



A G E N D A
LAS VEGAS VALLEY WATER DISTRICT
BOARD OF DIRECTORS

SPECIAL MEETING
1:00 P.M. – APRIL 27, 2020

VIEW ONLINE AT LVVWD.COM

Board of Directors

Marilyn Kirkpatrick, President
Jim Gibson, Vice President
Larry Brown
Justin Jones
Michael Naft
Tick Segerblom
Lawrence Weekly

John J. Entsminger,
General Manager

Date Posted: April 20, 2020

The Las Vegas Valley Water District makes reasonable efforts to assist and accommodate persons with physical disabilities who desire to attend the meeting. For assistance, call the Agenda Coordinator (702) 283-0176 at least 24 hours prior to the meeting.

THIS MEETING HAS BEEN PROPERLY NOTICED AND POSTED AT THE FOLLOWING LOCATION:

LAS VEGAS VALLEY WATER DISTRICT
1001 SOUTH VALLEY VIEW BOULEVARD
LAS VEGAS, NEVADA

All items listed on this agenda are for action by the Board of Directors, unless otherwise indicated. Items may be taken out of order. The Board of Directors may combine two or more agenda items for consideration, and/or may remove an item from the agenda or delay discussions relating to an item on the agenda at any time.

Visit our website at <https://www.lvvwd.com/lvvwd-agendas> for Las Vegas Valley Water District agenda postings, copies of supporting material and approved minutes. To receive meeting information, including supporting material, contact Jason Bailey at (702) 283-0176 or agendas@lvvwd.com.

CALL TO ORDER

COMMENTS BY THE GENERAL PUBLIC

NO ACTION MAY BE TAKEN: Public comment can be provided in advance of the meeting and submitted to publiccomment@lvvwd.com. Comments related to items on this agenda received before 12:00 p.m. on April 27 will be read into the record at this time. Public comment received through April 29 will be included in the meeting's minutes.

ITEM NO.

1. *For Possible Action:* Approve agenda with the inclusion of tabled and/or reconsidered items, emergency items and/or deletion of items.
2. *For Information Only:* Receive an overview and discuss the Fiscal Year 2020/2021 Tentative Budget.

COMMENTS BY THE GENERAL PUBLIC

NO ACTION MAY BE TAKEN: At this time, the Board of Directors will hear general comments from the public on matters under the jurisdiction of the Las Vegas Valley Water District. Members of the public wishing to address the Board can provide public comment using the phone number that will be displayed during the live broadcast of the meeting. Please dial the number made available and limit your comments to three minutes or less. Please mute your phone when not speaking.

Fiscal Year 2020-21 Budget Workshop



**LAS VEGAS VALLEY
WATER DISTRICT™**



1

2019-20 Highlights

- Continued progress on Board-approved 10-year Capital Improvements Plan (CIP)
- Doubled the number of Water Waste Investigations as compared to previous year
- New solar photovoltaic carport covers installed on LVVWD campus; expected to produce more than 4,200 megawatt hours in renewable energy
- Easier payment options added for customers: new payment kiosk installed in Customer Service lobby
- Received Oracle's *Sustainability Award* for LVVWD's Excessive Leak Monitoring Program
- Bond refunding activities have saved \$4 million to date and take advantage of low interest rates

2

2

2020-21 Budget Overview

- The LVVWD submitted a *Tentative Budget* by April 15 – before the impacts of COVID-19 were finalized
- The LVVWD prepared a *Proposed Final Budget* in response to the COVID-19, which projects declines in revenues compared to the *Tentative Budget*
- Total Budget: \$554.1 million; capital expenditures represent 26% of the total budget
- The Proposed Budget projects a \$57.6 million deficit
- LVVWD Reserves and prudent management of expenditures will help support the organization through this period of uncertainty

3

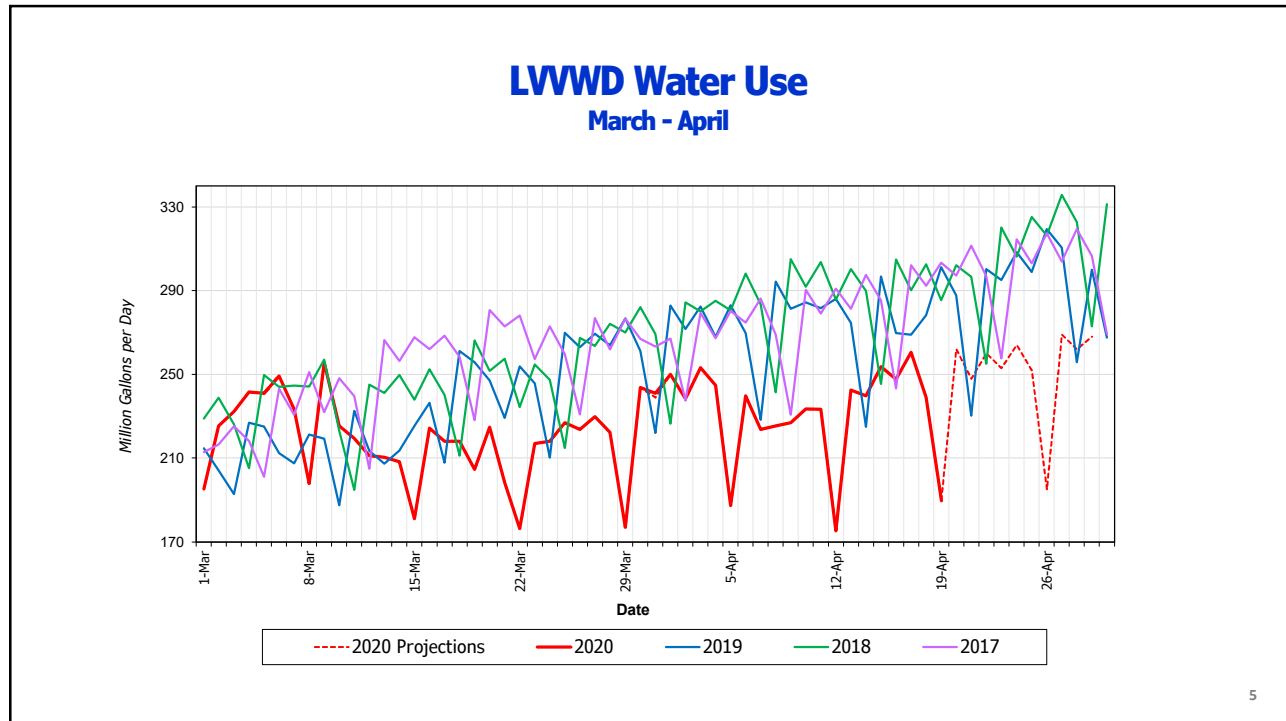
3

LVVWD Pandemic Response

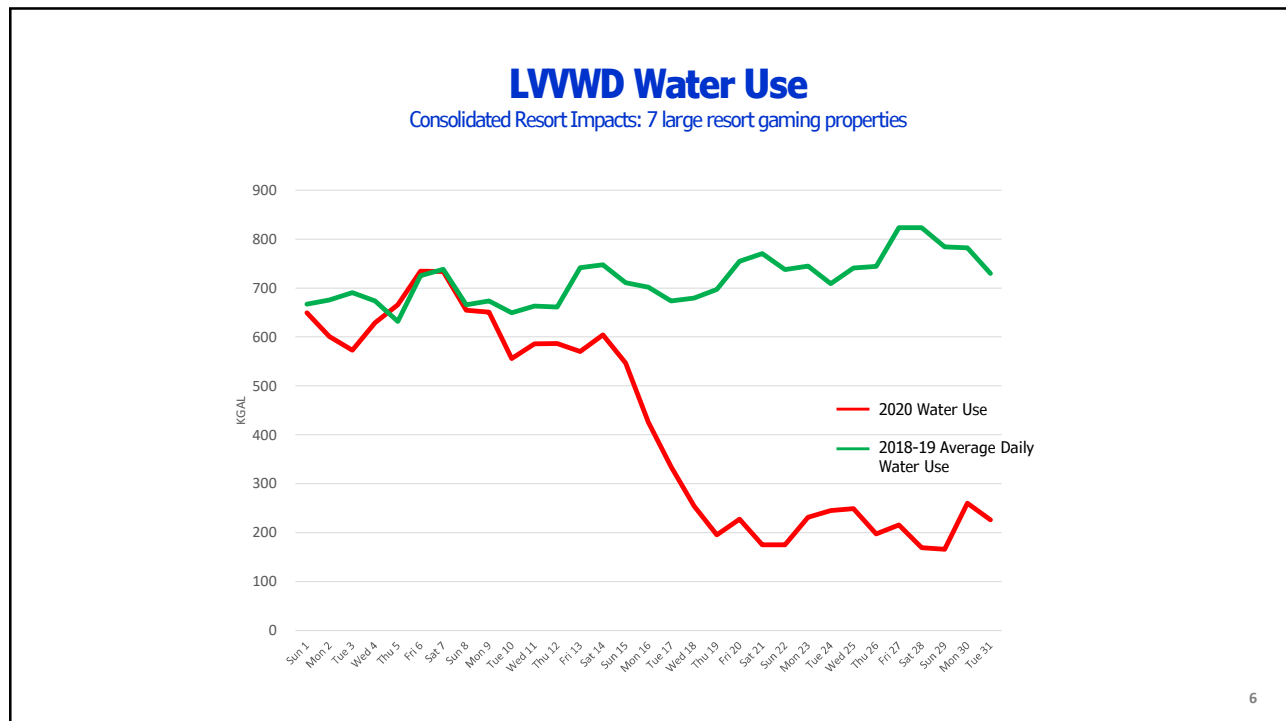
- Closed Springs Preserve on March 16; closed offices on March 17
- Moved staff to working remotely except those performing critical functions onsite
- All LVVWD facilities and construction sites taking extra measures to ensure sanitation and employee safety
- Shifted developer submittal process to accommodate social distancing
- Maintained employee working status and Collective Bargaining Agreements
- Donated 50,000 N95 masks to first responders
- Suspended customer shut offs for delinquent and/or non-payments
- Maintained the communities water service while meeting all safety standards under difficult circumstances

4

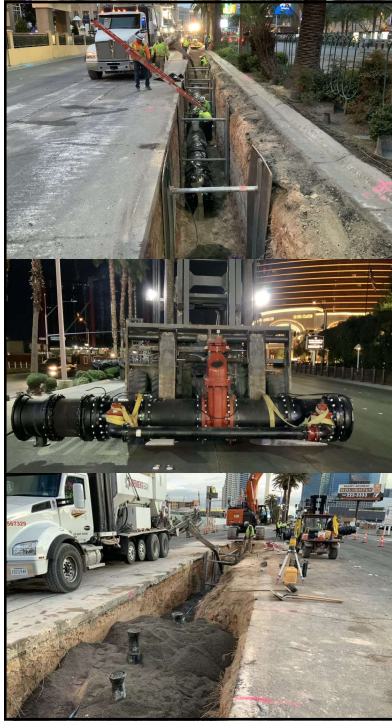
4



5



6



LWWD Capital Improvements Plan: LV Boulevard Improvements

Projects will increase the reliability of the water service through the replacement of aging and inaccessible infrastructure.

Performed alongside City and County projects to reduce impacts.

Project Components:

- Installation of a 24-inch water line from Sahara to Spring Mountain (replaces a pipeline installed in 1955)
- Design of 36-inch pipeline from 215 to Russell (replaces pipeline installed in 1963)
- Installation of new 16-inch pipeline from Sahara to Stewart (replaces pipeline installed in 1955 and moves services out of alleys)
- Design of pipeline improvements from Stewart to Bonanza
- Includes future phase from Russell to Spring Mountain

7

7

LWWD Capital Improvements Plan: **Cougar Reservoir**



6 RENDERED VIEW - OPTION C
SCALE: 1/4" = 1'-0"



6 RENDERED VIEW - OPTION C
SCALE: 1/4" = 1'-0"

When completed, the Cougar Reservoir will be a 10-million-gallon reservoir that will provide additional capacity for the 3090 Pressure Zone.

Located on Blue Diamond Road, near State Route 159 intersection.

Project Status:

- **Project is at 60% Design**
- **Construction slated to begin in March 2021**
- **Project should be completed in April 2022**

8

8

LWWD Capital Improvements Plan: **Pipeline Replacements**



These pipelines have experienced previous breaks and are categorized as “extreme risk”.

Contract No. C1511 (\$1.8 million)

Pipeline replacement in Bourbon and Cameron streets installed in the 1960s – 1970s

Contract No. C1513 (\$1.6 million)

Pipeline replacement in Decatur Boulevard (installed 1959) and pipeline in Warm Springs Road (installed 1971)

Contract No. C1530 (\$6.2 million)

Pipeline replacement in Paradise Road between Twain and Karen (installed in 1969)

Project has been fully designed, but revisions required due to Monorail impacts and required clearances

9

9

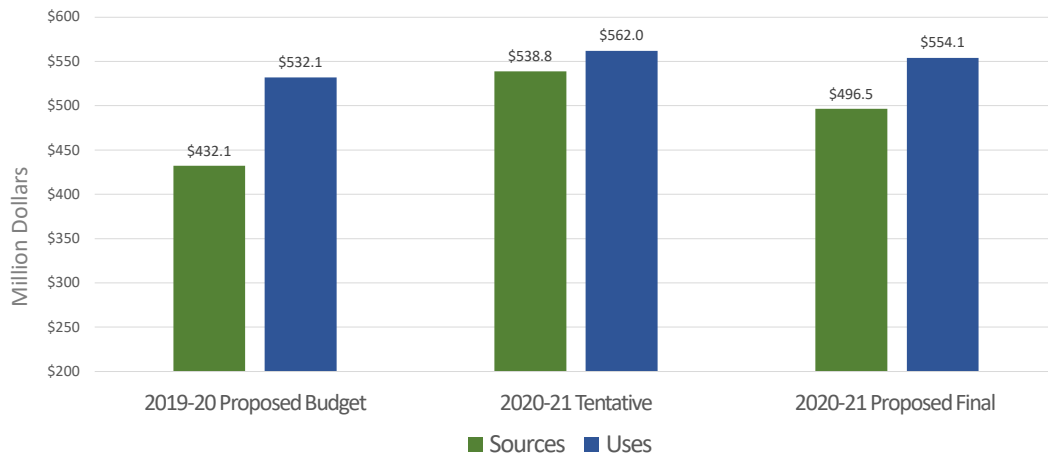


2020-21 BUDGET OVERVIEW

10

10

Sources and Uses Summary



11

11

COVID-19 PROJECTED IMPACTS

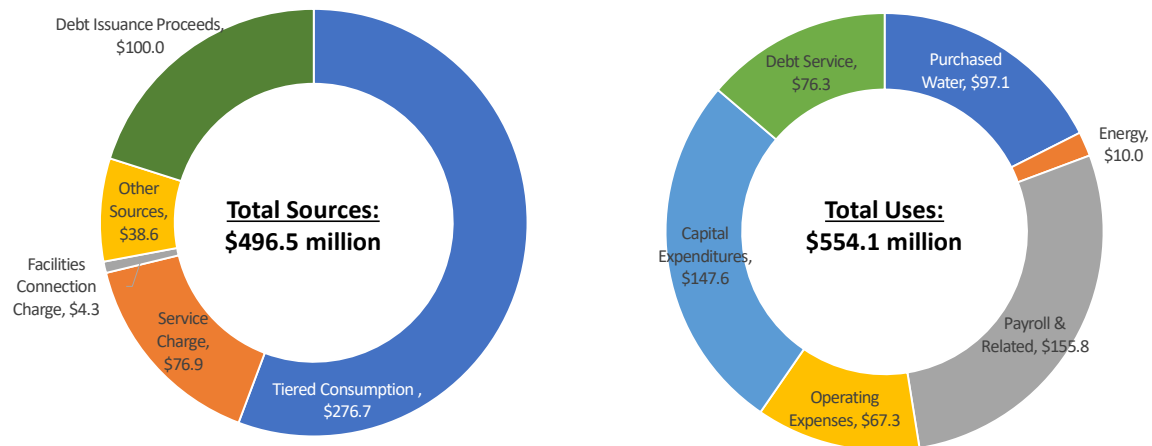
The ***Proposed Final Budget*** assumes the following impacts to LVVWD revenue sources, as compared to its ***Tentative Budget*** submitted before COVID-19 response projections:

- Tiered Consumption revenue down 9%
- Reclaimed Water revenues down 8%
- Facilities Connection Charge revenues down 75%
- Application and Inspection Fee revenues down 75%
- Investment Income down 8%

12

12

2020-21 Sources and Uses Overview



Amounts in million dollars. Totals are rounded.

13

13

2020-21 Budget Summary

- **Projected sources of funds, excluding debt proceeds, are down 7% due to COVID-19 impacts**
- **Uses of funds are up 4%, partly due to a 11% increase to capital expenditures**
- **Asset management remains a top priority**
- **The organization is deferring capital and reducing operating costs**
- **The organization is positioned to withstand ongoing impacts from COVID-19**

14

14





Las Vegas Valley Water District Operating and Capital **Budget 2021**



Fiscal year ending June 30, 2021

DRAFT

On the cover:

Beautiful and water-efficient streetscapes and medians—such as this historic Las Vegas neighborhood on Alta Drive—are being installed throughout the Las Vegas Valley, helping the community reach its conservation goals. Thanks to the community's response, Southern Nevadans used 27 billion gallons less water in 2018 than in 2002, a 38 percent decline, even as the population increased by 690,000 residents during that time.

Las Vegas Valley Water District

**Operating & Capital Budget
Fiscal Year Ending June 30, 2021**



LAS VEGAS VALLEY WATER DISTRICT™

Board of Directors

Marilyn K. Kirkpatrick, President

James B. Gibson, Vice President

Lawrence L. Brown III

Justin Jones

Michael Naft

Tick Segerblom

Lawrence Weekly

John J. Entsminger

General Manager

E. Kevin Bethel

Chief Financial Officer

Matt J. Chorpening

Assistant Chief Financial Officer

**Prepared by the Finance Department
1001 South Valley View Blvd., Las Vegas, Nevada 89153
702-870-2011 www.lvwd.com**

DRAFT

Note of Appreciation

We would like to express our appreciation to the Finance department staff, and staff members of other departments for their special work in the preparation of the 2020-21 budget document.

The **VISION** of the Las Vegas Valley Water District is
To be a global leader in service, innovation and stewardship

The **VALUES** of the Las Vegas Valley Water District are

- ◆ **Respect for People**
- ◆ **Integrity**
- ◆ **Service**
- ◆ **Excellence**
- ◆ **Sustainability**

The **MISSION** of the Las Vegas Valley Water District is to

**Provide world-class water service in a sustainable, adaptive
and responsible manner to our customers through reliable,
cost-effective systems**

CERTIFICATE OF ACHIEVEMENT

The Government Finance Officers Association of the United States and Canada (GFOA) presented an award of Distinguished Presentation to the **Las Vegas Valley Water District (LVVWD) for its annual budget for the fiscal year beginning July 1, 2019.**

In order to receive this award, a governmental unit must publish a budget document that meets program criteria as a policy document, as an operations guide, as a financial plan and as a communication device.

The award is valid for a period of one year only. The LVVWD believes our current budget continues to conform to program requirements, and we are submitting it to the GFOA to determine its eligibility for another award.



GOVERNMENT FINANCE OFFICERS ASSOCIATION

*Distinguished
Budget Presentation
Award*

PRESENTED TO

**Las Vegas Valley Water District
Nevada**

For the Fiscal Year Beginning

July 1, 2019

Christopher P. Morill

Executive Director

Las Vegas Valley Water District
Operating and Capital Budget
Table of Contents
Fiscal Year Ending June 30, 2021

SECTION 1: General Manager's Information Report

Executive Summary	1-1
Finance	1-2
Water Resources and Conservation.....	1-3
LVVWD Operations.....	1-5
Springs Preserve	1-7
Financial Summary	1-7
Approval	1-9

SECTION 2: Introduction and Strategic Plan

Introduction	2-1
Purposes and Powers.....	2-1
Intergovernmental Relationships.....	2-1
Areas Currently Served	2-2
Organizational Structure.....	2-3
Financial Structure and Controls.....	2-5
Budget Controls and Process	2-6
Budget Augmentation.....	2-8
Budget Calendar for the Fiscal Year 2020-21	2-9
Las Vegas Valley Water District Strategic Plan	2-12
Strategic Plan Background	2-12
Strategic Plan and 2020-21 Budget Plan Preparation	2-12
Vision-Mission-Goals	2-13
Strategic Plan Strategies	2-13

SECTION 3: Operating and Capital Budget Plan

Budget Summary	3-1
Sources	3-2
Uses	3-7
Summary of Sources and Uses of Funds and Changes in Net Assets	3-11

Las Vegas Valley Water District
Operating and Capital Budget
Table of Contents
Fiscal Year Ending June 30, 2021

SECTION 4: State of Nevada Budget Documents

State of Nevada, Department of Taxation, Budget Submittal.....	4-1
Budget Document Index	4-2
Schedule S-2: Statistical Data.....	4-3
Schedule A-2: Proprietary Funds	4-4
Schedule F-1: Enterprise Fund - Revenues, Expenses and Net Position.....	4-5
Schedule F-1.1: Pension Trust Fund - Revenues, Expenses and Net Position.....	4-6
Schedule F-1.2: OPEB - Revenues, Expenses and Net Position	4-7
Schedule F-2: Enterprise Fund - Statement of Cash Flows.....	4-8
Schedule C-1: Indebtedness	4-9
Lobbying Expense Estimate	4-10
Schedule 31: Schedule of Existing Contracts.....	4-11
Schedule 32: Schedule of Privatization Contracts.....	4-17
Affidavit of Publication	4-18
Letter of Compliance	4-19

SECTION 5: Department Budgets

Summary of Department Expenditures	5-1
Executive Management	5-2
Legal Services.....	5-12
Finance	5-15
Information Technology	5-22
Human Resources.....	5-29
Public Services	5-32
Environmental, Health, Safety & Corporate Security.....	5-38
Customer Care & Field Services	5-48
Engineering.....	5-55
Resources & Facilities	5-60
Infrastructure Management	5-72
Water Resources	5-83
Energy Management	5-93
Operations.....	5-98
Water Quality & Treatment.....	5-107

SECTION 6: Capital Plans

Capital Budget	6-1
Capital Improvement Plan	6-10

Las Vegas Valley Water District
Operating and Capital Budget
Table of Contents
Fiscal Year Ending June 30, 2021

SECTION 7: Debt Management Policy

Table of Contents	7-2
Introduction.....	7-3
Affordability of Debt.....	7-5
Supported by Water System Pledged Revenues	7-5
Supported by the SNWA Pledged Revenues.....	7-8
Debt Capacity	7-9
Debt Comparison (per capita and assessed valuation)	7-9
Policy Statement for Sale of Debt	7-10
Operation Costs and Revenue Sources for Projects in Capital Improvement Plan	7-12
Miscellaneous Items	7-13
Chief Financial Officer Information.....	7-16
Appendix.....	7-17

SECTION 8: Statistical Information

Table of Contents	8-1
Demographic Statistics	8-2
Top Ten Employers	8-3
Residential Real Estate	8-4
Secured Tax Roll	8-5
Temperature & Rainfall	8-6
Average Monthly Consumption per Active Service.....	8-7
Average Annual Water Billed per Active Service by Class of Service.....	8-8
Percent of Total Water Billed by Class of Service.....	8-9
Average Consumption and Monthly Revenue from Water Sales per Active Account..	8-10
Water Billed by Month	8-11

SECTION 9: Financial Policies

Financial Policy	9-2
Reserve Policy.....	9-5
Capitalization Policy.....	9-7

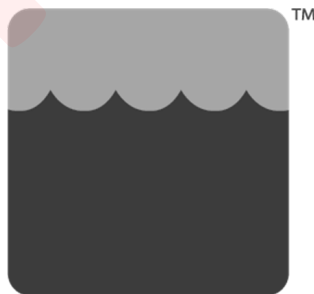
SECTION 10: Glossary

Glossary	10-1
----------------	------

SECTION 1

GENERAL MANAGER'S INFORMATION REPORT

Executive Summary	1-1
Finance	1-2
Water Resources and Conservation	1-3
LVVWD Operations.....	1-5
Springs Preserve.....	1-7
Financial Summary	1-7
Approval.....	1-9



LAS VEGAS VALLEY WATER DISTRICT
FISCAL YEAR 2020-21
OPERATING AND CAPITAL BUDGET

LAS VEGAS VALLEY WATER DISTRICT

GENERAL MANAGER'S INFORMATION REPORT

DATE: April 20, 2020

NO. 175

SUBJECT: LAS VEGAS VALLEY WATER DISTRICT
PROPOSED OPERATING AND CAPITAL BUDGET FOR FISCAL YEAR 2020-21

The Tentative Operating and Capital Budget of the Las Vegas Valley Water District (LVVWD) for fiscal year 2020-21 was submitted by April 15, 2020, to the State of Nevada Department of Taxation in accordance with NRS 354.596.

The 2020-21 tentative budget submitted by April 15th was largely based on assumptions and projections prior to the disruptions caused by the COVID-19 pandemic. The economic impacts in the wake of the COVID-19 pandemic are projected to be substantial. Given the rapidly changing developments and the State of Nevada's response to the COVID-19 pandemic over the past few weeks, the LVVWD has incorporated projected effects into the final budget, which is shown later in this General Manager's Information Report. The organization continues to monitor the economic developments and will adapt accordingly to help mitigate the impacts of the COVID-19 pandemic.

Executive Summary

Every year, the LVVWD strives to provide world-class water service in a sustainable, adaptive and responsible manner. Increasing system reliability and cost efficiency, while providing a safe drinking water supply to more than 1.5 million residents within its 300 square-mile service territory, remains a top priority. This same philosophy applies to the operation of several LVVWD-maintained rural water systems throughout Clark County, including Kyle Canyon Water District, Blue Diamond Water System, Searchlight Water

System, Jean Water System and Big Bend Water District.

In 2017, the LVVWD Board of Directors (Board) approved a 10-year Capital Improvement Plan (CIP). This document continues to serve as the roadmap for the reliable operation, appropriate maintenance and ongoing development of the water distribution system.

The LVVWD is not immune to the impacts of the emerging COVID-19 pandemic. In response, beginning mid-March 2020, the LVVWD immediately adjusted normal operations by retaining limited personnel onsite to ensure critical daily operations continue to meet its core function of delivering safe, quality drinking water. The LVVWD has identified the remaining workforce as either essential and working full-time remotely or classified as self-isolation.

The LVVWD developed its Pandemic Readiness and Response Plan more than 10 years ago to address potential influenza outbreaks and has updated that plan accordingly as the LVVWD continues to monitor COVID-19. To ensure water meets or surpasses drinking water standards, the LVVWD continuously monitors water quality 24 hours a day, 365 days a year. Southern Nevada's drinking water is treated using a combination of ozonation, filtration and chlorination, which are on the leading edge of water treatment processes and effective at removing contaminants from water. The

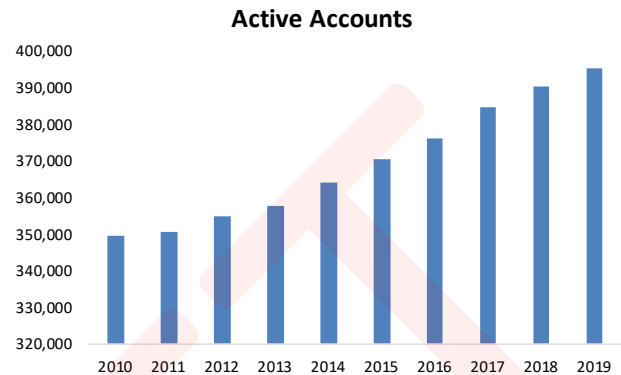
Las Vegas Valley Water District
Operating and Capital Budget
General Manager's Information Report
Fiscal Year Ending June 30, 2021

LVVWD does not anticipate any current scenario that would interrupt water availability to the community. Staff remains committed to ensuring water quality, reliability and security remain to the highest standards throughout this COVID-19 pandemic.

Finance

Even though Southern Nevada's economy had steadily recovered since the economic recession that began in 2008, the effects of the emerging COVID-19 pandemic will be substantial. Given the rapidly changing global developments from the COVID-19 pandemic and the State of Nevada's response, the LVVWD's fiscal year 2020-21 Budget Plan reflects projected impacts from COVID-19 and efforts and initiatives to maintain reliable water supplies for homes and businesses for years to come.

The LVVWD serves approximately 70 percent of all Clark County residents. As such, customer account growth within the LVVWD service area is a key indicator of the community's economic health. As shown below, the number of active LVVWD service accounts has continually trended upward since 2010, indicating steady economic growth over the past decade. The impact of COVID-19 pandemic to account growth remains to be seen.



Reserve Policy.

In 2016, the Board adopted a policy providing guidance for maintaining adequate cash and investment reserves. Since then, the LVVWD Reserve Policy has been a critical fixture in the organization's financial planning efforts.

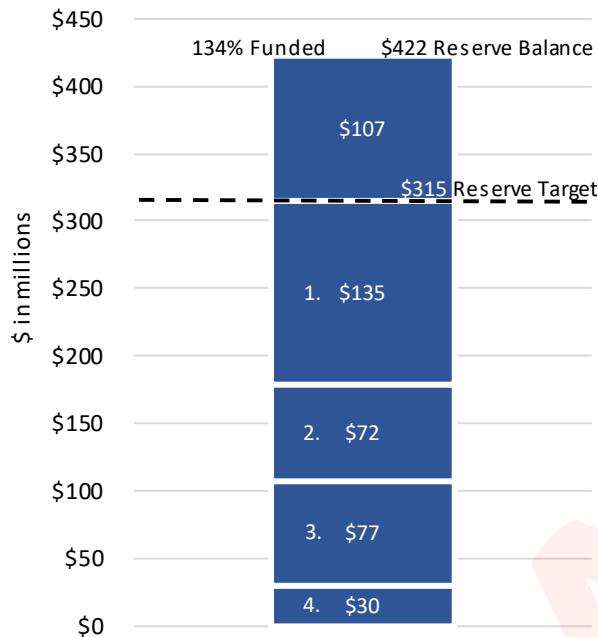
The LVVWD's reserve policy includes the following components (corresponding to the numbered dollar amounts in the chart below):

1. Adequate reserves to fund 180 days of operating and maintenance expenses
2. Adequate reserves to fund one year of the maximum annual debt service
3. Adequate reserves to fund a one-year average of future capital needs
4. Adequate reserves to fund one percent of assets subject to depreciation

During the last fiscal year, as the chart below indicates, the LVVWD met and exceeded its established unrestricted reserve target balance, an important indicator of the organization's financial health.

Las Vegas Valley Water District
Operating and Capital Budget
General Manager's Information Report
Fiscal Year Ending June 30, 2021

2018-19 Unrestricted Reserves



Project Funding.

Water Rates. Tiered water rates represent a significant portion of the LVVWD's financial revenues, accounting for approximately 70 percent of the organization's ongoing funding sources. In accordance with a 2016 Citizens Advisory Committee recommendation, LVVWD water rates have been adjusted annually in accordance with the Consumer Price Index (CPI) since January 1, 2019. In 2020, this resulted in a 2.9 percent increase to rates for consumptive water use and daily service charge. These dollars support day-to-day operations as well as projects set forth within the LVVWD's 10-year CIP.

Debt Reduction. To reduce interest costs, the Board adopted the 2020B LVVWD Refunding Bond Resolution in January 2020. By doing so, the LVVWD refunded General Obligation Water and Refunding Bonds, resulting in a net present value savings of approximately \$4 million. Also, the Board adopted the 2020D

LVVWD Refunding Bond Resolution in March 2020. This allowed the LVVWD to take advantage of historically low interest rates to convert \$98 million in variable rate debt to fixed rate debt.

Grant Funding. To help offset project costs within the LVVWD's service area, the rural water systems and the Springs Preserve, staff continually monitors grant and low-interest loan opportunities on both the state and federal levels.

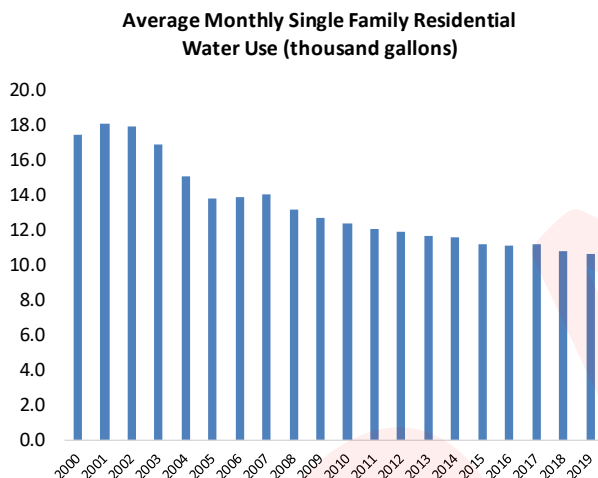
In 2019, staff applied for and received a \$56,000 grant from the U.S. Fish and Wildlife Service to support environmental initiatives at the Springs Preserve. The grant funds will be used to create additional habitat for two species native to Southern Nevada: the federally-listed endangered species Pahrump Poolfish, and the once-thought-extinct Relict Leopard Frog. Installing additional refuge for these species at the Springs Preserve will provide more opportunities for guests to learn first-hand about the fragility of desert ecosystems.

Water Resources and Conservation

Nevada's 300,000 acre-feet per year (AFY) Colorado River apportionment remains Southern Nevada's principal water resource, as it is drawn on to meet nearly 90 percent of the community's water demands. All remaining demands are met with groundwater rights within the local aquifer. The LVVWD purchases Colorado River water from the Southern Nevada Water Authority (SNWA), which diverts and treats water from Lake Mead.

Las Vegas Valley Water District
Operating and Capital Budget
General Manager's Information Report
Fiscal Year Ending June 30, 2021

The LVVWD's average monthly water use for residential single services, as shown below, was approximately 10,600 gallons in 2019, representing a 39 percent decrease from fiscal year 2000 consumption. Conservation efforts continue to yield positive results; however residential single-service consumption has somewhat stagnated over the past several years.



The LVVWD staff continues to evaluate and pursue opportunities to increase community conservation efforts.

Drought.

Persistent drought conditions and climate change impacts have reduced flows throughout the Colorado River Basin over the past two decades. To protect river supplies, provisions within the Colorado River Drought Contingency Plan require the states of Nevada, California and Arizona, as well as the country of Mexico, to reduce the amount of water diverted from the Colorado River if Lake Mead levels drop below predetermined elevations.

Accordingly, Southern Nevada's Colorado River water supplies will be reduced by 3

percent due to low water levels in Lake Mead; however, community conservation efforts have already met the reduction requirements.

Since the drought began in the early 2000s, community water use has decreased by 25 percent, despite a 46 percent population increase during that same time period. Ongoing community conservation efforts project to further reduce community water use moving forward.

Conservation.

Conservation is a critical component to Southern Nevada's water resource portfolio, as it not only reduces existing and future demands, but extends available supplies. As the drought throughout the Colorado River Basin continues, additional sustained efforts to reduce consumptive water use are imperative.

Advanced Metering Infrastructure and Software. The LVVWD is in the process of implementing an Advanced Metering Infrastructure (AMI) system. The AMI system will optimize customer and field services communication and support conservation by improving staff's ability to monitor and address water leaks in a more efficient manner.

To take full advantage of the new AMI capabilities, the LVVWD will be replacing its current Customer Care and Billing System with Oracle Utilities Customer to Meter System (C2M) software. The new software will provide enhanced customer management tools to manage customer accounts, rates and billing, payments, credit and collection and field activities. It will also provide advanced support for the new metering infrastructure, allowing staff to more efficiently monitor and

Las Vegas Valley Water District
Operating and Capital Budget
General Manager's Information Report
Fiscal Year Ending June 30, 2021

manage device inventory, device testing, usage data and smart meter commands. The purchase of Oracle software licenses was approved by the Board in May 2019.

Because of the enhanced efficiency offered through AMI and C2M, the LVVWD will be able to provide enhanced customer service and interaction, increased support for conservation initiatives, optimized service response and more efficient device management.

Water Waste Enforcement.

The LVVWD continues to increase its public outreach efforts, bolstering its water waste enforcement presence and expanding its suite of tools for residents to report water waste.

Public Outreach. Staff recently used meter data to identify customers who were exceeding the allowed number of watering days within the LVVWD's Service Rules. Courtesy notifications were sent to the top 500 offenders, resulting in 47 percent of the group complying after notification. Preparing to build on that successful response, staff is now increasing outreach to the top 5,000 non-compliant single-family residential customers.

Reporting Water Waste. The LVVWD also implemented a water waste reporting form on its website (<https://www.lvvwd.com>) in 2018 to provide a convenient means by which customers can report observed water waste. In 2019 alone, more than 5,700 water waste reports were submitted via the form, immediately notifying the LVVWD staff of the date, time, location and type of water waste occurrence so that proper investigation and citation procedures could be implemented.

Investigations. The LVVWD has strengthened water waste enforcement efforts, and as shown on the following page, water waste notices, investigations and fees continue to increase. In addition to more customer outreach, three full-time employees and six part-time interns have been hired in fiscal year 2019-20 to support watering compliance efforts.

Water Waste Investigation Efforts			
	2017	2018	2019
Water Waste Letters	4,015	5,468	6,244
Water Waste Investigations	3,875	5,736	16,804
Assessed Fees	\$19,360	\$61,200	\$260,640

LVVWD Operations

The LVVWD provides water service to customers in the City of Las Vegas, parts of unincorporated Clark County and several rural water systems that are not connected to in-valley infrastructure. The LVVWD operates the public water systems in Blue Diamond, Jean, Kyle Canyon, Laughlin and Searchlight. In 2019, the LVVWD delivered approximately 106 billion gallons of water to customers throughout its service area.

System Profile.

The LVVWD operates and maintains a complex water distribution system which connects approximately 400,000 homes and businesses to the community's water supply. Key components of the water system include:

- 6,466 miles of transmission, distribution and service lines
- 80 reservoir basins which collectively hold nearly one billion gallons of water

Las Vegas Valley Water District
Operating and Capital Budget
General Manager's Information Report
Fiscal Year Ending June 30, 2021

- 55 pump stations with the capacity to move more than one million gallons of water per minute
- 75 production wells
- 20 dedicated recharge wells and 38 combination wells capable of storing more than 140 million gallons of water per day

Each of these components are critical to ensuring that the LVVWD's customers always have reliable access to water.

Capital Improvements and Asset Management.

Completion of the LVVWD's 10-year CIP remains a top priority, and there has been significant progress toward that goal over the past year. The \$616 million CIP provides an outline to maintain water system assets, sufficiently expand the system to meet the demands of planned growth and meet state-mandated water quality compliance standards.

The following projects are currently either active or recently completed:

Backflow Program. To meet State requirements, approximately 35,000 meters within the LVVWD service area require backflow protection. Accordingly, staff has prioritized backflow installations based on their degree of risk to the system and has been systematically retrofitting properties that require backflow protection since 2017. Currently, staff is working to install 11,600 backflow prevention devices to non-residential meters throughout its service area and more than 1,622 backflow devices have been installed to date.

3665 Zone Reservoir. Construction on a 10 million-gallon reservoir on the western edge of the Summerlin community was completed in the summer of 2019. The project consisted of the construction of two 5 million-gallon basins, and the installation of approximately 3,000 feet of 42-inch pipeline to connect the reservoir to the existing water distribution system. The new reservoir and pipelines add capacity, reliability and emergency storage for current and future demands of the area.

SCADA Upgrades. The LVVWD's Supervisory Control and Data Acquisition (SCADA) center allows water system operators to monitor the water system 24 hours per day. It also uses advanced instrumentation to detect minute changes in water quality. The SCADA system was upgraded in the fall of 2019 to provide the ability for long-term maintenance, improved functionality for operators, increased vendor and integrator support and enhanced cybersecurity tools.

Solar PV Carports. Renewable energy remains a key component of the organization's energy strategy and aligns with the SNWA's corporate objective of promoting sustainability. Toward that end, solar photovoltaic carports have been installed over the past year at the LVVWD's main employee parking lots.

The new carports are projected to produce more than 4,200 megawatt hours (MWh) per year of solar energy, which will be used to offset the campus' overall energy requirements. The project will also bolster efforts to meet Nevada's Renewable Energy Portfolio standard to 50 percent by 2030.

Customer Care.

Customer service remains a top priority embedded within the LVVWD staff's daily

Las Vegas Valley Water District
Operating and Capital Budget
General Manager's Information Report
Fiscal Year Ending June 30, 2021

work efforts. As such, staff is continually pursuing opportunities to ensure customers consistently receive world-class service.

