynthia	Remove existing carpet and replace with new throughout Meridian facility.	0	0	0		0	0	HQ Asset Replacement Project	105	
1010-2122-AD	B2.3	9201	Meridian Landscape Signage	Duecker, Gregory	Replace landscaping and irrigation at the Meridian facility, while incorporating a demonstration garden. This project is currently being executed by Admin Services. Previously #6005-1819-A				60	800	860	HQ Asset Replacement Project	105	
2002-2021-F	B2.1	TBD	Meter Replacement and Retrofit Project (Phase II)	Mascaro, Kevin	Enhance meter accuracy and customer equity by replacing or retrofitting meters in the Riverside Service Area that are 7 years or older with AMI-compatible meters.	125	25	150	125	25	150	Riverside Potable Water System Improvement Project	204	Reclamation Grant $1M; Balance Bond Funding
2003-2021-F	A0	9245	MGL - WR-24 & WR-24DT Service Connection Modifications	Sr Engineer	(1) Adjust the existing range of WR-24D to a new range of 8-80 cfs, and (2) change WR-24DT from a temporary to a permanent service connection.	15	5	20	15	5	20	MGL Major Maintenance Project	407	
3000-1819-I	B2.2	9207	Computer Systems, Servers, & Network Infrastructure	Mouser, Michael	This project is an ongoing effort to replace capital IT equipment as needed annually.	40	0	40	40	0	40	IT Project	108	
3003-2223-I	A1.8	TBD	Meeting Room Technology Upgrade	Mouser, Michael	Complete an upgrade of the District's existing Room Wizard meeting room scheduling systems and expand the system to Operations conference rooms.	80	30	110		0	0	IT Project	108	
3005-2122-I	B1.7	TBD	ERP Improvements	Zheng, Yun	This project is an effort to improve Western's ERP system through a major version upgrade, migration to cloud hosted services, or transition to a new ERP product.		1230	1230		2600	2600	IT Project	108	
3006-2223-I	D1.4	TBD	CWMS Gap Analysis and Improvements	Diaz, Patricia	Perform Gap Analysis and develop improvements for the District's CWMS(Infor/Hansen) software system.	100	0	100		0	0	IT Project	108	
3007-2122-I	C1.6	TBD	District Facilities Audio/Visual Upgrade	Mouser, Michael	Plan and complete an upgrade to the audio/visual systems in the District's Board room and certain conference rooms.		0	0	120	0	120	HQ Facility Improvement Project	106	
4000-2021-M	A0	Various	Unplanned Projects < $100k	Miller, Craig	Funding for emergency and/or unplanned projects less than $100,000 authorized by the GM.	20	0	20	20	0	20	General District	100	

2020/2021	(Offset) 2020/2021	2021/2022	(Offset) 2021/2022	2022/2023	(Offset) 2022/2023	2023/2024	(Offset) 2023/2024	2024/2025	(Offset) 2024/2025	Total
$30,494,720	($21,155,000)	$28,219,343	($20,755,094)	$23,412,567	($15,395,282)	$15,450,630	($9,600,743)	$11,944,367	($6,130,000)	$36,485,508
	$9,339,720		$7,464,249		$8,017,285		$5,849,887		$5,814,367	

2020/2021	(Offset) 2020/2021	2021/2022	(Offset) 2021/2022	2022/2023	(Offset) 2022/2023	2023/2024	(Offset) 2023/2024	2024/2025	(Offset) 2024/2025	Total
$265,558		$253,510		$241,462		$63,754		$33,634		$857,918
$231,921		$25,811		$66,811		$85,811		$34,811		$445,165
$256,722		$256,722		$256,722		$256,722		$256,722		$1,283,610
$990,929		$835,716								$1,826,645
$125,000		$125,000								$250,000
$85,000										$85,000
								$400,000		$400,000
$112,000										$112,000
						$125,000				$125,000
				$325,000						$325,000
						$200,000				$200,000
		$75,000								$75,000
$1,840,000	($1,840,000)	$1,840,000	($1,840,000)							$0
$906,000										$906,000
$75,000		$75,000		$75,000		$75,000		$75,000		$375,000
$100,000		$0				$0		$0		$100,000
		$750,000		$1,750,000		$1,000,000				$3,500,000
$0		$0		$100,000		$100,000		$100,000		$300,000
$0		$300,000		$0		$0		$75,000		$375,000
$300,000		$300,000		$300,000		$300,000		$300,000		$1,500,000

Western Municipal Water District

Proposed Fiscal Year 2020-2021 CIFP

Department Key:
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Department Key:
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S = Arlington Desalter (PROJ #6,000 OR 8,000)

