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 completed the Information Systems Master Plan (ISMP) in 2012. The ISMP is an 8-year plan consisting of 32 capital and non-capital improvement projects. The ISMP was extended and refreshed through the completion of the 2019 Information Technology Strategic Plan, which identified critical areas of concentration through 2024.

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
- Capital Construction Management System

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 2019-20.

Information Technology Capital Improvements ($K)

Project Number	PROJECT NAME	Through FY19	FY20	FY20 Unspent	FY21	FY22	FY23	FY24	FY25	FY26-35	TOTAL
73274009	Data Consolidation	1,023	60	-	75	77	-	-	-	-	1,235
73274001	IT Disaster Recovery	2,396	-	946	-	67	-	-	-	-	2,463
73274002	ERP System Implementation	14,608	-	3,361	2,256	251	263	-	-	-	17,378
73274008	Software Upgrades & Enhancements	2,403	781	-	871	398	2,190	1,388	459	8,581	17,071
73274012	Telephone System Voiceover IP	-	1,116	-	132	-	-	-	-	-	1,248
73274011	E-Discovery Management System	545	16	-	-	-	-	-	-	-	561
95074039	Capital Construction Mgmt System	-	977	877	156	110	-	-	-	-	1,243
95274003	WTP-WQL Network Equipment	2,723	185	-	-	94	1,475	2,985	854	3,747	12,063
	TOTAL	23,698	3,135	5,184	3,490	997	3,928	4,373	1,313	12,328	53,262

FY 2019-20 Funds to be reappropriated

The following table shows funding requirements from each funding source for information technology capital improvements.

Information Technology – Funding Sources ($K)

Fund Number	FUND NAME	Through FY19	FY20	FY20 Unspent	FY21	FY22	FY23	FY24	FY25	FY26-35	TOTAL
61	Water Utility Enterprise Fund	2,723	1,162	877	156	204	1,475	2,985	854	3,747	13,306
73	Information Technology Fund	20,975	1,973	4,307	3,334	793	2,453	1,388	459	8,581	39,956
	TOTAL	23,698	3,135	5,184	3,490	997	3,928	4,373	1,313	12,328	53,262

FY 2019-20 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 2022

Phase	Cost	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30
Plan	-											
Design	-											
Construct	1,131	■	■	■								
Closeout	-											
	1,231											

EXPENDITURE SCHEDULE
(in thousands $)

Project	Actuals Thru FY19	Planned Expenditures FY20	FY21	FY22	FY23	FY24	FY25	Future	Total
73274009-Data Consolidation	121	962	75	73	0	0	0	0	1,231
with inflation	121	962	75	77	0	0	0	0	1,235

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE
(in thousands $)

Project	Budget Thru FY19	Adj. Budget FY20	Est. Unspent	Planned Funding Requests FY21	FY22	FY23	FY24	FY25	Future	Total
73274009-Data Consolidation	1,023	60	0	75	77	0	0	0	0	1,235

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES
(in thousands $)

SCVWD Information Technology Fund	1,235
Other Funding Sources	0
Total	1,235

OPERATING COST IMPACTS
This project will migrate Valley Water's business unit process's into the selected ECM. ECM implementation will begin with the Community Projects Review Unit as the pilot project, followed by the Records & Library Unit. Ongoing annual costs will be determined at the end of construction, and will be based on the selected ECM solution.

USEFUL LIFE: Not Available

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
Plan	14
Design	12
Construct	1,803
Closeout	-
	2,451

	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30
Construct											

EXPENDITURE SCHEDULE
(in thousands $)

Project	Actuals Thru FY19	Planned Expenditures FY20	FY21	FY22	FY23	FY24	FY25	Future	Total
73274001-Information Technology Disaster Recovery	671	779	801	200	0	0	0	0	2,451
with inflation	671	779	801	212	0	0	0	0	2,463

FUNDING SCHEDULE
(in thousands $)

Project	Budget Thru FY19	Adj. Budget FY20	Est. Unspent	FY21	FY22	FY23	FY24	FY25	Future	Total
73274001-Information Technology Disaster Recovery	2,396	0	946	0	67	0	0	0	0	2,463

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES
(in thousands $)

