

Information Technology Capital Improvements

INFORMATION TECHNOLOGY OVERVIEW

Valley Water relies on its software systems and technology infrastructure to help manage its core responsibilities of water supply, flood protection, and environmental stewardship. Recognizing the importance of Information Technology to its success, Valley Water created a new IT Strategic Plan in 2019. The strategy extends through 2024 and consists of 68 capital and non-capital projects focusing on the following critical pillars: Data and Analytics, Modernization, Partnership and Alignment, and Security.

In 2014, the Information Technology Capital Fund was created. It accounts for the costs to acquire, and install capital information technology projects with Valley Water-wide benefit. Projects include acquisition and replacement of computers, networks, and communications systems as well as major investments in enterprise software systems.

Costs are billed to user departments as Intra-District Computer Equipment Charges. Billing rates will be set to smooth charges over time by recovering current costs and accumulating reserves for major planned future projects. Current year charges or a combination of current year charges and reserves may be used to fund authorized projects. The purpose of this fund is to provide adequate resources while avoiding peaks and valleys in charges to user departments.

Major Capital Improvements Identified in the CIP

- Data Consolidation
- Information Technology Disaster Recovery
- ERP System Implementation
- Telephone System Voiceover IP
- Software Upgrades & Enhancements
- WTP-WQL Network Equipment

CIP PLANNING PROCESS AND FINANCIAL ANALYSIS

The annual CIP Planning Process starts with collecting information on proposed new capital projects in July, followed by the validation of proposed new projects, preliminary scoping, review and financial analyses to produce a Draft CIP in February.

The Board then authorizes release of the Draft CIP to the public and local municipalities for review, conducts a public hearing, and approves the resolution to adopt the Final CIP in May.

Financial analysis of the Information Technology Capital Fund was conducted to determine if there are limitations to funding the planned capital projects.

Through the CIP Planning Process and financial analysis, it was determined that funding needs for approved Information Technology projects can be met.

Information Technology Capital Improvements

The following table is a project funding schedule for information technology capital improvements resulting from this year's financial analysis. Detailed information for each project can be found in this document on the following pages in the order presented in this table. The chart also identifies partially funded projects and estimated unspent appropriation from FY 2020-21.

Information Technology Capital Improvements (\$K)

Project Number	PROJECT NAME	Through FY20	FY21	FY21 Unspent	FY22	FY23	FY24	FY25	FY26	FY27-36	TOTAL
73274009	Data Consolidation	1,083	74	-	76	-	-	-	-	-	1,233
73274001	IT Disaster Recovery	2,396	-	-	206	-	-	-	-	-	2,602
73274002	ERP System Implementation	14,608	2,258	1,956	324	248	-	-	-	-	17,438
73274008	Software Upgrades & Enhancements	3,184	871	-	372	2,007	1,248	405	504	6,779	15,370
73274012	Telephone System Voiceover IP	1,116	132	1	-	-	-	-	-	-	1,248
73274011	E-Discovery Management System	267	-	(279)	279	-	-	-	-	-	546
95274003	WTP-WQL Network Equipment	2,908	-	-	89	1,391	2,803	798	287	3,280	11,556
TOTAL		25,562	3,335	1,678	1,346	3,646	4,051	1,203	791	10,059	49,993

 FY 2020-21 Funds to be reappropriated

Information Technology - Funding Sources (\$K)

Fund Number	FUND NAME	Through FY20	FY21	FY21 Unspent	FY22	FY23	FY24	FY25	FY26	FY27-36	TOTAL
61	Water Utility Enterprise Fund	2,908	-	-	89	1,391	2,803	798	287	3,280	11,556
73	Information Technology Fund	22,654	3,335	1,678	1,257	2,255	1,248	405	504	6,779	38,437
TOTAL		25,562	3,335	1,678	1,346	3,646	4,051	1,203	791	10,059	49,993

 FY 2020-21 Funds to be reappropriated

Project	Data Consolidation
Program	Information Technology
Project No.	73274009
Contact	Mike Cook mcook@valleywater.org



Data consolidation will reduce Valley Water's data footprint

PROJECT DESCRIPTION

This project plans, designs, and implements improvements to Data management to accomplish the following objectives:

- ♦ Implement an enterprise content management (ECM) system with strong business intelligence.
- ♦ Move from an applications-centric model to a data-centric model, thereby removing silos of data stores.
- ♦ Manage data as a strategic core asset, with ongoing process and management control for data analytics.
- ♦ Provide and gain rapid insights using data analytics to solve complex business problems.
- ♦ Reduce the overall data footprint.