TOTAL

Net Totals

Project #	Rank	Activity #	Project Name	Project Manager	Project Description	YR 1 Project Hours	YR 1 Support Hours	YR 1 Total Hours	YR 2 Project Hours	YR 2 Support Hours	YR 2 Total Hours	Fund Description	Fund	Offset Explanation (Grants/Loans)
4001-2021-M	A0	Various	Minor Capital Projects/Programs	Miller, Craig	Year over Year maintenance or asset replacement programs throughout the District	N/A	N/A	N/A	N/A	N/A	N/A	General District	100	Various Funding Sources
5002-1819-W	A1.3	9030	Enhanced Recharge Project - SAR Spreading Basins	Shaw, Ryan	(VALLEY DISTRICT has ~$7M BUDGETED FOR NEXT FY...NEED TO DECIDE IF WE WANT TO INCLUDE THAT OR GO BACK TO THE BOARD IF AND WHEN THEY SPEND THAT MONEY) This is a joint project between WMWD, San Bernardino Valley Municipal Water District, San Bernardino Valley Water Conservation District, and the City of Riverside. An analysis performed as part of the Santa Ana River Watershed Integrated Regional Water Management Plan determined that an estimated 80,000 AFY of water can be recharged into the Bunker Hill Basin.	40	0	40	40	0	40	Water Resources Development Project	107	Plaintiff Party Cost Sharing Agreements
5003-1819-W	A1.3	9055	Active Recharge Project - SAR Tributaries	Shaw, Ryan	The Western-San Bernardino Watermaster identified access to additional water rights in the SBBA. This project seeks to capture these new water rights. This is a joint project between San Bernardino Valley Municipal Water District and Western Municipal Water District on behalf of the plaintiff parties.	40	0	40	40	0	40	Water Resources Development Project	107	Plaintiff Party Cost Sharing Agreements
5004-1819-R	B1.7	9127	SARCCUP Planning Activities	Shaw, Ryan	This project will include program management, planning and preliminary design efforts for SARCCUP related projects to prepare for design and construction.	460	40	500		40	40	Water Resources Development Project	107	Prop 84 grant funding (SAWPA)
6004-1819-E	A2.5	9231	ADS Well Rehab	Palacios, Ron	Rehabilitate the pumps and casings of the Arlington Desalter wells.	160	50	210	160	50	210	Arlington Desalter Asset Replacement Project	415	Bond Funding
6007-1819-E	B2	9234	Riverside Reservoir Management System (RMS)	Badaluco, D	RMS will decrease the amount of flushing necessary to maintain water quality. Overall system water quality will improve and public health protection increased.	480	620	1100		0	0	Riverside Potable Water System Improvement Project	204	
6011-2021-E	B1.9	9237	Non-Potable ~Recycled Tank Refurbishment Program	Project Partners	Funds for evaluations and future tank rehabilitations.	280	68	348	280	68	348	Riverside Non-potable Water Asset Replacement Project	215	
6012-2122-E	B1.8	9233	Reservoir Management - Murrieta	Badaluco, Dan	Adding a tank mixing system to the existing reservoirs will allow tanks to be kept at a high level rather than cycling the tanks from high to low water levels.		0	0	180	238	418	Murrieta System Improvement Project	234	
6013-1819-E	A1.7	9228	WWRF Solids Handling	Palacios, Ron	Conduct study to assess sewer treatment capacity and reliability by enhancing wet weather solids handling capacity. Year 1 conduct study and Year 2 implement design.	160	24	184	240	80	320	WWRF Treatment System Improvement Project	324	
6014-2122-E	C2.2	9187	Grizzly Ridge Rehabilitation	Palacios, Ron	Project will consist of lining or replacing the existing steel bolted tank with a welded steel tank and mixing system.		0	0		0	0	Murrieta Asset Replacement Project	235	
6015-2122-E	C2	TBD	Rainbow Tank Refurbishment Program	Sr Engineer	Pending a project consultant to begin work to coat and paint the Rainbow tank.		0	0		0	0	Rainbow/Rock Mountain Asset Replacement Project	245	
6016-2122-E	C2	TBD	MGL Blow-off Repairs and Isolation Valve Replacement	Sr Engineer	Repair or replace blow-offs and isolation valves along the fourteen mile pipeline.	260	80	340	180	80	260	MGL Major Maintenan	407	
6017-2122-E	C1.9	TBD	Potable Tank Refurbishment Program	Palacios, Ron	Perform periodic dive and dry inspections for 11 active tanks. Recoat tanks at approximate 10-year intervals and cleaning or minor coating repairs between these intervals.	280	68	348	280	68	348	Riverside Potable Water Asset Replacement Project	205	Bond Funding
6018-2223-E	C1.9	3648	1269 Lift Station - WWRF Collections	Project Partners	Replace electrical equipment, rebuild 3' higher to protect from 100-year flood, and increase wet well size to accommodate rain associated inflows.		0	0	240	96	336	WWRF Conveyance East Asset Replacement Project	335	Bond Funding
6019-1920-E	A	9225	Canon Street Interconnection with RPU	Palacios, Ron	Install interconnection with RPU and construct new pump station on Canon Road with chemical dosing for chloramine.	360	100	460	300	160	460	Riverside Potable Water System Improvement Project	204	Transfer of SARCCUP funds from Sterling by 9/30/2023;
6020-1920-E	A2.4	9206	Nandina Manhole Rehab/Replacement - WWRF Collections	Project Partners	16 manholes have been identified through condition assessment as in need of replacement or rehabilitation due to corrosion.	120	40	160		0	0	WWRF Conveyance West Asset Replacement Project	345	

2020/2021	(Offset) 2020/2021	2021/2022	(Offset) 2021/2022	2022/2023	(Offset) 2022/2023	2023/2024	(Offset) 2023/2024	2024/2025	(Offset) 2024/2025	Total
$30,494,720	($21,155,000)	$28,219,343	($20,755,094)	$23,412,567	($15,395,282)	$15,450,630	($9,600,743)	$11,944,367	($6,130,000)	$36,485,508
	$9,339,720		$7,464,249		$8,017,285		$5,849,887		$5,814,367	

2020/2021	(Offset) 2020/2021	2021/2022	(Offset) 2021/2022	2022/2023	(Offset) 2022/2023	2023/2024	(Offset) 2023/2024	2024/2025	(Offset) 2024/2025	Total
$750,000	($750,000)	$750,000	($750,000)	$750,000	($750,000)	$750,000	($750,000)	$750,000	($750,000)	$0
$7,500,000	($7,400,000)	$4,000,000	($3,900,000)							$200,000
		$600,000	($575,000)	$600,000	($575,000)	$800,000	($775,000)			$75,000
$400,000	($300,000)	$300,000	($200,000)	$200,000	($100,000)					$300,000
$415,000	($415,000)	$415,000	($415,000)	$415,000	($415,000)					$0
$600,000										$600,000
$75,000		$100,000		$700,000		$250,000		$700,000		$1,825,000
		$450,000								$450,000
$50,000		$250,000								$300,000
				$200,000		$1,100,000				$1,300,000
				$75,000		$795,000				$870,000
$317,800		$847,600		$337,400		$348,600		$179,200		$2,030,600
$175,000	($175,000)	$800,000	($800,000)	$280,000	($280,000)	$655,000	($655,000)	$280,000	($280,000)	$0
		$225,094	($225,094)	$675,282	($675,282)	$1,775,743	($1,775,743)			$0
$500,000	($500,000)	$2,000,000	($2,000,000)	$2,200,000	($2,200,000)					$0
$550,000										$550,000