SCVWD Information Technology Fund	2,463
Other Funding Sources	0
Total	2,463

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
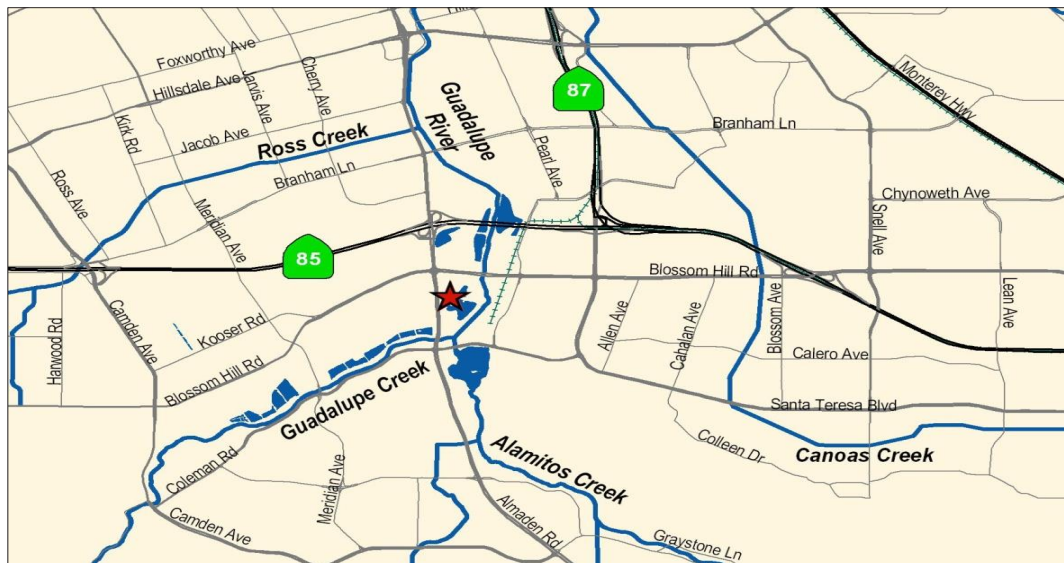
★ Project Location

SCHEDULE & STATUS
July 2013 to March 2023

Phase	Cost		FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30
Plan	-												
Design	-												
Construct	15,684												
Closeout	100												
	18,518												

EXPENDITURE SCHEDULE
(in thousands $)

Project	Actuals Thru FY19	Planned Expenditures							Total
		FY20	FY21	FY22	FY23	FY24	FY25	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	4,172	7,075	5,617	228	227	0	0	0	17,319
with inflation	4,172	7,075	5,617	251	263	0	0	0	17,378
TOTAL	5,371	7,075	5,617	228	227	0	0	0	18,518
with inflation	5,371	7,075	5,617	251	263	0	0	0	18,577

FUNDING SCHEDULE
(in thousands $)

Project	Budget Thru FY19	Adj. Budget FY20	Est. Unspent	Planned Funding Requests						Total
				FY21	FY22	FY23	FY24	FY25	Future	
60274062-ERP System Implementation	1,199	0	0	0	0	0	0	0	0	1,199
73274002-ERP System Implementation	14,608	0	3,361	2,256	251	263	0	0	0	17,378
TOTAL	15,807	0	3,361	2,256	251	263	0	0	0	18,577

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES
(in thousands $)

SCVWD General Fund	1,199
SCVWD Information Technology Fund	17,378
Total	18,577

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
Plan	325
Design	221
Construct	12,100
Closeout	-
	13,576

FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30

EXPENDITURE SCHEDULE

(in thousands $)

Project	Actuals Thru FY19	Planned Expenditures							Total
		FY20	FY21	FY22	FY23	FY24	FY25	Future	
73274008-Software Upgrades & Enhancements	1,574	1,610	871	361	1,892	1,142	360	5,766	13,576
with inflation	1,574	1,610	871	398	2,190	1,388	459	8,581	17,072

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

Project	Budget Thru FY19	Adj. Budget FY20	Est. Unspent	Planned Funding Requests						Total
				FY21	FY22	FY23	FY24	FY25	Future	
73274008-Software Upgrades & Enhancements	2,403	781	0	871	398	2,190	1,388	459	8,581	17,072

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Information Technology Fund	17,072
Other Funding Sources	0
Total	17,072