PROJECT LOCATION

No Map is provided for this project

SCHEDULE & STATUS

July 2015 to June 2023

Phase	Cost	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31
Plan	-											
Design	-											
Construct	1,110											
Closeout	-											
	1,231											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY20	FY21	FY22	FY23	FY24	FY25	FY26	Future	
73274009-Data Consolidation	121	1,037	73	0	0	0	0	0	1,231
with inflation	121	1,037	75	0	0	0	0	0	1,233

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY20	FY21		FY22	FY23	FY24	FY25	FY26	Future	
73274009-Data Consolidation	1,083	74	-1	76	0	0	0	0	0	1,233

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Information Technology Fund	1,233
Other Funding Sources	0
Total	1,233

OPERATING COST IMPACTS

The enterprise content management system will require a software license agreement at an approximate cost of \$100,000 per year. The cost is including in the Software Maintenance and Licenses project. Any future upgrade costs would be budgeted in the Information Technology Fund.

USEFUL LIFE: 3-5 Years

Project	Information Technology Disaster Recovery
Program	Information Technology
Project No.	73274001
Contact	Michael Cook mcook@valleywater.org



Existing Data Center that houses critical servers supporting Valley Water's normal operations

PROJECT DESCRIPTION

This project plans, designs, and implements improvements to Information Technology to accomplish the following objectives:

- Enable coordinated, rapid recovery from a disaster.
- Reduce Valley Water's business risk exposure.

PROJECT LOCATION

No Map is provided for this project

SCHEDULE & STATUS

July 2014 to June 2022

Phase	Cost	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31
Plan	14											
Design	12											
Construct	1,935											
Closeout	-											
	2,596											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY20	FY21	FY22	FY23	FY24	FY25	FY26	Future	
73274001-Information Technology Disaster Recovery	684	1,712	200	0	0	0	0	0	2,596
with inflation	684	1,712	206	0	0	0	0	0	2,602

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY20	FY21		FY22	FY23	FY24	FY25	FY26	Future	
73274001-Information Technology Disaster Recovery	2,396	0	0	206	0	0	0	0	0	2,602

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Information Technology Fund	2,602
Other Funding Sources	0
Total	2,602

OPERATING COST IMPACTS

Ongoing annual costs will be determined at the completion of construction, and will be based on implemented solutions.

USEFUL LIFE: Not Available

Project	ERP System Implementation
Program	Information Technology
Project No.	73274002
Contact	Michael Cook mcook@valleywater.org



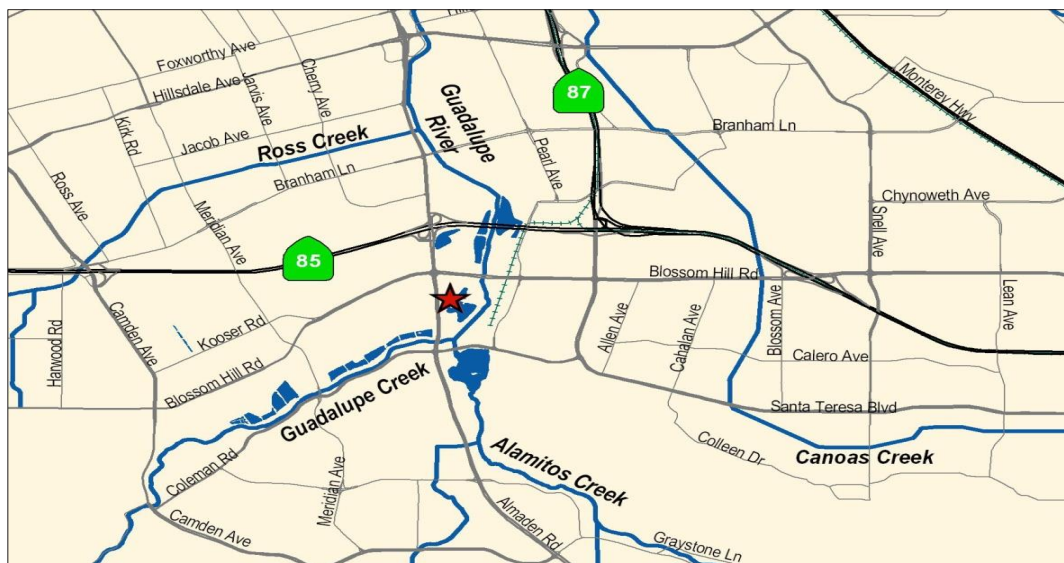
The new ERP system aims to increase operational efficiency