New Payment Kiosk. Customer Care staff continually strives to provide flexible options for customers to pay their water bills. This year, a new payment kiosk was installed in the LVVWD's customer service lobby, providing customers needing to pay their bill the opportunity to do so without having to wait in line to speak to a customer care associate. An outdoor drive-up kiosk is also being installed at the LVVWD campus to provide additional convenience and flexibility.

Updated Customer Care System. The LVVWD's Customer Care and Field Services Department recently launched the Genesys Pure Engagement and Workforce Management Programs. Prior to launch, multiple call center software applications were used to answer and distribute incoming calls among the Customer Care agents and to provide customers with an automated voice activated self-service option. Also, many of old applications are not compatible with Microsoft Windows 10 or updated Customer Care and Billing Software.

The new system enables Customer Care agents to multitask by handling text and email traffic simultaneously with voice transactions and enhance security by providing automated credit card payments.

Springs Preserve

The LVVWD owns and operates the Springs Preserve, a 180-acre facility built to inspire

culture and community, promote environmental stewardship and bring the vibrant history of the Las Vegas Valley to life.

The Springs Preserve continues to implement measures to enhance the guest experience through facility upgrades, new exhibits and community events.

Oasis Event Space.

Plans are currently underway to replace the Good Neighbor/Bad Neighbor Garden with an event space replicating a tall grass oasis. The Oasis will feature a large patio area surrounded by a low water use palm garden with seating for approximately 170 people and replaces an underutilized, inaccessible area near the Sustainability Gallery. It is estimated that the project will be complete by the end of 2020.

Electrical Expansion Project.

In January 2020, work commenced on upgrading the electrical infrastructure throughout the Preserve's Botanical Gardens. When complete, there will be increased power supply to support events in the Gardens area. This will also eliminate the need for noisy portable generators during evening events. Project completion is currently scheduled for fall 2020.

Financial Summary

The table on the following page contains a summary of sources and uses of funds for the LVVWD's fiscal years 2018-19, 2019-20 and 2020-21.

Las Vegas Valley Water District
Operating and Capital Budget
General Manager's Information Report
Fiscal Year Ending June 30, 2021



Budget Summary
(\$ in millions)

	Actual 2018-19	Budget 2019-20	Budget 2020-21	Budget-to-Budget Variance	
				\$	%
Sources					
Tiered Consumption	\$ 270.6	\$ 300.5	\$ 276.7	\$ (23.8)	-8%
Service Charge	70.6	73.6	76.9	3.3	5%
Backflow Charge	11.9	11.9	12.2	0.3	2%
Reclaimed Water	7.0	7.5	6.9	(0.6)	-8%
Other Water Bill Charges	8.3	7.6	9.7	2.1	27%
Facilities Connection Charge	18.2	16.7	4.3	(12.4)	-74%
Application & Inspection Fees	3.1	2.8	0.7	(2.1)	-74%
Investment Income	19.0	4.7	6.0	1.3	28%
Springs Preserve	3.0	3.1	3.1	0.0	1%
Other Sources	2.8	-	-	-	
Subtotal	414.5	428.4	396.5	(31.9)	-7%
Debt Issuance Proceeds	7.6	3.7	100.0	96.3	
LVVWD Sources	422.1	432.1	496.5	64.4	15%
Uses					
Purchased Water	91.5	100.9	97.1	(3.8)	-4%
Energy	9.1	10.1	10.0	(0.0)	0%
Payroll & Related	129.9	150.0	155.8	5.8	4%
Operating Expenses	40.5	67.4	67.3	(0.1)	0%
Capital Expenditures	87.4	133.4	147.6	14.3	11%
Debt Service	68.4	70.5	76.3	5.9	8%
LVVWD Uses	426.7	532.1	554.1	22.0	4%
LVVWD Net Surplus/(Deficit)	\$ (4.6)	\$ (100.0)	\$ (57.6)	\$ 42.4	
SNWA Charges					
Infrastructure Charge	\$ 117.0	\$ 115.8	\$ 120.3	\$ 4.4	4%
Commodity Charge	49.8	51.3	47.8	(3.5)	-7%
Connection Charge	46.5	43.5	11.1	(32.4)	-74%
Reliability Surcharge	4.1	4.2	3.9	(0.3)	-7%
SNWA Charges	\$ 217.3	\$ 214.9	\$ 183.1	\$ (31.8)	-15%
Total Sources	\$ 639.5	\$ 647.0	\$ 679.6	\$ 32.6	5%
Total Uses	644.0	747.0	737.2	(9.8)	-1%
Total Net Surplus/(Deficit)	\$ (4.6)	\$ (100.0)	\$ (57.6)	\$ 42.4	

Sources.

The 2020-21 Budget Plan's total sources of funds are projected to be \$679.6 million, or a

5 percent increase as compared to the 2019-10 Adopted Budget Plan. The increase is largely due to the LVVWD's planned \$100 million new money debt issuance.

Las Vegas Valley Water District
Operating and Capital Budget
General Manager's Information Report
Fiscal Year Ending June 30, 2021

Tiered consumption charges are projected to decrease \$23.8 million, or eight percent, reflecting lower consumption expected from impacts of COVID-19. The service charge is anticipated to increase \$3.3 million, or five percent. Tier consumption charges and service charge revenues also factored in water rate increases adopted by the Board in January 2017, and two percent projected growth in the number of active services.

Facilities Connection Charges are expected to decrease by \$12.4 million, or 74 percent, reflecting significant impacts on development in Southern Nevada from COVID-19. The Springs Preserve's revenue is expected to rise one percent, continuing its trend of growth.

The 2020-21 budget includes \$100 million in proceeds from a planned debt issuance. The debt proceeds will go towards funding the ongoing 10-year CIP.

Uses.

The 2020-21 Budget Plan's total uses of funds are projected to be \$737.2 million, or a one percent decrease compared to the 2019-20 Adopted Budget Plan. This is largely due to decreases in pass-through charges from the SNWA. Capital expenditures are expected to increase \$14.3 million, or 11 percent. This increase is attributable to alignment with the \$616 million 10-year CIP adopted by the Board in January 2017.

Purchased water costs are projected to decrease by \$3.8 million, or four percent, due to the projected decreases in water consumption, which leads to reduced wholesale water purchased from the SNWA. Energy costs are projected to remain steady. Payroll costs are anticipated to increase by \$5.8 million, or four percent, compared to the

2019-20 Adopted Budget Plan. The full-time equivalent employee count is projected to increase to support the 10-year CIP and operational demands.

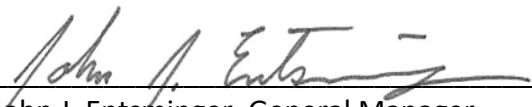
Non-payroll operating expenses are projected to essentially remain flat. Capital Expenditures are budgeted to rise by \$14.3 million in continuation of the adopted 10-year CIP. Debt service is anticipated to increase, compared to 2019-20, largely due to the planned \$100 million debt issuance.

Summary.

Overall, the LVVWD's fiscal year 2020-21 Budget Plan presents an outlook based on impacts of the COVID-19 pandemic on sources of funds and relatively stable uses of funds.

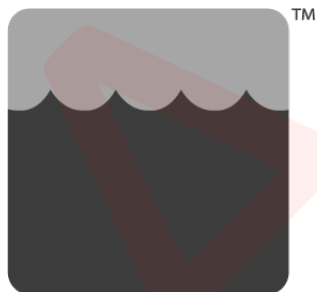
Approval

The public hearing on the LVVWD's 2020-21 Tentative Budget, and adoption of the Final Budget, is scheduled for 9:45 a.m., Monday, May 18, 2020.



John J. Entsminger, General Manager

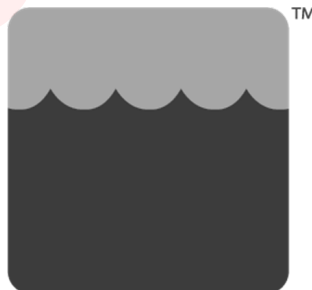
This page left intentionally blank



SECTION 2

INTRODUCTION AND STRATEGIC PLAN

Introduction	2-1
Purposes and Powers	2-1
Intergovernmental Relationships	2-1
Areas Currently Served	2-2
Organizational Structure	2-3
Financial Structure and Controls	2-5
Budget Controls and Process	2-6
Budget Augmentation	2-8
Budget Calendar for the Fiscal Year 2020-21	2-9
Las Vegas Valley Water District Strategic Plan	2-12
Strategic Plan Background	2-12
Strategic Plan and 2020-21 Budget Plan Preparation	2-12
Vision- Mission- Goals	2-13
Strategic Plan Strategies	2-13



LAS VEGAS VALLEY WATER DISTRICT
FISCAL YEAR 2020-21
OPERATING AND CAPITAL BUDGET

Las Vegas Valley Water District
Operating and Capital Budget
Introduction and Strategic Plan
Fiscal Year Ending June 30, 2021

Introduction

Purposes and Powers.

The Las Vegas Valley Water District (LVVWD) was created under a special act of the State of Nevada's legislature in 1947 for the purpose of obtaining and distributing water primarily in the Las Vegas Valley, including Blue Diamond, Jean and Searchlight, Nevada. The LVVWD also manages the water districts of Kyle Canyon, Searchlight, Coyote Springs and Big Bend under contracts with Clark County. The map on the following page shows the areas served by the LVVWD in relation to Clark County, Nevada.

The LVVWD has been granted certain powers to achieve its purpose, including the right of eminent domain, the right to cause taxes to be levied, the right to create assessment districts, the responsibility to operate and maintain the Southern Nevada Water Authority's (SNWA) regional treatment and transmission system and the right to incur indebtedness.

The LVVWD is governed by a seven-member Board of Directors (LVVWD Board), all of whom are elected Clark County Commissioners. The LVVWD Board has the sole power to set rates and charges for water, and charges cannot be put into effect until the conclusion of a public hearing process. The Las Vegas Valley Water District Act and applicable Bond Covenants provide that rates and charges should be sufficient to provide for operation and maintenance costs, general expenses of the LVVWD, and principal and interest payments on outstanding debt. Although the LVVWD Board may levy a tax on all taxable property within the LVVWD service

area, such a tax never has been levied. The daily operations of the LVVWD are overseen by the General Manager, appointed by the LVVWD Board.

Intergovernmental Relationships.

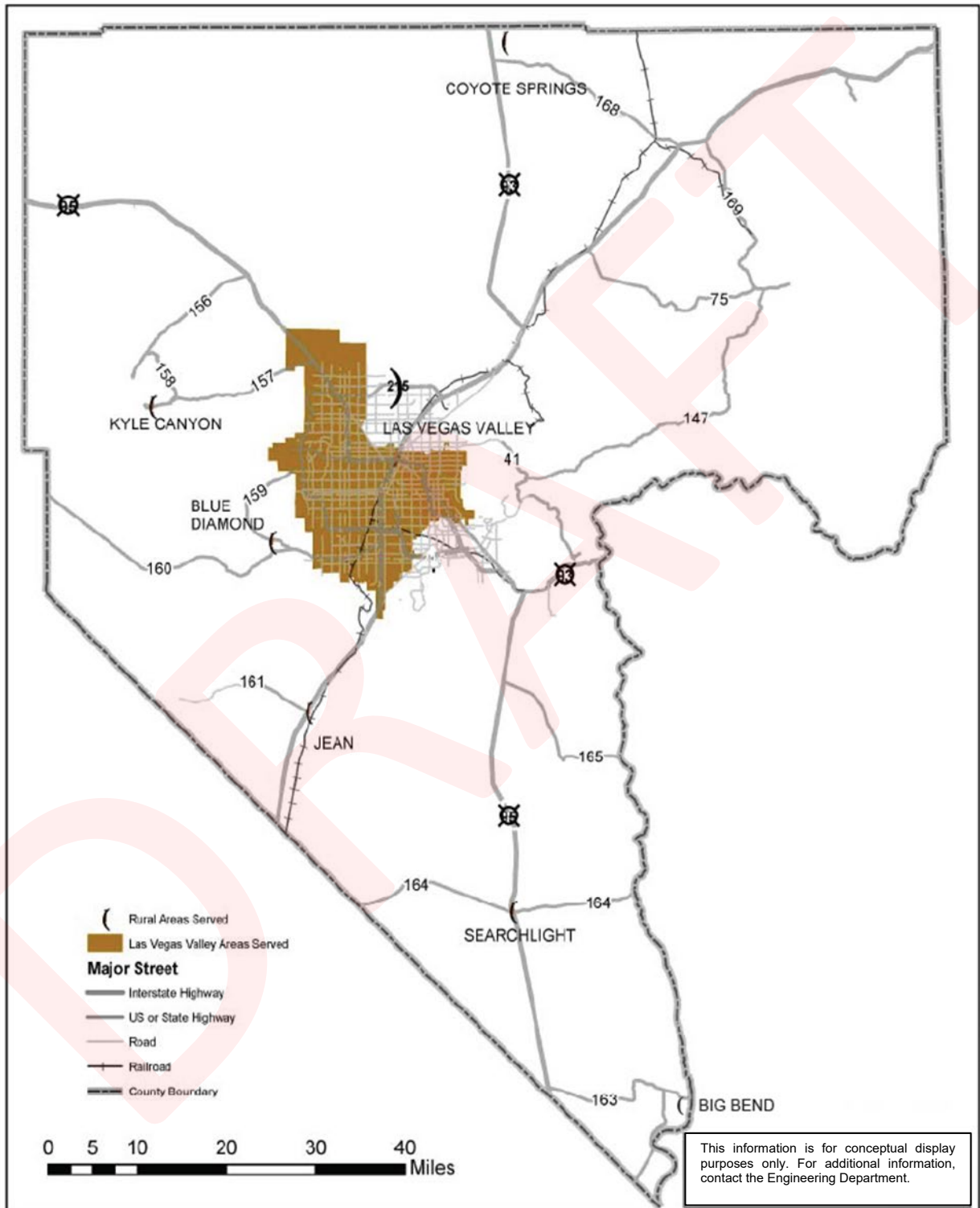
The LVVWD plays a vital role in the management of water resources in Southern Nevada. To fulfill this role, the LVVWD must work effectively and cooperate with state and federal governments, numerous local jurisdictions and other local water purveyors. These relationships play a vital role in shaping not only the demands on the LVVWD, but also the fiscal year 2020-21 Budget Plan. The following describes these intergovernmental relationships.

Las Vegas Valley Water District. The LVVWD serves potable water to customers in the City of Las Vegas and unincorporated urban areas of Clark County, Nevada. As the largest water purveyor in Southern Nevada, the LVVWD has taken a leadership role in conservation and regional water issues. The LVVWD provides the operating staff for the SNWA. The General Manager of the LVVWD serves as the General Manager of the SNWA.

Southern Nevada Water Authority. In 1991, the cities of Las Vegas, North Las Vegas, Henderson, and Boulder City, and the Big Bend Water District, Clark County Water Reclamation District and the LVVWD formed the SNWA to develop additional water resources and to address water issues on a regional basis. The Board of Directors of the SNWA (SNWA Board) consists of one member selected from each of the member agencies.

Las Vegas Valley Water District
Operating and Capital Budget
Introduction and Strategic Plan
Fiscal Year Ending June 30, 2021

Areas Currently Served



Las Vegas Valley Water District
Operating and Capital Budget
Introduction and Strategic Plan
Fiscal Year Ending June 30, 2021

Southern Nevada Water System (SNWS). The SNWS is the regional system consisting of water treatment plants, pumping and distribution facilities supplying water to the water purveyors in Southern Nevada. Prior to 1996, the SNWS was owned by the Colorado River Commission and operated by the LVVWD. In accordance with legislation passed by the Nevada State Legislature during its 1995 session, the SNWS was transferred to the SNWA in January 1996. The LVVWD continues to operate the SNWS.

Major Water Purveyors. The major water purveyors and the percentages of Colorado River water distributed in the Las Vegas area for the fiscal year ended June 30, 2019 are as follows: Boulder City (0.9 percent), Henderson (17.1 percent), North Las Vegas (12.6 percent), the LVVWD (69.0 percent) and others (0.4 percent).

Wastewater Treatment Agencies. The wastewater treatment agencies are as follows: City of Henderson, City of Las Vegas, City of North Las Vegas and the Clark County Water Reclamation District.

Colorado River Commission (CRC). The CRC is

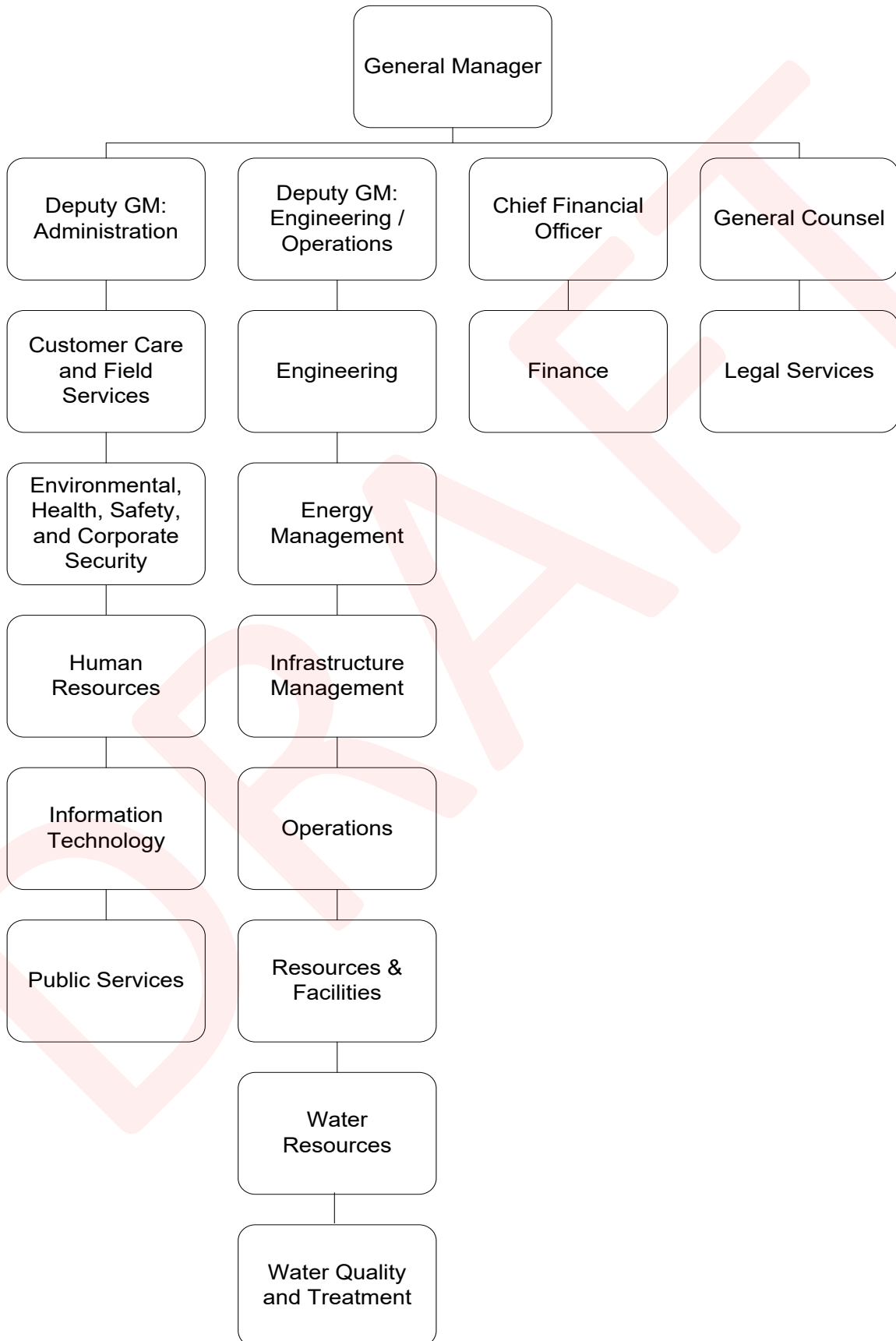
a Nevada State agency created in the mid-1930's to acquire and protect Nevada's right to water and power resources from the Colorado River. Colorado River water is apportioned among the seven Colorado River basin states and Mexico. The seven-member CRC consists of four members appointed by the Governor (including the Chairperson) and three SNWA Board members.

Bureau of Reclamation (BOR). The Bureau of Reclamation, within the U.S. Department of the Interior, is responsible for managing the Colorado River to benefit the users with Colorado River water rights. Any changes to the laws governing the Colorado River benefiting Nevada require the cooperation and approval of the federal government and all seven of the basin states.

Organizational Structure.

The LVVWD's organizational structure has evolved to meet the demands of major water facility expansions, conservation, customer service initiatives, and special projects. The organization chart on the following page reflects the LVVWD's current organizational structure.

Las Vegas Valley Water District
Operating and Capital Budget
Introduction and Strategic Plan
Fiscal Year Ending June 30, 2021



Las Vegas Valley Water District
Operating and Capital Budget
Introduction and Strategic Plan
Fiscal Year Ending June 30, 2021

Financial Structure and Controls.

The LVVWD's financial reporting structure is fund based. A fund is defined as a separate, self-balancing set of accounts used to account for resources segregated for specific purposes in accordance with special regulations, restrictions, and/or limitations. The LVVWD maintains two funds, a proprietary enterprise fund and a fiduciary pension trust fund. Both funds utilize full-accrual accounting.

Proprietary Fund Type - Enterprise Fund. The Enterprise Fund is used to account for the LVVWD's operations in a manner similar to private business enterprises. The intent of the LVVWD is to establish water user rates and charges sufficient to provide for payment of general operation and maintenance expenses, capital improvements and annual debt service. Revenues are recognized when they are earned, and expenses (including depreciation) are recognized when they are incurred.

Fiduciary Fund Type - Pension Trust Fund. The Pension Trust Fund is used to report the assets and liabilities of the LVVWD's defined benefit pension plan and the additions and deductions during the fiscal reporting period. The resources of the Pension Trust Fund are held in trust for the members and beneficiaries of the plan.

Capital and Debt Service Accounting. Capital and debt service finances are accounted for separately within the overall structure of the Enterprise Fund. Bond issuance resolutions require that bond proceed balances be maintained in restricted acquisition and construction accounts until they are expended. Assets restricted for specific

purposes (e.g. additions to plant or repayment of bonds) and liabilities payable from such assets are accounted for separately until disposition. Earnings on these assets also are considered restricted. Fund equity is restricted for assets, less related liabilities, which are restricted by law or other externally imposed regulations, such as bond covenants.

Internal Controls. In developing and evaluating the LVVWD's accounting system, consideration is given to the adequacy of internal accounting controls. These controls are designed to provide reasonable, but not absolute, assurance regarding the safeguarding of assets against loss from unauthorized use or disposition; and the reliability of financial records for preparing financial statements and maintaining accountability for assets. The concept of reasonable assurance recognizes the cost of a control should not exceed the benefits likely to be derived and the evaluation of costs and benefits requires estimates and judgments by management. All internal control evaluations occur within the above framework. The LVVWD's internal accounting controls safeguard assets and provide reasonable assurance of proper recording of financial transactions. On an ongoing basis, the LVVWD evaluates its internal controls and implements changes in response to dynamic operations.

Debt Administration. It is the general intent of the LVVWD that rates and charges are adequate to provide for all costs, and reliance on taxes is to be avoided. Ad valorem taxes have never been required to support the LVVWD's operations or debt service. As of June 30, 2020, the LVVWD has \$748 million in outstanding general debt. All applicable bond covenants, such as ratios of net income to

Las Vegas Valley Water District
Operating and Capital Budget
Introduction and Strategic Plan
Fiscal Year Ending June 30, 2021

debt service, sinking funds and insurance coverage have been met or exceeded. The LVVWD does not have a statutory debt limit. Currently, Standard and Poor's (S&P) Corporation rating for the LVVWD's general obligation bond issues is "AA+", while Moody's Investor Service, Inc. rating for outstanding LVVWD general obligation bonds is "Aa1".

Cash Management. During the year, available operating funds are invested in obligations of the United States agencies and in commercial paper with credit ratings of A-1, P-1 or its equivalent, or better. Investments are purchased through recognized and regulated brokers dealing in government securities. Investments are made with the objective of obtaining a market rate of return appropriate in relation to the prevailing budgetary and economic environment. Investments of the LVVWD are independently reviewed by an external auditor, and are reported in the LVVWD's annual financial report. All investments are held by a bank's trust department in the LVVWD's name.

Risk Management. The LVVWD employs a multifaceted approach to risk management, which includes the transfer, elimination, avoidance, reduction and/or assumption of risk of loss. The LVVWD also purchases risk insurance (including terrorism insurance) from the commercial insurance market on real and personal property, including earthquake and flood, with common policy restrictions, covering direct physical loss of or damage to buildings, fixtures, equipment, boilers, machinery and supplies. The blanket limit of liability under the property insurance program is \$500 million per occurrence with a deductible of \$1 million per occurrence. The program also includes earthquake coverage

(\$100 million limit) and flood coverage (\$50 million limit) each having a \$100,000 deductible. The LVVWD self-insures the first \$1 million for its automobile and general liability exposure and purchases \$30 million of excess liability insurance. The LVVWD self-insures its workers' compensation exposure up to \$500,000 per claim and purchases excess workers' compensation insurance, which provides statutory limits over the self-insured limit.

In contracts, the LVVWD obtains indemnification and hold-harmless agreements, and requires contractors name the LVVWD as an additional insured under the indemnitor's insurance coverage, usually \$1 million to \$10 million, for commercial general and auto liability insurance. The LVVWD provides builders risk insurance for all construction projects with a blanket limit of \$500 million per contract, or higher as needed, with a \$50,000 deductible per claim, except earthquake and flood, where the deductible is \$500,000 per claim.

Budget Controls and Process.

Budget Controls. By state statutes, the LVVWD's budget is approved annually, following a public hearing process, by the LVVWD Board. The LVVWD annually prepares a budget on a modified cash basis. The LVVWD also prepares and submits a budget to the Nevada State Department of Taxation in accordance with statutory laws based on a full accrual basis. Budgetary controls are established at the levels of total estimated operating and non-operating expenses. A utility or other enterprise is a self-supporting operation of a commercial nature, and the demand for service largely determines the appropriate level of revenues and

Las Vegas Valley Water District
Operating and Capital Budget
Introduction and Strategic Plan
Fiscal Year Ending June 30, 2021

expenditures. Depending upon the timing and level of the demand for services, revenues and expenditures will vary.

Budgetary controls are established at various levels to have effective control over the necessary expenditures. These levels always include departments and divisions and, in some instances, sections. Most disbursements are made through the issuance of purchase orders. The purchasing division in the Finance department administers purchases of new furniture, vehicles, and communication equipment. Computer equipment purchases are administered under the authority of the Director of the Information Technology department. The Finance department prepares and distributes monthly budget variance reports, and division managers can electronically access their budget information using the Oracle Financial System. Division managers are accountable for variances between the budgeted and actual expenditures. The LVVWD's staffing is controlled by the Human Resources department.

Budget Process. The LVVWD's budget process starts in December of each year, and proceeds with a series of meetings involving department directors and/or managers. Financial analysis is done to project the revenues under the projected water rate structure. The revenue projections are based on the estimated water the LVVWD is planning to deliver in the coming year. The budget reflects the strategies and goals adopted by the LVVWD.

The LVVWD's budget staff distributes current and historical information to managers to assist in the preparation of budgets within the budgeting guidelines. The budget process

consists of three major phases. The first phase includes preparing new requests for capital equipment, construction projects and staff positions for the new fiscal year. The second phase consists of preparing department-operating budgets, including payroll and related expenditures. Estimating payroll and related expenditures are based on current approved positions and factors based on historical adjustments throughout the year. The third phase involves department directors, managers and supervisors meeting with Executive Management to justify expenditure requests. After all the departments' budgets have been reviewed and approved by the Executive Management Office, the budget is consolidated for the entire LVVWD, and an initial proposed budget document is submitted to the Nevada State Department of Taxation by April 15. The state then reviews the proposed budget and issues a notice of compliance or noncompliance with the statutory laws of the State of Nevada.


The LVVWD, typically in late April, conducts a working session with the LVVWD Board to review the proposed budget in detail. On the third Monday in May, the LVVWD Board conducts a public hearing to allow the public an opportunity to discuss the proposed budget, and after discussion and/or amendments, the proposed budget receives final approval from the LVVWD Board. The approved final budget document is filed with the State of Nevada. Once approved and filed, copies of their budgets are provided to departments. The approved budget is implemented on July 1, the first day of the new fiscal year.

Budget Augmentation. Nevada State law (NRS 354.493) defines budget augmentation as a procedure for increasing appropriations

Las Vegas Valley Water District
Operating and Capital Budget
Introduction and Strategic Plan
Fiscal Year Ending June 30, 2021

of a fund with the express intent of employing unbudgeted resources to carry out the purpose for the increased appropriations. To augment the budget, the LVVWD Board must adopt a resolution providing for an augmentation at a regular meeting of the LVVWD Board by majority vote of all members. Budget augmentation becomes effective when an executed copy of the resolution for augmentation is delivered to the State of Nevada Department of Taxation.

FISCAL YEAR 2020-21 BUDGET CALENDAR


	All Departments	Financial Services	Executive Management	Human Resources
Dec	Thu Dec 5 Budget instructions and calendar received	Thu Dec 5 Budget instructions and calendar sent to departments		Dec Organization charts available for review in Workday. Adjustments to organization charts due to Human Resources Information Systems, (HRIS) (HRIS@lvvwd.com) by Thursday, January 16, 2020
	Mon Dec 9 Operating expense files received			
	Tue Dec 17 Budget Kick-off Meeting(s)	Mon Dec 9 Operating expense files sent. Coordination of budget process, schedule, and assigned department Analyst assistance begins	Tue Dec 17 – Thu Jan 16 Personnel related requests will be coordinated through each department's Director and Deputy General Manager	Thu Dec 19 List of existing interns and summer hire positions distributed to departments. Updates, corrections and new requests due to HRIS (HRIS@lvvwd.com) by Thursday, January 16, 2020
	Tue Dec 17 – Thu Jan 16 Personnel related requests will be coordinated through each department's Director and Deputy General Manager	Tue Dec 17 Budget Kick-off Meeting(s)		
		Thu Jan 16 Major data processing and equipment requests submitted to Information Technology and Fleet Services for review and coordination		
Jan	Thu Jan 16 Adjustments to organization charts submitted to Human Resources Information Systems, (HRIS) (HRIS@lvvwd.com)	Mon Jan 27 Coordination with departments incurring intercompany and overtime payroll costs begins		Thu Jan 16 List of existing interns and summer hire position renewals sent to Financial Services
	Thu Jan 16 Final requests for interns and summer hire positions submitted to HRIS (HRIS@lvvwd.com)			
	Thu Jan 30 Final 2020-21 operating expense budgets submitted to Financial Services Thu Jan 30 Final 2020-21 capital budget equipment and project requests submitted			

FISCAL YEAR 2020-21 BUDGET CALENDAR



	All Departments	Financial Services	Executive Management	Human Resources
Feb	Mon Feb 3 Budget narrative instructions received	Mon Feb 3 Budget narrative instructions sent to departments		
	Mon Feb 24 Summaries and detail of operating expense & capital expenditure budgets received	Mon Feb 24 Summaries and detail of operating expense & capital expenditure budgets sent to departments		
		Mon Feb 24 Assisting departments in preparation for the Senior Management Team (SMT) budget meeting presentations begins		
Mar		Wed Mar 4 Budget overview briefing with Executive Management (E-Team)	Wed Mar 4 Budget overview briefing	
	Mon Mar 9 Department budget meetings with SMT and overview briefing	Mon Mar 9 Department budget meetings with SMT and overview briefing	Mon Mar 9 Department budget meetings with SMT and overview briefing	
	Mon Mar 16 Budget narratives submitted to Financial Services		Tue Mar 10 – Mon Mar 16 Final budget decisions made by Executive Management (E-Team)	
Apr		Thu Apr 2 Proposed draft budgets completed for Budget Workshops with Boards of Directors	Thu Apr 16 Board of Directors Budget Workshop for SNWA	Mon Mar 16 Preliminary update of positions list based on Executive Management's final budget decisions
		Thu Apr 9 Preliminary Budgets filed with the Nevada State Department of Taxation	Mon Apr 27 Board of Directors Budget Workshop for LVVWD (including BBWD & Coyote Springs)	

FISCAL YEAR 2020-21 BUDGET CALENDAR

	All Departments	Financial Services	Executive Management	Human Resources
May		Tues May 5 LVVWD, BBWD, and Coyote Springs Public hearing notice published in LVRJ		
		Fri May 8 SNWA Public hearing notice published in LVRJ		
			Mon May 18 LVVWD Board of Directors public hearings conducted on proposed budgets of LVVWD, Big Bend, and Coyote Springs for possible adoption	
			Thu May 21 SNWA Board of Directors public hearing conducted on the proposed budget for possible adoption	
Jun		Thu May 28 Adopted budgets sent to the Nevada Department of Taxation		Thu May 21 Organization charts updated after Boards adopt budgets
Jul		Thu Jun 18 LVVWD, SNWA, BBWD & Coyote Springs annual summary fiscal reports published in LVRJ		
Aug		Thu Jul 23 Proof of publication of fiscal reports submitted to the Nevada State Department of Taxation		
		Thu Aug 6 Budget Award Application submitted to the GFOA		

Las Vegas Valley Water District
Operating and Capital Budget
Introduction and Strategic Plan
Fiscal Year Ending June 30, 2021

Las Vegas Valley Water District Strategic Plan

Strategic Plan Background.

The LVVWD's Strategic Plan represents the latest iteration in the LVVWD's long-standing commitment to self-assessment, continuous improvement, and comprehensive planning. The Strategic Plan provides future direction for the LVVWD, both in its role as a local water purveyor and in its operational and management support of the SNWA.

To respond to a variety of rapidly changing factors impacting the LVVWD, senior management and employees of the LVVWD, with policy guidance from the LVVWD Board, completed a comprehensive Strategic Plan in 1993. The LVVWD's Strategic Plan identified forces influencing decision-making and formulated goals and strategies to guide the LVVWD in responding to the challenges, and evolve into a dynamic, responsive and effective organization. In 1997, the LVVWD revised its original plan to reflect its evolving role in supporting and managing the SNWA, as well as meeting demands as a local water purveyor. In fiscal year 2003-04, senior management and staff completed a review and updated the goals and strategies of the LVVWD's Strategic Plan, and a revised plan with new goals and strategies was presented to and adopted by the LVVWD Board. At the same time, staff initiated strategic planning meetings with the SNWA member agencies, resulting in the identification of goals to guide the future of the SNWA, and provide a foundation for common understanding between the LVVWD and the SNWA.

In fall 2012, the Senior Management Team began meeting to develop a new strategic

plan. This strategic planning process allows the LVVWD and the SNWA to continue to respond to current economic conditions, plan for future needs and implement changes to ensure efficient and effective operations. The revised strategic plan was finalized, and the organization-wide implementation launched in 2013.

Strategic Plan and 2020-21 Budget Plan Preparation.

The LVVWD's Strategic Plan serves as a guide in the development of the LVVWD's annual Budget Plan. The Strategic Plan is used to guide and focus operational objectives and subsequently budget plan investments for the upcoming year. In section 5 of the 2020-21 Budget Plan, each department has established objectives for the upcoming year according to the relevant and existing Strategic Plan goal it is designed to address.

The LVVWD has undergone several strategic planning initiatives over the past several decades to ensure the organization has a framework for action and is prepared to address dynamic environmental and economic challenges. The Strategic Plan developed in 2013 addresses the current economic climate, organizational realignment and operational needs.

For the past decade, Southern Nevada has weathered unprecedented drought conditions on the Colorado River and, more recently, has survived the effects of the economic downturn. The recession impacts included a change in the community's business environment, a decrease in water sales and sales tax revenue, and a significant decrease in the SNWA connection charges. During this period of economic uncertainty,

Las Vegas Valley Water District
Operating and Capital Budget
Introduction and Strategic Plan
Fiscal Year Ending June 30, 2021

organizational structure and budgetary issues have been closely evaluated to ensure the organization's focus meets current community needs. The strategic plan represents a roadmap for the next three to five years which realigns the organization's focus on enhancing service levels, improving asset management, providing rate stability and streamlining the organization to meet current and future community needs.

The strategic planning process developed a "blueprint" to increase communication, emphasize accountability, and continue to cut costs and eliminate duplication in a manner representative of the organization's commitment to internal efficiency and exemplary customer service. The plan also establishes goals to facilitate these objectives. The strategic planning process involved management and employees in all departments through a comprehensive exercise to: assess the organizations and their current environment; review and clarify the organizational vision, mission and values; and develop goals and strategies to support these objectives. By involving all levels of employees in the development of measures, milestones and standards of excellence, and incorporating their input into the strategic plan, the entire workforce has had the opportunity to engage in the implementation of the new Strategic Plan. Additionally, each workgroup has the ability to monitor its own progress through an online administrative tool.

As a result of this strategic planning process, a new vision, mission and goals were developed:

VISION

To be a global leader in service, innovation and stewardship

MISSION

Provide world class water service in a sustainable, adaptive and responsible manner to our customers through reliable, cost-effective systems

GOALS

- Assure quality water through reliable and highly efficient systems.
- Deliver an outstanding customer service experience.
- Anticipate and adapt to changing climatic conditions while demonstrating stewardship of our environment.
- Develop innovative and sustainable solutions through research and technology.
- Ensure organizational efficiency and manage financial resources to provide maximum customer value.
- Strengthen and uphold a culture of service, excellence and accountability.

Strategic Plan Strategies.

In order to implement the goals of the Strategic Plan, the LVVWD prepared the following strategies:

Assure quality water through reliable and highly efficient systems.

- Provide a high-quality drinking water

Las Vegas Valley Water District
Operating and Capital Budget
Introduction and Strategic Plan
Fiscal Year Ending June 30, 2021

supply and delivery system that is sustainable and promotes the vitality and prosperity of the community.

- Maintain high levels of reliability through application of a sufficiently funded asset management program.
- Sustain operational continuity with a sufficiently staffed, well-trained and skilled workforce.
- Continually improve operating efficiencies by benchmarking to leading industry standards.
- Ensure a high quality of local and regional water resources through comprehensive water quality and watershed management.

Deliver an outstanding customer service experience.

- Assess customer satisfaction, establish benchmarks and determine where improvements are required.
- Continuously improve service processes and practices based on customer assessments.
- Utilize appropriate technology to simplify and improve the customer experience.
- Provide necessary training and development to ensure a quality customer service experience.
- Communicate with and receive continuous feedback from employees on organizational policy changes and improvements.
- Monitor other organizations/industries to identify innovations, best practices and ways to improve the customer experience.

Anticipate and adapt to changing climatic conditions while demonstrating stewardship of our environment.

- Enhance understanding of climate change impacts among ourselves and our stakeholders.
- Develop and implement adaptation plans to reduce or mitigate impacts of climate change on water and environmental resources.
- Conduct long-term water resources and facilities planning to ensure adequate resources are available when needed.
- Develop and implement proactive stewardship for environmental resources to ensure access to current and future water supplies.
- Champion innovative water efficiency initiatives to maximize beneficial use of resources.
- Incorporate sustainable best practices into organization initiatives and inspire positive change.

Develop innovative and sustainable solutions through research and technology.

- Identify, prioritize and implement sustainable and cost-effective solutions to organizational challenges.
- Promote a culture that is innovative, creative, and makes effective use of technology.
- Allocate the resources necessary to advance research, technology and other innovations.
- Develop and strengthen partnerships on a global basis to leverage resources and advance innovation.

Las Vegas Valley Water District
Operating and Capital Budget
Introduction and Strategic Plan
Fiscal Year Ending June 30, 2021

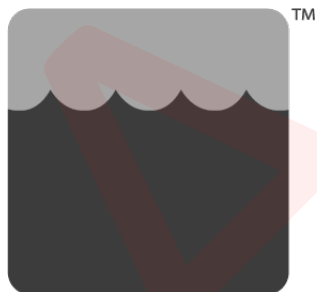
Ensure organizational efficiency and manage financial resources to provide maximum customer value.

- Increase customer communication so there is a better understanding of the value of our products and services.
- Ensure predictable rates that are aligned with community expectations.
- Seek out and deploy worldwide best practices to minimize costs.
- Establish and utilize benchmarks to explore new opportunities for improved efficiencies.
- Formulate risk assessments and develop alternatives for expenditure decisions.

Strengthen and uphold a culture of service, excellence and accountability.

- Improve the consistency and openness of communication to ensure employees are engaged and well informed.
- Increase the effectiveness of professional development by providing additional diverse learning opportunities.
- Hold ourselves accountable for delivering quality products and services to our customers, each other and the environment.
- Identify, monitor and measure key performance areas of the organization, openly sharing results and taking appropriate action.
- Provide and seek timely feedback on individual, team and departmental performance to enhance collaboration, accountability and excellence.