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Net Totals

Project #	Rank	Activity #	Project Name	Project Manager	Project Description	YR 1 Project Hours	YR 1 Support Hours	YR 1 Total Hours	YR 2 Project Hours	YR 2 Support Hours	YR 2 Total Hours	Fund Description	Fund	Offset Explanation (Grants/Loans)
6021-1920-E	A2.4	9229	Murrieta Inverted Siphon Max Capacity (collection system)	Palacios, Ron	Upgrade the Lemon St. inverted siphon currently operating over capacity due to upstream development.	280	20	300		0	0	Murrieta Wastewater System Improvement Project	354	
6022-1920-E	B1.9	TBD	Solar Site Erosion Damage Repair	Sr Engineer	Repair erosion damage from runoff of solar panel site at Operations near MWD channel.	80	20	100		0	0	Ops Facility Improvement Project	167	
6023-2122-E	B1.7	TBD	New Electrical Pump at Holcomb Pump Station	Palacios, Ron	Add an additional electrical pump to Holcomb Pump Station to realize more cost effective operations over time.		0	0		0	0	Riverside Potable Water System Improvement Project	204	
6029-2021-E	B1.9	TBD	PRVs for PZ1515 to achieve compliance	Project Partners	Install two PRVs for Pressure Zone 1515 to facilitate safety pressure requirements and compliance with State laws. Currently this area shows pressure dropping below 20psi whenever any fire flows are used in the model. If this project is not completed, the ability of Western to maintain pressure in the zone and comply with regulatory requirements will continue to be hindered.	40	372	412		0	0	Riverside Potable Water System Improvement Project	204	
6030-2021-E	B2	TBD	Flow based pump station at Lockwood	Project Partners	Install flow-based pump station near Lockwood tank to achieve minimum required residual pressure in surrounding area due to high elevations		0	0	120	40	160	Riverside Potable Water System Improvement Project	204	
6031-2122-E	D1.8	TBD	PRVs within PZ1515 for system improvement	Project Partners	Replace two existing isolation valves with PRVs within Pressure Zone 1515 to allow for additional operational flexibility within the zone and facilitate redundancy		0	0	40	372	412	Riverside Potable Water System Improvement Project	204	
6032-2021-E	A2.2	9213	MGL - Relocation within streambed due to Erosion	Project Partners	A section of the 54" MGL pipeline has been exposed due to erosion within a blueline stream. Project requires relocation of pipeline below grade for protection and to prevent further erosion as well as failure of the pipeline.	40	20	60	320	40	360	MGL Major Maintenance Project	407	
6033-2021-E	A	TBD	Victoria Basin Landscaping	Badaluco, Dan	Landscaping of internal property frontage along Victoria and Jackson Street per City of Riverside and Victoria Forever community	40	20	60		0	0	Arlington Desalter System Improvement Project	414	
6034-2021-E	A1.8	TBD	SAWPA Parking Lot	Project Partners	Installation of conduit for SCADA and paving of SAWPA Parking lot for the Sterling Pump Station project. An interagency agreement with SAWPA has been approved for this work	80	0	80		0	0	La Sierra Pipeline/Sterling Pump Station System Improvement	434	
6035-2223-E	B1.9	TBD	WWRF Cleaning Room	Felix, Sergio	Construction of clean room inside existing maintenance building at WWRF providing an area for proper cleaning and storage of samplers, clean storage area for sampling bottles and clean equipment after use.		0	0	40	16	56	WWRF Treatment System Improvement Project	324	
6036-2021-E	C1.5	TBD	Pump Station Improvements @ WWRF Pond	Sr Engineer	PS improvements at WWRF Pond to provide recycled water to cemetery as dedicated system	160	80	240		0	0	WWRF Treatment System Improvement Project	324	
6037-2021-E	A1.4	TBD	Magnolia Avenue interconnection with Riverside Public Utilities (RPU)	Sr Engineer	Install interconnection with RPU along Magnolia Avenue near Merced including metering facility, pressure control as well as connection point at Sterling Pump Station in order to convey water from RPU to Western	240	100	340	240	80	320	Riverside Potable Water System Improvement Project	204	SARCCUP
6040-1920-E	A	9179.2	Operations Building G	Sr Engineer	Construction of a manufactured metal building (Peak Steel Building) purchased by Operations to be installed at El Sobrante. Project requires permitting thru County of Riverside EDA	24	120	144		0	0	Ops Facility Improvement Project	167	
6041-2425-E	C	TBD	MGL - Cathodic Protection	Felix, Sergio	Install Cathodic protection for Mills Gravity Line		0	0		0	0	MGL System Improvement Project	404	
6043-2021-E	A1.4	TBD	SARRCUP Non-Potable Well (Well #7)	Huff, Sonia	Project will include a short pipeline and a groundwater production well in south Riverside basin for non-potable supplemental water supply and as needed for SARCCUP operations.	240	50	290	260	80	340	Riverside Non-potable Water System Improvement Project	214	SARRCUP
6044-2021-E	A2.5	9154	Cajalco Intake Switchgear & Motor Control Center Replacement	Huff, Sonia	Parts for maintenance and repair of the motor control center for this Lower Intake Potable Station are becoming obsolete. MCC needs to be replaced due to age and condition. BOD Design Award $400,000 (12/20/17)	280	120	400	280	120	400	Riverside Potable Water Asset Replacement Project	205	Bond Funding
6045-2021-E	A2	TBD	Linear Asset Management Program	Francis, Karl	Annual replacement program for aging infrastructure. Includes Old MARB Pipeline Gilley, Adams, and Dekay St	240	60	300	360	120	480	Riverside Potable Water Asset Replacement Project	205	Bond Funding

2020/2021	(Offset) 2020/2021	2021/2022	(Offset) 2021/2022	2022/2023	(Offset) 2022/2023	2023/2024	(Offset) 2023/2024	2024/2025	(Offset) 2024/2025	Total
$30,494,720	($21,155,000)	$28,219,343	($20,755,094)	$23,412,567	($15,395,282)	$15,450,630	($9,600,743)	$11,944,367	($6,130,000)	$36,485,508
	$9,339,720		$7,464,249		$8,017,285		$5,849,887		$5,814,367	

2020/2021	(Offset) 2020/2021	2021/2022	(Offset) 2021/2022	2022/2023	(Offset) 2022/2023	2023/2024	(Offset) 2023/2024	2024/2025	(Offset) 2024/2025	Total
$500,000										$500,000
$80,000										$80,000
				$300,000						$300,000
$200,000										$200,000
		$100,000		$600,000						$700,000
		$200,000								$200,000
		$200,000		$1,300,000						$1,500,000
$190,000										$190,000
$120,000										$120,000
		$120,000								$120,000
$150,000										$150,000
$175,000	($175,000)	$1,000,000	($1,000,000)							$0
$48,900										$48,900
								$1,500,000		$1,500,000
$600,000	($600,000)	$900,000	($900,000)	$3,500,000	($3,500,000)					$0
$3,500,000	($3,500,000)	$2,900,000	($2,900,000)							$0
$5,000,000	($5,000,000)	$5,000,000	($5,000,000)	$5,000,000	($5,000,000)	$5,000,000	($5,000,000)	$5,000,000	($5,000,000)	$0