PROJECT DESCRIPTION

This project selects and implements a new cloud-based, integrated, proven and state-of-the-art Enterprise Resource Planning (ERP) system to replace the current out-of-date ERP application. Below are the objectives:

- Provide up-to-date functionalities for Finance, HR, Payroll, Contract, Procurement, Inventory, and Warehouse areas, and to reengineer business processes to ensure that Valley Water takes full advantage of the software's inherent capabilities.
- Increase operational effectiveness, reduce costs and improve management decision-making processes by increasing the ability to access and analyze data.
- Leverage a cloud platform to improve the availability of Financials, Supply Chain, Human Resources, and Payroll data.
- Minimize customizations and adopt best standard business practices during implementation.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

July 2013 to March 2023

Phase	Cost	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31
Plan	1,438											
Design	-											
Construct	8,059											
Closeout	-											
	18,656											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY20	FY21	FY22	FY23	FY24	FY25	FY26	Future	
60274062-ERP System Implementation	1,199	0	0	0	0	0	0	0	1,199
with inflation	1,199	0	0	0	0	0	0	0	1,199
73274002-ERP System Implementation	10,597	4,451	2,182	227	0	0	0	0	17,457
with inflation	10,597	4,451	2,280	248	0	0	0	0	17,576
TOTAL	11,796	4,451	2,182	227	0	0	0	0	18,656
with inflation	11,796	4,451	2,280	248	0	0	0	0	18,775

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY20	FY21		FY22	FY23	FY24	FY25	FY26	Future	
60274062-ERP System Implementation	1,199	0	0	0	0	0	0	0	0	1,199
73274002-ERP System Implementation	14,608	2,258	1,818	462	248	0	0	0	0	17,576
TOTAL	15,807	2,258	1,818	462	248	0	0	0	0	18,775

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD General Fund	1,199
SCVWD Information Technology Fund	17,576
Total	18,775

OPERATING COST IMPACTS

Upon completion of this project, one full-time employee will be required within the Software Services Unit for expanded technical support of the new system modules and features, and to continue with operational refinements, enhancements, integrations, report development.

USEFUL LIFE: 5 Years

Project	Software Upgrades & Enhancements
Program	Information Technology
Project No.	73274008
Contact	Michael Cook mcook@valleywater.org



Existing systems will be upgraded and enhanced

PROJECT DESCRIPTION

This project provides upgrade and enhancement services to existing Valley Water systems, including the enterprise resource planning system, geographic information system, enterprise asset management software Maximo, the Oracle database management system, internal and external Valley Water websites, and related databases. Previously, software upgrades were budgeted to their individual respective maintenance and support projects. This new project aims to consolidate activities into a single project for better organization, planning and budgeting purposes.

The objective of this project is to regularly upgrade existing software packages to:

- ♦ Stay in compliance and reduce risks associated with being on a version that is no longer supported.
- ♦ Leverage new functionalities of up-to-date software.

PROJECT LOCATION

No Map is provided for this project.

SCHEDULE & STATUS

July 2015 to June 2032

Phase	Cost	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31
Plan	325											
Design	221											
Construct	11,787											
Closeout	-											
	13,576											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY20	FY21	FY22	FY23	FY24	FY25	FY26	Future	
73274008-Software Upgrades & Enhancements	1,887	2,168	361	1,892	1,142	360	435	5,331	13,576
with inflation	1,887	2,168	372	2,007	1,248	405	504	6,778	15,370

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY20	FY21		FY22	FY23	FY24	FY25	FY26	Future	
73274008-Software Upgrades & Enhancements	3,184	871	0	372	2,007	1,248	405	504	6,778	15,370

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Information Technology Fund	15,370
Other Funding Sources	0
Total	15,370

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Project	Telephone System Voice Over IP
Program	IT
Project No.	73274012
Contact	Michael Cook mcook@valleywater.org