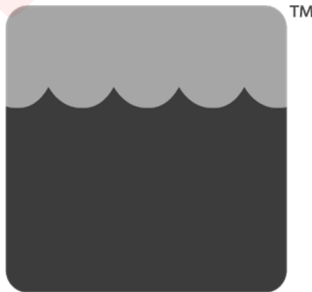
This page left intentionally blank



SECTION 3

OPERATING AND CAPITAL BUDGET PLAN

Budget Summary.....	3-1
Sources	3-2
Uses	3-7
Summary of Sources and Uses of Funds and Changes in Net Assets.....	3-11



LAS VEGAS VALLEY WATER DISTRICT
FISCAL YEAR 2020-21
OPERATING AND CAPITAL BUDGET

Las Vegas Valley Water District
Operating and Capital Budget
Operating and Capital Budget Plan
Fiscal Year Ending June 30, 2021

The fiscal year 2020-21 Budget Plan reflects the continued commitment of the Las Vegas Valley Water District (LVVWD) to provide water resources and services to meet the demands of Southern Nevada. The LVVWD utilizes its Strategic Plan as a guide in shaping its annual Budget Plan. The fiscal year 2020-21 Budget Plan's total sources of funds are projected to be \$679.6 million, or a five percent increase compared to the fiscal year

2019-20 Adopted Budget Plan. The fiscal year 2020-21 Budget Plan's total uses of funds are projected to be \$737.2 million, or a one percent decrease compared to the fiscal year 2019-20 Adopted Budget Plan. The table below shows the Sources and Uses of Funds Summary for the 2018-19, 2019-20, and 2020-21 fiscal years.



Budget Summary

	Actual 2018-19	Budget 2019-20	Budget 2020-21	Budget-to-Budget Variance	
				\$	%
Sources					
Tiered Consumption	\$ 270,649,413	\$ 300,475,251	\$ 276,681,168	\$ (23,794,083)	-8%
Service Charge	70,558,156	73,568,486	76,885,082	3,316,596	5%
Backflow Charge	11,945,349	11,908,629	12,187,326	278,697	2%
Reclaimed Water	7,009,290	7,500,339	6,936,938	(563,401)	-8%
Other Water Bill Charges	8,253,117	7,595,123	9,672,690	2,077,567	27%
Facilities Connection Charge	18,185,794	16,727,513	4,293,310	(12,434,203)	-74%
Application & Inspection Fees	3,106,856	2,832,318	724,256	(2,108,062)	-74%
Investment Income	18,957,469	4,721,991	6,034,677	1,312,686	28%
Springs Preserve	3,047,092	3,090,260	3,127,885	37,625	1%
Other Sources	2,806,282	-	-	-	-
Subtotal	414,518,818	428,419,910	396,543,331	(31,876,579)	-7%
Debt Issuance Proceeds	7,623,693	3,692,628	100,000,000	96,307,372	
LVVWD Sources	422,142,511	432,112,538	496,543,331	64,430,793	15%
Uses					
Purchased Water	91,499,814	100,853,938	97,091,127	(3,762,811)	-4%
Energy	9,106,323	10,056,500	10,009,000	(47,500)	0%
Payroll & Related	129,868,006	149,996,855	155,777,610	5,780,755	4%
Operating Expenses	40,490,706	67,385,506	67,276,623	(108,884)	0%
Capital Expenditures	87,397,401	133,377,574	147,629,101	14,251,527	11%
Debt Service	68,351,975	70,457,009	76,347,958	5,890,949	8%
LVVWD Uses	426,714,225	532,127,382	554,131,419	22,004,037	4%
LVVWD Net Surplus/(Deficit)	\$ (4,571,714)	\$(100,014,844)	\$ (57,588,088)		
SNWA Charges					
Infrastructure Charge	\$ 116,950,650	\$ 115,832,567	\$ 120,257,759	\$ 4,425,192	4%
Commodity Charge	49,800,992	51,308,350	47,778,141	(3,530,209)	-7%
Connection Charge	46,474,600	43,533,230	11,118,873	(32,414,357)	-74%
Reliability Surcharge	4,091,950	4,186,924	3,914,309	(272,615)	-7%
SNWA Charges	\$ 217,318,193	\$ 214,861,071	\$ 183,069,082	\$ (31,791,989)	-15%
Total Sources	\$ 639,460,704	\$ 646,973,609	\$ 679,612,412	\$ 32,638,803	5%
Total Uses	644,032,418	746,988,453	737,200,501	(9,787,952)	-1%
Total Net Surplus/(Deficit)	\$ (4,571,714)	\$(100,014,844)	\$ (57,588,088)		

Las Vegas Valley Water District
Operating and Capital Budget
Operating and Capital Budget Plan
Fiscal Year Ending June 30, 2021

Sources

The fiscal year 2020-21 Budget Plan's total sources of funds are projected to be \$679.6 million, which is a five percent increase compared to the 2019-20 Adopted Budget Plan.

The LVVWD revenue-based sources of funds are projected to fall by \$31.9 million, or seven percent. This decrease is largely due to projected effects from COVID-19 of reduced water consumption and significant impacts on development.

The LVVWD revenue-based sources of funds are also impacted by the implementation of the LVVWD Board of Directors (Board) adopted water rate adjustments. The Board adopted water rate adjustments are inflation-indexed annually, which increased 2.9 percent in January 2020. In addition to the rate adjustments, the LVVWD plans to issue \$100.0 million in bonds during 2020-21, which is discussed in further detail later in this section.

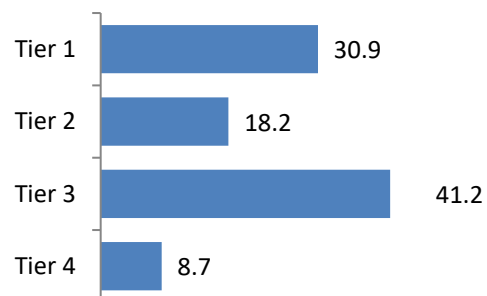
In January 2017, the Board approved the Citizens Advisory Committee (CAC) recommendations, which included the water rate adjustments noted above, to help fund the LVVWD's capital program through fiscal year 2026-27. The capital needs were included as part of the 10-year, \$616 million (in 2016 dollars) Capital Improvement Plan (CIP). The CIP was also adopted by the Board in January 2017. The CIP guides decisions related to asset management, necessary water system expansion and water quality compliance activities.

Tiered Consumption.

The LVVWD service rules have consumption rates of four tiers with thresholds for each tier varying by meter size and customer class. In establishing water rates, the LVVWD strives to set reasonable rates and considerations for the equitable allocation and recovery of costs of providing facilities and delivery of water service are made, except that the rates may be established in such a way as to encourage the conservation of water. Construction water and reclaimed water are sold at uniform rates. The historical 10-year average mix of actual water deliveries between the consumptive tiers is as follows:

- Tier 1 – 29%
- Tier 2 – 17%
- Tier 3 – 44%
- Tier 4 – 11%

**2020-21 Budgeted Water
Deliveries by Tier
(gallons in billions)**



Tier 1. Tier 1 rates have typically been considered the rate for “lifeline” water (i.e. the amount of water a small residence needs to satisfy typical indoor water uses such as bathing, washing clothes, toilets, etc.). The tier 1 consumption rate is currently set at \$1.32 per 1,000 gallons.

Las Vegas Valley Water District
Operating and Capital Budget
Operating and Capital Budget Plan
Fiscal Year Ending June 30, 2021

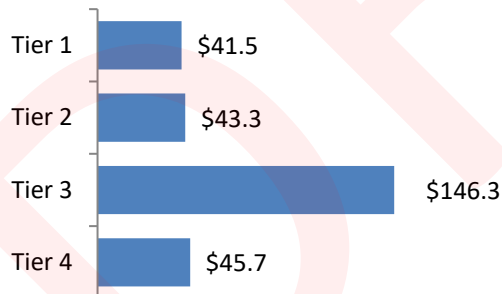
Tier 2. Tier 2 rates allow a typical small residence with very limited outdoor water use to avoid the 3rd tier. In addition, tier 2 thresholds have been compressed for residential services with a meter size of ¾" or above in order to encourage conservation. The tier 2 consumption rate is currently set at \$2.35 per 1,000 gallons.

Tier 3. Tier 3 typically delivers 40 – 45 percent of the water sold. The tier 3 consumption rate is currently set at \$3.50 per 1,000 gallons.

Tier 4. Tier 4 rates are designed to encourage conservation. The tier 4 consumption rate is currently set at \$5.19 per 1,000 gallons.

Construction Water. Construction water is sold at a uniform rate equal to the tier 3 rate. This water is typically delivered through a fire hydrant and is often used for dust suppression at construction sites.

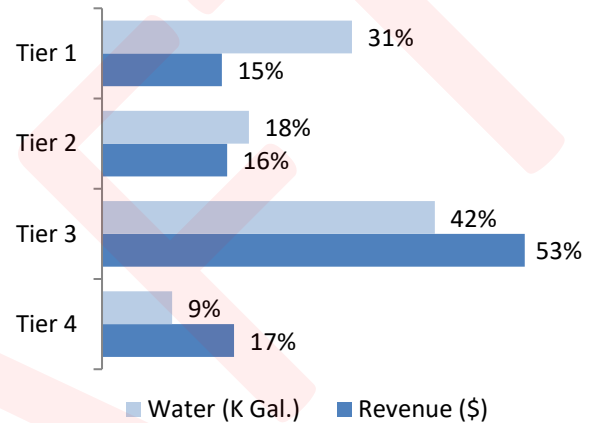
**2020-21 Budgeted
Revenue by Tier
(\$ in millions)**



The following chart shows the percent of budgeted water deliveries and revenue by tier for the fiscal year 2020-21. This chart illustrates the revenue impact on the water flowing through the tiers. In Tiers 1 and 2, the percentage revenue impact is less than the percent of water delivered, and the reverse is true in Tiers 3 and 4. While conservation is

important, from a revenue perspective, it is financially beneficial to the LVVWD to deliver water in the upper tiers.

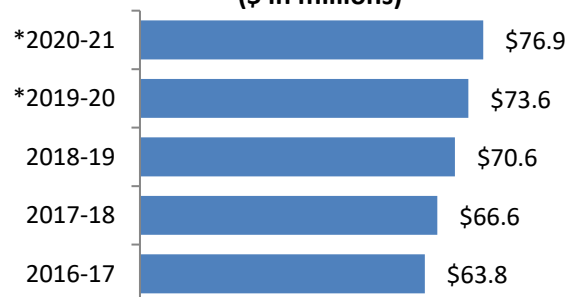
**Percent Budgeted Water
Deliveries & Revenue by Tier**



Service Charge.

The daily service charge is a fixed charge designed to cover the costs of servicing an account, regardless of the amount of water consumed. For example, costs like meter reading, meter maintenance, preparing the bill, postage, and remittance processing are approximately the same regardless of the amount of water consumed, and almost regardless of the size of the service.

**Service Charge
(\$ in millions)**

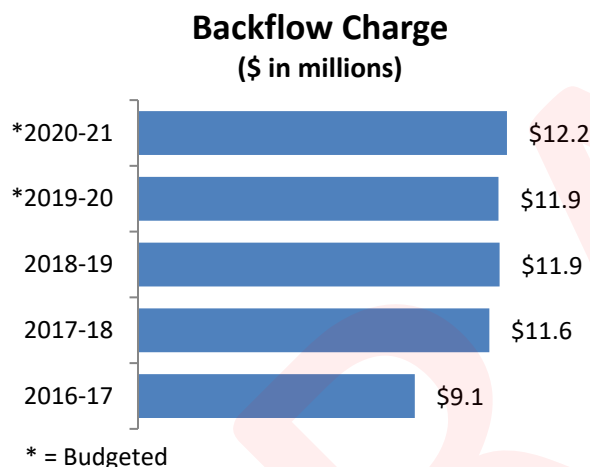


* = Budgeted

Las Vegas Valley Water District
Operating and Capital Budget
Operating and Capital Budget Plan
Fiscal Year Ending June 30, 2021

Backflow Charge.

The backflow charge is a fixed charge applied to customers with a backflow device. In the event of negative water pressure (a rare occurrence), a backflow device prevents water from flowing from pipes on the customer's premises back into the potable water system and thereby potentially contaminating the potable water system. The backflow charge is designed to cover the cost of maintaining those devices.



Reclaimed Water.

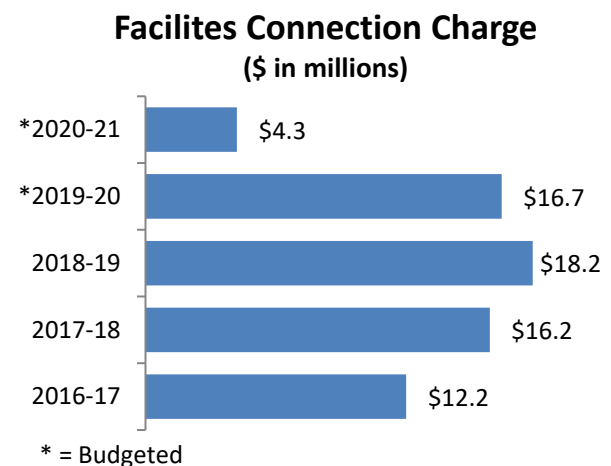
Reclaimed water is treated effluent from water reclamation centers, typically blended with potable water, and delivered to golf courses. The flat rate for reclaimed, or non-potable, water is \$2.33 per 1,000 gallons. Reclaimed water services are not subject to the daily service charge, the SNWA Commodity Charge or the SNWA Reliability Surcharge, but they are subject to the SNWA Infrastructure Charge. For the fiscal year 2020-21 Budget Plan, reclaimed water revenues are estimated to be \$6.9 million.

Other Water Bill Charges.

The water bill may contain various other charges which appear on customers' water bills, such as turn on charges, late fees, delinquent processing charges, lockout fees, returned check charges, etc. For the fiscal year 2020-21 Budget Plan, other water bill charges are anticipated to total \$9.7 million.

Facilities Connection Charge.

The facilities connection charge is based on meter size and is designed to offset costs of providing and/or expanding the LVVWD's water facilities. For the fiscal year 2020-21 Budget Plan, connection charges are anticipated to be \$4.3 million, which represents a \$12.4 million decrease compared to the fiscal year 2019-20 Adopted Budget Plan. The decrease is due to projected impacts from COVID-19. The facilities connection charge will be increased annually each March based on the Engineering News Record Construction Cost Index. These annual increases ensure the charged fee keeps pace with the expenditures required to render services.



Las Vegas Valley Water District
Operating and Capital Budget
Operating and Capital Budget Plan
Fiscal Year Ending June 30, 2021

Application & Inspection Fees.

The application and inspection fees are developer fees charged at the time a customer applies to connect to the water system or applies for changes in water service connection. These fees cover the costs associated with handling the application, setting up the service and reviewing plans. Inspection fees are those developer fees charged for the inspection of all new water facility installations and water services constructed by private contractors. In the fiscal year 2020-21 Budget Plan, application and inspection fees total \$724 thousand, a decrease of \$2.1 million compared to the fiscal year 2019-20 Adopted Budget Plan. This decrease reflects the projected impacts of COVID-19 on anticipated growth and development in the LVVWD's Service Area.

Investment Income.

Investment income is revenue earned from earnings on accumulated reserve balances. For the fiscal year 2020-21, interest earnings are anticipated to be \$6.0 million, a \$1.3 million increase compared to the fiscal year 2019-20 Adopted Budget Plan estimate. The increase is mostly the result of the inclusion of interest income that was previously allocated to capital projects. As a result of an update to GASB 89, interest is no longer allocated to capital projects.

Springs Preserve.

In 1998, the LVVWD entered into a partnership with the Las Vegas Springs Preserve Foundation, a tax-exempt charitable organization founded to provide funding for the Springs Preserve.

The Springs Preserve is a cultural and historic attraction located on the LVVWD property. The 180-acre national historic site is widely known as the "birthplace" of Las Vegas. The presence of an abundant water supply at the site was the original catalyst for the growth, development, and the resulting economic prosperity of the Las Vegas area. The Springs Preserve opened in June 2007.

For the fiscal year 2020-21 Budget Plan, revenues for the Springs Preserve are anticipated to total \$3.1 million, a one percent increase compared to the fiscal year 2019-20 Adopted Budget Plan.

Debt Issuance Proceeds.

Municipal Bond Proceeds. The LVVWD plans to issue \$100.0 million in bonds during 2020-21. The bond proceeds are to fund capital expenditures, which is discussed in further detail later in this section.

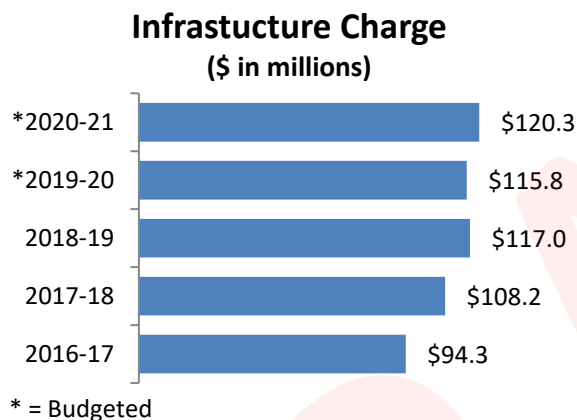
SNWA Infrastructure Charge.

In October 2011, the SNWA Board of Directors (SNWA Board) authorized an extensive rate study and a public outreach process to study various alternative rate structures to service the SNWA's outstanding debt. Debt had been issued to fund capital projects and additional debt was issued to fund ongoing capital needs. After the completion of a rate study and a public outreach process, the SNWA Board on February 29, 2012, unanimously approved an Infrastructure Charge to help offset declines in other sources of revenue. Subsequently, on March 6, 2012, the SNWA Infrastructure Charge was unanimously approved by the LVVWD's Board.

This source of revenue for the SNWA, which went into effect beginning May 2012, is

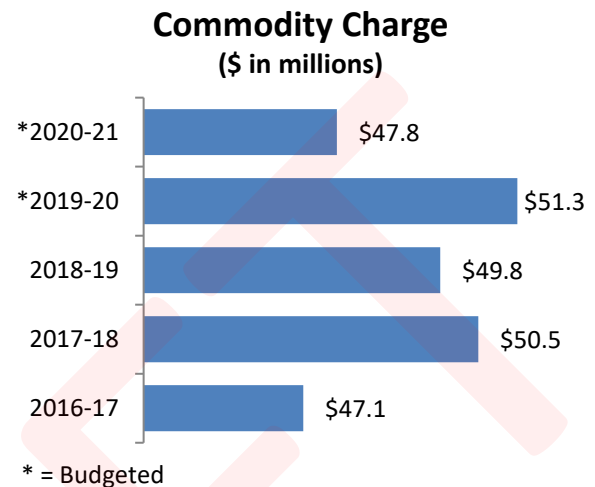
Las Vegas Valley Water District
Operating and Capital Budget
Operating and Capital Budget Plan
Fiscal Year Ending June 30, 2021

projected to generate \$120.3 million from the LVVWD customers. This represents an increase of \$4.4 million, or four percent, in the fiscal year 2020-21 Budget Plan when compared to the fiscal year 2019-20 Adopted Budget Plan. This charge is on the LVVWD customers' water bills and the funds pass directly to the SNWA. The Infrastructure Charge receipts will have no impact on the LVVWD's net surplus or deficit.



SNWA Commodity Charge.

The Commodity Charge was approved by the SNWA Board and the LVVWD Board in December 1995 and went into effect on purveyor water bills beginning in November 1996. This charge consists of a usage cost per 1,000 gallons sold by each of the SNWA's participating purveyor members to their customers. The charges are paid by the purveyors' customers based on the benefit they will accrue from the expansion of the SNWA's regional water treatment and transmission system. For fiscal year 2020-21, commodity charge revenues are anticipated to be around \$47.8 million, a decrease of \$3.5 million, or seven percent, compared to the fiscal year 2019-20 Adopted Budget Plan.



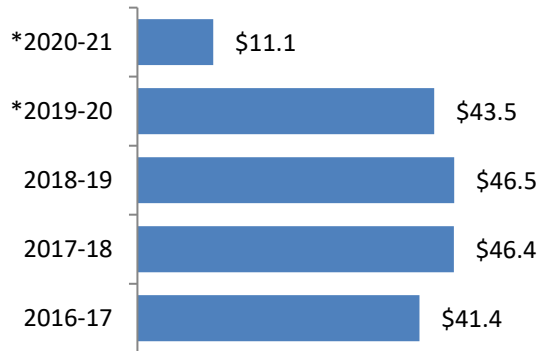
SNWA Connection Charge.

The Connection Charge was approved by the SNWA Board and the LVVWD Board in December of 1995 and became effective March 1, 1996. It was established to pay the majority of the costs of expanding the SNWA's regional water treatment and transmission system. It assesses new development to partially pay the costs of the system's current and future expansions. These revenues are passed directly from the LVVWD to the SNWA and are offset in the LVVWD's sources of funds with an equal amount of uses of funds. These revenues (as well as the SNWA Commodity and Reliability charges) are not used to support any of the LVVWD's ongoing operations or capital projects.

The fiscal year 2020-21 Budget Plan anticipates the SNWA connection charge collections of \$11.1 million, a decrease of \$32.4 million compared to the fiscal year 2019-20 Adopted Budget Plan. As with other sources of development-based revenue, this decrease reflects the projected impacts of COVID-19 on growth and development in the LVVWD's Service Area.

Las Vegas Valley Water District
Operating and Capital Budget
Operating and Capital Budget Plan
Fiscal Year Ending June 30, 2021

Connection Charge
(\$ in millions)



* = Budgeted

SNWA Reliability Surcharge.

The Reliability Surcharge was approved by the SNWA Board and the LVVWD Board in November 1997 and went into effect on purveyor water bills beginning in April 1998. It is applied to the total dollar amount of customers' bills, excluding the SNWA Infrastructure Charge. Residential customers are charged 0.25 percent of their total bill, while all other customers are charged 2.5 percent. The reliability surcharge is an additional charge to be paid by the purveyors' customers based on the benefit they will accrue from the expansion of the SNWA's regional water treatment and transmission system. In the fiscal year 2020-21 Budget Plan, it is estimated this charge will total \$3.9 million.

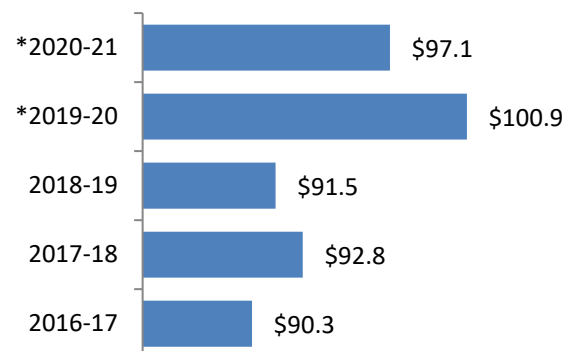
Uses

The fiscal year 2020-21 Budget Plan's total uses of funds are projected to be \$737.2 million, which is a one percent decrease compared to the 2019-20 budget. Factors in the reduction of uses of funds are a combination of decreases to the SNWA charges as well as increases in capital expenditures attributable to the \$616 million 10-year CIP adopted by the Board in January 2017.

Purchased Water.

The LVVWD purchases approximately 90 percent of its water from the SNWA. For the fiscal year 2020-21 Budget Plan, water costs are projected to be \$97.1 million, which is a four percent decrease compared to the fiscal year 2019-20 Adopted Budget Plan. This \$3.8 million reduction in costs can be attributed to estimated decreases in purchased water caused by COVID-19. The reduction is partially offset by an increase in the wholesale water rate on water purchased from the SNWA.

Purchased Water
(\$ in millions)

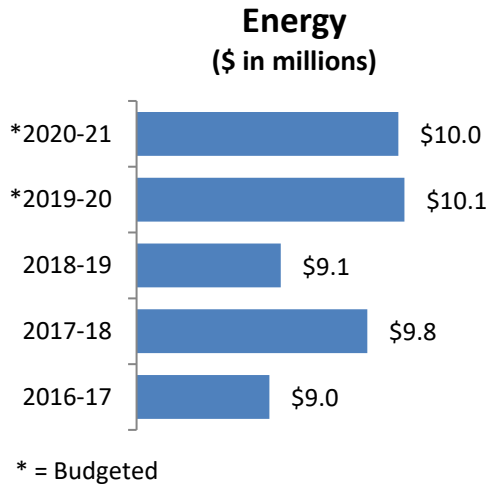


* = Budgeted

Las Vegas Valley Water District
Operating and Capital Budget
Operating and Capital Budget Plan
Fiscal Year Ending June 30, 2021

Energy.

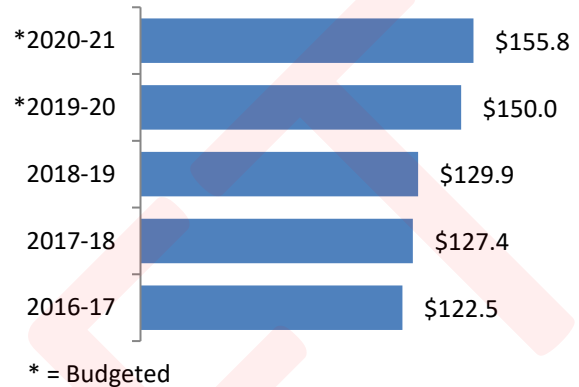
Compared to the 2019-20 Adopted Budget Plan, the cost of energy is expected to remain essentially flat for the fiscal year 2020-21 Budget Plan.



Payroll & Related.

Payroll costs include wages, salaries and benefits. For the fiscal year 2020-21 Budget Plan, payroll and related expenses are anticipated to be \$155.8 million. This represents an increase of \$5.8 million, or four percent, compared to the fiscal year 2019-20 Adopted Budget Plan.

Payroll & Related
(\$ in millions)



Full-time equivalent (FTE) is a unit of measurement which represents the workload of one full-time employed person. The LVVWD's FTE count is expected to increase by approximately 11 employees over the fiscal year 2019-20 Adopted Budget Plan. Demands to continue providing safe and reliable water service under current operational conditions, and the ongoing CIP, have resulted in increased staffing requirements for the LVVWD. The following chart summarizes the number of equivalent FTE positions by Department charging time to the LVVWD.

Las Vegas Valley Water District
Operating and Capital Budget
Operating and Capital Budget Plan
Fiscal Year Ending June 30, 2021

FTE Summary

<u>Department</u>	<u>Actual 2018-19</u>	<u>Budget 2019-20</u>	<u>Budget 2020-21</u>
Executive Management	5.1	5.5	6.4
Legal Services	8.4	8.5	8.5
Finance	31.8	35.3	34.8
Information Technology	94.6	103.0	95.4
Human Resources	21.3	25.6	26.4
Public Services	66.5	75.3	77.0
Environmental, Health, Safety & Corporate Security	49.6	45.8	44.4
Customer Care & Field Services	152.0	170.5	171.0
Engineering	75.4	88.3	94.0
Resources & Facilities	68.7	65.1	66.2
Infrastructure Management	64.2	66.2	66.8
Water Resources	1.6	9.4	13.4
Operations	193.3	190.0	195.4
Water Quality & Treatment	0.8	0.4	0.5
Total	833.3	888.8	900.0

**Totals may be off slightly due to rounding*

Operating Expenses.

Operating expenses include materials and supplies, maintenance and repairs, rental and leases, other employee expenses, and other expenses, which are described in detail after the following table.

Operating Expense Detail

	<u>Actual 2018-19</u>	<u>Budget 2019-20</u>	<u>Budget 2020-21</u>
Operating Expenses			
Materials & Supplies	\$ 14.7	\$ 16.2	\$ 18.9
Maintenance & Repairs	16.7	24.8	27.3
Rental & Leases	2.5	2.8	2.5
Other Employee Expenses	1.8	2.7	2.7
Other Operating Expenses	4.8	20.8	15.9
Total	\$ 40.5	\$ 67.4	\$ 67.3

**Totals may be off slightly due to rounding*

Materials and Supplies. This classification includes, but is not limited to, pipe, asphalt, concrete, office supplies, and materials required for the normal operation of the LVVWD's facilities. The fiscal year 2020-21

Budget Plan anticipates total expenditures of \$18.9 million for this expense category. This represents an increase of \$2.6 million, or 16 percent, compared to the fiscal year 2019-20 Adopted Budget Plan.

Maintenance and Repairs. This classification includes, but is not limited to, the outside purchase of goods and services associated with maintaining and repairing the water transmission system; buildings and grounds; and computer equipment. The fiscal year 2020-21 Budget Plan anticipates this expense will total \$27.3 million, an increase of \$2.5 million, or ten percent, compared to the fiscal year 2019-20 Adopted Budget Plan.

Rental and Leases. The fiscal year 2020-21 Budget Plan anticipates expenses of \$2.5 million, which includes rent/lease office space, communication equipment and outside storage facilities. This expense decreased by \$0.4 million when compared to the fiscal year 2019-20 Adopted Budget Plan.

Other Employee Expense. This classification includes such items as safety equipment, dues, travel and training, and tuition reimbursement. The Budget Plan anticipates a total of \$2.7 million spent within this category. This amount represents a decrease of \$0.1 million when compared to the fiscal year 2019-20 Adopted Budget Plan.

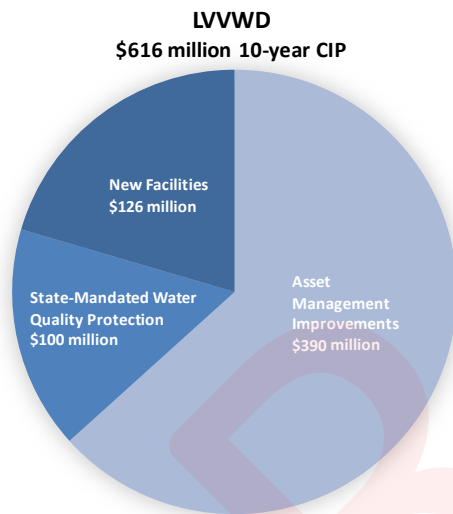
Other Operating Expense. This classification includes, but is not limited to postage, legal fees and professional services. For the fiscal year 2020-21 Budget Plan, other operating expenses are anticipated to total \$15.9 million, a decrease of \$4.9 million, or 23 percent, compared to the fiscal year 2019-20 Adopted Budget Plan.

Las Vegas Valley Water District
Operating and Capital Budget
Operating and Capital Budget Plan
 Fiscal Year Ending June 30, 2021

Capital Expenditures.

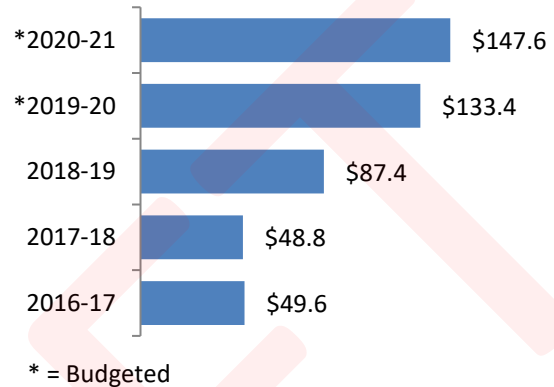
Capital expenditures are primarily driven by the need to expand and maintain the LVVWD's water storage, pumping, distribution system and facilities and equipment.

As mentioned earlier, in January 2017, the Board adopted the \$616 million (in 2016 dollars) 10-year CIP with the major components shown in the chart below.



For the fiscal year 2020-21 Budget Plan, the CIP and continued focus on asset management efforts to replace and maintain the LVVWD's essential equipment and water distribution facilities resulted in an increase in capital equipment and construction expenditures. For the fiscal year 2020-21 Budget Plan, total equipment and construction expenditures are budgeted at \$147.6 million, or an increase of 11 percent, compared to the fiscal year 2019-20 Adopted Budget Plan.

Capital Expenditures
(\$ in millions)



Capital Equipment and Vehicles. For the fiscal year 2020-21 Budget Plan, equipment purchases are anticipated to total \$5.8 million, an increase of \$0.5 million, or nine percent, compared to the fiscal year 2019-20 Adopted Budget Plan.

Capital Projects. For the fiscal year 2020-21 Budget Plan, the adopted CIP enhances the emphasis in capital projects, along with asset management, maintenance, and improvement of the LVVWD's water distribution system. In the fiscal year 2020-21 budget, the LVVWD anticipates spending \$141.8 million on capital projects, an increase of \$13.8 million, or 11 percent, compared to the fiscal year 2019-20 Adopted Budget Plan. The increases are prudent and necessary to fund new facilities and a number of large water distribution system projects. Both in the fiscal year 2020-21 Budget Plan, and in the fiscal year 2019-20 Adopted Budget Plan, expenditure increases for included projects are considered to be crucial for the continued operation of the water distribution system and include reservoir, well, pump, vault, pipe, motor and valve renovation and replacement projects.

Las Vegas Valley Water District
Operating and Capital Budget
Operating and Capital Budget Plan
Fiscal Year Ending June 30, 2021

Debt Service.

This classification includes debt service payments made for debt that the LVVWD has issued, or expects to issue, for funding capital projects as well as ongoing capital needs. For the fiscal year 2020-21 Budget Plan, total debt service payments are expected to total \$76.3 million. The increase of \$5.9 million, compared to the fiscal year 2019-20 Adopted Budget Plan, is largely due to the planned \$100.0 million debt issuance in 2020-21.

SNWA Charges.

As described in the Sources section previously, the overall SNWA Charges for the fiscal year 2020-21 Budget Plan are expected to be \$183.1 million. This amount represents a decrease of \$31.8 million, or 15 percent, when

compared to the fiscal year 2019-20 Adopted Budget Plan.

Summary of Sources and Uses of Funds and Changes in Net Assets

An enterprise fund's year-end balance differs dramatically from other government agencies' fund balances. The enterprise net asset balance closely approximates a private corporation's retained earnings section. As such, net assets are affected by operating items as presented in this document as well as other financial resources and expenditures. The LVVWD accounts for its Net Assets in accordance with GASB Statement 33. The table on the following page summarizes the estimated sources and uses of funds and changes in net assets for the fiscal year 2020-21 Budget Plan.

Estimated Net Assets Detail
Fiscal Year 2020-21 Budget

	Invested in Capital Assets Net of Related Debt	Restricted for Debt Service	Restricted for Capital Projects	Unrestricted Net Assets	Total Proprietary Fund Net Position	Pension Trust Fund	OPEB Trust Fund	Total Net Assets
Estimated Equity June 30, 2020	\$ 807,262,708	\$ 29,028,562	\$ 167,624	\$ 314,242,203	\$ 1,150,701,097	\$ 589,560,868	\$ 20,667,989	\$ 1,760,929,954
Capital Acquisitions	(147,629,101)	-	-	-	(147,629,101)	-	-	(147,629,101)
Bond Payments								
Principal	38,395,810	(38,395,810)	-	-	-	-	-	-
Interest	-	(37,952,148)	-	-	(37,952,148)	-	-	(37,952,148)
Transfer for Debt Service	-	76,347,958	-	(76,347,958)	-	-	-	-
Operating Revenues	-	-	-	386,215,344	386,215,344	59,265,174	2,500,004	447,980,522
Operating Expenses	-	-	-	(330,154,360)	(330,154,360)	(22,400,000)	(2,200,004)	(354,754,364)
Non Operating Revenue	-	-	-	10,327,987	10,327,987	-	-	10,327,987
Estimated Equity June 30, 2021	\$ 698,029,417	\$ 29,028,562	\$ 167,624	\$ 304,283,216	\$ 1,031,508,819	\$ 626,426,042	\$ 20,967,989	\$ 1,678,902,851

Invested in Capital Assets, Net of Related Debt. This classification is composed of Donated Capital. Cash is received from the

Facilities Connection Charge. Property and other non-cash items represent mains and services constructed to the LVVWD's

Las Vegas Valley Water District
Operating and Capital Budget
Operating and Capital Budget Plan
Fiscal Year Ending June 30, 2021

standards by developers and then donated to the LVVWD.

Restricted for Debt Service. Assets from this classification are transferred from Unrestricted Assets to the Debt Service classification on a monthly basis. Total transfers (\$76.3 million) are used to pay current portions of general obligation bonds.

Unrestricted Net Assets. Many different classifications make up this category including:

- **Transfer to Debt Service** - Described in preceding section.
- **Operating Revenue** - This represents the cumulative financial results of operations. Operating Revenue consists of water revenue, application and inspection fees, other revenues (backflow and hydrant service charges; delinquent charges, late charges and returned-check charges), and Springs Preserve revenues. For the fiscal year 2020-21, these revenues are anticipated to total approximately \$386.2 million.
- **Operating Expense** - Operating Expenses include all categories in the Uses of Funds, excluding pension expense, which is listed separately in preceding table, bond payments, capital equipment, major construction expenditures, and the SNWA charges (Regional Connection, Commodity, Reliability Surcharge and the Infrastructure Charge). For the fiscal year 2020-21, these expenses are anticipated to total approximately \$330.2 million.
- **Pension Expense** - For the fiscal year 2020-21, this expense has been

separated from the Payroll Expense listed in the Uses of Funds, and is shown as a separate operating expense in the preceding table in order to clarify and better track the transfer of this expense from the LVVWD's Proprietary Fund to the Pension Trust Fund.

- **Other Post Employment Benefits (OPEB) Expense** – For the fiscal year 2020-21, this expense has been separated from the Payroll Expense listed in the Uses of Funds, and is shown as a separate operating expense in the preceding table in order to clarify and better track the transfer of this expense from the LVVWD's Proprietary Fund to the OPEB Trust Fund.
- **Non-operating Revenues (net)** - Non-operating revenue consists of facilities connection charge and investment income.

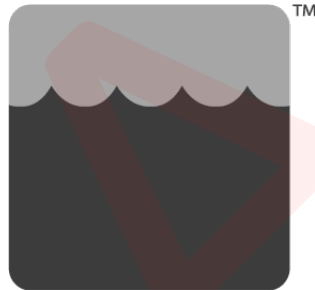
Pension Trust Fund. This is cumulative activity in the LVVWD's pension plan. The plan is a single-employer pension trust fund, established to provide pension benefits for the LVVWD's employees. Anticipated operating revenues shown for this fund include contributions from the operating revenues discussed above and are expensed within the operating expenses discussed above as part of overall payroll expenses. For the purpose of estimating the impact of the LVVWD's operations on the Pension Trust Fund, the pension expense included as part of the LVVWD's operations is shown.

OPEB Trust Fund. LVVWD contributes to a single-employer defined benefit OPEB trust fund. During 2018-19 the OPEB trust fund was established to where OPEB plan assets are

Las Vegas Valley Water District
Operating and Capital Budget
Operating and Capital Budget Plan
Fiscal Year Ending June 30, 2021

held in a trust to provide a means to fund the post-retirement benefits provided by LVVWD. Anticipated operating revenues shown for this fund include contributions from the operating revenues discussed above and are expensed within the operating expenses discussed above as part of overall payroll expenses. For the purpose of estimating the impact of the LVVWD's operations on the OPEB Trust Fund, the OPEB expense included as part of the LVVWD's operations is shown.

This page left intentionally blank

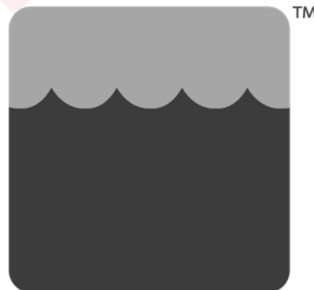


SECTION 4

STATE OF NEVADA

BUDGET DOCUMENTS

State of Nevada, Department of Taxation, Budget Submittal.....	4-1
Budget Document Index	4-2
Schedule S-2: Statistical Data.....	4-3
Schedule A-2: Proprietary Funds	4-4
Schedule F-1: Enterprise Fund - Revenues, Expenses and Net Position	4-5
Schedule F-1.1: Pension Trust Fund - Revenues, Expenses and Net Position.....	4-6
Schedule F-1.2: OPEB - Revenues, Expenses and Net Position.....	4-7
Schedule F-2: Enterprise Fund - Statement of Cash Flows	4-8
Schedule C-1: Indebtedness.....	4-9
Lobbying Expense Estimate	4-10
Schedule 31: Schedule of Existing Contracts.....	4-11
Schedule 32: Schedule of Privatization Contracts.....	4-17
Affidavit of Publication	4-18
Letter of Compliance	4-19



LAS VEGAS VALLEY WATER DISTRICT
FISCAL YEAR 2020-21
OPERATING AND CAPITAL BUDGET



LAS VEGAS VALLEY WATER DISTRICT™

Nevada Department of Taxation
1550 College Parkway, Suite 115
Carson City, NV 89706-7937

Las Vegas Valley Water District herewith submits the (TENTATIVE) (FINAL) budget for the
fiscal year ending June 30, 2021

This budget contains 0 funds, including Debt Service, requiring property tax revenues totaling \$ 0

The property tax rates computed herein are based on preliminary data. If the final state computed revenue limitation permits, the tax rate will be increased by an amount not to exceed 0. If the final computation requires, the tax rate will be lowered.