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Project #	Rank	Activity #	Project Name	Project Manager	Project Description	YR 1 Project Hours	YR 1 Support Hours	YR 1 Total Hours	YR 2 Project Hours	YR 2 Support Hours	YR 2 Total Hours	Fund Description	Fund	Offset Explanation (Grants/Loans)
6046-2122-E	A2.2	TBD	1269 Force Main Replacement WWRF	Sr Engineer	Lift station 1269 force main replacement. Board approved for $671,750 design services FY 18/19 (carryover into FY 19/20).	440	20	460	440	20	460	WWRF Conveyance West Asset Replacement Project	345	
6047-2223-E	C1.3	TBD	Perris Valley Pipeline Turnout at Western Way	Francis, Karl	Perform feasibility study for construction of a WMWD turnout on the Perris Valley Pipeline at Western Way just south of the March Air Museum.		0	0		0	0	Water Resources Development Project	107	Bond Funding
6049-2425-E	F2	TBD	MARB Sewer Infiltration Reduction	Sr Engineer	Develop plan and perform mitigation measures for PFOS.		0	0		0	0	WWRF Conveyance East System Improvement Project	334	
8000-1819-O	A	J1166	Hydro-Excavator Vehicle Lease	Chang, Alexander	Due to the network of underground utility lines encountered while excavating, this machine increases work site safety and reduces risk. This is to continue with the leasing agreement for this vehicle.	12	12	24	12	12	24	Fleet Expansion Project	144	
8001-1819-O	A	J1168	CCTV Inspection Vehicle Lease	Chang, Alexander	Robotic Closed Circuit TV (CCTV) inspections are the most frequent used, cost efficient, and most effective method to inspect the internal condition of a wastewater collection system. This is to continue with the leasing agreement for this vehicle.	12	12	24	12	12	24	Fleet Expansion Project	144	
8002-1920-O	A2.6	9215	Chlorine Analyzers at Reservoirs	Magallon, Luis	Chlorine analyzers will give operators a real time look at the water quality of the reservoirs. Analyzers will monitor reservoir residuals and track water quality trends.	30	60	90	30	60	90	Riverside Potable Water System Improvement Project	204	
8004-1920-S	B2.5	9216	ADS Train Valve Replacement	Magallon, Luis	The valves connecting the CIP system to the trains are leaking. By addressing these now, we reduce chemical costs and increase the life span of the membranes.	8	80	88	8	80	88	Arlington Desalter Asset Replacement Project	415	
8008-2021-O	B2.3	9140.4	Pump Motor Efficiency Program	Baringer, Jason	Using 3rd party efficiency testing, equipment will be rated and prioritized based on its efficiency percentage.	40	20	60	40	20	60	Riverside Potable Water Asset Replacement Project	205	
8009-1819-O	A2.5	9219	Water Systems Operations Plan Implementation	Miller, Gary	Hire consultant to assist in development of an operational plan for the potable water production and distribution system. Phase 1 will identify quick and easy changes we can make to our current operational strategy.	200	80	280		0	0	Riverside Potable Water System Improvement Project	204	
8010-1819-O	B2.3	9189.4	1269 Submersible Pump Replacement - WWRF Collections	Baringer, Jason	Replace three (3) submersible pumps (2X 40HP 1X 125HP) at 1269 lift station, that have over time become substantially less efficient. MCCs are also outdated and need replacement. This will be done in conjunction with pump replacement.	80	40	120	40	80	120	WWRF Conveyance East Asset Replacement Project	335	
8012-1819-O	B2.2	9218	Natural Gas Engine Overhaul Program	Baringer, Jason	Perform factory recommended complete engine overhauls on natural gas engines at Bergamont and Holcomb pump stations; one unit per year, over the next 5 years.	60	45	105	60	45	105	Riverside Potable Water Asset Replacement Project	205	
8013-2122-O	B2.2	9220	Distribution System Vault Hatch Replacement Program	Chanes, Lawrence	Replace aged vault lids with newer and safer technology that is more easily secured and opened.	0	0	0	40	0	40	Riverside Potable Water Asset Replacement Project	205	
8014-2021-O	A2.1	9227	SCADA Master Plan Implementation	Standing Warrior, Bull	This plan provides guidelines for all SCADA projects, including an implementation plan that outlines the recommended HMI and PLC hardware and software, design standards, communication, proper documentation and system implementation.	600	100	700	800	80	880	Ops Asset Replacement Project	165	Bond Funding
8015-1819-S	A2.1	9161	ADS Automation Upgrade	Standing Warrior, Bull	Automation upgrade to current HMI and PLCs' for the Desalter, Turnouts and Pump Stations. The current control system is beyond its useful life.	160	120	280		0	0	Arlington Desalter Asset Replacement Project	415	
8016-2021-S	A2	TBD	ADS RO Membrane Replacement	Magallon, Luis	Membrane life expectancy is 7 years. Replacing each train on a year-over-year basis until all have been replaced.	80	0	80	80	0	80	Arlington Desalter Asset Replacement Project	415	
8019-1920-S	B2.5	TBD	ADS RO Feed Pump Replacement	Baringer, Jason	Purchase a mission critical spare pump for Arlington Desalter RO pumps to minimize service interruption to our customers and increase efficiency in labor hours.	40	20	60		0	0	Arlington Desalter Asset Replacement Project	415	
8020-1920-S	B2.5	TBD	ADS Clean in Place Pump Replacement	Magallon, Luis	CIP pump needs to be replaced to extend the life span of membranes.	2	20	22		0	0	Arlington Desalter Asset Replacement Project	415	
8021-1920-O	C2.5	TBD	Non-Potable Pump Efficiency Program	Baringer, Jason	Reliability - Replacement of the Districts non-potable pumps and motors identified to be at the end of their useful service life.	60	20	80	60	20	80	Riverside Non-potable Water Asset Replacement Project	215	

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$30,494,720	($21,155,000)	$28,219,343	($20,755,094)	$23,412,567	($15,395,282)	$15,450,630	($9,600,743)	$11,944,367	($6,130,000)	$36,485,508
	$9,339,720		$7,464,249		$8,017,285		$5,849,887		$5,814,367	

2020/2021	(Offset) 2020/2021	2021/2022	(Offset) 2021/2022	2022/2023	(Offset) 2022/2023	2023/2024	(Offset) 2023/2024	2024/2025	(Offset) 2024/2025	Total
								$640,000		$640,000
				$1,100,000	($1,100,000)					$0
								$830,000		$830,000
$108,122		$108,122		$108,122						$324,366
$46,768		$46,768		$46,768						$140,304
$50,000		$30,000		$30,000		$30,000		$30,000		$170,000
$70,000		$40,000								$110,000
$100,000		$100,000		$100,000		$100,000		$100,000		$500,000
$150,000										$150,000
$80,000										$80,000
$100,000		$100,000		$100,000		$100,000		$100,000		$500,000
		$100,000		$100,000		$100,000		$100,000		$400,000
$250,000	($250,000)	$250,000	($250,000)	$800,000	($800,000)	$645,000	($645,000)	$100,000	($100,000)	$0
$350,000										$350,000
$200,000		$200,000		$200,000						$600,000
$100,000										$100,000
$50,000										$50,000
$80,000				$80,000				$80,000		$240,000