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
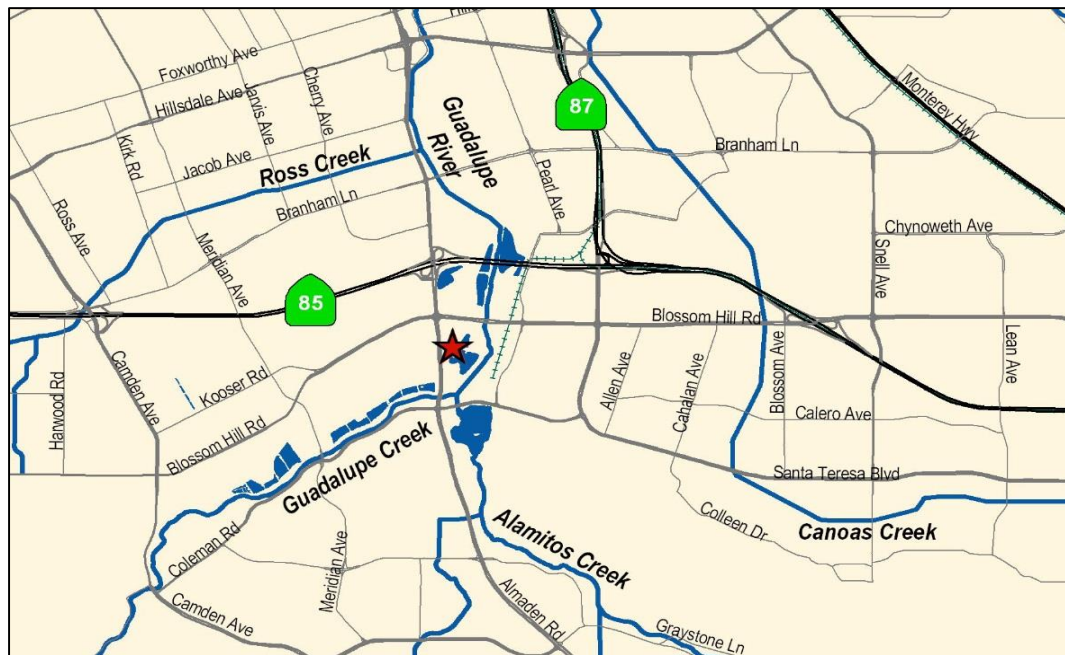
★ Project Location

SCHEDULE & STATUS

July 2019 to June 2021

Phase	Cost
Plan	-
Design	-
Construct	1,248
Closeout	-
	1,248

	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30
Construct											

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY19	FY20	FY21	FY22	FY23	FY24	FY25	Future	
73274012-Telephone System Voice Over IP	0	1,116	132	0	0	0	0	0	1,248
with inflation	0	1,116	132	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	FY19	FY20		FY21	FY22	FY23	FY24	FY25	Future	
73274012-Telephone System Voice Over IP	0	1,116	0	132	0	0	0	0	0	1,248

Adjusted Budget includes adopted budget plus approved budget adjustments.
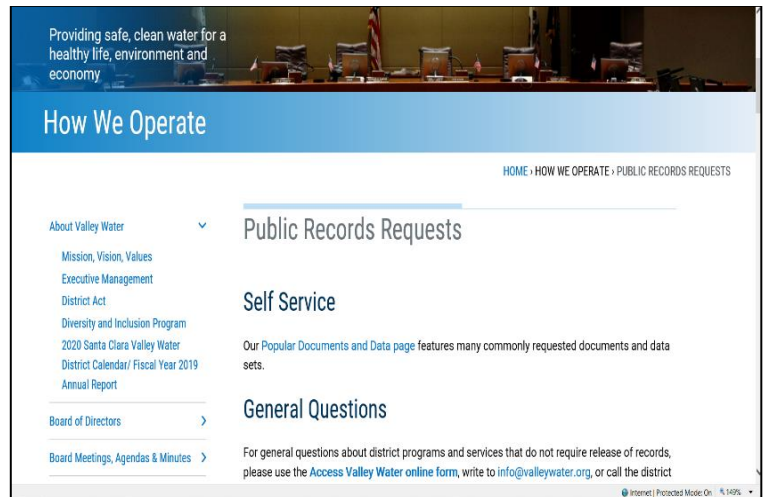
FUNDING SOURCES

(in thousands $)