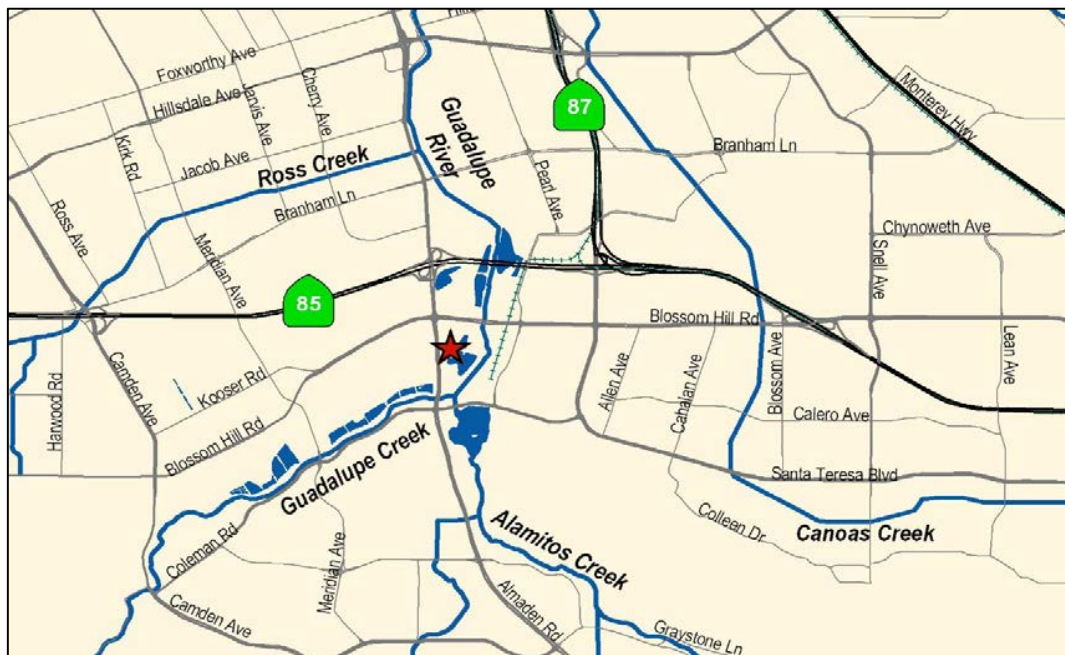
The current Avaya Telephone System was first installed in the Administration Building in 1986

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to Valley Water's Telephone system to accomplish the following objective:

- Replace current Avaya digital phone stations with new Avaya voice over IP telephone stations.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

July 2019 to December 2021

Phase	Cost	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31
Plan	-											
Design	-											
Construct	1,248											
Closeout	-											
	1,248											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY20	FY21	FY22	FY23	FY24	FY25	FY26	Future	
73274012-Telephone System Voice Over IP	0	1,247	1	0	0	0	0	0	1,248
with inflation	0	1,247	1	0	0	0	0	0	1,248

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY20	FY21		FY22	FY23	FY24	FY25	FY26	Future	
73274012-Telephone System Voice Over IP	1,116	132	1	0	0	0	0	0	0	1,248

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

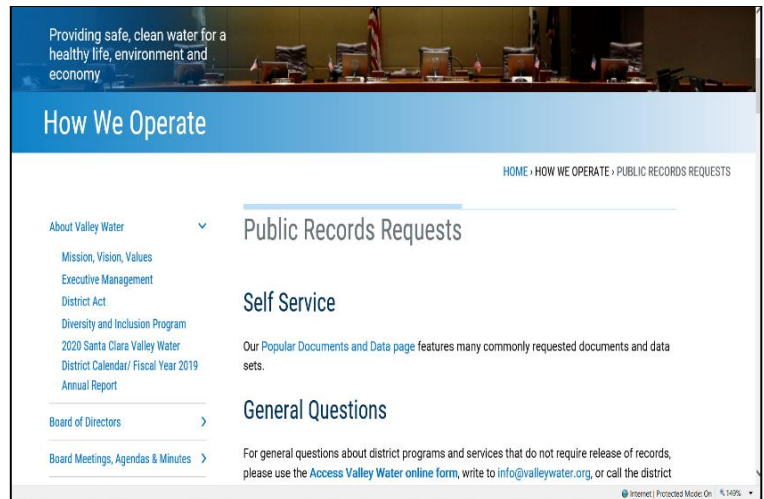
SCVWD Information Technology Fund	1,248
Other Funding Sources	0
Total	1,248

OPERATING COST IMPACTS

N/A

USEFUL LIFE: 7-10 Years

Project	E-Discovery Management System
Program	Information Technology
Project No.	73274011
Contact	Michael Cook mcook@valleywater.org