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8022-1819-S	B2.3	9186	ADS Dist Pumps 1-4 Replacement	Baringer, Jason	Purchase one mission critical spare ADS distribution pump for pumps 1, 2, 3, and 4. Pumps will be replaced as condition and/or efficiency testing dictates the need.	40	20	60	20	0	20	Arlington Desalter Asset Replacement Project	415	
8023-2122-O	C2.3	TBD	VFD Replacement - Non-Potable System	Standing Warrior, Bull	Assess and prioritize variable frequency drives (VFD) that have exceeded their life expectancy and are no longer supported. Replace over a 3 year period.		0	0	80	0	80	Riverside Non-potable Water Asset Replacement Project	215	
8024-1819-S	B2.2	TBD	ADS MOV Replacement	Baringer, Jason	The Desalter treatment system contains multiple motor operated valves (MOV) and failure could result in significant down time for the plant. The MOV's would be prioritized, then rebuilt or replaced.	40	20	60		0	0	Arlington Desalter Asset Replacement Project	415	
8025-2122-O	C2.1	9193	Replace Valves at Oleander Pump Station	Chang, Alexander	Install isolation valves outside of pump station to isolate flow for purposes of dewatering and completing necessary repairs as a short-term solution.	0	0	0	50	0	50	Riverside Potable Water Asset Replacement Project	205	
8026-2021-O	A2.1	TBD	Sampling Station Upgrade	Magallon, Luis	Upgrade outdated sample cans with newer cans to provide more coverage from the elements that can result in positive samples.	20	80	100	10	80	90	Riverside Potable Water System Improvement Project	204	
8028-2021-O	A1.9	TBD	Asphalt Seal Coating - Potable	Chanes, Lawrence	Implement a multi-year program to seal coat all Distribution system Potable water facilities to extend the life span of all paved Pump stations and Reservoirs.	20	0	20	20	0	20	Riverside Potable Water System Improvement Project	204	
8029-2021-O	A1.9	TBD	Asphalt Seal Coating - Non-Potable	Chanes, Lawrence	Implement a multi-year program to seal coat all Distribution system Non-Potable water facilities to extend the life span of all paved Pump stations and Reservoirs.	20	0	20	20	0	20	Riverside Non-potable Water Asset Replacement Project	215	
8030-2021-O	C1.9	TBD	Asphalt Seal Coating - La Sierra Collection System Lift Stations	Chang, Alexander	Implement a multi-year program to seal coat all Collection system Lift Stations to extend the life span of all paving.	40	0	40		0	0	La Sierra Area Asset Replacement Project	315	
8031-2122-O	C1.9	TBD	Asphalt Seal Coating - WWRF Collection System Lift Stations	Chang, Alexander	Implement a multi-year program to seal coat all Collection system Lift Stations to extend the life span of all paving.		0	0	40	0	40	WWRF Conveyance West Asset Replacement Project	345	
8032-2223-O	C1.6	TBD	Warehouse Assessment	Arimas, Maribel	Development of technical memo addressing storage capacity and layout design and optimization, as well as evaluation of inventory methods.	250	0	250		0	0	Ops Asset Replacement Project	165	
8033-2122-O	C2.5	9168.4	Potable Distribution System Rehabilitation	Chanes, Lawrence	Assessments of the District's water storage facilities and pump stations is ongoing. Funding the rehabilitation will allow staff to prioritize facilities based on need.	0	0	0	40	40	80	Riverside Potable Water System Improvement Project	204	
8034-1920-S	C2.5	TBD	ADS Delivery Isolation Valves etc	Fike, Christopher	Addition of isolation valves to ensure ability to operate MICADS system efficiently.	2	100	102		0	0	Arlington Desalter System Improvement Project	414	SARRCUP
8037-2021-O	A2.3	TBD	Purchase Emergency Generators	Standing Warrior, Bull	The District has procured emergency generators on a rent to own contract; staff recommends purchasing the generators outright.	4	0	4		0	0	Ops Equipment Acquisition Project	166	
8038-2021-O	C1.9	TBD	Machine Shop Equipment Assessment and Development	Baringer, Jason	Re-purpose the old auto shop building to house a machine shop and procure machine shop equipment.	50	40	90	50	30	80	Ops Equipment Acquisition Project	166	
8039-2021-O	A1.8	TBD	Operations Control Room	miller, Gary	Production/Distribution system control room for ongoing system monitoring and optimization.	40	110	150	40	110	150	Ops Facility Improvement Project	167	
8040-2122-O	D1.6	TBD	Operations fueling station	Fike, Chris	SAFETY/RELIABILITY Fleet efficiency for day-to-day operations as well as increased Emergency Management and Preparedness for generators etc.; Increased fuel supplies to maintain consistent reliable Operations in event of disaster, such as PSPS.	0	0	0	80	330	410	Ops Facility Improvement Project	167	
8041-2021-O	A2	TBD	WWRF Bleach Tank	Pollak, Anthony	There are 2 bleach tanks at WWRF, we previously repaired and replaced the first of two tanks, now the second tank appears to be reaching the end of its useful like. There is visible cracking and a minor leak. This project will repair/replace the second of the two tanks. The tanks have an estimated 7-10 year life expectancy.	20	60	80		0	0	WWRF Treatment Asset Replacement Project	325	

2020/2021	(Offset) 2020/2021	2021/2022	(Offset) 2021/2022	2022/2023	(Offset) 2022/2023	2023/2024	(Offset) 2023/2024	2024/2025	(Offset) 2024/2025	Total
$30,494,720	($21,155,000)	$28,219,343	($20,755,094)	$23,412,567	($15,395,282)	$15,450,630	($9,600,743)	$11,944,367	($6,130,000)	$36,485,508
	$9,339,720		$7,464,249		$8,017,285		$5,849,887		$5,814,367	

2020/2021	(Offset) 2020/2021	2021/2022	(Offset) 2021/2022	2022/2023	(Offset) 2022/2023	2023/2024	(Offset) 2023/2024	2024/2025	(Offset) 2024/2025	Total
$100,000		$100,000								$200,000
		$75,000		$75,000		$75,000		$75,000		$300,000
$20,000										$20,000
		$100,000								$100,000
$20,000		$20,000		$20,000		$20,000		$20,000		$100,000
		$50,000				$50,000				$100,000
$25,000				$25,000				$25,000		$75,000
$30,000				$30,000				$30,000		$90,000
				$20,000		$20,000				$40,000
				$100,000						$100,000
		$100,000		$100,000		$100,000		$100,000		$400,000
$250,000	($250,000)									$0
$750,000										$750,000
$50,000		$50,000								$100,000
$100,000		$100,000								$200,000
						$500,000				$500,000
$30,000										$30,000