This budget contains 0 governmental fund types with estimated expenditures of \$ 0 and
1 proprietary funds with estimated expenses of \$ 651,175,589

Copies of this budget have been filed for public record and inspection in the offices enumerated in NRS 354.596 (Local Government Budget and Finance Act).

CERTIFICATION

I E. Kevin Bethel
(Print Name)
Chief Financial Officer
(Title)

certify that all applicable funds and financial
operations of this Local Government are
listed herein

Signed: _____

Dated: _____

APPROVED BY THE GOVERNING BOARD

Marilyn K. Kirkpatrick, President

James B. Gibson, Vice-President

Lawrence L. Brown III

Justin Jones

Michael Naft

Tick Segerblom

Lawrence Weekly

SCHEDULED PUBLIC HEARING:

(Must be held from May 18, 2020 to May 31, 2020 this year)

Date and Time: Monday, May 18, 2020 at 9:45 AM

Publication Date: May 5, 2020

Place: Clark County Government Center, Grand Central Parkway, Las Vegas, NV

Page: 1
Schedule 1

FORM 4404LGF

**LAS VEGAS VALLEY WATER DISTRICT
BUDGET DOCUMENT INDEX**

Page No.

I INTRODUCTION	
1 Transmittal Letter	1
2 Budget Document Index	2
II SUMMARY FORMS	
1 Schedule S-2 - Statistical Data	3
2 Schedule A-2 - Proprietary Funds	4
III PROPRIETARY FUNDS	
1 Schedule F-1 - Enterprise Fund - Revenues, Expenses and Net Position	5
2 Schedule F-1.1 - Pension Trust Fund - Revenues, Expenses and Net Position	6
3 Schedule F-1.2 - Other Post Employment Benefits Trust - Revenues, Expenses and Net Position	7
4 Schedule F-2 - Enterprise Fund - Statement of Cash Flows	8
IV SUPPLEMENTARY INFORMATION	
1 Schedule C-1 - Indebtedness	9
V LOBBYING EXPENSE ESTIMATE	10
VI SERVICE CONTRACTS	
1 Schedule 31 - Schedule of Existing Contracts	11
2 Schedule 32 - Schedule of Privatization Contracts	12

FULL TIME EQUIVALENT EMPLOYEES BY FUNCTION

	ACTUAL PRIOR YEAR ENDING 06/30/19	ESTIMATED CURRENT YEAR ENDING 06/30/20	BUDGET YEAR ENDING 06/30/21
General Government			
Judicial			
Public Safety			
Public Works			
Sanitation			
Health			
Welfare			
Culture and Recreation			
Community Support			
TOTAL GENERAL GOVERNMENT			
Utilities	833.3	888.8	900.0
Hospitals			
Transit Systems			
Airports			
Other			
TOTAL	833.3	888.8	900.0

POPULATION (AS OF JULY 1)	1,621,175	1,655,382	1,691,138
SOURCE OF POPULATION ESTIMATE*	NV Dept. of Taxation (https://tax.nv.gov/) Publications, Population Statistics & Reports	Population Statistics & Reports Figure Increased by Demographer's annual % increase projection for Clark County	
Assessed Valuation (Secured and Unsecured Only)			
Net Proceeds of Mines			
TOTAL ASSESSED VALUE			
TAX RATE			
General Fund			
Special Revenue Funds			
Capital Projects Funds			
Debt Service Funds			
Enterprise Fund			
Other			
TOTAL TAX RATE			

*** Use the population certified by the state in March each year. Small districts may use a number developed per the instructions (page 6) or the best information available.**

Las Vegas Valley Water District
(Local Government)

SCHEDULE S-2 - STATISTICAL DATA

SCHEDULE A-2 PROPRIETARY AND NONEXPENDABLE TRUST FUNDS

Budget For Fiscal Year Ending June 30, 2021

Budget Summary for Las Vegas Valley Water District
(Local Government)

FUND NAME	*	OPERATING REVENUES (1)	OPERATING EXPENSES (2) **	NONOPERATING REVENUES (3)	NONOPERATING EXPENSES (4)	OPERATING TRANSFERS		NET INCOME (7)
						IN (5)	OUT (6)	
Las Vegas Valley Water District	E	\$ 569,284,425	\$ 613,223,441	\$ 15,327,987	\$ 37,952,148	\$ -	\$ -	\$ (66,563,177)
TOTAL		\$ 569,284,425	\$ 613,223,441	\$ 15,327,987	\$ 37,952,148	\$ -	\$ -	\$ (66,563,177)

* FUND TYPES: E - Enterprise
I - Internal Service
N - Nonexpendable Trust

** Include Depreciation

Page: 4
SCHEDULE A-2

PROPRIETARY FUND	(1)	(2)	(3) (4) BUDGET YEAR ENDING 06/30/21	
	ACTUAL PRIOR YEAR ENDING 6/30/2019	ESTIMATED CURRENT YEAR ENDING 6/30/2020	TENTATIVE APPROVED	FINAL APPROVED
OPERATING REVENUE				
Water Sales	\$ 368,415,325	\$ 401,047,828	\$ 409,037,700	\$ 382,363,203
Application & Inspection Fees	3,106,856	2,832,318	2,897,026	724,256
Springs Preserve	3,047,092	3,090,260	3,127,885	3,127,885
Other Operating Revenue	76,631	-	-	-
SNWA Infrastructure Charge	116,950,650	115,832,567	122,842,845	120,257,759
SNWA Commodity Charge	49,800,992	51,308,350	53,225,069	47,778,141
SNWA Connection Charge	46,474,600	43,533,230	44,475,490	11,118,873
SNWA Reliability Charge	4,091,950	4,186,924	4,267,333	3,914,309
Total Operating Revenue	591,964,097	621,831,477	639,873,348	569,284,425
OPERATING EXPENSE				
Purchased Water	91,499,814	100,853,938	105,003,852	97,091,127
Energy	9,106,323	10,056,500	10,009,000	10,009,000
Payroll & Related	120,420,009	149,996,855	155,777,610	155,777,610
Materials & Supplies	14,699,896	16,225,067	18,862,430	18,862,430
Maintenance & Repairs	16,671,982	24,802,120	27,327,141	27,327,141
Rent/Lease	2,472,247	2,836,500	2,485,440	2,485,440
Other Employee Expense	1,824,580	2,736,282	2,668,692	2,668,692
Other Operating Expense	(15,951,909)	20,785,537	15,932,920	15,932,920
SNWA Infrastructure Charge	116,950,650	115,832,567	122,842,845	120,257,759
SNWA Commodity Charge	49,800,992	51,308,350	53,225,069	47,778,141
SNWA Connection Charge	46,474,600	43,533,230	44,475,490	11,118,873
SNWA Reliability Charge	4,091,950	4,186,924	4,267,333	3,914,309
Depreciation/Amortization	85,670,125	110,000,000	100,000,000	100,000,000
Total Operating Expense	543,731,260	653,153,870	662,877,822	613,223,441
Operating Income or (Loss)	48,232,837	(31,322,393)	(23,004,474)	(43,939,016)
NONOPERATING REVENUES				
Capital Contributions	38,454,955	36,727,513	37,173,241	9,293,310
Investment Income - Unrestricted Funds	17,227,950	3,949,925	5,961,004	5,484,124
Investment Income - Restricted Funds	1,729,519	772,066	598,427	550,553
Other Nonoperating Revenue	2,729,650	-	-	-
Total Nonoperating Revenues	60,142,074	41,449,504	43,732,673	15,327,987
NONOPERATING EXPENSES				
Interest Expense	29,831,391	34,939,295	37,952,148	37,952,148
Total Nonoperating Expenses	29,831,391	34,939,295	37,952,148	37,952,148
Net Income before Operating Transfers	78,543,520	(24,812,184)	(17,223,949)	(66,563,177)
Transfers (Schedule T)				
In				
Out				
Net Operating Transfers				
CHANGE IN NET POSITION	\$ 78,543,520	\$ (24,812,184)	\$ (17,223,949)	\$ (66,563,177)

Las Vegas Valley Water District
(Local Government)

SCHEDULE F-1 REVENUES, EXPENSES AND NET POSITION

FUND ENTERPRISE

PROPRIETARY FUND	(1)	(2)	(3) (4) BUDGET YEAR ENDING 06/30/21	
	ACTUAL PRIOR YEAR ENDING 6/30/2019	ESTIMATED CURRENT YEAR ENDING 6/30/2020	TENTATIVE APPROVED	FINAL APPROVED
OPERATING REVENUE				
Contributions - Employer	\$ 40,450,000	\$ 45,440,146	\$ 48,378,903	\$ 48,378,903
Contributions - Employee	121,713	200,000	200,000	200,000
Investment Earnings	34,538,653	18,403,854	10,686,271	10,686,271
Total Operating Revenue	75,110,366	64,044,000	59,265,174	59,265,174
OPERATING EXPENSE				
Administrative & General Expenses	392,272	400,000	400,000	400,000
Benefits Paid	20,418,448	20,000,000	22,000,000	22,000,000
Total Operating Expense	20,810,720	20,400,000	22,400,000	22,400,000
Operating Income or (Loss)	54,299,646	43,644,000	36,865,174	36,865,174
NONOPERATING REVENUES				
Interest Earned	286,036	150,000	150,000	150,000
Total Nonoperating Revenues	286,036	150,000	150,000	150,000
NONOPERATING EXPENSES				
Investment Expense	380,911	150,000	400,000	400,000
Total Nonoperating Expenses	380,911	150,000	400,000	400,000
Net Income before Operating Transfers	54,204,771	43,644,000	36,615,174	36,615,174
Transfers (Schedule T)				
In				
Out				
Net Operating Transfers				
CHANGE IN NET POSITION	\$ 54,204,771	\$ 43,644,000	\$ 36,615,174	\$ 36,615,174

Las Vegas Valley Water District
(Local Government)

SCHEDULE F-1 REVENUES, EXPENSES AND NET POSITION

FUND _____ PENSION TRUST _____

PROPRIETARY FUND	(1)	(2)	(3)	(4)
	ACTUAL PRIOR YEAR ENDING 6/30/2019	ESTIMATED CURRENT YEAR ENDING 6/30/2020	BUDGET YEAR ENDING 06/30/21	
			TENTATIVE APPROVED	FINAL APPROVED
OPERATING REVENUE				
Contributions - Employer	\$ 20,000,000	\$ 1,999,624	\$ 2,000,004	\$ 2,000,004
Contributions - Employee	-	-	-	-
Investment Earnings	12,032	500,000	500,000	500,000
Total Operating Revenue	20,012,032	2,499,624	2,500,004	2,500,004
OPERATING EXPENSE				
Administrative & General Expenses	-	200,000	200,000	200,000
Benefits Paid	-	1,999,624	2,000,004	2,000,004
Total Operating Expense	-	2,199,624	2,200,004	2,200,004
Operating Income or (Loss)	20,012,032	300,000	300,000	300,000
NONOPERATING REVENUES				
Interest Earned	426	50,000	50,000	50,000
Total Nonoperating Revenues	426	50,000	50,000	50,000
NONOPERATING EXPENSES				
Investment Expense	2	50,000	50,000	50,000
Total Nonoperating Expenses	2	50,000	50,000	50,000
Net Income before Operating Transfers	20,012,456	300,000	300,000	300,000
Transfers (Schedule T)				
In				
Out				
Net Operating Transfers				
CHANGE IN NET POSITION	\$ 20,012,456	\$ 300,000	\$ 300,000	\$ 300,000

Las Vegas Valley Water District
(Local Government)

SCHEDULE F-1 REVENUES, EXPENSES AND NET POSITION

FUND OTHER POST EMPLOYMENT BENEFITS (OPEB) TRUST

PROPRIETARY FUND	(1)	(2)	(3) (4) BUDGET YEAR ENDING 06/30/21	
	ACTUAL PRIOR YEAR ENDING 6/30/2019	ESTIMATED CURRENT YEAR ENDING 6/30/2020	TENTATIVE APPROVED	FINAL APPROVED
A. CASH FLOWS FROM OPERATING ACTIVITIES:				
Cash Received from Customers	\$ 362,199,171	\$ 406,970,406	\$ 415,062,611	\$ 386,215,344
Cash Payments to Suppliers for Goods and Services	(139,618,220)	(178,295,944)	(182,289,475)	(174,376,750)
Cash Payments for Salaries and Benefits	(131,361,506)	(149,996,855)	(155,777,610)	(155,777,610)
Other Cash Receipts	1,085,084	-	-	-
Other Cash Payments	(6,961)	-	(15,000,000)	(15,000,000)
a. Net cash provided by (or used for) operating activities	92,297,568	78,677,607	61,995,526	41,060,984
B. CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES:				
b. Net cash provided by (or used for) noncapital financing activities	-	-	-	-
C. CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:				
Acquisition and Construction of Capital Assets	(79,409,537)	(133,377,574)	(147,629,101)	(147,629,101)
Capital Contributed for Construction	24,551,463	36,727,513	37,173,241	9,293,310
Proceeds from Sale of Property and Equipment	399,618	-	-	-
Proceeds from Sale of Bonds	-	-	100,000,000	100,000,000
Proceeds from State Revolving Fund Loan	7,623,693	3,692,628	-	-
Bond Issue Costs	-	-	-	-
State Revolving Fund Loan Issue Costs	-	-	-	-
Principal Paid on Bonds	(32,438,000)	(34,153,000)	(35,903,000)	(35,903,000)
Principal Paid on State Revolving Fund loans	(960,146)	(1,364,714)	(2,492,810)	(2,492,810)
Interest Paid	(34,953,829)	(34,939,295)	(37,952,148)	(37,952,148)
Interest Rebate	1,412,414	-	-	-
Construction Deposits	10,098,164	-	-	-
c. Net cash provided by (or used for) capital and related financing activities	(103,676,160)	(163,414,442)	(86,803,818)	(114,683,749)
D. CASH FLOWS FROM INVESTING ACTIVITIES:				
Purchase of Investment Securities	(707,902,787)	(780,618,265)	(401,475,340)	(401,475,340)
Proceeds from Maturities of Investment Securities	709,290,000	920,429,230	358,617,446	398,617,446
Investment Income	7,457,946	4,721,991	6,559,432	6,034,677
d. Net cash provided by (or used in) investing activities	8,845,159	144,532,956	(36,298,462)	3,176,783
NET INCREASE (DECREASE) in cash and cash equivalents (a+b+c+d)	(2,533,433)	59,796,122	(61,106,754)	(70,445,982)
CASH AND CASH EQUIVALENTS AT JULY 1, 20xx	13,760,824	11,227,389	71,023,511	71,023,511
CASH AND CASH EQUIVALENTS AT JUNE 30, 20xx	\$ 11,227,389	\$ 71,023,511	\$ 9,916,757	\$ 577,529

Las Vegas Valley Water District
(Local Government)

SCHEDULE F-2 STATEMENT OF CASH FLOWS

FUND ENTERPRISE

Page: 8
Schedule F-2

ALL EXISTING OR PROPOSED
GENERAL OBLIGATION BONDS, REVENUE BONDS,
MEDIUM-TERM FINANCING, CAPITAL LEASES AND
SPECIAL ASSESSMENT BONDS

* - Type
1 - General Obligation Bonds
2 - G.O. Revenue Supported Bonds
3 - G.O. Special Assessment Bonds
4 - Revenue Bonds
5 - Medium-Term Financing

6 - Medium-Term Financing - Lease Purchase
7 - Capital Leases
8 - Special Assessment Bonds
9 - Mortgages
10 - Other (Specify Type)
11 - Proposed (Specify Type)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
NAME OF BOND OR LOAN List and Subtotal By Fund	*	TERM	ORIGINAL AMOUNT OF ISSUE	ISSUE DATE	FINAL PAYMENT DATE	INTEREST RATE	BEGINNING OUTSTANDING BALANCE 7/1/2020	REQUIREMENTS FOR FISCAL YEAR ENDING 06/30/21 INTEREST PAYABLE	PRINCIPAL PAYABLE	(9)+(10) TOTAL
ENTERPRISE FUND										
LVVWD 2008 Clean Energy	2	14 Years	\$ 2,520,000	07/15/08	12/15/22	1%	\$ 504,000	\$ 5,460	\$ 168,000	\$ 173,460
LVVWD 2010A BABS	2	30 Years	75,995,000	06/15/10	03/01/40	5.6%-5.7%	75,995,000	4,311,398	-	4,311,398
LVVWD 2011D	2	16 Years	78,680,000	10/19/11	06/01/27	2.0%-5.3%	43,440,000	2,216,850	5,330,000	7,546,850
LVVWD 2012A	2	20 Years	39,310,000	09/05/12	06/01/32	5.0%	39,310,000	1,965,500	-	1,965,500
LVVWD 2014 \$20 Million SRF	10	20 Years	19,929,329	12/01/14	07/01/34	2.6%	17,506,988	443,479	1,010,457	1,453,936
LVVWD 2015A	2	11 Years	172,430,000	06/01/15	06/01/27	2.0-5.0%	109,285,000	5,464,250	14,450,000	19,914,250
LVVWD 2016B	2	20 Years	108,220,000	04/06/16	06/01/36	2.5-5.0%	94,310,000	4,644,250	4,030,000	8,674,250
LVVWD 2016 \$15 Million SRF	10	20 Years	15,000,000	09/01/16	07/01/36	1.8%	14,759,788	259,282	776,980	1,036,262
LVVWD 2017 \$15 Million SRF	10	20 Years	15,000,000	05/01/17	01/01/37	2.4%	14,624,674	348,230	705,373	1,053,604
LVVWD 2017A	2	21 Years	130,105,000	03/14/17	02/01/38	4.0-5.0%	121,400,000	5,550,400	4,360,000	9,910,400
LVVWD 2018A	2	30 Years	100,000,000	06/26/18	07/01/48	5.0%	96,590,000	3,790,663	1,895,000	5,685,663
LVVWD 2020B	2	18 Years	22,240,000	02/01/20	03/01/38	2.0-5.0%	22,240,000	862,059	815,000	1,677,059
LVVWD 2020C	11	30 Years	100,000,000	2020-21	2049-50	2.0-5.0%	100,000,000	3,638,889	1,190,000	4,828,889
LVVWD 2020D	2	16 Years	98,080,000	03/01/20	06/01/36	2.0-5.0%	98,080,000	4,451,439	3,665,000	8,116,439
TOTAL ALL DEBT SERVICE			\$977,509,329				\$ 848,045,450	\$ 37,952,148	\$ 38,395,810	\$ 76,347,958

SCHEDULE C-1 - INDEBTEDNESS

Las Vegas Valley Water District Budget Fiscal Year 2020-2021
(Local Government)

Page: 9
Schedule C-1

LOBBYING EXPENSE ESTIMATE

Pursuant to NRS 354.600 (3), **each** (emphasis added) local government budget must obtain a separate statement of anticipated expenses relating to activities designed to influence the passage or defeat of legislation in an upcoming legislative session.

Nevada Legislature: 81st Session; February 1, 2021 to May 31, 2021

1. Activity:	<u>Legislature 2021 - Las Vegas Valley Water District</u>
2. Funding Source:	<u>Operating Revenues</u>
3. Transportation	\$ <u>23,868</u>
4. Lodging and meals	<u>25,887</u>
5. Salaries and Wages	<u>61,159</u>
6. Compensation to lobbyists	<u>-</u>
7. Entertainment	<u>-</u>
8. Supplies, equipment & facilities; other personnel and services spent in Carson City	<u>541</u>
Total	\$ <u><u>111,455</u></u>

Entity: Las Vegas Valley Water District

Budget Year 2020-2021

SCHEDULE OF EXISTING CONTRACTS

Budget Year 2020 - 2021

Local Government: Las Vegas Valley Water District

Contact: E. Kevin Bethel

E-mail Address: kevin.bethel@lvvwd.com

Daytime Telephone: 702-822-8809

Total Number of Existing Contracts: 308

Line	Vendor	Effective Date of Contract	Termination Date of Contract	Proposed Expenditure FY 2020-21	Proposed Expenditure FY 2021-22	Reason or need for contract:
1	Alarmco	10/01/18	09/30/23	\$ 15,000	\$ 15,000	Fire Alarm Monitoring
2	Allied Universal Security Services	03/07/17	02/28/22	1,260,000	1,260,000	Security Services
3	Allison Payment Systems LLC	04/10/18	04/09/21	300,000	300,000	Document Design, Production and Mailing Services
4	Amalgamated Plant Company	06/21/18	06/20/23	14,000	14,000	Plant Care Services
5	Amy Ayoub	12/18/18	12/17/20	98,500	-	Springs Preserve Foundation Fundraising Consulting Services
6	Argus Engineering	07/01/15	06/30/20	-	-	PSA for SCADA System
7	Atkins North America	10/03/18	10/02/20	5,000,000	-	Right Of Way Research & Acquisition
8	Atkins North America	12/15/18	12/15/23	114,000	114,000	Engineering Design Services
9	Attraction Technology LTD	02/16/16	12/31/21	50,000	50,000	Smart Phone Mapping Application Services
10	Automic Software, Inc.	12/01/16	11/30/21	108,207	54,103	Appworx Software Maintenance and Support
11	AviSight LLC	08/22/16	08/21/20	40,000	40,000	Aerial Imagery Services
12	Baker & Hostetler LLP	03/01/17	02/28/25	25,000	25,000	Cyber Security Data Breach Prevention
13	Banctec USA	07/01/14	06/30/24	160,000	160,000	Check Payment Processing Services For Customer Care
14	Black & Veatch	02/06/18	02/06/25	425,978	425,978	Engineering And Construction Support Services
15	Black & Veatch	02/06/18	02/05/25	426,000	426,000	Engineering Design Services
16	Blackbaud	11/12/15	11/11/22	80,000	800,000	Software Maintenance And Support
17	Blackline Systems Inc	12/31/18	12/31/23	70,000	70,000	Account Reconciliation Subscription Services
18	Blue Locker Commercial Diving	10/08/14	10/07/20	50,000	-	Diver Inspection And Cleaning Services For Tanks And Reservoirs
19	Boomi Inc	08/02/18	08/01/24	160,000	160,000	Software Maintenance And Support
20	Bridge Works Iii, LLC	10/15/18	10/14/25	52,500	91,000	Consulting Services For Human Resources
21	Broniec Associates	08/21/17	08/20/23	-	-	Auditing Services - Accounts Payable
22	Bugs-R-Us Pest Control	07/01/16	06/30/21	30,879	30,879	Pest Control
23	C.A. Group Inc	09/05/17	09/04/22	84,400	84,400	Engineering Design Services
24	Capitol North American	01/01/17	12/31/21	150,000	-	Installation Of Systems Furniture
25	Cardino Inc	01/10/19	01/09/26	14,000	14,000	Horizontal & Vertical Utility Location Services
26	Carpenter Sellers Del Gatto Architects	12/04/18	12/03/21	21,000	21,000	Professional Architectural/Design Services
27	CDW Government	02/01/16	01/31/21	500,000	500,000	Computer Hardware, Software, And Maintenance
28	Celebrate Kids	02/03/16	02/02/21	14,500	14,500	Year Round Educational Events At The Springs Preserve
29	Celebrity Coaches	04/04/18	04/30/21	15,000	15,000	Bus Services For Events At The Springs Preserve
30	CH2M Hill Engineers & Hdr Engineering	07/01/17	06/30/22	600,000	600,000	Professional Engineering Services - LVVWD
31	Chem-Aqua	08/15/18	08/14/23	25,000	25,000	Maintenance And Repairs
32	City Of Las Vegas	12/05/18	12/31/21	1,849,749	1,849,749	Interlocal Agreement For Water Facilities Construction
33	CMMCM dba Muller Construction	04/19/18	04/19/23	220,000	220,000	Misc. Concrete & Restoration Services
34	Communication Electronic Systems	04/17/18	04/16/23	50,000	50,000	Fire Alarm System Inspection, Testing, And Repairs
35	Cosco Fire Protection Inc	08/13/18	08/12/23	100,000	100,000	Fire System Testing
36	Cox Communications Las Vegas Inc	06/13/18	05/04/25	99,000	990,000	Internet Services
37	Crawford & Company	01/23/19	01/22/24	25,000	25,000	Claims Adjusting Services
38	Custard Insurance Adjusters, Inc.	02/25/18	02/24/23	25,000	25,000	Claims Adjusting Services
39	D & L Roofing LLC	09/18/18	09/17/23	60,000	60,000	Building Maintenance
40	D&R Hydrant Inc	08/09/18	08/08/24	23,930	23,930	Testing Of Below Ground And Rural Area Backflow Assemblies
41	D.R. Backflow Services	04/01/17	03/31/22	234,000	234,000	Backflow Inspection Services
42	Design Vision Inc	03/06/18	03/05/25	50,000	50,000	Professional Architectural/Design Services
43	Dielco Crane Service	03/20/18	03/19/23	25,000	25,000	On-Call Crane Services For LVVWD
44	Digital Guardian Inc	12/29/16	12/28/21	54,000	27,000	Software Technical Implementation Services
45	DJA Inspection Services	09/06/18	09/05/23	50,000	50,000	Storage Tank Inspection Services For Condition Assessment For Asset Management
46	Dons Window Washing Service	06/07/18	06/06/23	24,630	24,630	Window Washing Services For Facilities
47	Dyno Plumbing	11/14/18	11/13/23	25,000	25,000	On-Call Plumbing Services LVVWD
48	E-Builder Inc	12/04/18	12/03/21	167,000	167,000	Construction Management Software & Technical Implementation Services
49	Echologics Engineering	07/01/17	06/30/22	100,000	100,000	Large Pipeline Leak Detection And Assessment Services For Asset Management
50	Electric Power Systems	02/17/18	02/16/20	191,442	-	ARC For Multi-Site Testing
51	Emtec Consulting Services LLC	02/05/18	02/04/23	100,000	100,000	Data Conversion Services
52	Entco Government Software LLC	06/27/18	06/26/21	60,000	60,000	Hp Fortify Software Performance Improvement Services
53	Environmental Systems Research Institute Inc	07/01/16	06/30/21	372,000	372,000	Geographic Information System Software Services
54	Epiq eDiscovery Solutions, Inc.	01/18/03	Upon notice	98,985	98,985	Legal Dept. Process Review
55	Epiq eDiscovery Solutions, Inc.	07/12/17	Upon notice	97,772	97,772	CMS Software Implementation
56	Epiq Systems	02/07/15	06/30/22	500,000	500,000	Technical Services For Technical Upgrades Of It Initiatives
57	Experian Information Solutions, Inc.	11/01/17	10/31/22	96,000	96,000	Risk Credit Assessment
58	Faiss Foley Warren	04/01/15	03/31/21	96,000	96,000	PSA For Public Information Projects For The Springs Preserve
59	Fencing Specialists Inc.	08/03/16	08/02/20	24,000	-	Tortoise Fencing Repairs/Replacement
60	Fireeye Inc. dba Mandiant	03/16/17	03/15/22	-	-	MSA For Software Products And Services
61	First Data Government Solutions	05/19/16	05/18/21	35,000	35,000	Outbound Calling Implementation Services
62	Fiserv Solutions, Inc	01/01/19	12/31/23	1,800,000	1,800,000	Electronic Payments And Related E-Bill Services
63	Fisher & Phillips, LLP	03/18/15	03/17/20	-	-	Consulting Services For Human Resources

SCHEDULE OF EXISTING CONTRACTS

Budget Year 2020 - 2021

Local Government: Las Vegas Valley Water District

Contact: E. Kevin Bethel

E-mail Address: kevin.bethel@lvvwd.com

Daytime Telephone: 702-822-8809

Total Number of Existing Contracts: 308

Line	Vendor	Effective Date of Contract	Termination Date of Contract	Proposed Expenditure FY 2020-21	Proposed Expenditure FY 2021-22	Reason or need for contract:
64	Flairsoft Limited	03/22/18	10/21/23	325,000	325,000	Right Of Way And Property Management Software And Technical Implementation Services
65	Fleet Management Solutions Inc	11/30/18	06/30/24	28,000	28,000	District's Vehicle Tracking System Services
66	Frasco Investigative Services	02/02/18	02/01/23	15,000	15,000	Investigative Services
67	FTN Financial Main Street Advisors	10/08/14	03/04/19	172,000	172,000	Fixed Income And Cash Investment Management Services
68	G & G Systems	06/04/18	05/31/22	25,000	25,000	Building Maintenance
69	Gatekeeper Systems	07/01/16	07/01/21	121,000	-	Software Maintenance - Mapping Software
70	George T. Hall	07/01/17	06/30/22	750,000	750,000	Professional Services For Automation Projects
71	Geotechnical & Environmental Services	11/13/18	11/12/25	14,000	14,000	Geotechnical Engineering Services
72	Glass Box Technology Inc	02/21/18	02/20/23	500,000	500,000	Dell/EMC Hardware And Software Maintenance
73	Guardian Elite Medical	09/01/17	08/31/20	15,000	4,000	PSA Extend Ambulatory Services To Group Sales At The Las Vegas Springs Preserve
74	Gutic Enterprises	09/15/16	09/14/22	35,000	35,000	PSA For Springs Preserve
75	Hands On Technology	02/07/18	02/06/22	99,000	99,000	Training Customized Applications For Modern Programming Languages
76	Harris Acquisition Quality	05/23/18	05/22/22	25,000	25,000	HVAC Repair
77	Harris Forms dba Harris Computer Systems	07/01/18	06/30/23	12,000	12,000	Form Printing
78	Hispana Comunicacion Integral	03/17/16	03/16/22	60,000	60,000	Spanish Language Creative And Production Development For Springs Preserve
79	Hitachi Vantara Corporation	03/22/16	03/21/21	50,000	50,000	Data Storage Hardware, Maintenance, And Support
80	Hobbs, Ong And Associates	05/01/12	upon notice	-	-	Financial Advisory Services
81	Holland And Hart	09/23/08	upon notice	100,000	100,000	Environmental Legal Services
82	Hooks, Meng, Schaan, Clement	10/30/17	Upon notice	30,000	30,000	Nevada OSHA Matters
83	Innovyze Inc	03/10/16	03/09/21	250,000	250,000	Engineering Software Maintenance And Support Services
84	Itron Inc	02/05/13	02/04/23	564,000	564,000	AMR Meter Reading System
85	IZ Design Studio	11/08/18	11/07/23	270,513	270,513	West Administration Building Lobby And Interior Remodel Design Services
86	J & J Enterprises Services	01/23/17	01/22/22	25,000	25,000	Asphalt Milling Services
87	Jordan Lawrence Group LLC	05/03/18	05/31/21	25,000	25,000	Software Services Agreement
88	Joshua Tree Productions	07/01/18	07/16/23	80,000	80,000	Springs Elemental Professional Video Services
89	Joshua Tree Productions	07/01/18	06/30/23	25,000	25,000	Video Production Services
90	Joshua Tree Productions	06/15/17	06/14/21	80,000	80,000	Professional Video Services
91	Kara Ann Peterson	03/02/18	03/01/22	24,000	24,000	Marketing Services
92	Katarina Hradilek dba Double Vision Art & De	06/14/17	06/13/21	97,000	97,000	Professional Design Services
93	Kimley Horn & Assoc	10/03/18	10/01/22	842,523	842,523	Engineering Design Services
94	Kimley Horn & Assoc	04/16/18	04/15/25	123,000	123,000	Engineering Design Services
95	Korn Ferry Hay Group, Inc.	07/01/17	06/30/20	-	-	Talent Management Strategy
96	Las Vegas Paving Corp.	11/09/17	11/08/22	1,395,490	1,395,490	On-Call Oper. & Main. Svc-LVVWD
97	Las Vegas Plumbing	11/01/14	10/31/21	30,000	30,000	Plumbing Repair Services For Meter Change-Outs By Field Services
98	Las Vegas Plumbing	03/30/17	03/29/21	20,000	20,000	Miscellaneous On-Call Plumbing Services For Distribution
99	Lawrence Roll-Up Doors Inc	05/14/18	05/13/22	25,000	25,000	Roll Up And Fire Door Preventative Maintenance And Repair Services
100	Lebenson Actuarial Services, Inc.	06/01/16	05/31/23	40,000	40,000	Actuarial Services
101	Lincoln County Telephone Sys Inc	02/18/18	02/17/25	30,250	30,250	Meet-Point Circuits
102	Lynn Belcher Lnc Associates	01/26/18	01/25/23	15,000	15,000	Nursing Consulting Services
103	Manpower Inc. Of Southern Nevada	04/01/13	03/31/21	1,064,800	1,064,800	Temporary Staffing
104	Market Decisions Corporation	04/01/17	03/31/22	150,000	150,000	Data Collection Services
105	MCS Inspection Group	06/07/18	06/06/23	90,000	90,000	Prof. Services. For Nace Level 3 Welding Insp.
106	Microsoft Corporation	08/31/15	08/30/20	103,518	-	Software Maintenance And Technical Services
107	Microsoft Corporation	01/07/19	01/06/26	365,000	365,000	Technical Services - Commercial Cloud Migration
108	Mike's Drain & Plumbing	11/13/14	10/31/21	-	-	On Call Plumbing Services
109	Moapa Valley Telephone Company	03/15/12	Perpetual	14,500	14,500	T1 Communication Lines
110	Mobile Mini Inc	10/01/18	09/30/23	25,000	25,000	Communication
111	Mr Camera Inc	04/24/18	04/30/25	60,000	60,000	Video Services
112	NDL Group Inc	04/04/18	04/03/23	24,500	24,500	General Contracting Services At The Springs Preserve
113	Nevada Tap Master	01/02/18	01/01/20	-	-	Large Diameter Pipeline Hot Tap Services For Asset Management
114	Novus Architecture LLC	09/06/18	09/05/21	12,650	12,650	Professional Architectural/Design Services
115	Ogletree Deakins	07/20/16	Upon notice	100,000	100,000	Counsel on ADA Issues
116	Olson Precast Company	12/04/17	12/04/22	235,000	235,000	Misc. Vault Pipe Coatings
117	Ontario Refrigeration	04/03/18	03/31/22	25,000	25,000	Chiller Maintenance
118	Oracle America, Inc.	05/15/18	05/14/22	231,190	242,750	Oracle Applications Testing Suites (Oats)
119	Oracle America, Inc.	05/12/16	08/19/21	372,680	391,314	Hardware And Software Maintenance For "Supercluster" Server Systems
120	Osisoft LLC	10/25/17	10/24/22	163,447	171,619	Software Licenses And Maintenance
121	Pacific Surveys	09/11/17	09/10/22	40,000	40,000	Geophysical Inspection And Well Profiling Services
122	Park Landscape	09/28/15	09/27/21	362,960	362,960	Grounds Maintenance
123	Parsons Transportation Group Inc.	12/04/18	12/04/25	657,143	657,143	Implementation Of A New Project Management Information System
124	Perficient Inc	09/06/18	09/05/24	60,000	20,000	Dell Integration Software Implementation Services

SCHEDULE OF EXISTING CONTRACTS

Budget Year 2020 - 2021

Local Government: Las Vegas Valley Water District

Contact: E. Kevin Bethel

E-mail Address: kevin.bethel@lvvwd.com

Daytime Telephone: 702-822-8809

Total Number of Existing Contracts: 308

Line	Vendor	Effective Date of Contract	Termination Date of Contract	Proposed Expenditure FY 2020-21	Proposed Expenditure FY 2021-22	Reason or need for contract:
125	Pica Corporation	05/08/18	05/07/23	-	-	Large Diameter Pipeline Leak Detection Service For Asset Management
126	Piercy Bowler Taylor & Kern	03/30/17	03/29/22	82,500	82,500	District/BBWD Auditor Services
127	Platinum Edge LLC	01/19/17	03/08/21	100,000	100,000	"Scrum" Training Services.
128	Precision Crane & Hoist	02/06/16	02/05/22	102,430	117,795	Overhead Crane Maintenance And Repair Service
129	Precision Electric Inc	07/24/18	07/23/23	25,000	25,000	On-Call Electrical Services
130	Pyro Combustion & Controls	11/14/18	11/13/23	25,000	25,000	Boiler Pm And Repair Services
131	R&R Partners	07/01/17	06/30/22	2,420,000	2,662,000	Integrated Marketing, Communications And Public Outreach Services
132	R&R Partners Inc	05/18/17	05/17/22	50,000	50,000	Advertising Services
133	Raysco	10/18/18	10/18/21	25,000	25,000	Floor Cleaning Services At The Springs Preserve
134	Rebel Party Rentals	09/27/18	09/26/23	20,000	20,000	Event Set-Up And Fixture Rental Services
135	Red Clay Consulting Inc	01/30/19	06/30/25	500,000	500,000	C2M Software Implementation Services
136	Reward Strategy Group	11/01/14	10/31/21	95,000	95,000	HR Consulting Service For Compensation
137	River Valley Air Conditioning Inc	01/01/18	12/31/23	25,000	-	HVAC Maintenance, Filter Changes And Related Non-Construction Services
138	Rogich Communication Services	02/27/09	03/31/22	96,000	96,000	Consulting, Educating, Programming Services For Springs Preserve
139	Rogich Communications	06/15/17	06/14/21	960,000	96,000	Communication Services
140	RSVP Party Rentals	09/26/18	09/25/21	15,000	15,000	Event Set-Up And Fixture Rental Services
141	S & S Concrete And Materials	08/03/16	08/02/22	25,000	25,000	Type II Material And Waste Disposal Services
142	Santoro Whitmire LTD.	06/01/15	05/31/22	100,000	100,000	Legal Representation A-15-718938-C
143	Santoro Whitmire LTD.	11/06/18	11/05/25	500,000	500,000	Legal Representation A-18-778039-C
144	Schneider Electric Systems USA Inc	04/26/16	04/25/21	500,000	500,000	Scada System Software Products And Maintenance
145	Schneider Electric Systems USA Inc	04/26/16	04/25/22	100,000	100,000	Software Consulting Services
146	Schneider Electric Systems USA Inc	04/10/17	04/09/22	50,000	50,000	Avantis Technical Services And Software Maintenance
147	Sectran Security Inc.	04/01/15	03/31/22	22,500	22,500	Armored Car Services
148	SH Architecture	03/06/18	02/28/23	29,000	29,000	Architectural Design Services
149	Sherman & Howard	07/30/15	07/29/23	100,000	100,000	Miscellaneous Bond And Financial Services
150	Sierra Nevada Administrators	11/01/17	10/31/22	100,000	100,000	Self-Funded Workers' Compensation Program Third Party Administration Services
151	Silver State Analytical Laboratories	07/01/18	06/30/23	20,000	20,000	Testing Of Sodium Hypochlorite Deliveries For Disinfection
152	Simplifile	01/01/18	12/31/24	20,000	20,000	Lien Filing Service For Customer Care
153	Sirius Computer Solutions	11/06/17	11/05/22	500,000	500,000	Software Maintenance Services On An As Needed Basis
154	Slater Hanifan	09/25/17	09/24/24	-	-	Engineering Services For Spring Preserve Cienega Improvements Project
155	Spa Risk	10/15/18	06/30/20	-	-	PSA for CUWNet Earthquake Damage Model
156	Standard Automation & Control Lp dba Wond	06/13/18	06/30/25	426,709	426,709	Scada Software And Implementation Services
157	Statera, Inc.	07/16/17	07/05/25	276,300	276,300	Technical Services For Aptus Software
158	Stradling Yocca Carlson & Rauth	12/05/17	12/05/24	100,000	100,000	Bond Disclosure Counsel Services
159	Stradling Yocca Carlson & Rauth	02/05/17	12/04/22	100,000	100,000	Bond Disclosure Counsel Services
160	Sunbelt Controls	08/13/18	08/12/23	25,000	25,000	EMS Maintenance
161	Sunflower Construction	03/28/18	03/27/23	24,500	24,500	Painting Services At The Springs Preserve
162	T&M Controls	03/06/18	03/05/23	240,000	240,000	On-Call Elec. Services For LVVWD
163	Technical Inspection Agency USA	08/01/18	07/30/23	15,000	15,000	Elevator Inspection Services
164	Technical Inspection Agency USA Inc	08/01/18	07/31/23	15,000	15,000	Third-Party Witness Of Elevator Inspections
165	The Law Offices Of Rory Reid	06/01/18	05/31/25	31,000	31,000	Legal Services
166	Thomas Lucas	11/20/18	10/30/20	55,000	-	PSA For Archaeological Consulting Services At The Springs Preserve
167	Top Bird Entertainment	09/20/18	09/19/23	14,000	14,000	PSA For Extreme Parrot Shows At The Springs Preserve
168	Topnotch Services Inc	07/10/15	07/09/22	75,653	75,653	Street Sweeping
169	Total-Western, Inc.	06/07/18	06/06/23	200,000	200,000	Misc. Mechanical Services For LVVWD
170	TRC Solutions	08/23/18	08/22/23	20,000	20,000	Annual Compliance Testing For Campbell Station Natural Gas Engines
171	Tre Barnen	01/11/18	01/10/20	-	-	Misc. Fence Installations
172	Trench Shoring	03/18/14	03/19/22	50,000	50,000	Rental Of Trench Shoring And Plates
173	Unifirst Corporation	08/01/11	07/31/20	100,000	100,000	Uniform Rental And Laundry Services
174	United Site Services	10/02/18	09/30/24	25,000	25,000	Sewage Waste Removal
175	University Of Utah	01/02/19	01/01/24	25,000	25,000	Research/Testing Services
176	Veterinarian Aquarium Group	04/14/14	04/13/21	85,000	85,000	Veterinary Services - Springs Preserve
177	Wells Fargo	07/06/17	07/06/22	17,500	17,500	Custody Services
178	Wilson Elser Moskowitz Edleman & Dicker	10/06/15	10/05/23	100,000	100,000	Legal Services Case No. A-15-714878
179	Wunderlich-Malec	07/01/17	06/30/22	750,000	750,000	Tech. Services For Automation Projects
180	Xebialabs Inc	06/30/18	06/29/23	140,000	140,000	Application Development Software And Implementation Services
181	Agile For All	02/25/19	12/31/23	100,000	100,000	Certified Scrummaster Training
182	AJNC Industries LLC dba Clark Welding	01/21/20	01/20/21	100,000	25,000	Welding And Fabricating Services For Distribution
183	Alarmco	10/29/19	10/28/20	15,000	15,000	Fire Alarm Monitoring
184	Amalgamated Plant Company	06/21/19	06/20/22	12,360	12,360	Plant Care
185	American Red Cross	02/01/19	12/31/19	21,793	-	AED And CPR Training Services
186	Annadatha V.M. Rao	03/21/19	03/20/26	60,000	60,000	Water Distribution Plan Software Development Services