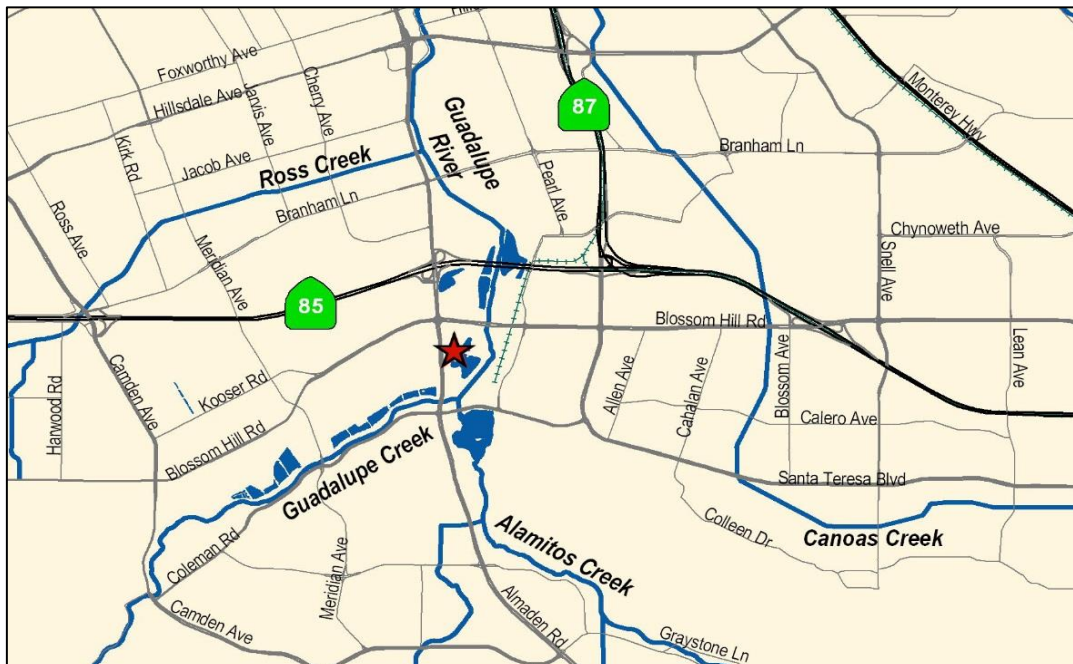
Screenshot of the Valley Water's Public Records web page

PROJECT DESCRIPTION

This project plans, designs, and implements a software solution to accomplish the following objectives:

- ♦ Issue formal notification of litigation holds.
- ♦ Search and locate/identify electronically stored information (ESI).
- ♦ Collect, preserve, process, review, and analyze ESI.
- ♦ Produce ESI in context to litigation, in response to California Public Records requests, and other government investigations.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

April 2017 to June 2020

Phase	Cost	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31
Plan	-											
Design	-											
Construct	-											
Closeout	-											
546												

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY20	FY21	FY22	FY23	FY24	FY25	FY26	Future	
73274011-E-Discovery Management System	546	0	0	0	0	0	0	0	546
with inflation	546	0	0	0	0	0	0	0	546

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY20	FY21		FY22	FY23	FY24	FY25	FY26	Future	
73274011-E-Discovery Management System	267	0	-279	279	0	0	0	0	0	546

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Information Technology Fund	546
Other Funding Sources	0
Total	546

OPERATING COST IMPACTS

Operating cost impacts of the project includes maintenance of the Exterro subscription, and are estimated to be \$200,000 per year, beginning in FY21.

USEFUL LIFE: Not available

Project	WTP-WQL Network Equipment
Program	Information Technology
Project No.	95274003
Contact	Michael Cook mcook@valleywater.org



View of network equipment to be modernized at the Water Quality Lab

PROJECT DESCRIPTION

This project plans, designs, and implements upgrades to the existing network to ensure that Valley Water has a current and robust computer network to accomplish the following objectives:

- Deliver greater access speeds.
- Restore vendor maintenance.
- Improve software application performance.
- Provide a path to meet future data communications needs.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

July 2014 to June 2032

Phase	Cost	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31
Plan	-											
Design	-											
Construct	8,931											
Closeout	-											
9,916												

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY20	FY21	FY22	FY23	FY24	FY25	FY26	Future	
95274003-WTP-WQL Network Equipment	1,451	1,457	85	1,274	2,456	669	230	2,294	9,916
with inflation	1,451	1,457	89	1,391	2,803	798	287	3,281	11,556

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY20	FY21		FY22	FY23	FY24	FY25	FY26	Future	
95274003-WTP-WQL Network Equipment	2,908	0	0	89	1,391	2,803	798	287	3,281	11,556

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Water Utility Enterprise Fund	11,556
Other Funding Sources	0
Total	11,556

OPERATING COST IMPACTS

Upon completion of this project operating costs are anticipated to increase by \$37,000 beginning in FY33 with an increase of 3% each year after that to pay for hardware maintenance agreements.

USEFUL LIFE: 10 Years