Western Municipal Water District

Proposed Fiscal Year 2020-2021 CIFP

Department Key:
X = JPA Projects (PROJ # 900)
AD = Administration (PROJ # 1,000)
F = Finance (PROJ # 2,000)
I = Information Technology (PROJ # 3,000)
W = Recharge Projects (PROJ # 5,000)

Department Key:
M = Management (PROJ # 4,000)
R = Water Resources (PROJ # 5,000)
E = Engineering (PROJ # 6,000)
O = Operations (PROJ # 8,000)
S = Arlington Desalter (PROJ #6,000 OR 8,000)

TOTAL

Net Totals

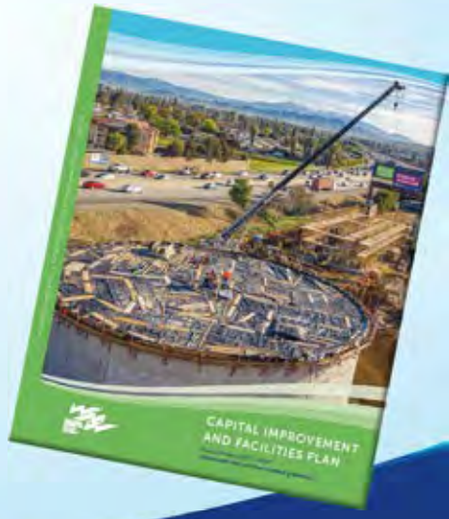
Project #	Rank	Activity #	Project Name	Project Manager	Project Description	YR 1 Project Hours	YR 1 Support Hours	YR 1 Total Hours	YR 2 Project Hours	YR 2 Support Hours	YR 2 Total Hours	Fund Description	Fund	Offset Explanation (Grants/Loans)
8044-2021-O	D2	TBD	Portable Water Pumps	Baringer, Jason	Purchase two portable water pump that can be used to maintain necessary flow during a planned shutdown or emergency.		0	0	80	0	80	Fleet Expansion Project	144	
8045-2021-O	D2.3	TBD	Electrical Run for Ops Main Generator	Standing Warrior, Bull	Maintenance shop and radio shack currently supported by small, outdated non-compliant generator. Staff proposes to connect locations to the Ops main generator. Design year one and implement year two. (Recommended in RRA and ERP, industry best practice)	120	28	148	240	0	240	Ops Facility Improveme	167	
8046-2021-O	A2.1	TBD	Scissor Lift	Chanes, Lawrence	Purchase scissor lift to allow staff and other state officials to conduct tank inspections safely.	40	0	40		0	0	Ops Equipment Acquisition Project	166	
8047-2223-O	B2.6	TBD	Boom Truck	Baringer, Jason	Purchase boom truck for electricians to access elevated SCADA and radio equipment for maintenance and repairs.		0	0	40	10	50	Riverside Potable Wate	204	
8048-2021-O	D2.4	TBD	Roof Repair and Roof Access Rehabilitation Holcomb Pump Station	Baringer, Jason	Skylights are currently leaking; roof needs to be repaired and skylights replaced. Ladder access to roof was intended for emergency access only and does not have necessary components for regular use; business processes require roof access weekly during peak pumping times. Ladder needs to be rehabilitated to include proper safety measures for long-term consistent use.	40	0	40		0	0	Riverside Potable Water Asset Replacement Project	205	
8049-2021-O	C2.3	TBD	Site Security Improvements	Standing Warrior, Bull	Install intrusion switches, cameras, lighting, or other security measures as recommended by the RRA, ERP, and industry best practices.	160	40	200	160	40	200	Riverside Potable Water System Improvement Project	204	

2020/2021	(Offset) 2020/2021	2021/2022	(Offset) 2021/2022	2022/2023	(Offset) 2022/2023	2023/2024	(Offset) 2023/2024	2024/2025	(Offset) 2024/2025	Total
$30,494,720	($21,155,000)	$28,219,343	($20,755,094)	$23,412,567	($15,395,282)	$15,450,630	($9,600,743)	$11,944,367	($6,130,000)	$36,485,508
	$9,339,720		$7,464,249		$8,017,285		$5,849,887		$5,814,367	

2020/2021	(Offset) 2020/2021	2021/2022	(Offset) 2021/2022	2022/2023	(Offset) 2022/2023	2023/2024	(Offset) 2023/2024	2024/2025	(Offset) 2024/2025	Total
		$350,000								$350,000
		$100,000		$100,000						$200,000
$100,000										$100,000
		$175,000								$175,000
$70,000										$70,000
$30,000		$30,000		$30,000		$30,000		$30,000		$150,000

Capital Improvement and Facilities Plan

Board Workshop
May 18, 2020



WESTERN MUNICIPAL WATER DISTRICT

Agenda

1. CIFP Committee
2. Project Selection
3. Increasing Reliability, Local Supplies, and Efficiency
    a. Biennial Budget Authorization
    b. Minor Capital Projects Program
4. Affordability Assessment
5. Bond Financing and Longer-term Projects

CIFP Committee

CIFP Process

February

- 2 Committee Meetings
- 4 Internal Meetings

Project Manager Tasks:
Status of FY20 carryover;
Review, edit outer years;
Propose new projects;
Determine rankings for all; and
Calculate Year 1 labor hours

March

- 2 Committee Meetings
- 4 Internal Meetings

Project Manager Tasks:
Q+A for specific projects;
Calculate Year 2 Hours; and
First Draft edits.

Affordability Review

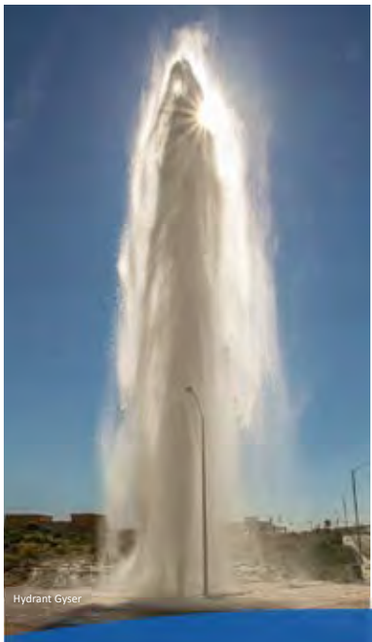
Reassess for COVID19

April/May

- 1 Committee Meeting
- 3 Department Meetings
- 4 Internal Meetings

COVID19 Considerations and edits
Project Manager Final Review

Final Affordability Review
Board Preparations



Hydrant Gyser

Project Ranking

Process for Rating Capital Improvement and Facilities Plan (CIFP) Projects

step 1: Identify all projects to be considered. Projects are collected from all District departments.

step 2: Determine the Project Tier Rating based on the following criteria:

Bracket A

Projects that have or will receive Board approval within 60 days of the start of the following Fiscal year. Partnership projects with significant partner funding. Approved for construction projects.