SCHEDULE OF EXISTING CONTRACTS

Budget Year 2020 - 2021

Local Government: Las Vegas Valley Water District

Contact: E. Kevin Bethel

E-mail Address: kevin.bethel@lvvwd.com

Daytime Telephone: 702-822-8809

Total Number of Existing Contracts: 308

Line	Vendor	Effective Date of Contract	Termination Date of Contract	Proposed Expenditure FY 2020-21	Proposed Expenditure FY 2021-22	Reason or need for contract:
187	Aon Risk Consultants, Inc	04/04/19	04/03/21	40,000	40,000	Risk Finance And Captive Consulting Services
188	Arizona Machinery, LLC. dba Stotz	12/08/16	12/07/21	99,825	109,808	Parts And Service For Agricultural Equipment
189	Atkins North America	07/06/19	07/08/26	301,000	301,000	Professional Design/Engineering Services
190	Atkins North America, Inc.	04/01/19	03/31/20	99,000	-	Design Services For Waterline Project
191	Black & Veatch	02/05/19	02/04/24	34,000	34,000	Professional Design/Engineering Services
192	Blue Locker Commercial Diving	10/01/19	09/30/20	100,000	100,000	Diver Inspection And Cleaning Services For Tanks And Reservoirs
193	Bombard Electric	06/27/19	10/31/19	140,876	-	Solar Parking Upgrade Support
194	Booky Oren Global Water Tech	05/15/19	05/14/20	80,000	80,000	Aid In Advancing Innovative Solutions Related To The Delivery Of Water
195	Booky Oren Global Water Tech	01/01/20	12/31/20	100,000	100,000	Water Related Innovation Solutions
196	Bridgeworks	02/25/19	02/24/21	91,000	91,000	Professional Consulting Services - Scope Of Services And Cost Limitation Clarification
197	Bright Horizons Family Solutions	02/01/19	12/31/19	137,435	-	Case Management Services
198	Brilliant Remote Sensing Labs Fz Lle	04/01/19	03/31/20	10,000	10,000	Remote Sensing Certification And Online Training Services
199	Brothers, Cody S	02/01/19	12/31/19	25,000	-	NEA Grant Services
200	Byrd Underground, LLC	10/15/19	10/14/20	500,000	500,000	On-Call O&M Support Services
201	Capriati Construction Corp.	04/18/19	04/17/20	220,000	-	Update Cathodic Test Stations
202	Carollo Engineers Inc	07/15/19	07/14/26	15,000	15,000	Professional Design/Engineering Services
203	Carolyn S. Fowler	09/26/19	09/26/26	5,000	5,000	Decor Installation And Strike Services At The Springs Preserve Gift Shop
204	Carpenter Sellers Del Gatto Architects	05/13/19	12/03/21	73,190	73,190	Engineering Design Services
205	Carter Agri Systems	06/23/18	06/22/19	80,000	-	Parts And Service For Agricultural Equipment
206	Cbiz Valuation Group, LLC	03/18/19	06/30/19	25,000	25,000	Data Collection And Property Valuation Services
207	Celebrity Coaches	04/04/18	04/30/21	15,000	-	Transportation Services - Springs Preserve
208	City Of Las Vegas	02/01/19	12/31/19	74,985	-	Event Fees And Utility Services
209	City Plan Develop. dba Savi Con.	11/13/19	08/31/20	177,524	-	Field Services Building Office Upgrade
210	Clark County Public Works	02/28/19	06/30/21	562,963	562,963	Interlocal Agr. Karen Ave-Paradise Road
211	Coaching By Wendy	02/01/19	12/31/19	18,000	-	Executive Coaching Services
212	Communtcaton Electronc Systems	04/17/19	04/16/20	50,000	50,000	Fire Alarm System Services
213	Corporate Air Mechanical Services Inc	10/07/19	02/06/24	50,090	50,090	HVAC Services
214	Darrel W. Cook & Associates	10/30/19	10/29/26	30,000	30,000	Representation On Datamatic Lawsuit
215	Design Vision, Inc. dba Southwick Landscap	05/09/19	Perpetual	263,120	263,120	Professional Architectural/Design Services
216	DLT Solutions	07/01/03	06/30/22	1,442,098	1,730,518	Autodesk - Water Distribution System
217	Dons Window Washing Service	06/07/19	06/07/22	25,000	25,000	Window Washing Service
218	Douglas L. Wild	09/26/19	09/26/26	5,000	5,000	Decor Installation And Strike Services At The Springs Preserve Gift Shop
219	EMD Consulting Group, LLC	02/14/19	2/14/2020	25,000	25,000	Botanical Gardens Supervisor Executive Search Services
220	Epicor Software Corporation	09/28/17	09/27/24	194,483	204,207	Accounts Payable Automation Software (Docstar)
221	Epiq Ediscovery Solutions, Inc.	12/04/19	12/03/26	84,150	84,150	Exterro Public Records Request Software Implementation Services
222	Exterro Inc.	12/28/16	12/27/23	475,800	475,800	Subscription, Modules And Maintenance For Legal Hold Management Software
223	Fracta	03/14/19	Perpetual	24,999	24,999	Pipeline Breakage Risk Assessment Services
224	Freshworks, Inc	05/21/19	07/20/26	87,200	87,200	Help Desk Software And Implementation Services
225	GCW, Inc	05/07/19	05/06/22	430,937	-	Professional Services For The Design Of Existing Water Main Replacement
226	General Networks Corporation	05/07/19	05/06/22	1,888,930	1,888,930	Enterprise Software Integration Services
227	GQR Global Markets	03/20/19	Perpetual	89,315	89,315	Staffing Placement Services - Scope Of Work And Cost Limitation Clarifications
228	Grantworthy Funding & Strategy	03/21/19	Perpetual	24,000	24,000	Professional Grant Writing Services
229	Guardian Elite Medical Services LLC	09/01/17	08/30/20	15,000	7,000	Ambulatory Services At Springs Preserve
230	Hal Mechanical, Inc.	12/04/19	02/29/20	17,300	-	EI Capitan MCC Upgrade
231	HDR Engineering Inc	01/22/20	01/21/27	45,000	45,000	Professional Design/Engineering Services
232	HDR Engineering Inc	01/22/20	01/21/27	137,000	137,000	Professional Design/Engineering Services
233	Henderson Engineers, Inc.	04/11/19	03/02/20	90,000	90,000	Miscellaneous Maintenance Engineering Project Engineering Services
234	Holley, Driggs, Walch, Fine, Puzey, Stein & T	12/10/19	12/10/26	15,000	15,000	Contract Review
235	Horrocks Engineers	08/08/19	08/07/20	140,756	-	Professional Design/Engineering Services
236	Horrocks Engineers	09/17/19	09/16/20	100,000	100,000	PSA For Consultant Engineering Svcs.
237	Idaho Truck Specialties dba Cobalt	03/07/17	03/06/21	1,200,000	1,200,000	Cab & Chassis Trucks
238	Industrial Power Corp.	12/11/19	05/31/20	348,000	-	Rice North Site Upgrades
239	Interworks, Inc.	12/06/18	12/05/25	300,000	300,000	Construction Management Reporting Software
240	IZ Design Studio	03/13/19	Perpetual	90,000	90,000	LVVWD East Remodel Design Services
241	J&J Enterprises Services, Inc	06/04/19	04/20/20	1,109,967	-	Pavement Replacement Services
242	J&J Enterprises Services, Inc	05/07/19	05/06/22	1,000,000	521,261	Pavement Replacement And Concrete Appurtenances Services
243	Jacobs	02/20/19	06/30/21	150,000	-	Engineering Services for Pipeline Participation Project
244	James F. Thompson, Jr. dba American Sout	11/05/19	12/31/20	1,400,785	-	Springs Preserve Gardens Electrical Services Expansion

SCHEDULE OF EXISTING CONTRACTS

Budget Year 2020 - 2021

Local Government: Las Vegas Valley Water District

Contact: E. Kevin Bethel

E-mail Address: kevin.bethel@lvvwd.com

Daytime Telephone: 702-822-8809

Total Number of Existing Contracts: 308

Line	Vendor	Effective Date of Contract	Termination Date of Contract	Proposed Expenditure FY 2020-21	Proposed Expenditure FY 2021-22	Reason or need for contract:
245	Johnson Controls Inc	12/01/19	12/31/26	100,000	100,000	Ongoing Maintenance Of The Hardware And Software For The District's Johnson Controls' Access Security System
246	Louis Berger			120,000	-	Pipeline Replacement Engineering Services
247	Kone Inc	03/06/19	03/05/24	150,000	150,000	Elevator Maintenance Services
248	Matthew Jacob	12/03/19	06/30/20	62,400	62,400	Communication/Writing Services
249	Merrick & Company	05/07/19	05/06/21	130,000	13,000	Digital Elevation Data Services
250	Microsoft Corporation	04/01/19	03/31/20	99,169	-	Standard Microsoft Premier Support
251	Mikon Construction Co Inc	07/31/19	07/30/20	503,950	-	Pavement Replacement Services, Las Brisas Pm Service Line
252	My Next Career Path Staffing, LLC	05/28/19	08/31/26	50,000	50,000	Springs Preserve Summer Camp Counseling Services
253	Nancy Weaver	09/29/19	09/28/20	98,000	98,000	Communication Consulting Services
254	Nevada Pneumatic	04/11/19	04/10/25	20,000	20,000	Maintenance/Repairs
255	Nevada Tap Master, Inc.	11/13/19	01/31/20	12,620	-	Install Flange Hot Tap
256	Open Text Inc	07/01/19	12/31/19	27,663	-	Software and Maintenance
257	Open Text Inc	07/01/19	12/31/19	36,000	-	Software Subscription
258	Opportunity Village	05/01/19	04/30/26	438,918	438,918	Custodial Services
259	Origami Risk, LLC.	03/27/19	03/26/20	260,000	336,850	Risk Management Software With 256 Full User Licenses
260	Pathfinder Communications Solutions LLC	06/03/19	06/02/20	275,000	-	Avaya Telecommunications Hardware, Software, Maintenance Support, And Technical Services
261	Perry Investigations	02/01/19	12/31/19	16,372	-	Professional Investigation Services
262	PFE Holdings, LLC	07/24/19	01/10/21	250,000	250,000	LVSP Temporary Exhibit Services
263	PGAL, LLC	11/12/18	04/30/20	45,680	-	PSA For L0022 And L0023
264	Precision Pump Companies LLC	08/20/19	10/31/19	16,633	16,633	LVSP Control Valve Installation
265	Purcell Tire Company dba Purcell Tire And S	08/15/19	03/30/24	135,000	135,000	Tires, Tubes & Services
266	Pyro Combustion And Controls, Inc.	11/14/19	11/13/23	25,000	25,000	Preventative Maintenance
267	Rafael Construction, Inc.	12/16/19	02/15/20	99,579	-	Facilities Material Storage Bin Installation
268	Rebel Party Rentals	09/27/18	09/26/23	10,000	10,000	Fixture Rental Services For The Springs Preserve
269	Red Clay Consulting, Inc	10/03/19	06/30/21	3,700,000	-	C2M Software Implementation Services
270	Roadsafe Traffic Systems	08/05/19	08/04/24	541,130	541,130	Traffic Control And Barricade Services For Distribution, Asset Management, And Field Services
271	Robert J. Gower	09/19/19	09/18/20	100,000	100,000	Hearing Officer Services
272	Robin Rockey	08/13/19	07/14/23	25,000	25,000	Community Outreach Services
273	Rogich Communication Services	04/01/19	03/31/20	96,000	96,000	Community Awareness And Education Programs On Behalf Of LVVWD & Springs Preserve
274	Sandra Shulman	07/01/19	06/30/20	30,000	30,000	Employee Development Training Consultation Services
275	SC East Landco, LLC	08/06/19	08/05/20	1,633,000	-	Skye Canyon Park 2860 Zone Pipeline Installation Of Fiber Optic Conduit And A Pressure Reducing Valve
276	Schneider Electric Systems USA Inc	04/26/16	04/25/22	600,000	600,000	Professional Services For Scada Software
277	SHI International Corp.	05/16/17	05/15/22	500,000	500,000	Computer Hardware, Software, And Maintenance
278	SHI International Corp.	08/15/18	05/06/23	263,000	276,150	Adobe Document Management Software And SaaS
279	SHI International Corp.	05/31/18	06/25/23	93,295	102,624	Security Software Maintenance
280	Simmons Group Nevada, LLC	07/11/19	07/10/20	10,000	10,000	Employee Development Training
281	Simpson Gumpertz & Heger Inc	01/01/20	12/31/24	40,000	40,000	Pipeline Leak Analysis For Asset Management
282	Sirius Computer Solutions	10/22/19	10/21/22	172,446	172,446	Trend Micro (TMI) On-Premise Deep Security Software
283	Sirius Computer Solutions	03/27/19	03/26/26	158,057	165,960	Tipping Point Security Software, Hardware, Licensing And Support (Internet And Scada Systems)
284	Skillforge	07/02/19	12/31/20	100,000	100,000	Onsite And Online Technical And Business Skills Training Course Services
285	Skillsoft Corporation	04/25/19	12/31/20	500,000	500,000	Software Implementation And Training Services
286	So. Nevada Tba Supply Co dba Ted Wiens	08/15/19	03/30/24	135,000	135,000	Tires, Tubes & Services
287	Southwest Truck Driver Training	02/01/19	12/31/19	33,000	-	CDL Training Services
288	Spatial Tech Admin & Dev	04/22/19	04/21/26	90,000	90,000	GIS Software Training Services
289	Stanley Convergent Security Solutions Inc	07/01/19	06/30/20	10,000	-	Maintenance
290	Stantec Consulting	06/10/19	06/10/26	57,000	57,000	Professional Design Services For Bid C1513 Pipe Replacement
291	Stantec Consulting	08/07/19	08/06/26	635,000	635,000	Professional Design/Engineering Services
292	Statewide Fire Protection Inc	04/18/19	04/17/24	25,000	25,000	Fire Hydrant Testing And Repair Services
293	Steve Robbins	02/28/19	02/27/20	69,950	69,950	Diversity Workshop Services
294	Sunrise Paving Inc	08/01/19	07/30/21	914,550	-	Pavement Replacement Services
295	Sunrise Paving Inc	11/18/19	11/17/22	239,500	239,500	On Call Pavement Replacement Services
296	Susan Tinder White Consulting, LLC	06/06/19	6/6/2020	25,000	25,000	Talent Acquisition Consulting Services
297	Switch, Inc	09/10/19	09/09/20	750,000	-	Colocation And Internet Access Services
298	T&M Controls	08/27/19	02/28/20	526,764	-	Campbell Pump Station Elec. Upgrade
299	Tand, Inc	12/03/19	12/31/20	1,053,450	-	Miscellaneous Pipe Installations
300	Technical Training Institute	02/01/19	12/31/19	15,710	-	Educational And Training Services
301	Tek Systems, Inc.	06/21/17	06/20/22	100,000	100,000	Professional Services To Assist With Temporary Staffing Needs In The IT Dept.
302	Total-Western, Inc.	10/24/19	02/28/20	27,120	-	Standby Power For Radio Room
303	Total-Western, Inc.	05/13/19	12/30/19	38,900	-	Fleet Service Building Electrical Upgrade
304	Total-Western, Inc.	03/01/19	12/20/19	548,021	-	Luce Site North Electrical Upgrades
305	Unifirst Corp	03/21/19	03/13/25	11,500	11,500	Cleaning Of Towels And Dust Mops

SCHEDULE OF EXISTING CONTRACTS

Budget Year 2020 - 2021

Local Government: Las Vegas Valley Water District

Contact: E. Kevin Bethel

E-mail Address: kevin.bethel@lvvwd.com

Daytime Telephone: 702-822-8809

Total Number of Existing Contracts: 308

Line	Vendor	Effective Date of Contract	Termination Date of Contract	Proposed Expenditure FY 2020-21	Proposed Expenditure FY 2021-22	Reason or need for contract:
306	VTN Nevada	08/12/19	08/11/26	11,000	11,000	Professional Design/Engineering Services
307	Westwood Professional Services	06/27/19	06/26/26	141,000	141,000	Professional Design/Engineering Services
308	Zions Public Finance Inc	02/01/19	12/31/19	17,000	-	Secondary Market Disclosure Services
	Total Proposed Expenditures			\$ 68,271,986	\$ 48,028,366	

Additional Explanations (Reference Line Number and Vendor):

Page: 11
Schedule 31

SCHEDULE OF PRIVATIZATION CONTRACTS

Budget Year 2020 - 2021

Local Government: Las Vegas Valley Water District
 Contact: E. Kevin Bethel
 E-mail Address: kevin.bethel@lvvwd.com
 Daytime Telephone: 702-882-8809

Total Number of Privatization Contracts: None

Line	Vendor	Effective Date of Contract	Termination Date of Contract	Duration (Months/ Years)	Proposed Expenditure FY 2020-21	Proposed Expenditure FY 2021-22	Position Class or Grade	Number of FTEs employed by Position Class or Grade	Equivalent hourly wage of FTEs by Position Class or Grade	Reason or need for contract:
1	None									
2										
3										
4										
5										
6										
7										
8	Total									

Attach additional sheets if necessary.

Page: 12

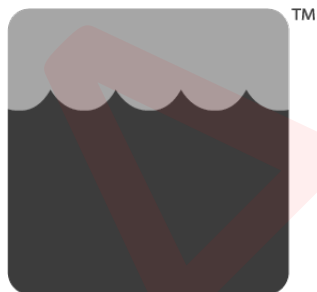
Schedule 32

Place holder for
affidavit of
publication

Department of Taxation

Letter Place Holder

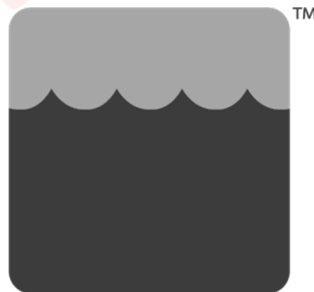
This page left intentionally blank



SECTION 5

DEPARTMENT BUDGETS

Summary of Department Expenditures	5-1
Executive Management.....	5-2
Legal Services	5-12
Finance	5-15
Information Technology	5-22
Human Resources.....	5-29
Public Services	5-32
Environmental, Health, Safety & Corporate Security	5-38
Customer Care & Field Services.....	5-48
Engineering	5-55
Resources & Facilities.....	5-60
Infrastructure Management.....	5-72
Water Resources	5-83
Energy Management	5-93
Operations.....	5-98
Water Quality & Treatment.....	5-107



LAS VEGAS VALLEY WATER DISTRICT
FISCAL YEAR 2020-21
OPERATING AND CAPITAL BUDGET

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Fiscal Year Ending June 30, 2021

Department Budgets

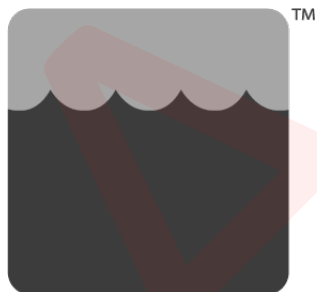
This section contains summaries of budgets for each of the Las Vegas Valley Water District's (LVVWD) departments. Each department's budget narrative contains detailed budget information and other

highlights of the 2020-21 Budget Plan. The following table presents the 2018-19 actual, 2019-20 Adopted Budget and 2020-21 Budget Plan for each of the departments.

LVVWD
Summary of Department Expenditures

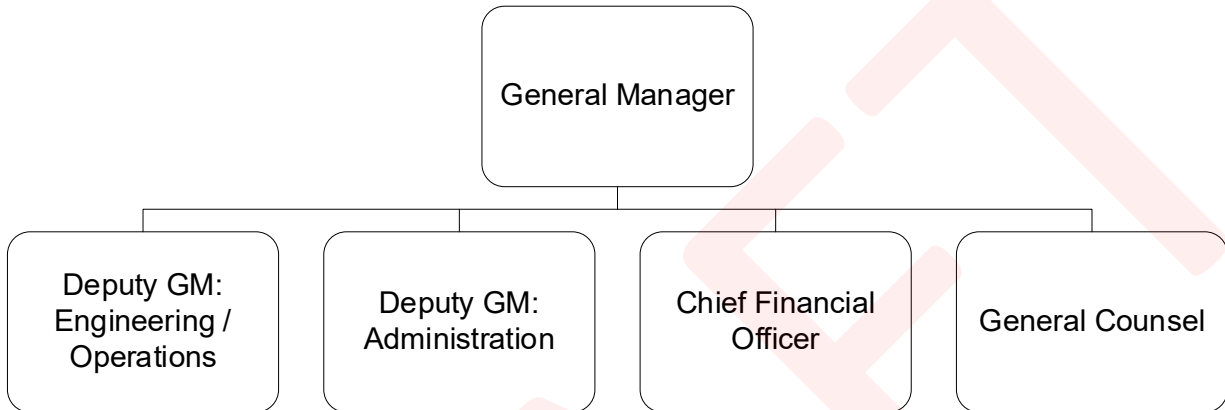
Departments	2018-19 Actual	2019-20 Budget	2020-21 Budget	Budget-to-Budget Variance
Executive Management	\$ 1,357,493	\$ 1,723,161	\$ 1,795,657	\$ 72,496
Legal Services	3,290,486	5,337,966	5,921,141	583,175
Finance	302,423,151	320,315,179	281,067,410	(39,247,769)
Information Technology	35,913,819	46,214,111	52,925,313	6,711,203
Human Resources	5,300,881	6,265,836	6,634,247	368,411
Public Services	15,001,095	20,674,601	22,043,804	1,369,202
Environmental Health Safety & Corporate Security	10,006,685	10,799,280	10,818,765	19,486
Customer Care & Field Services	27,843,008	36,592,956	41,516,953	4,923,997
Engineering	72,420,421	116,375,088	115,996,615	(378,473)
Resources & Facilities	19,285,656	23,576,021	26,119,825	2,543,805
Infrastructure Management	29,996,707	30,001,400	32,367,262	2,365,863
Water Resources	4,906,192	4,468,110	7,005,879	2,537,769
Energy Management	(823)	-	-	-
Operations	47,744,196	54,014,597	56,414,666	2,400,070
Water Quality & Treatment	191,475	173,139	225,004	51,865
Total Department Expenditures	575,680,443	676,531,444	660,852,542	(15,678,902)
Debt Service	68,351,975	70,457,009	76,347,958	5,890,949
Total Uses of Funds	\$ 644,032,417	\$ 746,988,453	\$ 737,200,501	\$ (9,787,953)

This page left intentionally blank



EXECUTIVE MANAGEMENT

Level: 1000



Mission Statement

Provide world class water service in a sustainable, adaptive and responsible manner to our customers through reliable, cost effective systems.

The Executive Management Team

The Executive Management Team is responsible for strategic planning, general administration and operational oversight of the Las Vegas Valley Water District (LVVWD) and the Southern Nevada Water Authority (SNWA). The function is staffed by a General Manager, who has responsibility for managing the two organizations. Two Deputy General Managers, a Chief Financial Officer and a

General Counsel also oversee administrative and operational activities.

The Executive Management Team implements policy as established by the LVVWD and SNWA Boards of Directors. The team is responsible for anticipating organizational needs and implementing appropriate strategies to ensure these needs are met. To fulfill the missions of both organizations, the Executive Management Team petitions the respective boards for direction and approval of funding or other support and directs staff accordingly. It also interacts with other local, national and international entities in developing strategies to meet demands and responsibly manage resources.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Executive Management
Fiscal Year Ending June 30, 2021

Expenditures

LVVWD Uses	Actual 2018-19	Budget 2019-20	Budget 2020-21
Materials & Supplies	\$ 11,643	\$ 11,350	\$ 9,216
Maintenance & Repairs	-	100	-
Rental & Leases	-	-	-
Other Employee Expenses	64,546	104,100	102,336
Other Expenses	61,203	169,640	80,112
Total Operating Expenses	137,393	285,190	191,664
Capital Expenditures	-	-	-
Payroll & Related Costs	1,220,100	1,437,971	1,603,993
Total Department Expenditures	\$ 1,357,493	\$ 1,723,161	\$ 1,795,657
FTE Positions	5.1	5.5	6.4

Major Activities

The Executive Management Team continues to direct efforts to ensure that Southern Nevada has access to a safe, reliable and sustainable water supply. This is achieved by implementing and overseeing initiatives to mitigate the impacts of drought and climate change, maintaining community-wide water conservation efforts and identifying present and future infrastructure and resource needs. Significant initiatives over the past year include support and completion of:

- The Integrated Resource Planning Advisory Committee 2020 (IRPAC 2020) process.
- Completion of the new Low Lake Level Pumping Station (L3PS).
- Continued implementation of LVVWD's 10-year Capital Improvement Plan.
- A significant amendment to the SNWA's Major Construction and Capital Plan.
- Continued progress toward the regional conservation goal with new initiatives and efforts.
- Leadership and involvement in Colorado River issues and initiatives.
- Continued collaboration with Colorado River partners on conservation programs

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Executive Management
Fiscal Year Ending June 30, 2021

to help protect Lake Mead water elevations, including execution of the Lower Basin Drought Contingency Plan.

- Continued progress toward the Nevada Renewable Standard of 50 percent by 2030.
- Continued participation in the WaterStart partnership.
- Responding to the Coronavirus Pandemic

Coronavirus Pandemic Response

In March 2020, the organization acted swiftly to appropriately respond to the Coronavirus pandemic, implementing its Readiness and Response Plan, while maintaining critical functions. The organization finalized a work-from-home structure for employees performing functions that did not require working on-site. Additionally, provisions were put into effect for customers unable to continue paying their bills as a result of the halted economy. Other efforts included implementing plans to maintain employee morale and disseminating timely and regular communications to employees.

Lower Basin Drought Contingency Plan

On May 20, 2019, the Department of the Interior, Bureau of Reclamation and representatives from all seven Colorado River Basin states gathered to sign the completed Drought Contingency Plan (DCP) for the Upper and Lower Colorado River Basins. Under the Lower Basin DCP, the states of Arizona, California and Nevada, as well as the country of Mexico (through Minute 323 to the 1944 Water Treaty between the United States and Mexico) are required to reduce the amount of water diverted from the Colorado River if Lake Mead levels drop below a predetermined

elevation. Overall, the DCP aims to keep more water in the Colorado River, benefiting all water users. It also helps to preserve critical reservoir elevations at Lake Mead.

Integrated Resource Planning Advisory Committee 2020

In October 2019, the SNWA Board appointed 11 local citizens to the IRPAC 2020 to examine Southern Nevada's long-term water planning efforts and develop recommendations for infrastructure, water resources, rates, water conservation, out-of-valley water use and funding.

The committee included representatives from the business, tourism, residential, development and financial sectors and held seven public meetings between October 2019 and March 2020. Staff experts presented information on infrastructure, water resources, conservation and rate scenarios to the committee to assist the group in the development of their formal recommendations, which were presented to the SNWA Board in March 2020. Recommendations included amending the SNWA Major Construction and Capital Plan (MCCP) to include funding for:

- New facilities to support existing and new customers
- New water resource acquisition opportunities through Colorado River partnerships
- Sustained and enhanced water conservation initiatives

To support these initiatives, the committee also recommended gradual increases to the

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Executive Management
Fiscal Year Ending June 30, 2021

SNWA infrastructure, commodity and connection charges over the next six years and indexing those charges in accordance with inflation in each year thereafter. The committee unanimously approved the recommendations in March 2020 and the SNWA Board will consider those recommendations at a future meeting depending upon circumstances surrounding the Coronavirus pandemic.

Conservation Initiatives

The SNWA has a long history of working with the community to set and achieve conservation goals through education, incentives, regulation and water pricing. Currently, the community is working to maintain a water conservation goal of 105 Gallons Per Capita Per Day (GPCD) by 2035.

Because sustained conservation represents such a critical element of SNWA's water resource portfolio, Executive Management continues to evaluate and implement large-scale efforts to reduce consumptive water use.

Non-functional Turf Reduction. Non-functional turf is a wasteful use of water resources and covers approximately 5,000 acres within Southern Nevada. In July 2019, the SNWA Board of Directors approved a resolution that further refined prohibitions on non-functional turf applications and applied standards to new turf installations to maximize functionality. SNWA member agencies are working to embed these principles in municipal codes and Service Rules.

SNWA will also continue to incentivize turf removal and explore new opportunities to accelerate non-functional turf removal to double the amount of non-functional turf removal each year.

Cool-Season Turf Limitations. Water savings can be achieved through the conversion of functional cool season turf to more water-efficient varieties of grass (also known as warm-season turf). SNWA recently partnered with the City of Henderson Parks and Recreation Department to convert more than one million square feet of cool-season grass in ten parks to warm-season grass, yielding a projected savings of more than 22 million gallons of water per year.

Staff will continue to work with community partners to accelerate the conversion of parks and school fields to warm season turf and to use warm grasses as functional turf is installed.

Leveraging New Technology. Compliance with mandatory day-of-week and time-of-day watering restrictions, as well as efficient discovery and repair of water leaks can result in significant water savings. With new smart controllers that are now available, landscape watering compliance can be automated and adjusted to weather with ease, helping to ensure that customers are adhering to seasonal watering schedules.

Additionally, the installation of advanced metering infrastructure can help notify water providers and customers alike of water leaks in near real-time. This type of immediate notification would greatly reduce the time it takes for leaks to be detected and repaired, and ultimately reduce water loss.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Executive Management
Fiscal Year Ending June 30, 2021

Staff continues to seek opportunities to advance the implementation of these types of technologies throughout the SNWA service area.

Water Waste Enforcement. The LVVWD continues to increase its public outreach efforts, bolstering its water waste enforcement presence and expanding its suite of tools for residents to report water waste.

LVVWD staff recently used meter data to identify customers who were exceeding the number of watering days allowed within LVVWD's Service Rules. Courtesy notifications were sent to the top 500 offenders, resulting in 47 percent of the group becoming compliant after being notified. Hoping to build on that successful response, staff completed outreach to the top 5,000 non-compliant single-family residential customers, and found similar results.

The LVVWD also implemented a water waste reporting form on LVVWD.com in 2018 to provide a convenient means by which customers can report observed water waste. In 2019 alone, more than 5,700 water waste reports were submitted via the form, immediately notifying LVVWD staff of the date, time, location and type of water waste occurrence so that proper investigation procedures could be implemented.

As part of LVVWD's increased water waste enforcement efforts, water waste notices, investigations and fees continue to increase. In addition to more customer outreach, three full-time employees and six part-time interns have been hired to support watering compliance efforts. In 2019, staff conducted 16,800 water waste investigations, nearly

tripling the number of investigations completed during the previous year.

Low Lake Level Pumping Station (L3PS)

The construction of L3PS at Lake Mead, one of the SNWA's largest construction projects to date was completed in April 2020. As final activities, workers successfully installed 34 submersible pumps, capable of pumping up to 900 million gallons of water per day to the SNWA's two water treatment facilities. Crews then tested the pumps from the control room located in the electrical substation that powers the pumping station.

Once complete, L3PS will help Southern Nevada maintain reliable access to its primary water supplies even as lake levels decline and drought conditions continue.

LVVWD Capital Improvements Plan

Steady progress continues to be made toward the LVVWD's 10-year Capital Improvements Plan. The \$616 million plan provides an outline to maintain water system assets, sufficiently expand the system to meet the demands of planned growth and meet state-mandated water quality compliance standards.

There are several major capital projects currently in either the planning or active project phase, including:

- Installation of 11,600 backflow prevention devices on meters throughout the LVVWD's service area. To date, more than 1,620 backflows have been installed.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Executive Management
Fiscal Year Ending June 30, 2021

- Construction of the 10 million-gallon, 3665 Zone Reservoir and associated appurtenances was completed in summer 2019. The project, which consisted of the construction of two 5 million-gallon basins, also included the installation of approximately 3,000 feet of 42-inch pipeline to connect the reservoir to the existing water distribution system. The new reservoir and pipelines add capacity, reliability and emergency storage for current and future demands in the area.
- Solar photovoltaic carports have been installed over the past year at the LVVWD's main employee parking lots. The new carports are projected to produce more than 4,200 megawatt hours (MWh) per year of solar energy, which will be used to offset the campus' overall energy requirements. The project will also bolster efforts to meet Nevada's Renewable Energy Portfolio standard to 50 percent by 2030.

SNWA Major Construction and Capital Plan (MCCP)

SNWA's MCCP is the planning document that sets forth the major infrastructure process and resources needed to meet community's water needs. The previous MCCP, which was last updated in 2015, received an update to reflect new demands on the water system, the maximization of existing resources, development of new resources and new asset management projects. The MCCP also establishes overall spending thresholds for these activities and identifies candidate projects for construction. Once staff completes an update of the MCCP, it will then be considered by the SNWA Board of

Directors at a future meeting, depending upon circumstances surrounding the Coronavirus pandemic.

During the IRPAC 2020 process, SNWA proposed an amendment to its MCCP, which would include projects and activities totaling \$3.166 billion. Major candidate projects proposed for inclusion within the MCCP amendment include:

- Horizon Lateral, a proposed new lateral towards the south end of the regional water system to accommodate projected demands and ensure redundancy and reliability in that part of the system. The anticipated facility will have a transmission capacity of more than 400 million gallons per day (MGD).
- Water and wastewater infrastructure for the 11,500-acre Apex industrial park in North Las Vegas.
- Acquisition of new Colorado River water resources through investments in a water recycling project in Southern California or through brackish and ocean water desalination plants.
- Various conservation initiatives to continue progress toward the conservation goal of 105 GPCD by 2035.

Strategic Plan Objectives and Accomplishments

The Executive Management Team oversees and manages the implementation of the strategic plan goals identified by the LVVWD and the SNWA.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Executive Management
Fiscal Year Ending June 30, 2021

Strategic Plan Goal - Assure quality water through reliable and highly efficient systems.

2020-21 Performance Objectives

- Develop and maintain existing state, federal and international partnerships to advance and promote water-related technical development and innovative water-resource solutions.
- Conduct public outreach and Implement IRPAC 2020 recommendations.
- Continue to identify opportunities for increased efficiency and enhanced customer service.
- Continue to work with federal, state and local agencies to develop and operate joint facilities that provide regional solutions to water quality, water supply and environmental issues on the Colorado River.
- Demonstrate national and international leadership in water research, conservation and water quality efforts.
- Implement the LVVWD and SNWA Capital Plans.

2019-20 Major Accomplishments

- The SNWA Board of Directors approved an updated Water Resource Plan in 2019. The plan provides a comprehensive overview of projected water demands in Southern Nevada over a 50-year planning horizon, as well as the resources available to meet those demands over time.
- The SNWA Board of Directors adopted a new 5-year Water Conservation Plan in November 2019. The plan describes the SNWA's current conservation goal and efforts to support that goal, as well as

strategies and tactics for continued water savings.

- Completion of the IRPAC 2020 public participation process and approval of the committee's recommendation report.
- Successful completion of L3PS, on-time and under budget.
- Continued progress on asset management, necessary system expansion and water quality compliance projects provided within LVVWD's 10-year Capital Improvement Plan.

Strategic Plan Goal - Deliver an outstanding customer service experience.

2020-21 Performance Objectives

- Identify and implement further operational and management practices to maintain service levels with greater efficiency.
- Continue implementation and increase use of analytics software to detect potential leaks and notify customers.

2019-20 Major Accomplishments

- A new payment kiosk was installed in the LVVWD customer service lobby, providing customers the opportunity to pay their bill without having to wait in line to speak to a customer care associate. An outdoor drive-up kiosk is also being installed at the LVVWD campus to provide additional convenience and flexibility.
- Continued construction schedule coordination with the City of Las Vegas and Clark County for all major projects occurring throughout the LVVWD's service

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Executive Management
Fiscal Year Ending June 30, 2021

area, resulting in lower costs and reduced traffic impacts.

- Continued outreach to customers through trickle report letters, which are sent to customers whose meters report constant water use—often the sign of an undiscovered on-site leak.

Strategic Plan Goal - Anticipate and adapt to changing climatic conditions while demonstrating stewardship of our environment.

2020-21 Performance Objectives

- Continue leadership on Colorado River issues to ensure Southern Nevada's needs are addressed.
- Participate in national and industry discussions and planning on climate change, including active membership in the Water Utility Climate Alliance.
- Continue effective management of the Spring Valley ranching properties.
- Continue conservation education and incentive programs to maximize available water supplies.

2019-20 Major Accomplishments

- Successful execution of the Drought Contingency Plan.
- Significantly increased water waste enforcement efforts to stimulate sustained water conservation throughout the community.
- Single-family residents converted more than 2.5 million square feet of turf in 2019, resulting in an estimated savings of 156.8 million gallons of water each year.
- Installation of Solar PV carports at the LVVWD campus, which will produce more

than 4,200 MWh per year and offset the campus' overall energy requirements.

Strategic Plan Goal - Develop innovative and sustainable solutions through research and technology.

2020-21 Performance Objectives

- Expedited implementation of Automated Metering Infrastructure to allow for increased efficiency in responding to potential compliance and leak issues.
- Continue to lead the implementation of the Las Vegas Wash Comprehensive Adaptive Management Plan.
- Continue participation with the WaterStart initiative to identify and adopt innovative solutions to water resource challenges.

2019-20 Major Accomplishments

- 13 rebates were given to businesses who participated in the Water Efficient Technologies Program in 2019, which will result in an estimated 66.4 million gallons of water saved each year.
- Continued to support environmental management efforts at the SNWA Northern Resource Properties by putting primary groundwater rights to beneficial use. Ranch staff maintains critical assets and provides services to technical staff conducting research and monitoring activities.
- Development of the Lower Las Vegas Wash Capital Improvements Plan, which outlines planned projects and associated expenses to support the long-term enhancement and management activities of the Lower Las Vegas Wash.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Executive Management
Fiscal Year Ending June 30, 2021

- Continued management of the Warm Springs Natural Area, including aquatic fish habitat restoration, control and eradication of invasive species, fire prevention and general property maintenance. These efforts help to provide mitigation benefits for water development.
- LVVWD received Oracle's Sustainability Award for its Excessive Leak Monitoring program. In the past year and a half, the program has resulted in 91 percent of excessive leak cases being solved in less than 90 days and reduced the number of at-home leak service calls, cutting yearly mileage by 30,000 miles, reducing carbon emissions and netting \$846,020 in truck roll savings in 2019.

Strategic Plan Goal - Ensure organizational efficiency and manage financial resources to provide maximum customer value.

2020-21 Performance Objectives

- Continue to establish and maintain responsible reserve policies to ensure both SNWA and LVVWD can weather unanticipated expenditures and maintain positive bond ratings.
- Continue to evaluate opportunities to save ratepayer dollars through bond refunding and other activities.
- Plan and develop opportunities to increase LVVWD and SNWA investments in alternative and renewable energy supplies.

2019-20 Major Accomplishments

- In July 2019, the SNWA Board petitioned the Clark County Commission to remove

the sunset clause provision on the quarter-cent sales tax for water and wastewater projects. On September 3, 2019 the Clark County Board of Commissioners approved the removal of the cessation date for the quarter-cent sales tax. To date, the sales tax has generated more than \$1.6 billion and has been a stable revenue source for Southern Nevada water and wastewater agencies.