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

OPERATING COST IMPACTS

N/A

USEFUL LIFE: N/A

|	
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
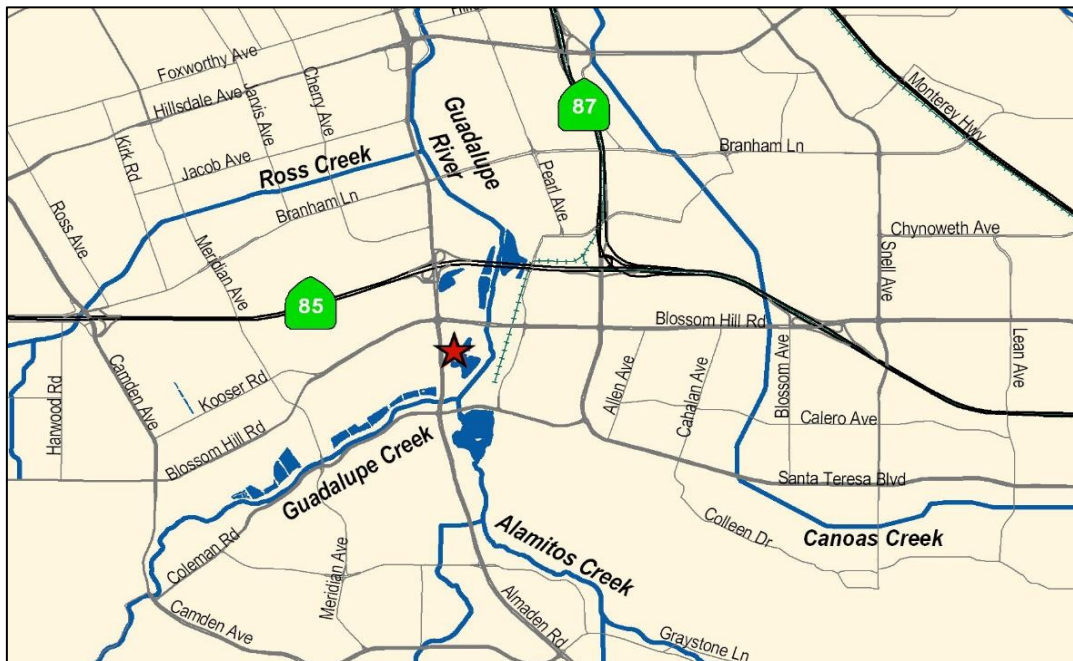
★ Project Location

SCHEDULE & STATUS

April 2017 to June 2020

Phase	Cost	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30
Plan	-											
Design	-											
Construct	54											
Closeout	-											
	561											

EXPENDITURE SCHEDULE

(in thousands $)

Project	Actuals Thru FY19	Planned Expenditures FY20	FY21	FY22	FY23	FY24	FY25	Future	Total
73274011-E-Discovery Management System	507	54	0	0	0	0	0	0	561
with inflation	507	54	0	0	0	0	0	0	561

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

Project	Budget Thru FY19	Adj. Budget FY20	Est. Unspent	Planned Funding Requests FY21	FY22	FY23	FY24	FY25	Future	Total
73274011-E-Discovery Management System	545	16	0	0	0	0	0	0	0	561

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Information Technology Fund	561
Other Funding Sources	0
Total	561

OPERATING COST IMPACTS

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

USEFUL LIFE: Not available

Project	Capital Construction Management System
Program	Water Supply - Treatment
Project No.	95074039
Contact	Erin Baker
	ebaker@valleywater.org

PROJECT DESCRIPTION

This project selects and implements a new capital project management software to accomplish the following objectives for large capital projects:

- Tracking of overall project performance.
- Management of entire project lifecycle: planning, design, construction, operations.
- Improve decision-making by evaluating real-time data.
- Establish centralized document management and control.

PROJECT LOCATION

No Map is provided for this project

SCHEDULE & STATUS
July 2019 to December 2021

Phase	Cost
Plan	-
Design	-
Construct	1,133
Closeout	100
	1,233

	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30

EXPENDITURE SCHEDULE
(in thousands $)

Project	Actuals Thru FY19	Planned Expenditures FY20	FY21	FY22	FY23	FY24	FY25	Future	Total
95074039-Capital Construction Management System	0	100	1,033	100	0	0	0	0	1,233
with inflation	0	100	1,033	110	0	0	0	0	1,243

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE
(in thousands $)

Project	Budget Thru FY19	Adj. Budget FY20	Est. Unspent FY20	Planned Funding Requests FY21	FY22	FY23	FY24	FY25	Future	Total
95074039-Capital Construction Management System	0	977	877	156	110	0	0	0	0	1,243

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES
(in thousands $)

SCVWD Water Utility Enterprise Fund	1,243
Other Funding Sources	0
Total	1,243

OPERATING COST IMPACTS
N/A

USEFUL LIFE: N/A

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

SCHEDULE & STATUS
July 2014 to June 2032

Phase	Cost
Plan	-
Design	-
Construct	9,045
Closeout	-
	9,916

	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30

EXPENDITURE SCHEDULE
(in thousands $)

Project	Actuals Thru FY19	Planned Expenditures FY20	FY21	FY22	FY23	FY24	FY25	Future	Total
95274003-WTP-WQL Network Equipment	1,337	1,571	0	85	1,274	2,456	669	2,524	9,916
with inflation	1,337	1,571	0	94	1,475	2,985	854	3,747	12,063

FUNDING SCHEDULE
(in thousands $)

Project	Budget Thru FY19	Adj. Budget FY20	Est. Unspent	Planned Funding Requests FY21	FY22	FY23	FY24	FY25	Future	Total
95274003-WTP-WQL Network Equipment	2,723	185	0	0	94	1,475	2,985	854	3,747	12,063

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES
(in thousands $)

SCVWD Water Utility Enterprise Fund	12,063
Other Funding Sources	0
Total	12,063

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