Bracket B

If project is initiated due to an immediate safety/health/regulatory issue, is essential to enable District activities to continue OR the asset is at risk of immediate failure OR is a project funded by grants/agency partnership may be considered. Bracket A projects with overall ratings of <2 may be downgraded at the discretion of the CIFP Committee or Executive Management.

Bracket C

Asset replacement or an item that was previously scheduled for action

Bracket D

If project is not initiated due to the factors in Bracket A, B, or C.

Project Ranking Continued

step 3: Assess each project using the outlined criteria below, which is then used to calculate the **Overall Rating** based on an average of the ratings assigned.

	3 RATING	2 RATING	1 RATING
ASSET CONDITION	Poor	Marginal	Good
DISTRICT IMPACT	District operations or daily activities cannot take place without this.	Not essential to District operations **BUT** will impact daily activities.	**DOES NOT** impact basic District operations but could improve efficiency, workload, or reliability.
FINANCIAL BENEFIT	Cost saved by improving today **AND** operating costs decrease in the future.	Cost saved by improving today **OR** operating costs decrease in future.	No significant financial benefit now or in the future.
DISTRICT STRATEGIC PRIORITIES	Specifically identified in the plan	Strong linkage established with the plan	Not a Strategic Priority
CHANGING STATE / REGULATORY REQUIREMENTS	Yes, changes within the next fiscal year	Yes, changes within 3-5 fiscal years	No requirements
STATUS OF FUNDING	Project is Board authorized and work order opened	Work order opened/Board approval not required	New project/request
SAFETY ELEMENT	Critical danger	Moderate-low danger	No safety danger
CONSEQUENCE OF ASSET FAILURE	Critical	Moderate	Low
PROJECT READINESS	**WILL** be complete within next FY	**MAY** be complete in next FY	Multi-year project
DEPARTMENT COLLABORATION	Lead team only	1 additional team only	2+ additional teams

Leak Repair

Project Ranking Continued

step 4: After each project receives an overall rating, they are reviewed and ranked highest to lowest score within each Bracket.

step 5: WORKLOAD IMPACT ASSESSMENT - Once all projects have been ranked and prioritized, the CIFP Committee will review the workload impact to each department and the District overall.

step 6: Review of available funding, impact on days cash on hand, and potential impact on bond rating. Final determination of project ranking is assessed by Executive Management.


Grizzly Ridge


Sterling Pump Station


Operations Repair

Workload Impact Assessment

	Support Hours for FY20/21 YEAR 1 (Insert hours for each department):															
	Year 1 Project Hours	Admin	CA	Eng.	Fin	HR	IT	WR	Ops.	Electrical	Const/Coll	Mechanical	Prod/Dist	Wastewater	Water City	Year 1 Support Hours	Year 1 Total Hours
	12	0	0	0	12	0	0	0	0	0	0	0	0	0	0	12	24
	12	0	0	0	12	0	0	0	0	0	0	0	0	0	0	12	24
	30	0	0	0	0	0	0	0	0	30	30	0	0	0	0	60	90
	40	0	0	0	0	0	0	0	0	10	0	0	10	0	0	20	60
	200	0	0	16	0	0	0	16	0	24	0	24	0	0	0	80	280
	60	0	0	0	0	0	0	0	0	30	0	0	15	0	0	45	105
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	600	0	0	40	0	0	60	0	0	0	0	0	0	0	0	100	700
TOTAL	*9,480*	*90*	*425*	*254*	*654*	*100*	*606*	*626*	*290*	*476*	*1,460*	*342*	*314*	*68*	*122*	*5,827*	*15,307*

*Graphic extracted from the active CIFP listing. Not a complete list.


ADS Well Rehab

Five Year Top 10 Projects (~54%)

Project	Gross Total Cost
Pipeline Replacement	$25.0M
Cajalco Switchgear	$6.40M
SARCCUP Non-Potable Well	$5.00M
Canon Pump Station/RPU Intertie	$4.70M
Minor Capital Projects Program*	$3.75M
Meter Replacement	$3.68M
ERP Improvements	$3.50M
1269 Lift Station	$2.68M
Potable Tank Refurbishment Program	$2.19M
SCADA MP Implementation	$2.05M
TOTAL	***$58.9M***

Top 10 Projects - Year 1 (~51%)

Project	Gross Total Cost
Pipeline Replacement	$5.0M
Cajalco Switchgear	$3.5M
Meter Replacement	$1.8M
WRCRWA System Improvements	$1.0M
MGL WR-24DT	$900K
Minor Capital Projects Program*	$750K
Emergency Generators	$750K
SARCCUP Non-Potable Well	$600K
Riverside Reservoir Management System	$600K
Nandina Manholes	$550K
TOTAL	***$15.5M***


Alson Pump Station

Top 10 Projects – Year 2 (~61%)

Project	Total Cost
Pipeline Replacement	$5.0M
Cajalco Switchgear	$2.9M
Canon Pump Station/RPU Intertie	$2.0M
Meter Replacement	$1.8M
Magnolia Interconnection	$1.0M
SARCCUP Non-Potable Well	$900K
MGL Blow-off Replacement	$850K
WRCRWA System Improvements	$835K
Potable Tank Maintenance Program	$800K
Minor Capital Projects Program*	$750K
TOTAL	***$16.8M***

SARRCUP Related Projects

Project	Year 1 (FY21)	Year 2 (FY22)	Year 3 (FY23)	Total Cost	Grant Offset	Third-Party Projects
Sterling PS and La Sierra Pipeline	-	-	-	$34,506,770[1]	($9,250,000)	
Magnolia Avenue Interconnection	$300,000	$1,000,000		$1,300,000	($1,300,000)	
Cannon Pump Station	$500,000	$2,000,000	$2,205,000	$4,705,000	($2,800,000)	
Riverside-South Non-potable Well	$600,000	$900,000	$3,500,000	$5,000,000	($5,000,000)	
ADS Delivery Isolation Valves	$250,000			$250,000	($250,000)	
SARCCUP Planning Activities	$400,000	$300,000	$200,000	$900,000	($600,000)	
EVMWD Well Projects[2]				$4,620,000[2]	($3,044,580)	x
RPU Capacity Collaboration[3]				$4,500,000[3]	($4,500,000)	x
			TOTALS:	$55,781,770	(26,744,580)	

1. This total cost does not reflect the final total amount for the LSP/SPS project.
2. May not reflect total cost of project.
3. Project not completely defined as of May 2020. The total cost is not yet known.