- LVVWD ended fiscal year 2018-19 with \$422 million in reserves, exceeding its fund balance target by 34 percent.
- SNWA ended fiscal year 2018-19 with \$665.3 million in unrestricted reserves, exceeding its fund balance target by 35 percent.

Strategic Plan Goal - Strengthen and uphold a culture of service, excellence and accountability.

2020-21 Performance Objectives

- Ensure continual security and safety of LVVWD and SNWA facilities and promote an organizational climate and culture of safety and security for employees, customers and the community.
- Identify opportunities to strengthen a culture of accountability and efficiency throughout the organization.

2019-20 Major Accomplishments

- The SNWA and LVVWD General Manager John Entsminger was elected to serve a two-year term as President of the Colorado River Water Users Association, a national forum through which Colorado River users exchange ideas and

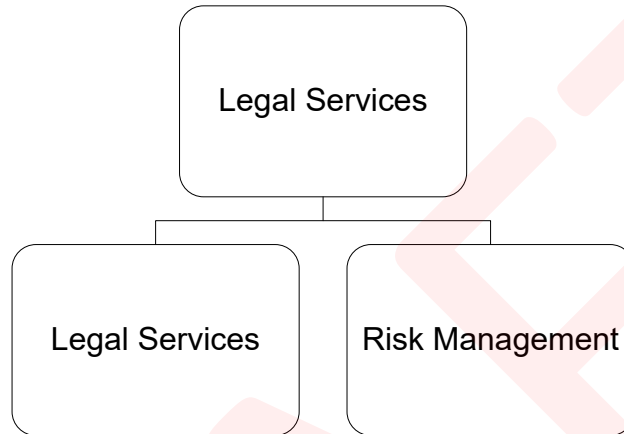
Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Executive Management
Fiscal Year Ending June 30, 2021

perspectives on the use and management of the Colorado River.

- In 2019, LVVWD's Fleet Services division was featured as a "world-class operation" in the Spring/Summer issue of Automotive Service Excellence's *Tech News*. The distinction was earned by maintaining a wide variety of vehicles and equipment, the advanced training and qualifications of the division's employees and the high level of customer service the division provides.
- LVVWD recently rolled out a new comprehensive health and wellness program for its employees. Named "The Ripple Effect," employees have access to a variety of programs to support wellness inside and outside the workplace, including health screenings, walking challenges and mental health classes.

LEGAL SERVICES

Level: 1200



Mission

To provide expert legal counsel in support of the organization's mission, policies, goals and strategies.

Department Description

Legal Services acts as corporate counsel to the organization, providing legal review of policies and procedures to ensure compliance with applicable laws and regulations. The department represents the organization in court proceedings and before administrative boards and hearing panels in a variety of natural resource, property, personnel and other litigation matters. The department reviews contract documents and provides services for land and natural resource acquisitions associated with capital development programs. Legal Services coordinates and monitors efforts of outside counsel who represent the organization. The

department is involved in resource planning and continues to advise on electrical power issues.

The Risk Management division assesses risk and insurance needs on an organization-wide basis, procures appropriate coverage, and manages submitted claims. The department works closely with the General Manager and Deputy General Managers in providing legal advice and in the development and review of proposed legislation and regulations at the local, state, and federal levels.

Budget Objectives and Highlights

Attorneys in the department are performing a steadily increasing practice before Nevada courts, federal courts, and state and federal administrative agencies. The 2020-21 budget contains continuing funding to support these efforts and for outside counsel who perform a variety of other legal services for the organization.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Legal Services
Fiscal Year Ending June 30, 2021

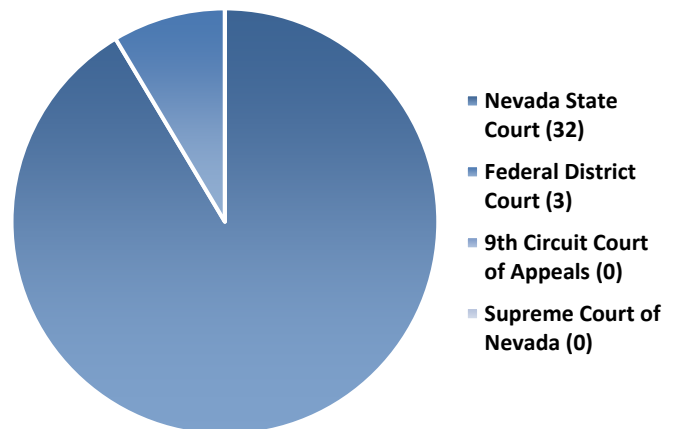
Expenditures

LVVWD Uses	Actual 2018-19	Budget 2019-20	Budget 2020-21
Materials & Supplies	\$ 8,007	\$ 66,950	\$ 63,072
Maintenance & Repairs	10,000	-	-
Rental & Leases	-	-	-
Other Employee Expenses	46,671	90,100	84,144
Other Expenses	1,394,164	3,223,350	3,746,640
Total Operating Expenses	1,458,843	3,380,400	3,893,856
Capital Expenditures	-	-	-
Payroll & Related Costs	1,831,644	1,957,566	2,027,285
Total Department Expenditures	\$ 3,290,486	\$ 5,337,966	\$ 5,921,141
FTE Positions	8.4	8.5	8.5

Department Performance

Representing the organization in litigation is only a small part of what Legal Services does. In addition to litigation, department attorneys support the organization by giving advice and counsel on transactional matters and on sensitive personnel issues.

Pending Litigation Matters
Number of Cases: Federal, State, or
Administrative Forum



Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Legal Services
Fiscal Year Ending June 30, 2021

Strategic Plan Objectives and Accomplishments

Deliver an Outstanding Customer Service Experience

The department will continue to focus on client satisfaction to ensure our internal clients receive highly responsive, clear and accurate legal opinions.

Strengthen and Uphold a Culture of Service, Excellence and Accountability

Legal Services and Risk Management have provided and will continue to provide training sessions to organization staff to develop internal capacity and strengthen the culture of excellence.

2020-21 Performance Objectives

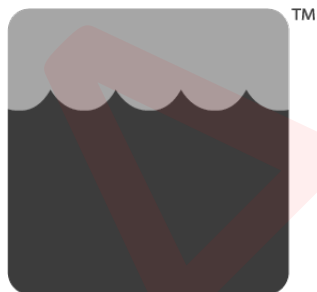
- To be highly responsive to the needs of our clients and provide concise, clear and accurate legal opinions.
- To increase communication between Legal Services and organization staff in a coordinated response to legal issues.
- To provide proactive contract reviews to minimize the threat of extended and costly litigation.
- To take an active role regarding resource acquisition and management with regard to legal issues and strategy concerning water and power.
- To support the organization's Information Governance initiative.

2019-20 Major Accomplishments

- Negotiated water and power resource positions and agreements, as well as renewable resource agreements.
- Kept construction on schedule without costly delays due to litigation and arbitration.
- Prevailed in adversarial proceedings.
- Minimized the need for any construction project condemnations.
- Continued implementation of the District/SNWA Contract Management Software.
- Continued leadership role in several workgroups implementing Minute 323 with Mexico.

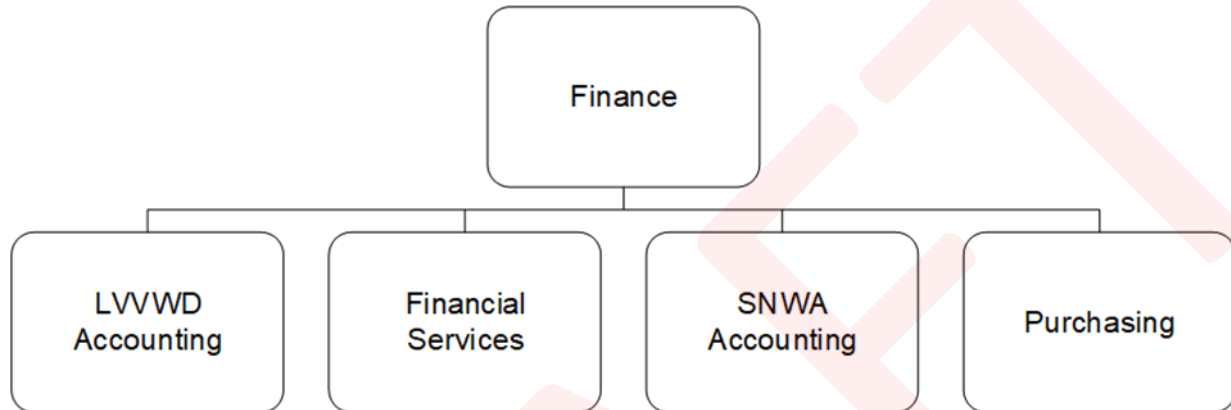
Filed an amicus brief on a water law issue pending before the Nevada Supreme Court concerning the interplay between the public trust doctrine and prior appropriation in Nevada.

This page left intentionally blank



FINANCE

Level: 2100



Mission

Ensure the financial integrity and safeguard the assets of the Las Vegas Valley Water District (LVVWD) and the Southern Nevada Water Authority (SNWA) by providing strategic planning and utilizing effective finance, budgeting, debt management, treasury, accounts payable, and purchasing procedures and processes.

Department Description

The Finance department is responsible for day-to-day accounting, financial reporting, financial planning, debt and treasury management, budgeting, centralized purchasing activities, and all aspects of financial operations of the LVVWD and the SNWA. Following the principles of governmental accounting, the department maintains, on an accrual basis, an Enterprise Fund for the LVVWD and the SNWA and Pension and Other Employee Benefits Trust Funds. In the Enterprise Funds, financial activities are recorded in a similar manner to

that of a private business. The Pension and Other Employee Benefits Trust Funds are used to account for the investments, earnings, contributions, expenses, and projected pension and other employee benefits of the Las Vegas Valley Water District Plans. The department also coordinates the LVVWD's and the SNWA's budget processes in compliance with Nevada State Law. Internal accounting controls, as required under generally accepted accounting principles (GAAP), are strictly enforced for safeguarding property and in preparing financial statements.

The Finance department budget also includes the LVVWD's costs for water supply and charges that are made on behalf of the SNWA (pass-through costs).

Budget Objectives and Highlights

The 2020-21 Finance department budget contains funding to maintain the necessary functions that the LVVWD and the SNWA require to provide quality services to both

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Finance
Fiscal Year Ending June 30, 2021

internal and external customers.

Expenditures

LVVWD Uses	Actual 2018-19	Budget 2019-20	Budget 2020-21
Purchased Water	\$ 91,481,393	\$ 100,814,938	\$ 97,052,127
Materials & Supplies	599,187	767,750	705,792
Maintenance & Repairs	900,652	4,265,500	4,086,720
Rental & Leases	-	2,000	5,280
Other Employee Expenses	44,751	251,300	80,122
Other Expenses*	204,346,290	208,200,072	173,124,730
Total Operating Expenses	297,372,272	314,301,559	275,054,771
 Capital Expenditures	 -	 -	 -
 Payroll & Related Costs	 5,050,880	 6,013,620	 6,012,639
Total Department Expenditures	\$ 302,423,151	\$ 320,315,179	\$ 281,067,410
 FTE Positions	 31.8	 35.3	 34.8

*Includes SNWA Pass-Throughs and Allocations

Department Performance

LVVWD Accounting. The LVVWD Accounting division is responsible for accounting, financial reporting, treasury and debt management, accounts payable, as well as supporting cashiering activities at the Springs Preserve. The division ensures adequate controls over all revenues, expenditures, assets and liabilities, and prepares the LVVWD Comprehensive Annual Financial Report (CAFR). The division provides accounting services for LVVWD, Big Bend Water District (BBWD), Kyle Canyon, Coyote Springs, and three rural systems that are part of the

LVVWD. The division also provides accounting services for the Las Vegas Valley Water District Pension and Other Employee Benefit Plans.

Accounting functions include: ensuring financial statements and reports are accurate, complete and consistent; maintaining the general ledger, inventory, fixed asset and other system records; cash management and the accounting and reporting of investments of the LVVWD's funds; debt management; reconciling bank statements; accounting for the Springs Preserve; accounts receivable, and federal and state agency grant accounting that require preparing and submitting reports to obtain reimbursements.

**Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Finance**

Fiscal Year Ending June 30, 2021

The LVVWD outsources its mail payment remittance processing. The Accounting division researches and resolves mail payment exceptions, records and reconciles payments received by direct debit, electronic funds transfer, credit card payments by phone, internet payments, recurring credit card transactions and payments received from over 150 satellite pay station locations throughout the Las Vegas valley.

The Accounting division is also responsible for monitoring and supporting all cashier functions at the Springs Preserve, including; managing the cash vault, daily preparation, distribution and reconciliation of cashier banks and bank deposits. In addition, Accounting coordinates and processes group sales and vendor payments for special events as well as providing revenue-based reports and analysis for organizational departments.

Financial Services. A broad range of financial services are provided by this division, including oversight of annual budgets; designing, analyzing, and recommending water rates; providing short and long-term financial plans.

Financial Services is responsible for preparing the annual operating and capital budgets for the LVVWD, SNWA, BBWD and Coyote Springs. This includes budget development, implementation and monitoring for the LVVWD, SNWA, and BBWD. Financial Services prepares variance reports by department, and directors are accountable for expenditures over and under budget.

The division also performs a variety of strategic and long-range financial forecasting, financial and water rate scenario analyses and

develops water rates, connection and other fee recommendations for the organization. On an annual basis, this division conducts a survey of water rates from over 50 cities located in the western United States, closely monitors water production and consumption data, and prepares statistical reports.

SNWA Accounting. The SNWA Accounting division is responsible for accounting, financial reporting, treasury and debt management, revenue billing, and various financial analyses. The division ensures adequate controls over revenues, expenditures, assets and liabilities.

The financial reporting includes the SNWA's monthly and quarterly financial statements, as well as, the SNWA's Comprehensive Annual Financial Report and corresponding audit. In addition, the SNWA Accounting division prepares and submits the financial reporting related to grant activities for both the SNWA and LVVWD.

The SNWA Accounting division supports both senior management and other workgroups within the SNWA with financial analysis. Some areas include construction related activities, groundwater management programs, conservation related activities, Las Vegas Wash, energy management, and various water rights related activities.

Purchasing. The Purchasing division is responsible for the centralized purchasing activities of the LVVWD, and the SNWA. These activities include: market analysis, developing and identifying new, expanded or alternative suppliers, systems contracting, formal and informal solicitation/bidding processes, sustainable purchasing, disposition of company property, and the support of a

**Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Finance
Fiscal Year Ending June 30, 2021**

diversified supplier program. The development of supply agreements containing appropriate contract terms and conditions, in conjunction with the Legal department, are an integral function of the Purchasing division. Ensuring compliance with all applicable purchasing statutes, obtaining quality products and services to serve our customers, and cost savings are among the division's priorities.

Strategic Plan Objectives and Accomplishments

By the very nature of its activities, the Finance department either directly or indirectly impacts all the Strategic Plan Goals through the prudent and strategic funding of the various activities and services provided by the LVVWD and the SNWA.

Strategic Plan Goal - Assure quality water through reliable and highly efficient systems.

2020-21 Performance Objectives

- Identify and secure funding for critical infrastructure.
- Provide timely and accurate financial reporting for all capital programs.
- Provide timely and accurate support for the LVVWD, the SNWA and small water system rate proceedings.
- Develop long-term financial plans to ensure a sustainable revenue base to support operations.

Strategic Plan Goal - Deliver an outstanding customer service experience.

2020-21 Performance Objectives

- Continue implementation of a new procure-to-pay system that streamlines the procurement process, creating efficiencies that will allow staff the time to manage their assigned commodities and services more effectively.
- Continue to improve and streamline day-to-day accounting practices, specialized processes, improved financial analyses, reporting, and information sharing to departments.
- Continue to provide the quality products, equipment and services to departments in a timely manner.
- Improve occurrences of achieving the financial month-end close within 30 days of the end of the following month.

2019-20 Major Accomplishments

- Achieved several months of completing the financial month-end closings within 30 days of the end of the following month.
- Vendor selection and contract completion of new procure-to-pay system.
- Expanded use of electronic systems for the submission and analysis of bids for construction, and evaluation of complex Request for Proposals. The ability to submit bids and proposals electronically helped increase competition, and exposure of the LVVWD's contracting activity to a

**Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Finance
Fiscal Year Ending June 30, 2021**

larger supply base, including diverse suppliers.

- Expansion of the Procurement Card program for small dollar purchases to further increase transparency, accountability and efficiency for small dollar purchases and decrease the transactional costs for such items.
- Completed successful transition of Big Bend Water District to the Customer Care & Billing System (CC&B).
- Updated the Purchasing Guidelines to reflect newly implemented local purchasing statutes.

Strategic Plan Goal - Develop innovative and sustainable solutions through research and technology.

2020-21 Performance Objectives

- Implement a new technology tool and accounting procedures to ensure compliance with GASB 87 leases.
- Implement the transaction matching module in Blackline for SNWA.
- Increase use and training of Splash BI Publishing and GL Connect reporting tools to improve reporting and automation technology to provide more timely information for management to make decisions, increased employee efficiency, better control of the approval/authorization process and to maximize vendor discounts.
- Actively participate in defining financial information requirements to new system project management information system, continued enhancements and upgrades to CC&B, and Workday software.

2019-20 Major Accomplishments

- Completed a major system upgrade to the Oracle System.
- Implemented Workiva financial reporting software to automate and add efficiencies to the LVVWD and SNWA CAFR preparations.
- Implemented Sympro Debt Management software to improve debt management accounting, reporting, and analysis for LVVWD and SNWA.
- Fully implemented the accounts payable automation system to streamline and introduce workflow to the processing of invoices.
- Automated several manual processes through implementation of automated workflow solutions to improve accuracy and efficiency of payment processes.
- Created a new internal financial forecasting model to enhance and support the organization's long-term planning efforts.
- Entered implementation phase of a new procure-to-pay system.

Strategic Plan Goal - Ensure organizational efficiency and manage financial resources to provide maximum customer value.

2020-21 Performance Objectives

- Issue the Las Vegas Valley Water District General Obligation (Limited Tax) (Additionally Secured by Pledged Revenues) Series 2020C Water Refunding Bonds to acquire \$100 million of new monies to fund the next tranche of the District's capital

**Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Finance**

Fiscal Year Ending June 30, 2021

- improvements plan.
- Implement technological changes and new practices to ensure the processing of SNWA vendor payments directly from its own funds.
 - Continue the Finance department's long-standing record of excellence in budgeting and financial reporting.
 - Continue to enroll vendors and develop payment opportunities for credit card program to increase the credit card rebate.
 - Complete implementation and go-live of the new procure-to-pay system that will increase the overall efficiency of the procure-to-pay process.

2019-20 Major Accomplishments

- The long-term credit ratings of AA+/Stable were affirmed by Standard and Poor's and Moody's affirmed their Aa1/Stable rating. These ratings help keep rates affordable and acknowledge the LVVWD's strong financial management practices and policies, maintenance of robust cash reserves, and continued economic growth in the Las Vegas area.
- Issued the Las Vegas Valley Water District General Obligation Bonds (additionally secured by SNWA Revenues) Series 2019B Refunding Bonds generating net present value savings of \$10.7 million.
- Issued the Las Vegas Valley Water District General Obligation (Limited Tax) (Additionally Secured by SNWA Pledged Revenues) Series 2020A Water Refunding Bonds taking advantage of historically low interest

rates to convert variable rate debt to fixed rate debt.

- Issued the Las Vegas Valley Water District General Obligation (Limited Tax) (Additionally Secured by Pledged Revenues) Series 2020B Water Refunding Bonds generating net present value savings of \$6.0 million.
- Issued the Las Vegas Valley Water District General Obligation (Limited Tax) (Additionally Secured by Pledged Revenues) Series 2020D Water Refunding Bonds taking advantage of historically low interest rates to convert variable rate debt to fixed rate debt.
- Processed approximately 41,000 vendor payments annually, earning more than \$233,000 in discounts on invoices processed in fiscal year 2018-19, and achieved a rebate of \$83,000 on annual credit card spend.
- Updated the Capitalization Policy including the early adoption of GASB Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*, which eliminates interest capitalization incurred before the end of a construction period.
- Fully implemented DocStar, an accounts payable automation and workflow system that increases employee efficiency, better controls the approval/authorization process and maximizes vendor discounts.
- Provided comprehensive financial planning and analytical support for the SNWA's Integrated Resource Planning Advisory Committee 2020.

**Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Finance
Fiscal Year Ending June 30, 2021**

Strategic Plan Goal - Strengthen and uphold a culture of service, excellence and accountability.

Capital Budgets for the year beginning July 1, 2019.

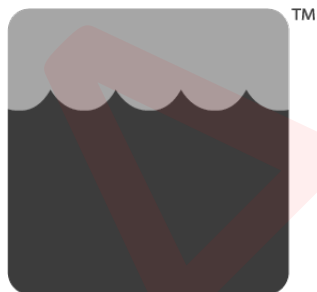
2020-21 Performance Objectives

- Submit the LVVWD and SNWA CAFR for the year ending June 30, 2020, to the Government Finance Officers Association (GFOA) to receive the Certificate of Excellence in Financial Reporting.
- Receive unmodified opinions from external auditors for the LVVWD, SNWA and BBWD fiscal year 2020 audits.
- Receive the Distinguished Budget Presentation Award from the GFOA for the LVVWD and SNWA Operating and Capital Budgets for the year ending June 30, 2021.

2019-20 Major Accomplishments

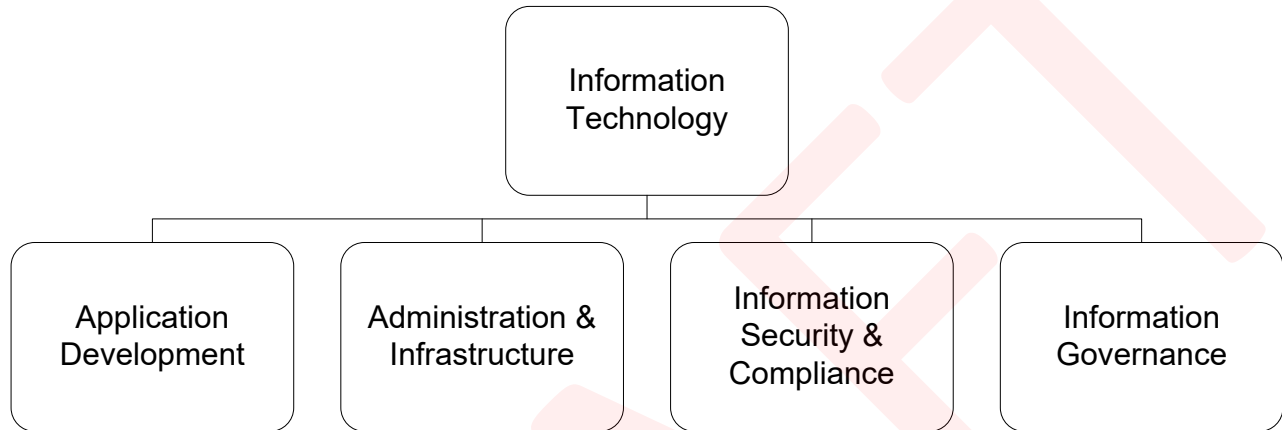
- Received the Certificate of Excellence in Financial Reporting from the GFOA of the United States and Canada for the forty-first (41st) consecutive year for the LVVWD CAFR for the ended June 30, 2019.
- Received the Certificate of Excellence in Financial Reporting from the GFOA for the twenty-fourth (24th) consecutive year for the SNWA CAFR for the year ended June 30, 2019.
- Received an unmodified opinion from external auditors for the LVVWD, SNWA and BBWD fiscal year 2019 audits.
- Received the Distinguished Budget Presentation Award from the GFOA for the LVVWD and SNWA Operating and

This page left intentionally blank



INFORMATION TECHNOLOGY

Level: 2300



Mission

Establish a leadership position by the use and support of leading information technologies while making customer service the top priority.

Department Description

The Information Technology department is responsible for the Las Vegas Valley Water District's (LVVWD), Southern Nevada Water Authority's (SNWA), Springs Preserve's, and the Big Bend Water District's (BBWD) acquisition, administration, and maintenance of software products, installation and maintenance of all computer-related and office management hardware products, cybersecurity, Payment Card Industry (PCI) Compliance, Geographic Information Systems (GIS), telecommunications and the organization's Information Governance Initiative. The department is also responsible

for the acquisition and maintenance of spatial data in support of ongoing projects, such as the Clark County Imagery Project. Specific support activities are noted for each division herein.

The Information Technology Steering Committee was established in 2015 and is comprised of customer representatives throughout the organization. The committee evaluates projects relative importance using an objective and quantifiable system that directs Information Technology initiatives to meet business needs.

Budget Objectives and Highlights

The 2020-21 Information Technology department budget contains funding to continue the development and implementation of technology projects and provide daily operational support to the LVVWD, SNWA, the Springs Preserve, and BBWD information technology systems.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Information Technology
Fiscal Year Ending June 30, 2021

Expenditures

LVVWD Uses	Actual 2018-19	Budget 2019-20	Budget 2020-21
Materials & Supplies	\$ 1,482,295	\$ 1,750,700	\$ 1,981,968
Maintenance & Repairs	8,486,167	9,472,055	9,062,056
Rental & Leases	580,500	750,000	708,960
Other Employee Expenses	244,488	424,959	373,636
Other Expenses	4,816,608	5,507,070	6,628,560
Total Operating Expenses	15,610,059	17,904,784	18,755,180
 Capital Expenditures	 3,134,905	 7,236,000	 14,496,007
 Payroll & Related Costs	 17,168,856	 21,073,327	 19,674,126
 Total Department Expenditures	 \$ 35,913,819	 \$ 46,214,111	 \$ 52,925,313
 FTE Positions	 94.6	 103.0	 95.4

Department Performance

Information Technology completed many projects to improve business processes, functionality, system operations, and security, while reducing expenses and risk to the organization. Major projects during the year included the completion of the first phase of the Workday Human Capital Management System, upgrade of network storage, implemented the Genesys Contact Center and new CityBase payment kiosk for LVVWD and BBWD, continuation of the PC/monitor refresh program, development of a new Conservation system to manage Water Smart Landscapes program, deployment of a business intelligence system, completion of the 2019 Clark County Imagery Project, and

completion of the Spatial Information Portal (SIP) GIS application.

Information Technology Application Development. This multi-division team performs software development, upgrades and version testing, and validation of key operational systems utilized throughout the organization.

Systems supporting Finance, Customer Care, and Engineering are targeted for upgrades and enhancements.

A new purchasing system will be implemented that will streamline the procure-to-pay functions and centralize purchasing processes. The project is scheduled to be completed by May 2021.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Information Technology
Fiscal Year Ending June 30, 2021

Implementation of a new customer care, billing and meter management system continues. The new system combines utility customer management (i.e. accounts, rates and billing, payments, credit and collection, field activities) with support for advance metering infrastructure (i.e. device inventory, device testing, usage and event data and smart meter commands). The system will enhance customer service, better support conservation initiatives, further optimize service response and improve device management.

Application Development will continue to provide support for the Project Management Information System (PMIS). PMIS, a multi-year project, includes technology that supports a more consistent and efficient capital program and project delivery for Engineering. Implementation of a program portal and data warehouse to combine active projects and legacy projects are among the deliverables planned. PMIS will consolidate processes, improve workflow and eliminate legacy applications. The project is on schedule and on budget with functionality being moved into production regularly.

Application Development is creating a new customer-facing mobile application for iPhone Operating System (iOS) and Android devices that features billing information and payment options, push notifications, and watering group information.

Further enhancements are planned to systems recently implemented. These include new features for the Financials systems to better support capital project, lease and debt management.

Ongoing support will continue to be provided to Operations and Water Quality staff through effective delivery of Supervisory Control and Data Acquisition (SCADA) information required for compliance, metrics, and performance monitoring.

Information Technology Administration and Infrastructure. This multi-division team is comprised of the Customer Support division, the Technical Services division, and the Spatial Technologies division.

The Customer Support division is responsible for many diverse functions within the company. This group supports desktops, field and personal laptops and all supporting desktop applications. This group provides remote and on-site support for over 4,000 computers, monitors, and printers, as well as over 1,000 applications, on all company desktop and laptop devices.

The Technical Services division is responsible for application administration of business systems utilized throughout the organization. It is also responsible for the architecture and administrative support for the corporate infrastructure to include server, storage, and database administration, e-mail, web services, network infrastructure, and the telecom group. Additionally, this division is responsible for the maintenance of the SCADA systems for LVVWD, SNWA, and BBWD and the Laboratory Information Management System (LIMS).

Enterprise application support focuses on providing uninterrupted application services to customers, while providing for planned and unplanned infrastructure outages. Efforts encompass design and implementation of off-

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Information Technology
Fiscal Year Ending June 30, 2021

site redundant configurations for critical applications, formalized change management processes, quality assurance testing procedures, and implementation of proactive monitoring and alerting tools.

Major on-going initiatives include continued implementation of Genesys contact center features, including the introduction of chat and SMS communications, selection and beginning implementation of new LIMS, upgrade of the corporate wide area network backbone to support 100 GB between campuses, and upgrades to the enterprise backup and recovery infrastructure.

The Spatial Technologies division is responsible for the acquisition and delivery of high-resolution imagery, GIS application development and maintenance. GIS data management, and infrastructure to support the organization.

Ongoing initiatives include acquisition of very-high resolution imagery for the multi-agency Clark County Imagery Project, acquiring imagery of the Muddy and Virgin Rivers in concert with the Intentionally Created Surplus (ICS) project for the Bureau of Reclamation, continued upgrades for GIS infrastructure, upgrading SIP and other GIS applications, and mapping support for a wide range of projects important to the organization.

Information Security and Compliance. This team was formed in July of 2016 to ensure strong and continued focus on cybersecurity and PCI compliance. Major emphasis will continue to be on cybersecurity as world-wide security breaches increase at an alarming rate. Significant effort will continue to be directed toward providing an operationally stable and

secure computer system and infrastructure, developing strategies with Legal and Risk Management to reduce and manage cyber risk, as well as educating employees on cybersecurity topics.

Ongoing initiatives include continued work to promote off-site disaster recovery capability, allowing continuous service and business continuity, defense against cybersecurity threats and vulnerabilities, identification and management of risks, delivering cybersecurity awareness briefings, providing guidance on system upgrades and/or replacements to critical infrastructure, implementation of technology to meet required PCI Data Security Standards (PCI-DSS), capacity planning to increase network performance and efficient data storage, recommending best practices to ensure high availability of applications and databases, support to mobile devices, as well as developing and refining processes to support secure infrastructure.

Security efforts include continual review and enhancement to security procedures, monitoring for cyber threats, managing vulnerabilities in addition to promoting the timely application of security patches, and establishing audited/controlled system and data access for Data Loss Prevention (DLP). In addition, the division focuses on ensuring software technologies and business processes meet the continuously evolving PCI-DSS requirements.

Information Governance. This division was formed in July of 2016. The distributed nature of data assets at the organization is becoming increasingly complex. In part, Information Governance (IG) strives to support the

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Information Technology
Fiscal Year Ending June 30, 2021

organization in optimizing the management and use of its data.

Additional projects include conducting an IG audit and outreach efforts, supporting and extending the document imaging program, such as the RedEye initiative and other engineering efforts, working with various departments on records-related issues and coordinating with Legal and Public Information on the responsive delivery of public records requests.

During 2020-21, implementation of an Enterprise Content Management System (ECMS) will be one of the key deliverables for Information Governance. This system will be comprised of strategies, methods and tools used to manage information throughout its useful life cycle within the organization. The ECMS will also facilitate the tracking of information and data contained in disparate silos and provide a platform for achieving compliance and improved governance of this data.

Strategic Plan Objectives and Accomplishments

Information Technology provides support to all departments to achieve Strategic Plan goals through the acquisition, development, administration, and maintenance of technology-related products and services.

Strategic Plan Goal – Deliver an outstanding customer service experience.

2020-21 Performance Objectives

- A new system will be implemented that combines utility customer

management with support for advance metering infrastructure. The system will enhance customer service, better support conservation initiatives, further optimize service response and improve device management.

- Implement a mobile application that will improve customer service by providing account information on a mobile device, view historical usage, allow customers to make payments on the go, and provide information on watering groups and conservation information.
- Installation of hardware to provide an infrastructure needed to replace legacy customer billing environment.

2019-20 Major Accomplishments

- New kiosks were added for LVVWD and BBWD customers to provide enhanced self-service options for in-person payments.
- Completion of the first full 3-year cycle of the desktop and monitor refresh project, which has increased staff efficiency and reduced downtime and labor/maintenance cost.
- Migration of Microsoft Office cloud platform to utilize new features and automation.
- Upgrade of legacy server and desktop operating systems.
- Integration of applications with a cloud-based directory service.
- Network core upgrades and expansion of network capabilities.

**Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Information Technology
Fiscal Year Ending June 30, 2021**

Strategic Plan Goal – Ensure organizational efficiency and manage financial resources to provide maximum customer value.

2020-21 Performance Objectives

- A new purchasing system is being implemented that will streamline the procure-to-pay functions and centralize purchasing processes. The implementation project is scheduled to complete early in the second quarter of 2021.
- A multi-year effort will continue to develop a new engineering PMIS. Implementation of a program portal and data warehouse to combine active projects and legacy projects are among the deliverables planned. PMIS will consolidate processes, improve workflow and eliminate many legacy applications.
- Replace Customer Care Communications and Contact Management infrastructure to provide a stable and reliable work environment, introduce current and next generation multi-media technology, and improve the overall customer experience by providing additional automation and contact options.
- Continue adding new functionality and enhancements to the SIP GIS Application, including upgrading existing GIS facilities database to more modern networking system, as prioritized by the GIS Workgroup comprised of staff across the Organization. Upgrade the current LIMS software to the latest release to support the Water Quality and

Research Lab to allow better automation, data reporting, workflows, and instrument integration.

- Upgrades to the Corporate Business Storage platform to allow for future application data growth and replacement of end of life network storage arrays/platforms.

2019-20 Major Accomplishments

- The Financial Management System was upgraded to ensure continued system stability.
- Computers used to collect Water Resource data were upgraded and multiple legacy applications were retired to better leverage field computer functionality and to consolidate all necessary functionality into one platform.
- Completed the upgrade of our enterprise print and fax capabilities to the next generation of newer printer features and integration of fax capabilities, which advanced the organization from analog to digital fax, reducing overall print costs and increased staff efficiency.
- Implemented the Genesys Contact Center, which included a new IVR with customer payment portal, Workforce Management, and Quality Management applications.
- Completed the implementation of new CityBase payment kiosk in both the Valley View and Big Bend customer lobbies.
- Completed major application upgrades for Avantis and FMMS.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Information Technology
Fiscal Year Ending June 30, 2021

- Completed the replacement of the corporate backup infrastructure to streamline backup policies, remove obsolete data stores, and provide enhanced disaster recovery options.
- Review of all projects and development of prioritization ranking of Information Technology initiatives and projects by the Information Technology Steering Committee.
- Completed the upgrade of the Corporate Oracle Database to support the future upgrades to critical business applications and position the organization for DevOps.
- Replaced existing facilities mapping application with SIP to improve ability to meet long-term management of water infrastructure assets and mapping needs.
- Implemented technology to govern the creation of cloud-based Microsoft Office resources.
- Replacement of legacy network load balancers with hardware that provides high availability and integrates with DevOps deployments.

Strategic Plan Goal – Strengthen and uphold a culture of service, excellence and accountability.

2020-21 Performance Objectives

- Make numerous enhancements to cybersecurity which include the implementation of additional threat monitoring tools and further data separation to achieve PCI compliance 3.2.
- The Aquarius system used to manage water resource and water quality data

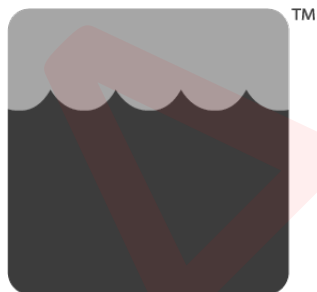
will be upgraded and served in the cloud to optimize availability and provide an interactive online portal for internal and external stakeholders.

- Begin implementation of a new LIMS application for the River Mountains Lab. The new application is scoped to have minimal customizations and provide high availability and compliance monitoring.
- Complete 2021 Clark County Imagery Project, including acquisition, performing quality assurance, and making imagery available to internal customers and to external partner agencies.

2019-20 Major Accomplishments

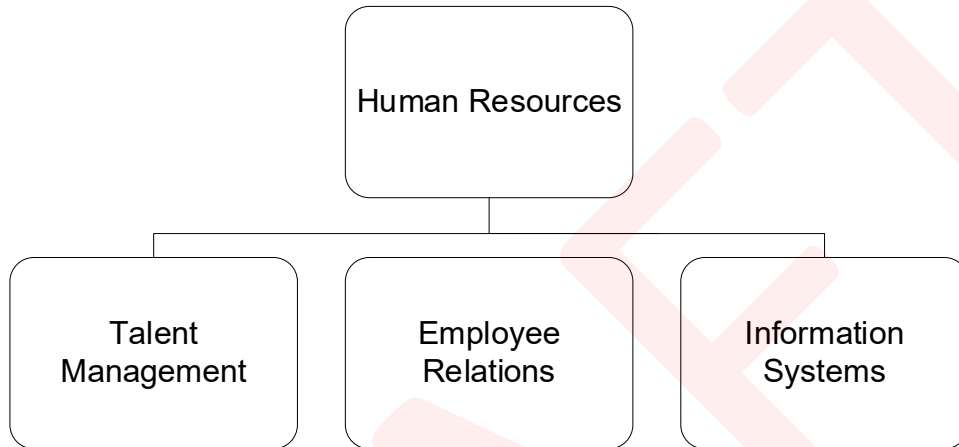
- The organization's decade-old intranet system was updated and modernized to meet emerging technology and business challenges such as a mobile workforce. The new system allows employees to securely access their business applications and data from anywhere in the world using any device including their cell phones.
- Continued implementation of Agile methodology throughout Information Technology utilizing both Scrum and Kanban principles to enhance interdepartmental collaboration and improve bidirectional customer communications.
- Completed 2020 Clark County Imagery Project, delivering very-high resolution imagery for internal customers and external partner agencies.

This page left intentionally blank



HUMAN RESOURCES

Level: 2400



Mission

To recruit, develop and retain the best employees to accomplish the organization's vision, mission and goals in accordance with the organization's values and ethics.

Department Description

The Human Resources department is responsible for payroll, recruitment and selection; engagement and employee development; employee relations; benefit plans; compensation and classification plans for the Las Vegas Valley Water District (LVVWD) and the Southern Nevada Water Authority (SNWA). The department also administers fair employment policies and procedures and negotiates all collective bargaining agreements. Presently, there are three service groups within the department: HRIS, Employee Relations, and Talent Management.

Budget Objectives and Highlights

The Human Resources department continues to monitor budgetary expenditures, while still pursuing its efforts towards progress with the Human Capital Management System, Talent Management program, diversity and inclusion, recruitment, engagement, employee development, and productive employee relations.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Human Resources
Fiscal Year Ending June 30, 2021

Expenditures

LVVWD Uses	Actual 2018-19	Budget 2019-20	Budget 2020-21
Materials & Supplies	\$ 22,679	\$ 150,500	\$ 120,480
Maintenance & Repairs	-	500	480
Other Employee Expenses	330,124	393,000	507,840
Other Expenses	1,568,496	1,417,100	1,253,856
Total Operating Expenses	1,921,299	1,961,100	1,882,656
Capital Expenditures	-	-	-
Payroll & Related Costs	3,379,582	4,304,736	4,751,591
Total Department Expenditures	\$ 5,300,881	\$ 6,265,836	\$ 6,634,247
FTE Positions	21.3	25.6	26.4

Department Performance

Talent Management. Provides recruitment and selection services; strategies to increase employee retention, employee engagement and opportunities for professional and personal development. This group develops and administers recruitment and selection methods. This group also recruits and staffs the volunteers for the Springs Preserve.

Employee Relations. Responsible for light duty and return to work program; administration of collective bargaining agreements; consultation regarding federal, state and local employment laws; and internal mediation services designed to

improve communication and understanding between employees. Provides support for HR management programs, activities and processes.

HR Information Systems. Responsible for the administration of various employee benefit plans and all employee personal records and payment data. Responsible for the administration and support of the Human Capital Management System (Workday) for the organization. This team processes payroll and benefits, prepares data in response to Workday requests for employee information; implements organizational changes; provides employee application training and bi-annual updates.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Human Resources
Fiscal Year Ending June 30, 2021

Strategic Plan Objectives and Accomplishments

The Human Resources department provides a foundation for all departments to reach the goals of the Strategic Plan through appropriate recruitment; employee engagement; and productive employee relations. The Human Resources department is dedicated to supporting work environments where employees are encouraged to perform at their highest potential.

Strategic Plan Goal – Strengthen and uphold a culture of service, excellence and accountability.

Strategic Plan Goal – Ensure organizational efficiency and manage financial resources to provide maximum customer value.

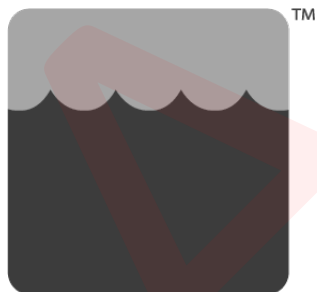
2020-21 Performance Objectives

- Continue implementation of Workday modules, including Prism/People Analytics and Workday Expenses.
- Implement Milliman MARC system for employee retirement planning and projections.
- Launch/deploy robust recognition program (Bucketlist).
- Develop opportunities that support the professional advancement and leadership skill of employees (TAP and mentoring).
- Integrate recruitment, engagement and development into comprehensive talent management strategy.

2019-20 Major Accomplishments

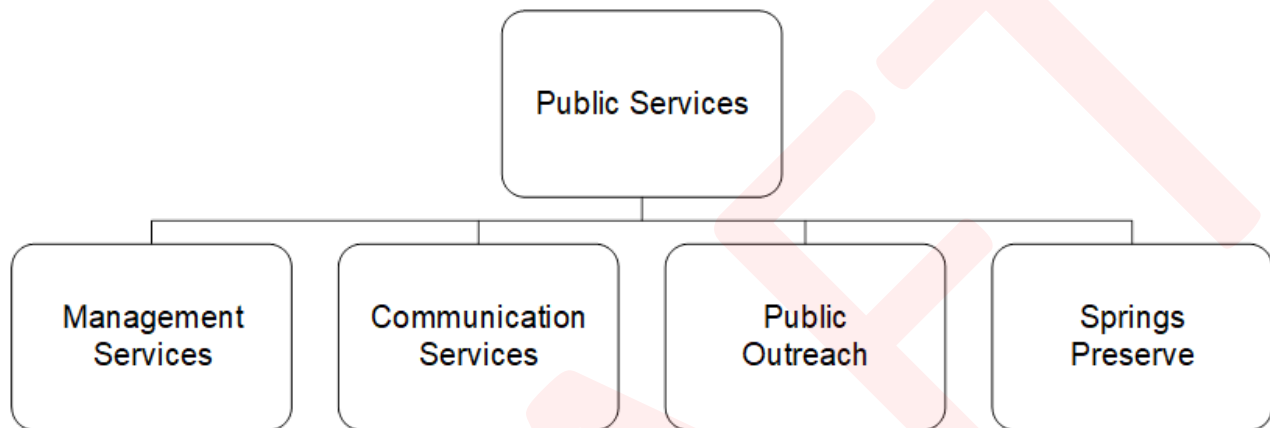
- Coordinated the successful implementation of Workday Modules, including e-learning and training in cooperation with Management Services.
- Conducted Workday 33 and Workday 34 upgrades.
- Implemented new and streamlined onboarding and employee orientation.
- Completed the evaluation of the Engineering and Administration management through the new Talent Management program.

This page left intentionally blank



PUBLIC SERVICES

Level: 2500



Mission

The Public Services Department is responsible for communicating the organization's goals and initiatives to the community and educating the public about water issues. This effort is accomplished through government relations, stakeholder and customer outreach, and operation of the Springs Preserve.

Department Description

The department is comprised of four divisions: Management Services; Communication Services; Public Outreach; and the Springs Preserve.

Together, the four divisions work together to support customer service efforts to the organization's internal and external customers, and communicate organizational initiatives to various audiences.

The Management Services division oversees the organization's government affairs, agenda processes, public participation efforts and provides expert analysis and support to senior management.

Communication Services is responsible for communicating organizational messaging through the development and maintenance of websites, social media platforms, video production, and numerous printed materials such as bill inserts.

The Public Outreach division is responsible for providing information to the media and customers. The division also executes special events, including those at the Springs Preserve and the WaterSmart Innovations conference.

The Springs Preserve aims to build community, inspire environmental stewardship, and celebrate the vibrant history of the Las Vegas Valley.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Public Services
Fiscal Year Ending June 30, 2021

Expenditures

LVVWD Uses	Actual 2018-19	Budget 2019-20	Budget 2020-21
Materials & Supplies	\$ 822,978	\$ 1,215,260	\$ 974,042
Maintenance & Repairs	576,367	827,965	826,205
Rental & Leases	12,127	27,000	28,800
Other Employee Expenses	211,382	240,223	285,986
Other Expenses	4,364,958	4,734,027	4,656,722
Total Operating Expenses	5,987,811	7,044,475	6,771,755
Capital Expenditures	463,461	3,302,500	4,465,000
Payroll & Related Costs	8,549,822	10,327,626	10,807,049
Total Department Expenditures	\$ 15,001,095	\$ 20,674,601	\$ 22,043,804
FTE Positions	66.5	75.3	77.0

Budget Objectives and Highlights

The 2020-21 budget remains consistent with the organization's efforts to enhance efficiency and service to internal and external customers.

Department Performance

In fiscal year 2019-20, the Public Services Department continued efforts to provide outstanding service and support of organizational initiatives and priorities:

Management Services. Management Services is responsible for board administration, special events, tours, meeting monitoring, presentations, coordination of special processes and offering support to

organizational initiatives through a wide variety of activities.

In the last fiscal year, the division successfully spearheaded the effort to pass Assembly Bill 84, which reauthorizes state general obligation bonds for the preservation and protection of cultural heritage and natural resources throughout the State. Part of the reauthorization of the bill includes \$30 million for further development of the Springs Preserve.

Management Services prepared briefing materials that supported the removal of the cessation date for the quarter-cent sales tax that has been vital in funding reliable and secure water systems.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Public Services
Fiscal Year Ending June 30, 2021

The division also supported the IRPAC 2020 process that was established to look at long-term water planning efforts and develop recommendations for infrastructure, water resources, rates, water conservation and out-of-valley water use.

Management Services also supports the organization's development activities through grant development and Springs Preserve fundraising activities to offset programming, capital and operational expenses. In the last fiscal year, more than \$1 million was secured for the organizations.

Communication Services. Communication Services is responsible for developing materials that reach customers through web, social media, television, email and print. Over the past year, the division produced a direct mail campaign – consisting of year-round water schedules and seasonal compliance reminders – sending more than 2.5 million reminders directly to residential properties. The direct mail campaign was an integral part of the larger advertising effort that achieved a 95 percent awareness of seasonal watering restrictions among residential water customers.

Communication Services also recently launched an SNWA Nextdoor account to expand the reach of watering compliance, conservation and water quality messaging to neighborhoods throughout the valley. In this fiscal year, the LVVWD's social media channels experienced an 84 percent growth in followers, and SNWA's social media followers grew by 36 percent. Social media messaging about reporting water waste reached 1.5 million people during this fiscal year.

Public Outreach Programs. The Public Outreach Division is responsible for developing and implementing public awareness and education campaigns that support and advance organizational initiatives, managing external communications with media and journalists, and coordinating the Springs Preserve's cultural and community events.

Recent outreach efforts include the development of integrated communication campaigns for the SNWA and LVVWD to advance water conservation and water waste awareness among residents and businesses in the community. Last year, SNWA developed and launched the "Reality Check" campaign, which reminded the community about seasonal watering restrictions through a strategic partnership with the Vegas Golden Knights and professional hockey player, Ryan Reaves. As a result, customers demonstrated a 40 percent improvement in recalling the right number of fall watering days, which is a strong indicator of compliance with the restrictions.

SNWA also developed the "Founders of the Future" campaign last year that highlights local businesses and HOAs that have participated in water conservation programs.

The LVVWD developed and launched the "Wasted Water" campaign in summer 2019. The campaign focused on increasing public participation in reducing water waste, converting useless turf, and addressing leaks on the property. This campaign supplements the "Reality Check" and is intended to reinforce conservation messaging and increase awareness about water waste prevention.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Public Services
Fiscal Year Ending June 30, 2021

Springs Preserve outreach included the development of a marketing campaign to promote group sales, rental space, and other third-party rental offerings.

Additionally, the division managed more than 100 inquiries and records requests from a variety of local, national and international news organizations throughout the past year.

Springs Preserve. Springs Preserve staff is responsible for overall facility operations and developing programs and events that enhance the visitor experience. Bringing community members of all ages together is part of the Preserve's Mission, and the Preserve hosted more than 31,000 students in Clark County throughout the year. In addition, volunteers continue to play a crucial role and in this fiscal year, the Preserve received over 30,000 volunteer service hours from individuals in the community, schools, churches and corporations. Furthermore, the Springs Preserve opened the new Mariposa Playground for children with the assistance from state funding. The community has taken notice of the efforts and commitment as the Springs Preserve received the Award of Excellence Hall of Fame from TripAdvisor.

Strategic Plan Objectives and Accomplishments

The Public Services Department is committed to accomplishing the goals and objectives set forth within the organization's Strategic Plan. While the department is not solely responsible for one goal, it works to support each goal through the coordination and administration of support functions.

Strategic Plan Goal – Assure quality water through reliable and highly efficient systems.

2020-21 Performance Objectives

- Provide a high-quality water supply and delivery system that is safe, sustainable and promotes the vitality and prosperity of the community.
- Maintain high levels of reliability through the application of a sufficiently funded asset management program.
- Continually improve operating efficiencies by benchmarking to leading industry standards.
- Ensure a high quality of local and regional water resources through comprehensive water quality and watershed management.

2019-20 Major Accomplishments

- Supported legal efforts required for the removal of the cessation date for the quarter-cent sales tax that has been vital in funding reliable and secure water systems.
- Continually working with the U.S. Army Corps of Engineers to reallocate funds for water and wastewater system improvements.

Strategic Plan Goal – Deliver an outstanding customer service experience.

2020-21 Performance Objectives

- Assess customer satisfaction, establish benchmarks and determine where improvements are required.
- Continuously improve service processes and practices based on customer assessments.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Public Services
Fiscal Year Ending June 30, 2021

- Utilize appropriate technology to simplify and improve the customer experience.
- Monitor other organizations and industries to identify innovations, best practices and ways to improve the customer experience.

2019-20 Major Accomplishments

- Continued an active Springs Preserve social media program designed to increase attendance and revenue. Social media posts received 13.8 million impressions; more than 300,000 engagements; 49,693 link clicks; and 757,995 video views during the first seven months of the 2019-2020 fiscal year.
- Public Information launched three successful educational outreach campaigns to encourage water-use reduction by residents and businesses.
- Responded to approximately 478 phone inquiries on the Groundwater Information Line.
- Supported the execution of more than six community-wide special events at the Springs Preserve.

Strategic Plan Goal – Anticipate and adapt to changing climatic conditions while demonstrating stewardship of our environment.

2020-21 Performance Objectives

- Enhance understanding of climate change impacts among ourselves and our stakeholders.
- Conduct long-term water resources and facilities planning to ensure adequate resources are available when needed.

- Champion innovative water efficiency initiatives to maximize beneficial use of resources.
- Incorporate sustainable best practices into organizational initiatives and inspire positive change.

2019-20 Major Accomplishments

- Continued support of the Sustainability Cross-Departmental Team (CDT) to examine internal processes and develop sustainable practices within the organization.
- Secured \$3,000,000 in state funding to remodel the Springs Preserve's Sustainability Gallery, start design work of the Origen Museum remodel and construct a new conservation center.
- Supported the IRPAC 2020 process, in which the committee examined Southern Nevada's long-term water planning efforts and develop recommendations for infrastructure, water resources, rates, water conservation and out-of-valley water use.

Strategic Plan Goal – Ensure organizational efficiency and manage financial resources to provide maximum customer value.

2020-21 Performance Objectives

- Increase customer communication so there is a better understanding of the organization's products and services.
- Ensure predictable rates that are aligned with community expectations.
- Establish and utilize benchmarks to explore new opportunities for improved efficiencies.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Public Services
Fiscal Year Ending June 30, 2021

- Formulate risk assessments and develop alternatives for expenditure decisions.

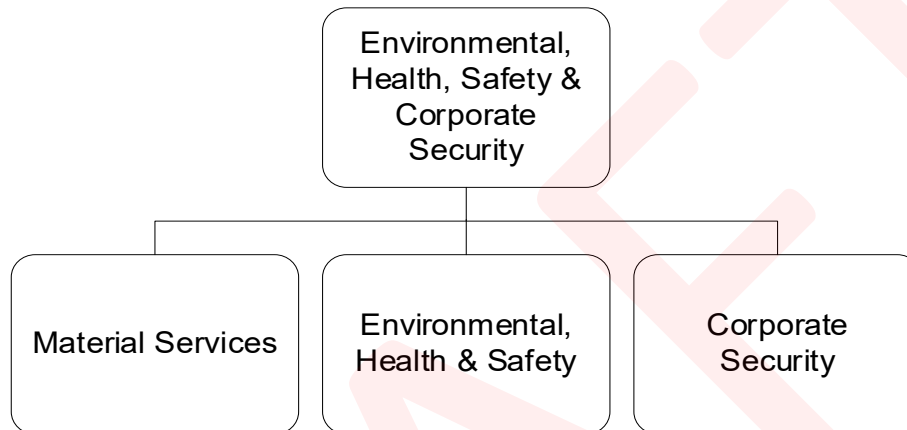
2019-20 Major Accomplishments

- The Legislative Team successfully took the leading role to pass Assembly Bill 84, which reauthorizes the State to sell bonds for the preservation and protection of cultural heritage and natural resources throughout Nevada. As part of the reauthorization, \$30 million from bond proceeds will go towards the Springs Preserve.
- Supported the process for the removal of the quarter-cent sunset clause.
- Supported development of an amended SNWA Major Construction and Capital Plan.
- Supported the IRPAC process that resulted in inflation-based rate increases.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Environmental, Health, Safety & Corporate Security
Fiscal Year Ending June 30, 2021

ENVIRONMENTAL, HEALTH, SAFETY & CORPORATE SECURITY

Level: 2700



Mission Statement

Provide a safe, secure environment and supply logistical services to employees, customers and the community.

Department Description

The Environmental, Health, Safety & Corporate Security (EHSCS) department works to ensure organizational compliance with all applicable statutes; maintain the safety and security of our employees, facilities and customers, as well as a high performance environmental, health and safety (EHS) culture; and develop strategies and programs to eliminate or mitigate risk and cost exposure.

Material and Mail Services delivers reliable customer service by providing quality operating and maintenance products, material requirements planning, inventory management, and storage and retrieval services.

Budget Objectives and Highlights

The 2020-21 EHSCS budget contains the funding necessary to support the safety and security of our organization's workforce, customers and facilities. Our departmental strategic planning efforts have allowed us to streamline processes and reduce costs.

Material Services supports sustainability through inactive and obsolete inventory reduction activities and use of repurposed shipping materials, and administers, coordinates and manages investment recovery efforts for various recyclable and repurposed equipment and material through the auction program and bid sales.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Environmental, Health, Safety & Corporate Security
Fiscal Year Ending June 30, 2021

Expenditures

LVVWD Uses	Actual 2018-19	Budget 2019-20	Budget 2020-21
Materials & Supplies	\$ 440,979	\$ 1,023,000	\$ 982,080
Maintenance & Repairs	150,667	190,000	184,320
Rental & Leases	25,389	25,000	24,000
Other Employee Expenses	317,361	432,500	443,040
Other Expenses	1,929,990	2,170,300	2,369,846
Total Operating Expenses	2,864,387	3,840,800	4,003,286
Capital Expenditures	48,821	-	-
Payroll & Related Costs	7,093,478	6,958,480	6,815,479
Total Department Expenditures	\$ 10,006,685	\$ 10,799,280	\$ 10,818,765
FTE Positions	49.6	45.8	44.4

Department Performance

Environmental, Health and Safety Division.

The EHS division is responsible for overall management of the LVVWD's Environmental, Health and Safety program to guarantee a safe workplace for all employees. The EHS division tracks leading and lagging indicators in the program, making necessary adjustments to ensure a positive safety culture is maintained, while providing ongoing environmental, health and safety training for employees. The division is responsible for permitting and compliance with federal, state and local agencies on environmental regulations regarding pollution control (including air pollution, water pollution, land disturbances, implementation of chemical control and waste management), and manages environmental

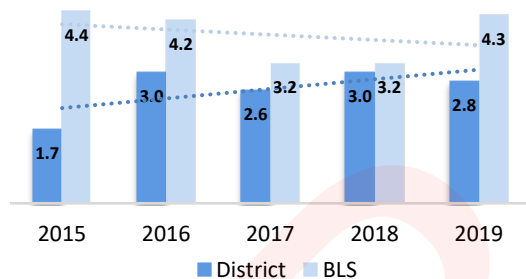
permitting and compliance reporting for operations and maintenance. The EHS division maintains proper upkeep and care of the LVVWD's Process Safety Management program for a highly hazardous chemical (chlorine) at Alfred Merritt Smith Water Treatment Facility (AMSWTF). The division develops and publishes safety procedures ensuring compliance with Occupational Safety and Health Administration (OSHA) and state regulations. The EHS division employs an aggressive accident prevention program, investigates on-the-job accidents and injuries, and manages a comprehensive Fleet Safety program that encompasses vehicle and heavy equipment training, defensive driving education, and commercial driver licenses. The division conducts monthly meetings with the EHS Steering Committee, comprised of

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Environmental, Health, Safety & Corporate Security
 Fiscal Year Ending June 30, 2021

employees from various departments and labor management representatives. The health discipline manages the Asbestos, Lead Awareness and Hearing Conservation programs for the organization.

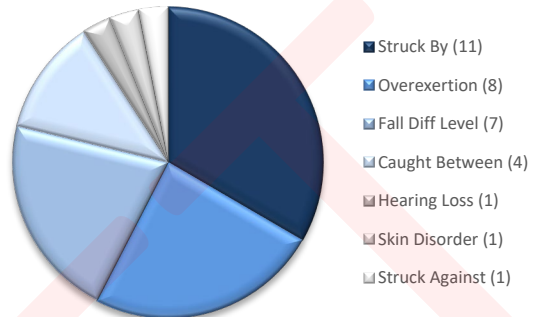
Recordable Injury Rates

The EHS division tracks recordable injuries and illnesses annually and compares them to the Bureau of Labor Statistics (BLS) annual averages for similar industries. The recordable injury rate decreased from 3.0 to 2.8 over the last year.



Recordable Injuries by Category

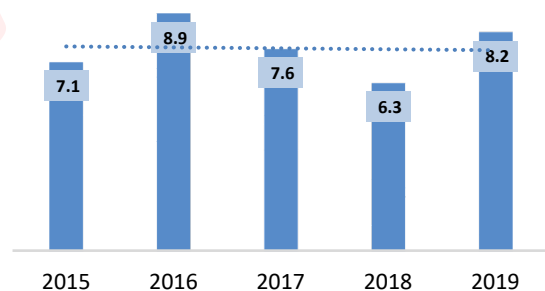
There were 11 “Struck By” injuries that were a result of employees being hit by something at the work site. This category resulted in 34 percent of recordable injuries in 2019. As a result, the EHS division has made this a special interest item and will conduct spot audits that focus on factors that contributed to these injuries experienced in 2019.



Vehicle Accidents & Rates

The LVVWD experienced an increase in at-fault vehicle accidents: 29 in 2018 vs. 38 in 2019.

The LVVWD’s vehicle accident frequency rate increased from 6.3 in 2018 to 8.2 in 2019. Rates are computed using the following formula: # vehicle accidents X 1,000,000 miles/actual miles driven.



Health Assessments

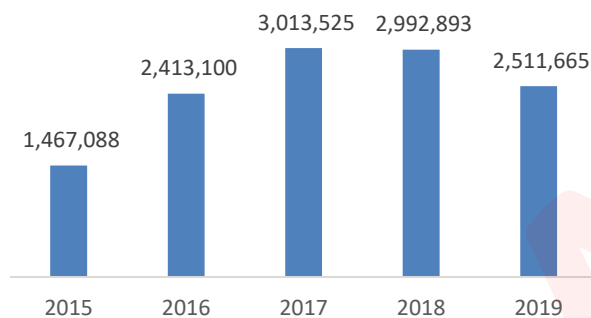
There are 185 LVVWD employees in the Hearing Conservation Program; 100 percent compliance was obtained related to audiometric testing in 2019. There were 296 LVVWD employees respiratory fit tested in 2019. A new vendor was selected to provide vaccinations for LVVWD employees. Employees are offered Hepatitis A, Hepatitis B

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Environmental, Health, Safety & Corporate Security
 Fiscal Year Ending June 30, 2021

and Rabies vaccinations when they have a potential occupational exposure risk.

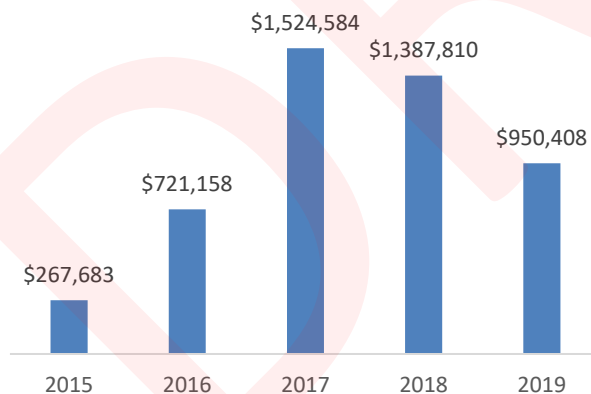
Total Pounds Recycled

LVVWD and SNWA recycled a combined total of 2,511,665 pounds of materials in 2019, an 18 percent decrease from 2018.



Total Revenue Generated

Total revenue for 2019 was \$950,408 (scrap = \$267,469, auctions = \$164,054, vehicles = \$518,885).



Corporate Security Division. Corporate Security's mission is to assure the protection of people, property, facilities and water treatment/delivery systems by providing 24-hour security services on a system-wide basis.

Corporate Security staff and officers provide fire protection equipment inspections, assist with customer parking, escort customers and visitors to areas where they can conduct their business, provide information assistance, monitor access to restricted areas, and provide access to facilities and monitoring of vendor visits during and after business hours. Security officers patrol and protect all LVVWD/SNWA properties by responding to intrusion alarms at outlying properties and patrolling reservoir and pumping station sites. Physical security networks and systems (e.g., electronic access control systems, security camera systems, alarms and locking systems) are in place and monitored by Security 24 hours/day (24/7).

Corporate Security operates a 24/7 Security Center where security officers conduct video surveillance, log all radio communications, and provide central response to alarms, calls for assistance and accidents. Corporate Security also provides on-scene incident command services in emergency situations and has formed partnerships with federal, state and local law enforcement authorities and other utilities/infrastructures in a collaborative effort to protect against malicious acts toward people, sites and systems.

Emergency Management. Emergency Management works to assure a water system that adapts to or withstands the effects of a malevolent act or natural hazard without interruption to the asset or system's function, or, if interruption occurs, works to rapidly return to normal operating condition.

To meet or exceed federal guidelines for water sector preparedness and to increase organizational resiliency, Emergency

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Environmental, Health, Safety & Corporate Security
Fiscal Year Ending June 30, 2021

Management staff conducts work in all five phases of emergency management: mitigation, planning, prevention, response and recovery.

Material Services. The primary mission of Material Services is to deliver reliable customer service by providing quality operating and maintenance products, material requirements planning, inventory management, storage and retrieval services. To facilitate this level of customer service, as of January 2020, Material Services managed inventory assets valued over \$14 million, consisting of approximately 14,502 inventory items. Material Services partners with internal customers to identify, forecast, and schedule capital and operations project material requirements and processes deliveries to all facilities across the LVVWD/SNWA service network.

Mail Services. Mail Services processes incoming and outgoing intercompany and United States Postal Service (USPS) mail, and office supply deliveries. Mail Services processes deliveries to all facilities across the LVVWD service network. Mail Services also delivers and posts public notices, administers LVVWD's postage budget and processes special communication campaign projects for Public Services. Terrorism training certification is required annually by all Mail Services personnel.

Strategic Plan Objectives and Accomplishments

Strategic Plan Goal – Assure quality water through reliable and highly efficient systems.

2020-21 Performance Objectives

- Conduct weekend/after-hours spot audits of industrialized work activities supporting water treatment, water quality, water distribution or other activities.
- Complete two comprehensive audits of departments involved in high hazard activities to measure regulatory compliance.
- Review and update the EHS Manual and all internal EHS procedures.
- Maintain a formalized training schedule for all EHS instructor-led courses.
- Benchmark accident/injury standards to comparable industries via BLS rates.
- Obtain all required operational water pollution control permits and continually monitor water discharge parameters to reduce pollutants discharged.
- Review maintenance and professional services contracts to ensure EHS operational compliance.
- Participate in National Level Exercise 2020 Binary Blackout to address the impacts of an extended regional power outage.
- Finalize the comprehensive Corporate Security Manual for internal publication.
- Operate the Security Center, monitoring organizational security systems, and continue to implement automated security systems to improve the protection of facilities.
- Expand the use of card activated access control and security system technologies to enhance efficiency.
- Increase the use of automated security

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Environmental, Health, Safety & Corporate Security
Fiscal Year Ending June 30, 2021

camera analytics in order to more accurately distinguish between a human caused security incident or normal activity.

- Train key employees and conduct drills on the LVVWD/SNWA Emergency Response Plan (ERP).
- Explore new technologies and methods of utilizing the security surveillance system.
- Continue partnership with the Department of Homeland Security and the Southern Nevada Counter-Terrorism Center to prepare for potential threats to facilities or the water industry.
- Conduct a Risk and Resiliency Assessment in accordance with the American Water Infrastructure Act.
- Maintain rigorous training and exercise programs.
- Maintain cyclical plans review, revision and improvement based on training and exercise results.
- Continue development of an incident management team (IMT).

2019-20 Major Accomplishments

- Completed over 90 documented audits (spot and comprehensive).
- Conducted over 283 investigations related to recordable injuries, preventable vehicle accidents, preventable property damage incidents, near-misses, chemical spills and first-aid events. Recommended corrective actions were included as appropriate to reduce the chance of recurrence.
- Achieved an LVVWD/SNWA incidence rate of 2.8, compared to the BLS rate of 4.3, extending LVVWD/SNWA's

history of falling below BLS rates.

- EHS renewed 175 environmental permits.
- Received no OSHA or EPA citations in 2019.
- Continued supporting and promoting the Department of Homeland Security's national "If You See Something, Say Something™" campaign.
- Participated in the Silver Crucible statewide security exercise in partnership with federal, state and local first responders.
- Installed access control card readers, security cameras and automatic security gates at the IPS3 site for access improvement and control.
- Installed access control card readers and security cameras at the new Summerlin pump station and reservoir.
- Installed new security cameras at Cliff's Edge reservoir and tank, based on a recommendation from the Department of Homeland Security's vulnerability assessment.
- Installed new cameras at AMS to monitor safety and security of chemical deliveries.
- Reviewed and updated the Emergency Operations Plan (EOC) and Continuity of Operation Plan (COOP).

Strategic Plan Goal – Deliver an outstanding customer service experience.

2020-21 Performance Objectives

- Provide evaluation forms for instructor-led courses to assess customer satisfaction.
- Participate in local association

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Environmental, Health, Safety & Corporate Security
Fiscal Year Ending June 30, 2021

meetings to gather information on best management practices to support the Safety Management System and adopt and implement proven work methods.

- Participate in internal and external committees or groups to improve communication and enhance customer service.
- Seek professional training opportunities to augment EHS skills and knowledge.
- Explore and test new security technology and systems.
- Identify additional opportunities for security service and collaboration with internal departments.
- Attend briefings, meetings, training and support groups such as the Utility Pipeline and Coordinating Group, InfraGard, Southern Nevada Counter-Terrorism Center, Department of Homeland Security, Local Emergency Planning Committee, and Southern Nevada Health Preparedness Coalition, American Water Works Association (AWWA), Security Practices and Emergency Preparedness Committees.
- Establish monthly planning and review meetings with Field Services to monitor and ensure consistent meter/register/parts material management and stocking for short- and long-term projects.

2019-20 Major Accomplishments

- Collected student evaluation forms after each EHS instructor-led course to improve future course curriculums.
- Represented EHS in department safety action teams, the EHS Steering

Committee and several cross-department teams (CDT) to include the Specifications Committee and the Sustainability Committee.

- Updated electronic materials on the Hydroweb to ensure that LVVWD/SNWA employees have access to useful safety and health literature, information and videos for training.
- Participated in continuing EHS education, including webinars, local training opportunities and online training to assist in professional development and maintenance of professional certifications.
- Organized EPA Security workshop for police, fire, and first responders to recognize criticality of waters systems and elicit aid if needed.
- Increased onsite training and strengthened partnerships with other responders by allowing them to use our facility and provide rescue and emergency response training.
- Enhanced security in Information Governance, Operations and the Molasky Corporate Center by adding additional safe rooms using a Nightlock device.
- Implemented Metal Detector screening at major events held at the Las Vegas Springs Preserve (Springs Preserve).
- Updated security uniform and equipment for the entire LVVWD/SNWA security force.
- Provided increased foot and vehicle patrols on all campuses.
- Increased security patrols at sites of vandalism and backflow device theft.
- Conducted Active Shooter preparedness training for 80 percent

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Environmental, Health, Safety & Corporate Security
Fiscal Year Ending June 30, 2021

of LVVWD/SNWA employees.

- Coordinated with LVVWD/SNWA Facilities and construction crews during all phases of the solar carport construction to ensure employee security and safety.
- Provided enhanced security screening and protection at LVVWD/SNWA public meetings and at the Las Vegas Springs Preserve events.
- Trained security supervisors on risk assessment, hazard identification and DHS incident response to terrorist bombings.
- Coordinated and delivered DHS Bomb Awareness and Response training to all LVVWD/SNWA security officers.
- Worked closely with Distribution, Field Services, and Big Bend Water District staff to ensure there is a sufficient supply of parts and safe disposal of surplus materials.

Strategic Plan Goal – Anticipate and adapt to changing climatic conditions while demonstrating stewardship of our environment.

2020-21 Performance Objectives

- Prepare and submit environmental reports to regulatory agencies.
- Review current recycling and waste streams at manned facilities to identify new recycling opportunities.

2019-20 Major Accomplishments

- Tracked and submitted operational environmental permits in a timely fashion with zero negative impact to the LVVWD/SNWA.

- Monitored the LVVWD and SNWA recycling program, with a combined revenue totaling \$950,408 (scrap = \$267,469, auctions = \$164,054, vehicles = \$518,885).
- Generated a combined total of 4,615 pounds of hazardous waste at a cost of \$11,674, a reduction from 2018 attributable to continued focus on reducing hazardous waste.
- Provided additional security presence for our employees during heightened customer interactions on campus and at job sites.

Strategic Plan Goal – Develop innovative and sustainable solutions through research and technology.

2020-21 Performance Objectives

- Enhance security blotter system to track theft, vandalism and suspicious activity accurately.
- Continue converting mechanical locks to Medeco electronic locks for greater security and accountability.
- Track guest visitor management system to log and account for guest and vendor visits at all sites, and chemical deliveries to AMS and RMWTF.
- Evaluate mobile technologies to improve efficiency.

2019-20 Major Accomplishments

- Completed the update of Origami Phase III, which includes forms for documenting supervisor/manager and Safety Action Team spot audits, Field Discharge Reports and Asbestos

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Environmental, Health, Safety & Corporate Security
Fiscal Year Ending June 30, 2021

Competent Person daily logs.

- Installed Medeco electronic locks in over 1,300 doors, vaults and reservoirs across district properties.
- Installed additional security cameras/duress feature to monitor Big Bend Water District Customer Care kiosk.
- Monitor over 700 cameras in Security Center by using video analytics.
- Began conversion of paper-based systems and processes to online programs to increase efficiency and documentation, while providing customers with easier use of applications.

Strategic Plan Goal – Ensure organizational efficiency and manage financial resources to provide maximum customer value.

2020-21 Performance Objectives

- Identify new regulations and policy changes and collaborate with other pertinent agencies.
- Continue partnership with Southern Nevada Counter Terrorism Center and Metropolitan Police Department Area Commands and attend classified briefings on threats to critical infrastructure.
- Increase use of contract security officers at static posts to allow vetted and trained District security officers to patrol critical water sites.
- Assess all security processes, priorities and resource utilization to improve efficiency.
- Continue to develop and implement best practice inventory management and reporting, realigning materials management to be consistent and cost effective across the LVVWD/SNWA

network to minimize duplication and improve customer service.

2019-20 Major Accomplishments

- Adjusted instructor led EHS training schedule to ensure critical safety training is offered to newly hired employees in their first week.
- Hosted area police and fire departments at AMS and RMWTF to increase responder knowledge of the criticality of the water system.
- Partnered with City of Henderson, Southern Nevada Health District and Nevada Department of Environmental Protection to participate in the Yankee Papa full-scale water contamination exercise.

Strategic Plan Goal – Strengthen and uphold a culture of service, excellence and accountability.

2020-21 Performance Objectives

- Conduct management, leadership team and divisional staff meetings to update employees on all major projects and communicate status changes and challenges.
- Conduct instructor led EHS training for LVVWD/SNWA employees.
- Provide EHS information updates through electronic Management Advisory and Safety Alert messages, Pipeline and Hydroweb articles.
- Provide diverse learning opportunities in all department disciplines.
- Recognize employees and teams for their unique talents and accomplishments.
- Engage in future construction and

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Environmental, Health, Safety & Corporate Security
Fiscal Year Ending June 30, 2021

maintenance contracts to ensure security issues and concerns are addressed at the earliest stages.

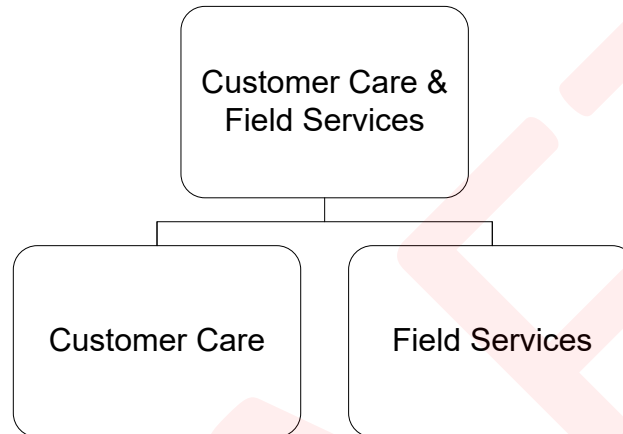
2019-20 Major Accomplishments

- Completed the annual EHS Trend Analysis Report which highlights major EHS accomplishments in 2019.
- Received and monitored 17 Safety Action Requests to ensure corrective actions were implemented.
- Developed and implemented the 101 Critical Days of Summer safety campaign.
- Applied Origami software risk accident/incident tracking and reporting processes through the Security Center.
- Participated in multiple professional development courses while continually searching for and participating in relevant low- or no-cost training opportunities.
- Achieved 2019 Safety Stand Down Day participation of over 273 employees.
- Monitored 14 scheduled outage events and worked with respective work groups to ensure employee safety; zero injuries occurred during the outages.
- Participated in planning and pre-event and spot audits to ensure 12 major public events were successfully accomplished.
- Continued 100 percent identification badge checks at all entrance points to facilities, maintaining tighter control of access points.
- Monitored three scheduled outage events at the Valley View campus as part of the solar carport construction project.
- Provided support for the mutual assistance partners in Clark County by providing water utility expertise at the Multi-Agency Coordination Center (MACC) for large-scale events that may impact LVVWD/SNWA customers (e.g., New Year's Eve, NASCAR, Life is Beautiful).
- Represented LVVWD/SNWA on multiple regional and national committees and working groups for several major regional/comprehensive plans.
- Maintained lost-time accident history of 25 years for LVVWD Material Services; 18 years for SNWA Material Services and 7 years for Mail Services.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Customer Care and Field Services
Fiscal Year Ending June 30, 2021

CUSTOMER CARE AND FIELD SERVICES

Level: 2800



Mission

To deliver an outstanding customer experience by providing accurate service data to ensure timely billing and responsible customer concern resolution.

with the organization's efforts to reduce costs where possible while continuing to improve departmental efficiencies through both technological and performance-based enhancements to provide the optimum customer experience.

Department Description

The Customer Care and Field Services department was created with the express goal of developing a customer facing department dedicated to delivering world class service. The department handles all customer transactions from meter to cash.

Customer Care. Continuing efforts to reengineer business processes and implement new technology to support the meter to cash philosophy, minimizing field impacts and enhancing the overall customer experience.

Budget Objectives and Highlights

The 2020-21 budget for the Customer Care and Field Services department is consistent

Field Services. The 2020-21 Budget Plan contains funding for meter maintenance, advanced metering infrastructure, and operational costs.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Customer Care and Field Services
Fiscal Year Ending June 30, 2021

Expenditures

LVVWD Uses	Actual 2018-19	Budget 2019-20	Budget 2020-21
Materials & Supplies	\$ 2,259,630	\$ 2,094,250	\$ 4,982,448
Maintenance & Repairs	512,639	2,042,500	4,682,880
Rental & Leases	-	-	-
Other Employee Expenses	128,879	155,035	131,098
Other Expenses	3,365,065	7,762,000	5,331,360
Total Operating Expenses	6,266,213	12,053,785	15,127,786
Capital Expenditures	1,314,485	-	400,000
Payroll & Related Costs	20,262,310	24,539,171	25,989,167
Total Department Expenditures	\$ 27,843,008	\$ 36,592,956	\$ 41,516,953
FTE Positions	152.0	170.5	171.0

Department Performance

In 2019-20, the Customer Care and Field Services department continued to refine business processes and advance technology in service to the Las Vegas Valley Water District's (LVVWD) customers. The department focused efforts on maximizing the customer experience through four strategic goals: Delivering an Outstanding Customer Experience; Anticipate and Adapt to Changing Climatic Conditions while Demonstrating Stewardship for our Environment; Develop Innovative and Sustainable Solutions through Research and Technology; Strengthen and Uphold a Culture of Service, Excellence, and Accountability.

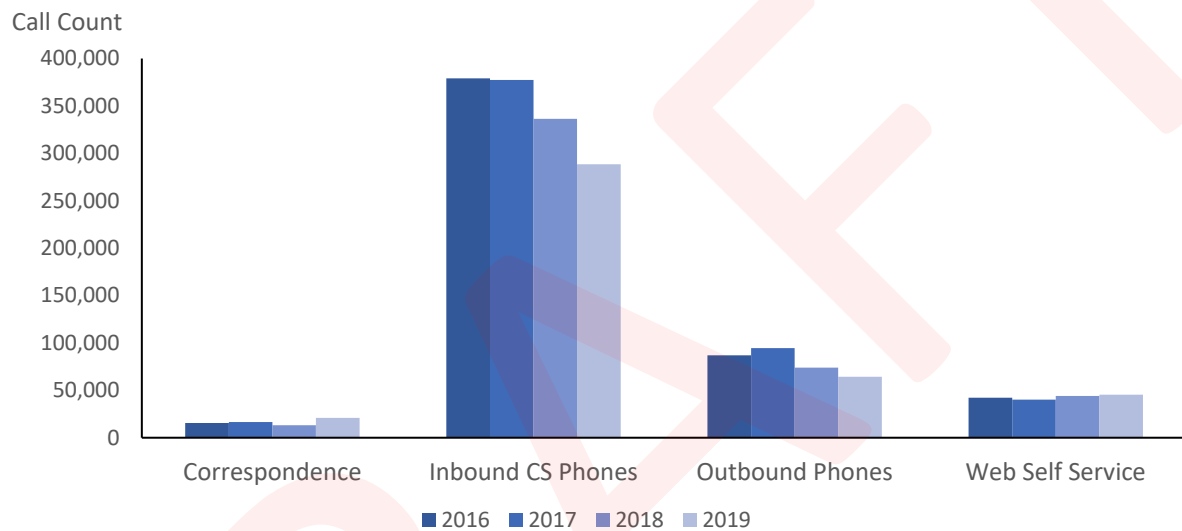
Customer Care. The Customer Care division serves as the primary point of contact for internal and external service inquiries—supporting approximately 403,000 active services. The division manages the customer care phones, web requests, correspondence and walk-in requests. Customer Care handles payments, pay arrangements, collection courtesy calls, delinquent account processing, high consumption requests, water-waste complaints, 24/7 emergency phone coverage, along with providing monthly billing to the LVVWD's customers.