Murrieta Inverted Siphon


Meter Replacement Project


Meridian Electrical Improvements

Two-year (Biennial) Plan

- Streamlined Planning Efforts
- Improved Project Definition
- Lower Resource Costs to Develop and Publish the Plan
- Alignment with Biennial Operating Budget
- Rigorous Fiscal Oversight


WWRF Tertiary Rehab


Van Buren Repair


North Well #2

Minor Capital Projects Program

- Total request is $750,000/year
- Represents 3.4% of forecast 5-year capital spending
- Biennial expenditure for a specific project/program less than or equal to $200,000.
- Funding source for specific project has more than $2.5M in reserves.
- The project is not directly tied to a future expenditures – example, a study.
- Staff will not exceed the total program limit in a given Board-approved period.
- Staff will present a biannual progress report to Finance Committee.

Minor Capital Projects Program

Project (Examples, not limited to)	Example Costs
Sampling Station Upgrade	$20,000
Asphalt Seal Coating – Potable Sites	$50,000
Asphalt Seal Coating – Non-potable Sites	$25,000
Asphalt Seal Coating – La Sierra Lift Stations	$30,000
Meridian Facility Improvements	$85,000
Computer Systems, Servers, Networks	$75,000
Natural Gas Engine Overhaul	$100,000
Distribution System Vault Hatch Replace	$100,000
Pump Motor Efficiency Program	$100,000
Pump Station Repairs (Holcomb)	$70,000
Valve Replacements (Oleander)	$100,000
VFD Replacement – Non-potable	$75,000
Site Security Improvements	$30,000

Comparison to Current CIFP

Fiscal Year	Gross Total	Offset*	Net Total
FY 2019-2020 (Current)	$37,789,279	$(20,725,000)	$17,064,279
FY 2020-2021 (Yr. 1)	$30,494,720	$(21,155,000)	$9,339,720
FY 2021-2022 (Yr. 2)	$28,219,343	$(20,755,094)	$7,464,249

*Funding offsets are derived from planned bond and third-party financing, Federal and State grant funding, and partner agency agreements for specific projects.

The Five Year Outlook

Fiscal Year	Gross Total	Offset*	Net Total
FY20-21	$30,494,720	$(21,155,000)	$9,339,720
FY21-22	$28,219,343	$(20,755,094)	$7,464,249
FY22-23	$23,412,567	$(15,395,282)	$8,017,285
FY23-24	$15,450,630	$(9,600,743)	$5,849,887
FY24-25	$11,994,367	$(6,130,000)	$5,814,367
TOTALS	**$109,521,627**	**($73,036,199)**	**$36,485,428**

*Funding offsets are derived from planned bond and third-party financing, Federal and State grant funding, and partner agency agreements for specific projects.

Affordability Assessment

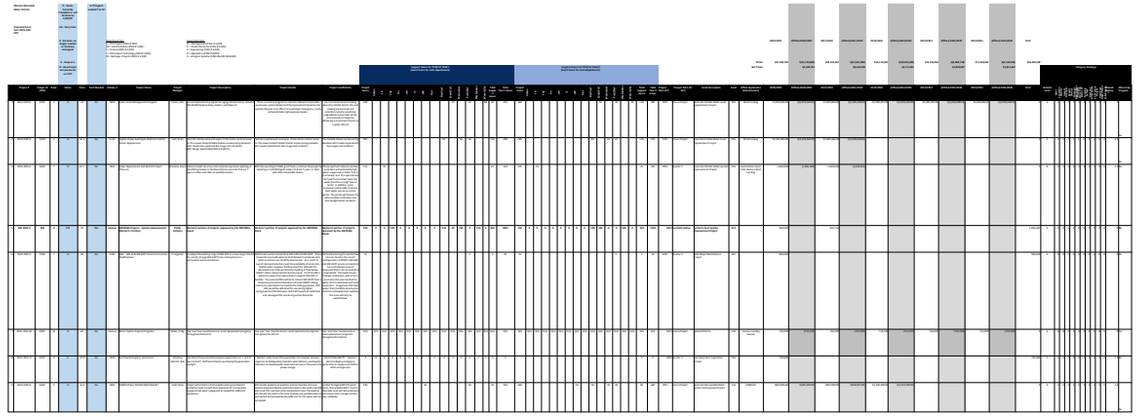
- Review Reserve Level Targets
- Review Projected Ending Reserve Balances
- Review Days Cash on Hand
- Maintain Credit Ratings
- Analyze Most Effective Method to Fund Projects
- Long Range Financial Modeling


Balancing Risk and Affordability

	FY20-21	FY21-22	FY22-23	FY23-24	FY24-25
Number of Projects*	46	35	29	17	15
Planned Net Expenditures**	$9,339,720	$7,464,249	$8,017,285	$5,849,887	$5,814,367
Resultant Days Cash on Hand	389	397	403	415	428

* Does not include Minor Capital Projects or projects with other agency partners.
**Includes funding offsets (Loans, Reimbursements, and Grants)

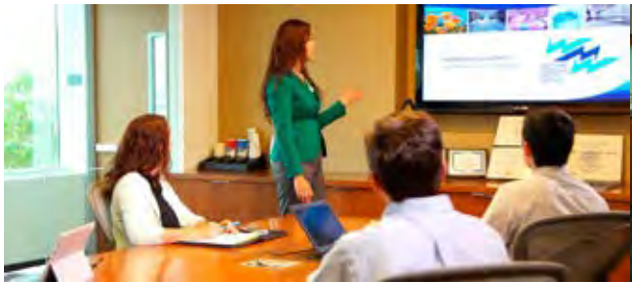
Discuss CIFP Projects



Refer to Handout (Workshop Attachment)

New Bond Financing ~$25M

- ADS Well Rehabilitation
- Cajalco Intake Switchgear
- Canon Street RPU Interconnection
- Meter Replacement Program
- Potable Tank Refurbishment
- Perris Valley Pipeline Turnout
- Pipeline Replacement (Asset Management)
- SCADA Master Plan Implementation
- WWRF 1269 Lift Station



Longer-Term Projects

- MARB Sewer Collection PFAS Mitigation
- MARB Sewer Infiltration Reduction
- Murrieta Legacy Pipe Fire Flow Updates
- Murrieta Sewer Infiltration Reduction
- WWRF 1269 Force Main Replacement
- WWRF Pond Improvements
- ADS Well Number 6 and Pipeline

Western Riverside County Regional Wastewater Authority

WESTERN MUNICIPAL WATER DISTRICT

Western Municipal Water District
Administration 951.571.7100
Operations 951.789.5100
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WMWDVideo1
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