Customer care continues its proactive approach to customer education and service through outbound customer service calls and customer notifications.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Customer Care and Field Services
 Fiscal Year Ending June 30, 2021

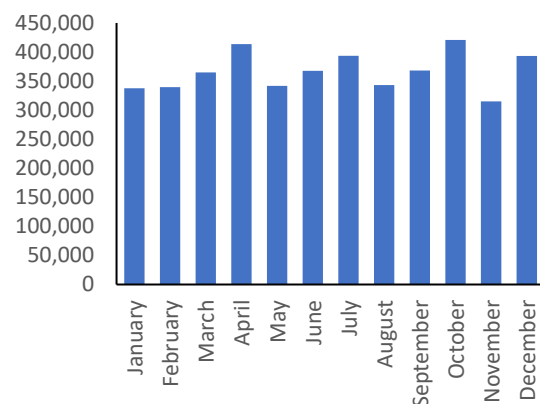
The following graph illustrates the shift in volume distribution over the past four years as process and technical innovations advance the meter to cash philosophy.

Customer Care Phone and Correspondence Volume



Advancements in processes and technology have improved service performance and bill outcomes. These efforts are best illustrated in a low percentage of estimated bills. Customer Care and Field Services manages the monthly billing process from meter to cash for residential customers, large services, developer accounts, adjustments, investigations, quality control, supplemental, fire protection services, consumption notifications and mobile meters.

Bills Generated 2019



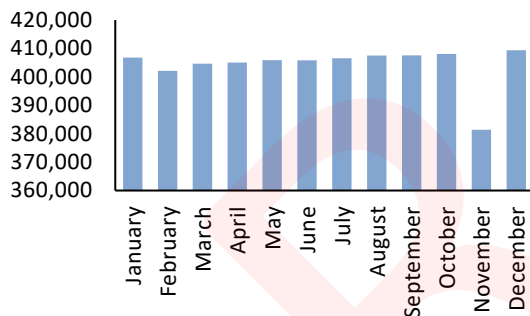
The following chart depicts the total number of bills generated monthly in 2019.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Customer Care and Field Services
Fiscal Year Ending June 30, 2021

Field Services: The Field Services division is responsible for reading and maintaining meters for approximately 403,000 services in Las Vegas, Searchlight, Blue Diamond, Kyle Canyon, Laughlin and Jean. The division also responds to leak investigations, low pressure, high consumption, water waste inquiries, billing requests, and turn ons/shut offs.

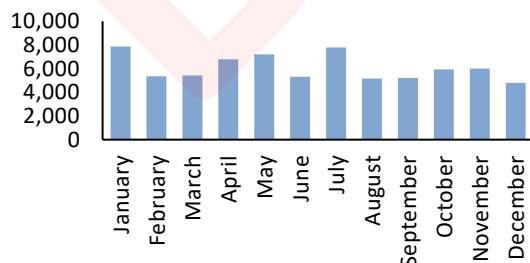
The 2019 Meter Reads chart illustrates the number of meter reads processed by Field Services in 2019 (Over 4.6 million total).

Meter Reads 2019



The following chart illustrates the number of work orders processed by Field Services in 2019 (Over 90,000 processed).

Field Activities Completed 2019



Strategic Plan Objectives and Accomplishments

Strategic Plan Goal – Deliver on Outstanding Customer Service Experience.

2020-21 Performance Objectives

- Continued assessment of customer satisfaction; establish benchmarks and identify all avenues for enhancement. Assess customer satisfaction results against overall quality outcomes for actionable improvement.
- Establish culture of continuous improvement of processes and practices using feedback from our customers, customer care stakeholders as well as affiliated departments throughout the LVVWD.
- Work with IT for continued integration of state-of-the-art technologies to enhance the customer experience, increase efficiencies, create multi-channel platform capabilities as well as eliminate external vendor dependencies.
- Implement additional technologies aimed at the promotion of efficiencies, reduction of appurtenant expenses as well as informational integration.
- Provide continuous training and development to ensure a quality customer service experience.
- Communicate with and receive continuous feedback from employees on organizational policy changes and procedural/process

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Customer Care and Field Services
Fiscal Year Ending June 30, 2021

improvements.

- Monitor and collaborate with other organizations/industries to identify innovations, best practices and ways to improve the customer experience.
- Enhancement of the Quality Assurance initiatives to improve call assessment, incorporate more feedback and interactional based development.
- Expand the functionality of online “My Account” to improve overall customer experience.
- Continue to improve customer care technologies, tools, training and implementation.
- Convert drive by reading system to an Advanced Metering Infrastructure, bringing on-demand reads to our customer base.

2019-20 Major Accomplishments

- Partnered with SNWA to train staff for water waste compliance for assisting our customers in water conservation efforts.
- Supported the development of a new water waste reporting tool.
- Conducted 4 media segments on water waste.
- Collected 3.4 billion hourly reads to help customers with their consumptive use.
- Completed 64 Water Waste Educational Visits for customers with onsite issues.
- Restructured literature left onsite to provide customers increased opportunities to provide feedback on field staff performance.

Strategic Plan Goal – Anticipate and Adapt to Changing Climatic Conditions while Demonstrating Stewardship for our Environment.

2020-21 Performance Objectives

- Reduce and dispose of waste responsibly.
- Maintain proper disposal of scrap and waste products, especially lithium batteries.
- Continue to support organizational water conservation efforts through improved technology, customer and interdepartmental communication.
- Educate customers on water usage and trends through all contact center activities.

2019-20 Major Accomplishments

- Disposed of toxic waste material in compliance with OSHA regulations.
- Introduced new Water Waste Reporting Tool to allow customers to report violations from their mobile devices.
- Enhanced proactive notice of water leaks to notify customers more promptly.
- Provided cross training to other LVVWD departments to increase visibility of water waste enforcement and employee engagement.
- Mailed 12,522 water waste letters in 2019.
- Completed 16,804 Water Waste investigations resulting in \$260,640 in fees assessed.
- Field Services completed over 70,200 Field Activities.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Customer Care and Field Services
Fiscal Year Ending June 30, 2021

- Dedicated staff handled nearly 8,500 Springs Preserve related inquiries in 2019.
- Used analytics to notify customers that they are watering on Sunday.
- Using data analytics to improve efficiencies around residential zero consumption on active accounts.

Strategic Plan Goal - Develop Innovative and Sustainable Solutions through Research and Technology.

2020-21 Performance Objectives

- Develop and strengthen global partnerships to leverage resources and advance innovations in Customer Service.
- Continue identification, assessment and implementation of customer care technologies, tools and resources.
- Leverage Business Process Reengineering to identify improvements and prepare for the upgrade to a new and improved Customer Information System.
- Install outdoor self-service kiosk technology to improve ease of pay.
- Continue improvements to “My Account” to support conservation efforts including watering groups and customer notifications for leaks.
- Launch chat channel for customers to engage with the organization through a digital platform.
- Improve technology solutions for revenue protection and greater collection gains.
- Continue to educate customers using advanced meter reading data.

- Evaluating current meter population to create and implement an appropriate preventative maintenance plan and schedule.
- Enhancing and expanding current field and dispatch Quality Monitoring program.
- Host and participate in education and technical venues for business advancement throughout 2020.
- Continue to use data analytics to identify equipment nearing failure in order to provide proactive maintenance and replacement.

2019-20 Major Accomplishments

- Lobby payments and transactions continue to decline with successful expanded payment and self-service options, reducing lobby traffic and carbon footprint.
- Leveraged existing meter read and interval data to significantly reduce field work.
- Identified leaks through the excessive leak program resulting in nearly 90% resolution rate within less than 100 days.
- Launched Sunday Watering Letter Program.

Strategic Plan Goal – Strengthen and Uphold a Culture of Service, Excellence, and Accountability.

2020-21 Performance Objectives

- Provide and seek timely feedback on individual, team and departmental performance to enhance

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Customer Care and Field Services
Fiscal Year Ending June 30, 2021

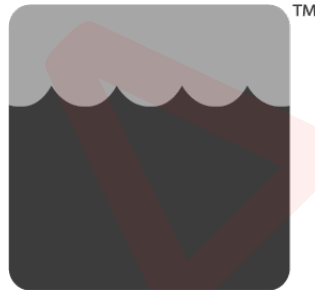
collaboration, accountability and excellence.

- Ensure timely and consistent communication with team to provide feedback and solicit recommendations.
- Maintain weekly communications to keep the team informed of business impacts and process improvements.
- Continuous communication forum between workgroups to address interdepartmental challenges and business impacts.
- Facilitate a forum between workgroups to address interdepartmental challenges and business impacts.
- Leverage the existing resources for expert training classes to employee skill development.

2019-20 Major Accomplishments

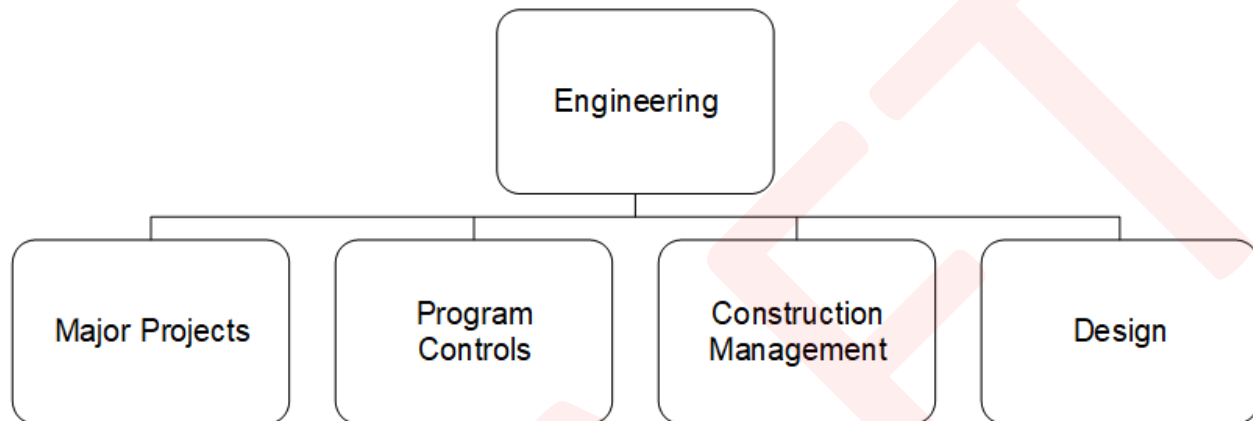
- Revamped doorhanger notifications that will allow feedback from our customer base.
- Increased Quality Monitoring to enhance the functional capabilities of the individual, team and departmental performance.
- Utilized various subject matter experts throughout the department to support training initiatives.
- Restructured Credit & Collections processing to improve field operations and increase communications with past due customers.
- Adopted Agile methodologies in key areas to improve project management and collaboration.

This page left intentionally blank



ENGINEERING

Level: 3400



Mission

The mission of the Engineering department is to provide excellence in the field of engineering and related support services for a reliable and cost-effective water system.

Department Description

The Engineering department is responsible for implementing capital improvements projects for the Las Vegas Valley Water District (LVVWD), the Southern Nevada Water Authority (SNWA), and Big Bend Water District (BBWD).

The LVVWD's capital projects are currently focused on the rehabilitation and replacement of aging pipelines, along with design and construction of new reservoirs, pumping stations, and related components of the large water distribution system spread across the Las Vegas Valley and in nearby rural areas. These projects are described in the LVVWD Capital Improvements Plan (LVVWD CIP). Several new facilities are also being

designed and constructed to meet long term operational requirements. In coordination with the Operations, Resources and Facilities, and Infrastructure Management departments, Engineering provides design and construction services for many of the LVVWD CIP projects.

The SNWA owns and operates the regional water supply system, the Southern Nevada Water System (SNWS), which treats Colorado River water and delivers it to SNWA purveyor members in the Las Vegas Valley. Improvement projects for the SNWS are identified in the Major Construction and Capital Plan (MCCP). The MCCP describes ongoing projects and initiatives related to establishing and maintaining reliable system capacity, providing necessary support facilities, and developing access to new water resources. In coordination with the Operations, Resources and Facilities, and Infrastructure Management departments, Engineering provides design and construction services for many of the MCCP projects.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Engineering
Fiscal Year Ending June 30, 2021

The SNWA is also responsible for the facilities providing erosion protection in the Las Vegas Wash, as defined in the Las Vegas Wash Capital Improvements Plan (Wash CIP). Engineering accomplishes the planning, design and construction of all projects defined by the Wash CIP.

Engineering also provides project controls, construction management, inspection, permitting, surveying, and rights-of-way support services to other departments for their operating and capital projects.

Expenditures

LVVWD Uses	Actual 2018-19	Budget 2019-20	Budget 2020-21
Materials & Supplies	\$ 64,829	\$ 95,550	\$ 77,520
Maintenance & Repairs	1,393,931	1,375,000	1,320,000
Rental & Leases	-	-	-
Other Employee Expenses	66,363	124,550	117,432
Other Expenses	82,888	1,496,950	751,152
Total Operating Expenses	1,608,011	3,092,050	2,266,104
 Capital Expenditures	 57,620,077	 96,663,950	 96,010,400
 Payroll & Related Costs	 13,192,334	 16,619,088	 17,720,111
 Total Department Expenditures	 \$ 72,420,421	 \$ 116,375,088	 \$ 115,996,615
 FTE Positions	 75.4	 88.3	 94.0

Budget Objectives and Highlights

The 2020-21 Engineering department budget demonstrates significant ongoing commitment for LVVWD CIP, development needs, proposed Lower Las Vegas Wash Restoration Plan, and the proposed SNWA MCCP Amendment. In addition, a major portion of the department staff will continue to be focused on many projects directly supporting the Operations, Resources and

Facilities, and Infrastructure Management departments in preserving the facilities needed to assure a reliable, quality water supply.

With the completion of the Low Lake Level Pumping Station (L3PS) in fiscal year 2019-20, staff will focus support on restoration requirements to Lake Shore Road, completing this final phase of work for the L3PS program in calendar year 2020.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Engineering
Fiscal Year Ending June 30, 2021

Work continued on the Alfred Merritt Smith Water Treatment Facility (AMSWTF) filter media replacement with 11 filters completed. The remaining nine filters to be upgraded are currently under contract with completion scheduled for 2021.

The Engineering department will also advance various capital projects for the LVVWD by designing and managing construction of projects to install new facilities, replace water mains, rehabilitate valve or meter vaults, install backflow prevention devices and perform other necessary system improvements.

Department Performance

The Engineering department is organized around five functional areas.

Major Projects. Teams are organized, as needed, to successfully manage completion of major capital projects of the LVVWD and the SNWA capital plans. Currently, the active major project is the Horizon Lateral. Staff is currently in the progress of preparing a feasibility study for this major project. The feasibility study will identify several constructible alternative pipeline alignments, pumping station, reservoir, and points of delivery locations along with probable construction costs and recommended contracting scopes and methods.

Design. The design team is comprised of professional engineers, technicians, permit coordinators, and support staff who work with operators, planners and asset managers in other departments to define project requirements and incorporate those requirements into design and construction packages. These packages are generally

prepared for public bidding to construction contractors. The design team members work closely with their clients and the construction managers to assure design requirements are clear, compliant with the approved scope of work, align with schedule and budget, and consistent with generally accepted engineering standards. Design also coordinates with in-house Legal, Safety, Risk Management, and Purchasing staff to ensure contract provisions are appropriate.

Construction Management. The construction management team is comprised of engineers and inspectors who have extensive experience in the construction of public works for water utilities and manage the construction of necessary facilities and inspection of new developer-installed facilities. These team members also participate in the development of design packages to assure construction complexities are properly considered and addressed prior to inviting contractor bids. They also coordinate with the Legal department to assure laws, regulations, and contract provisions are properly observed.

Program Controls. A technical team organized to assist with the implementation and management of the LVVWD and SNWA capital programs through the establishment of consistent project management practices and reporting systems for effective cost and schedule control. This team provides cost and schedule reports and analysis of capital projects. This team makes use of computer-based tools which compile relevant project data from various departments. This team also performs a vital function in collecting projected capital expenditures as a tool for forecasting future funding requirements and

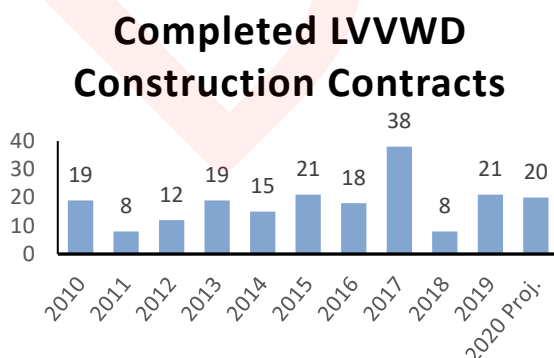
Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Engineering
Fiscal Year Ending June 30, 2021

coordinates closely with the Finance department.

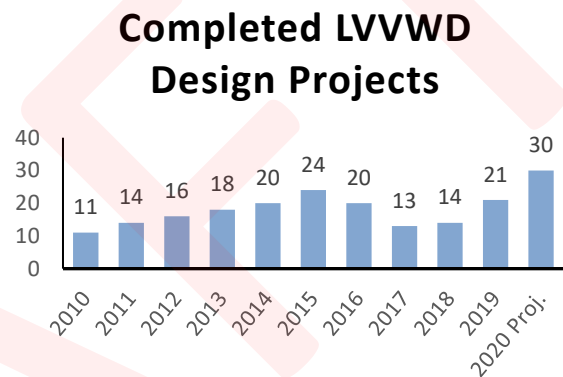
Survey, Property Management and Infrastructure Mapping Services. Professional staff within the department support design and construction of infrastructure by providing land surveying, water rights surveying, line location, right of way acquisition and property management and as-built record drawings for both the LVVWD and SNWA systems. These services are vital to the efficient management of property controlled by the LVVWD and SNWA and the infrastructure installed within public rights of way.

With the completion of the Las Vegas Wash Capital Improvements Plan and L3PS becoming operational in April 2020, no charts for work activities for these are included. In subsequent years, information will be provided on the 2020 MCCP Amendment and on the Lower Las Vegas Wash Restoration Plan.

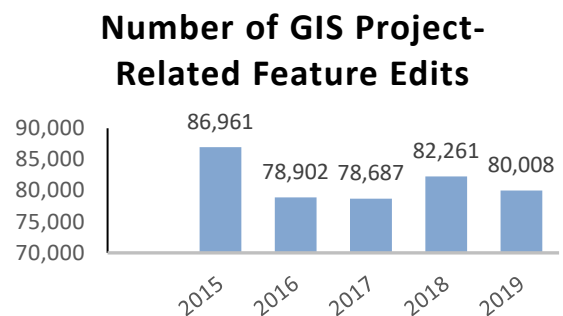
The chart below (Completed LVVWD Construction Projects) represents the number of the LVVWD construction projects completed by Engineering since 2010 and the number expected to be completed in 2020.



The following chart (Completed LVVWD Design Projects) illustrates the number of projects Engineering has designed since 2010 to support the infrastructure management requirements of the LVVWD.



The chart below shows how many thousands of features related to water facility assets constructed under capital projects for both the LVVWD and SNWA that have been edited (added or updated) within the geographic information system facility database over the past five years. The chart mirrors the increase in development activities experienced in the service area over this time.



Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Engineering
Fiscal Year Ending June 30, 2021

Strategic Plan Objectives and Accomplishments

Strategic Plan Goal – Assure quality water through reliable and highly efficient systems.

2020-21 Performance Objectives

- Complete design and construction of projects in accordance with forecasted capital budgets, the cost estimates and schedules identified in the capital plans.
- Complete the feasibility study for the future Horizon Lateral.
- Provide the Infrastructure Management, Resources and Facilities, and Operations departments with a high level of technical services and capital project support.
- Consolidate project tracking applications and align work processes to improve staff efficiency.
- Initiate design efforts to support projects in the SNWA 2020 M CCP Amendment.
- Continue to improve methods for direct electronic capture field inspection of attributes for constructed water facilities.
- Complete combination of SNWA Facility Engineering Guides and LVVWD Design Guidance Documents into a single Engineering Design Guides document.

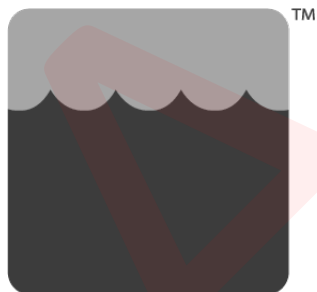
2019-20 Major Accomplishments

- Completed, and placed into operation the Low Lake Level Pumping Station.
- Completed construction of 31 LVVWD projects valued at \$45.5 million

related to improvement of the LVVWD's facilities.

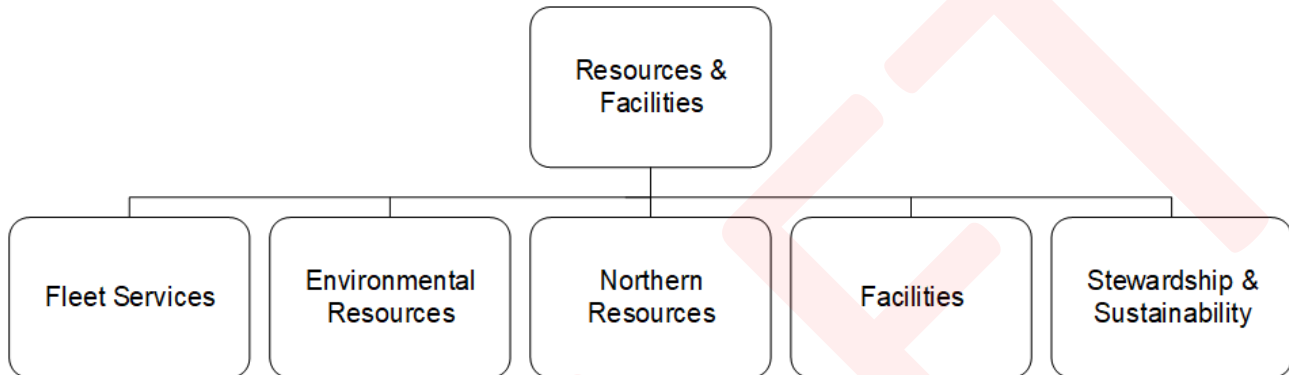
- Awarded 24 LVVWD construction contracts valued at \$45.8 million related to improvement of the LVVWD's facilities.
- Completed and put into action the Las Vegas Wash Long Term Operating Plan.
- Completed Sodium Hypochlorite System Upgrades at RMWTF, improving facility reliability.
- Completed construction and placed into service the Summerlin 3665 Zone Reservoir.
- Performed inspections on approximately 722 different developer related projects, involving over 29,000 individual inspection actions.

This page left intentionally blank



RESOURCES & FACILITIES

Level: 3600



Mission

The mission of the Resources & Facilities department is to sustainably manage the Southern Nevada Water Authority's (SNWA) land and environmental resources through sound policy, applied science and advanced technology; and, to sustainably manage the SNWA and the Las Vegas Valley Water District (LVVWD) facilities and fleet assets through cost effective strategies supporting operations, organizational business, and values.

Department Description

The Resources & Facilities department consists of five divisions that include the Fleet Services division, Facilities division, Northern Resources division, Stewardship and Sustainability division and Environmental Resource division. Additional responsibilities assigned to the department include, climate change science and policy analysis, and leadership in organizational sustainability.

Budget Objectives and Highlights

The 2020-21 Resources & Facilities department budget contains funding for a wide range of initiatives discussed below.

Facilities. The Facilities division budget contains \$6 million in operational funding for the repair, maintenance, cleaning and servicing of all the LVVWD and the SNWA buildings and facilities, including landscape, roadways, office and meeting space, lighting, and building mechanical, electrical and plumbing systems.

Fleet Services. The Fleet Services division budget contains approximately \$7.41 million for new & replacement vehicles and related equipment having reached their end of life cycle. An additional \$260,000 for a new paint booth replacing our old paint booth that has become obsolete. Fleet Services is also requesting \$620,000 for replacement of two-way radios that are becoming obsolete and will soon be inoperable on the Southern

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Resources & Facilities
Fiscal Year Ending June 30, 2021

Nevada Area Communications Council (SNACC) radio system.

Environmental Resources. The Environmental Resources division budget contains \$1 million in operational funding for environmental planning, compliance, permitting, and resource management activities. The division will continue to provide environmental support and ensure regulatory compliance for the Northern Resources, Water Resources, Engineering, Energy Management, Operations and other departments.

Northern Resources. The Northern Resources division gross budget totals \$4.8 million, of which, \$3.2 million allocated to operations, \$350,000 is for livestock inventory purchase and \$1.3 million for capital improvements to develop, utilize and maintain primary groundwater rights. Total gross revenues are projected to exceed \$3.2 million from

commodity sales. Program activities including water development, nutrient management, cropping, and propagation of systematically bred livestock provide sustainable revenue centers that support operations.

Stewardship and Sustainability. The Stewardship and Sustainability division budget contains \$1,226,838 million in operational funding for property and project management, restoration, monitoring compliance and outreach for the Las Vegas Wash program and the Warm Springs Natural Area to meet agreements and further the SNWA resource management objectives. The funding will also be used to help guide sustainability efforts for the organization. In fiscal year 2020-21, the division anticipates receiving \$828,000 in revenue from Federal and State grants and local contributions for the Las Vegas Wash program.

Expenditures

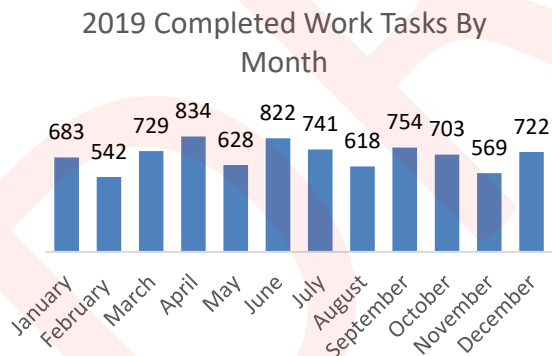
LVVWD Uses	Actual 2018-19	Budget 2019-20	Budget 2020-21
Materials & Supplies	\$ 2,934,832	\$ 4,164,000	\$ 4,158,720
Maintenance & Repairs	2,207,911	2,305,000	2,304,000
Rental & Leases	1,829,640	2,032,500	1,718,400
Other Employee Expenses	57,410	127,150	146,928
Other Expenses	(2,351)	113,300	110,112
Total Operating Expenses	7,027,442	8,741,950	8,438,160
Capital Expenditures	3,303,235	5,480,624	8,147,694
Payroll & Related Costs	8,954,979	9,353,447	9,533,971
Total Department Expenditures	\$ 19,285,656	\$ 23,576,021	\$ 26,119,825
FTE Positions	68.7	65.1	66.2

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Resources & Facilities
 Fiscal Year Ending June 30, 2021

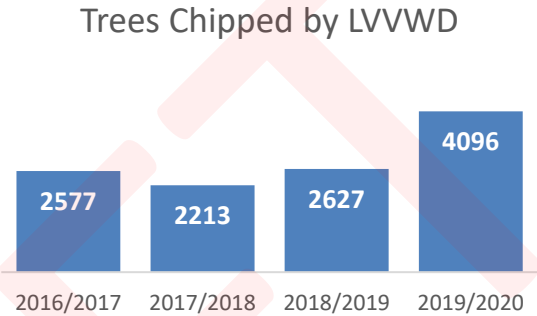
Department Performance

Facilities. The Facilities division has seven (7) teams that support Facilities Maintenance, Facilities Services, and Buildings and Grounds. The division is responsible for ensuring the four (4) main campuses and the two hundred twenty-four (224) offsite properties totaling 1,463 acres exceed SNWA/LVVWD standards for appearance, quality and cost-effectiveness. Additionally, Facilities supports numerous rural system sites including Big Bend Water District, Warm Springs, Mount Charleston, Jean, Searchlight, Northern Resource Properties, and others. The division provides support during the design and construction of new facilities, as well as, site remodeling and/or retrofit support for existing structures.

The following charts depict the total work orders completed by month.



The following chart shows the number of trees chipped by LVVWD.



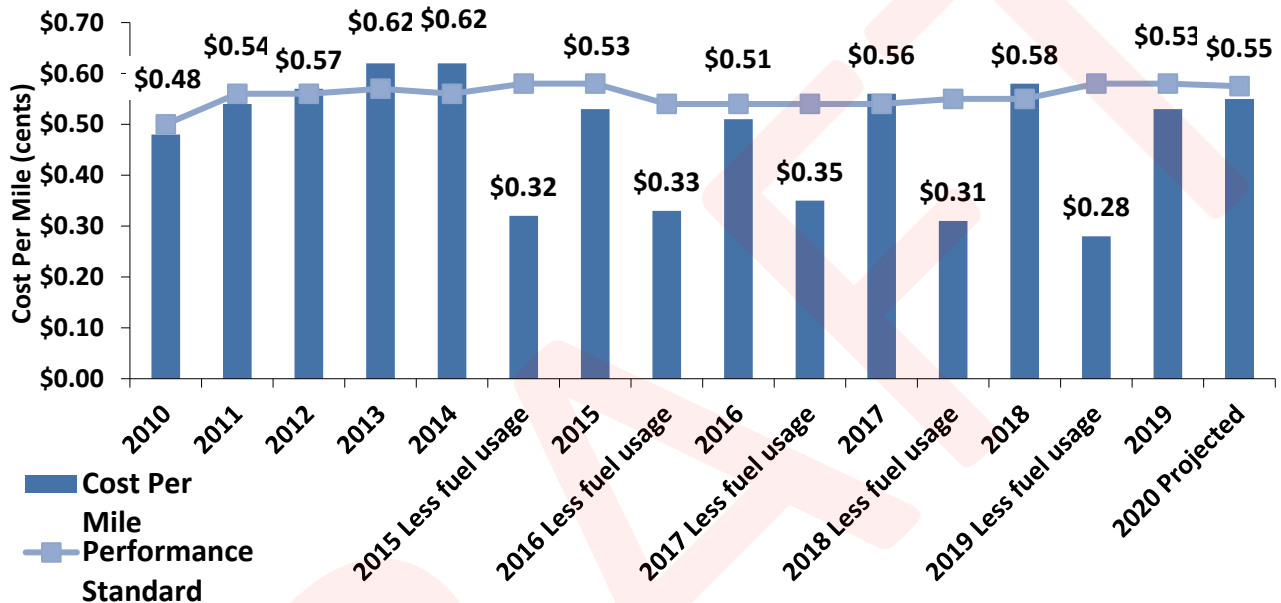
In the 2019 Holiday season tree recycling/chipping: 4096 trees were chipped this season, an increase of 1469 trees over the prior year.

Fleet Services. The mission of the Fleet Services division is to provide safe, reliable and functional vehicles, equipment, tools, fuel, and communications equipment to the LVVWD, SNWA, LVSP, and BBWD operations. Currently the division maintains more than 1,800 vehicles and support equipment pieces and 1,100 pieces of communications equipment for the organization. This includes services for repair, maintenance, acquisition and disposition of all vehicles, support equipment, communications equipment and loanable tools. Fleet Services also operates seven service facilities and seven fueling facilities located in Las Vegas, Boulder City, Henderson and White Pine County.

The following chart reflects the LVVWD's average vehicle operating cost per mile compared to accepted performance standards.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Resources & Facilities
Fiscal Year Ending June 30, 2021

2010 - 2019 AVERAGE VEHICLE OPERATING COST PER MILE COMPARED TO PERFORMANCE STANDARD



Environmental Resources. The Environmental Resources division conducts environmental planning, compliance, and natural resource management for SNWA, LVVWD, and small systems. This includes preparation of compliance documents and environmental studies that are required by federal and state environmental regulations, water right rulings, and interagency environmental agreements. The division also conducts biological monitoring for construction activities and environmental based inspections to ensure compliance with permits and laws.

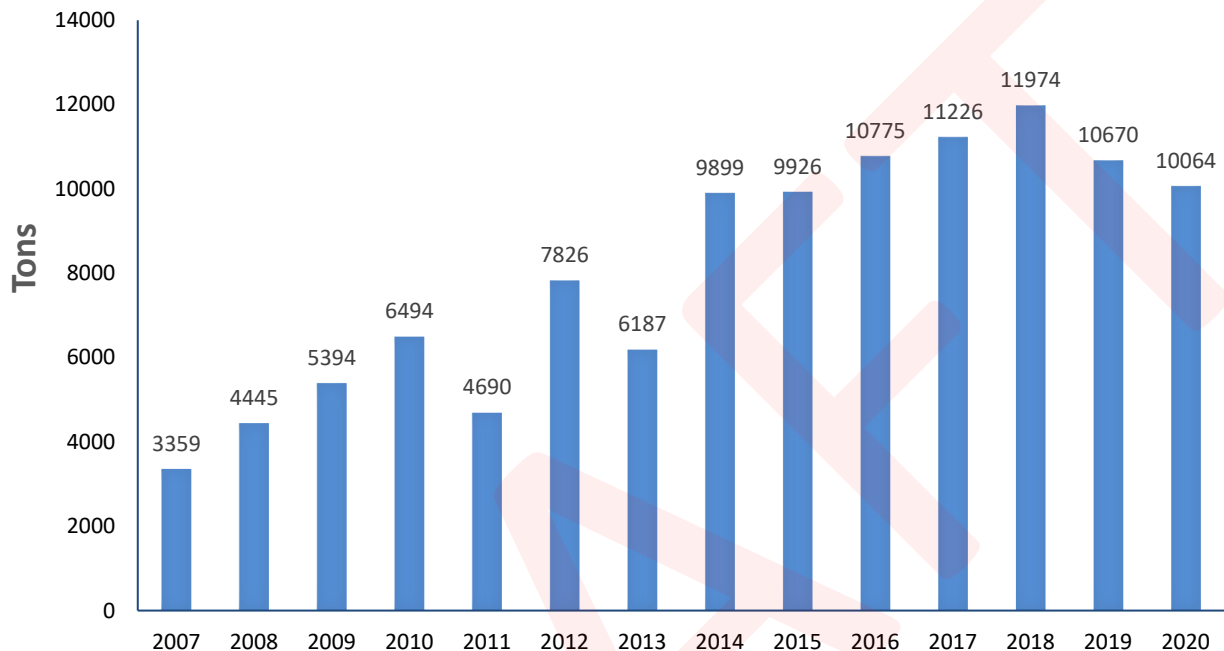
Stewardship and Sustainability. The Stewardship and Sustainability division is responsible for management, restoration, monitoring, compliance and outreach for the Las Vegas Wash and the Warm Springs Natural

Area property, as well as for sustainability initiatives for the organization.

Northern Resources. The Northern Resources division maintains the physical and natural resource assets of a 950,000-acre ranch and farm while producing agricultural products, including beef calves, lambs, wool and alfalfa. These commodities represent approximately \$3.2 million in projected ranch revenue for fiscal year 2020-21. Improvements in agricultural practices, livestock genetics and husbandry have resulted in increased efficiency and effectiveness in utilizing Federal rangeland and private forage. The ranch continues to produce and deliver quality products and service, exhibit scientific based stewardship, and demonstrate financial and organizational efficiency.

**Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Resources & Facilities
Fiscal Year Ending June 30, 2021**

Forage Production



Strategic Plan Objectives and Accomplishments

Strategic Plan Goal – Assure quality water through reliable and highly efficient system.

2020-21 Performance Objectives

- Maintain critical equipment and building systems to ensure a safe and comfortable work environment; measure equipment uptime percentage.
- Develop and implement 10 year rolling asset management plan.
- Comply with environmental permit requirements for operation of erosion control facilities in Las Vegas Wash.
- Conduct research and public outreach for the Las Vegas Wash in accordance with agreements and the Las Vegas

Wash Comprehensive Adaptive Management Plan.

- Create and implement a long-term operating plan for the Las Vegas Wash.
- Complete environmental planning and compliance for construction of new SNWA, LVVWD, or Small Systems infrastructure.
- Provide environmental compliance and monitoring in accordance with permit requirements for existing SNWA, LVVWD, and Small Systems facilities.

2019-20 Major Accomplishments

- Drafted Cooperative Management Agreement with the National Park Service for the lower Wash Capital Improvement Program.
- Conducted surveys for reptiles, mammals, fish, and threatened and

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Resources & Facilities
Fiscal Year Ending June 30, 2021

endangered birds and cataloged new invertebrates along the Las Vegas Wash.

- Conducted compliance monitoring and reporting in support of weir construction on the Las Vegas Wash.
- Re-vegetated approximately 24 acres along the Las Vegas Wash and conducted vegetation monitoring on more than 500 acres.
- Surveyed 600 acres for noxious weeds, treated 4.4 acres, and removed 11.5 acres of tamarisk.
- Conducted two Wash Green-Up events, where more than 900 volunteers planted approximately 19 acres and four Girl Scout events, where scouts planted 3 acres.
- Coordinated and hosted a two-day science symposium for nearly 250 high school students as part of World Wetlands Day.
- Educated approximately 100 fifth grade students about the Las Vegas Wash and Lake Mead and introduced mobile data collection to field trips.
- Provided five tours of the Las Vegas Wash for elected officials, agency regulators, conference attendees, organizations, and other interested stakeholders.
- Provided public outreach promoting the Las Vegas Wash and the Las Vegas Wash Coordination Committee at 13 local events.
- Drafted Las Vegas Wash Long-Term Operating Plan (LTOP) to guide continued implementation of actions from the Las Vegas Wash Comprehensive Adaptive Management Plan.

- Gave the desert tortoise education program to 280 contractors and staff and relocated one desert tortoise.
- Responded to 8 calls for dangerous animals at SNWA and LVVWD facilities.
- Monitored tortoise exclusion fencing at all existing facility sites on federal lands and coordinated needed fence repairs and the installation of a tortoise road crossing guard.
- Supported the establishment of a Pahrump poolfish refugia and relict leopard frog population at the Springs Preserve.

Strategic Plan Goal – Deliver an Outstanding Customer Service Experience.

2020-21 Performance Objectives

- Achieve an 80 percent or greater satisfaction rating for facilities-related customer interactions.
- Continue to include customers in the specification process of new and/or replacement vehicles and equipment.
- Continue to partner with all departments to better assess vehicle/equipment needs and improve end products provided.
- Continue to minimize equipment down time through the use of technology, technician training and good parts availability.
- Continue to provide the best possible equipment choices to the departments to assist them in meeting their goals efficiently and effectively.
- Respond to changing customer needs and implement and/or change services to better support the mission.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Resources & Facilities
Fiscal Year Ending June 30, 2021

2019-20 Major Accomplishments

- Enhanced customer service in outlying areas through the use of technology, improved parts availability, and scheduling of technicians.
- Fleet Services completed 11,303 work orders and over 14,570 repair tasks on vehicles and equipment over the past 12 months.
- Maintained Automotive Service Excellence (ASE) “Blue Seal of Service Award”.
- Maintained Automotive Service Excellence (ASE) “World Class Technician Status”.
- Maintained I-Car Platinum status for the fleet paint and body operation.
- Completed the EHS/Security area remodel and relocated the affected associates back into their permanent environment.
- Coordinated IT, Energy, Water Resources relocations on the 8th, 9th, 10th, and 12th floors of the Molasky building.
- Facilities completed 8,345 work orders over the past 12 months.
- Facilitated major internal events including: all Divisional holiday parties, Safety Stand-Down Day, Celebrating You week.
- Continued the intensive and proactive disinfection program to minimize employee impact during the flu season.

Strategic Plan Goal – Anticipate and Adapt to Changing Climatic Conditions while Demonstrating Stewardship of our Environment.

2020-21 Performance Objectives

- Continue to lead and develop the alternative fuel vehicle program in support of clean air in the Las Vegas Valley.
- Continue to recondition and reuse service bodies and vehicle up-fit equipment for district vehicles and equipment.
- Maintain the Districts plug-in electric vehicles fleet.
- Expand the use of compressed natural gas as an automotive fuel.
- Expand the use of hybrid technology within fleet services.
- Utilize environmentally friendly practices in automotive paint and body repair.
- Provide environmental support for the maintenance and acquisition of SNWA water rights and resources.
- Conduct environmental research and planning to support strategic decisions relating to SNWA water resources and assets.
- Sustainably manage the Great Basin Ranches such that annual gross revenue covers at least 100 percent of direct costs, measured as a five-year running average.
- Develop and certificate 100 percent of ranch water rights.
- Maintain Great Basin Ranch assets, including property, facilities, water rights, and grazing allotments in accordance with annual work plans and permits.
- Inspect 100 percent of ranch irrigation, stock, and domestic wells at least annually, and maintain at least 90

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Resources & Facilities
Fiscal Year Ending June 30, 2021

percent of the wells at full operational capacity.

- Collaborate on all major local and regional climate change initiatives relevant to the SNWA.
- Make progress towards achieving the goals of the Recovery Plan for rare aquatic species on the Muddy River).
- Provide public access and outreach at the Warm Springs Natural Area.
- Reduce fire fuels and maintain fire breaks annually at the Warm Springs Natural Area in accordance with the property Fire Management Plan.
- Communicate sustainability goals and progress to the organization.

2019-20 Major Accomplishments

- Budgeted, sourced, removed old pipe and installed new HDPE, plus reclaimed the ROW of the Williams Creek pipeline.
- Replaced two miles of perimeter fence at Phillips/Huntsman for security and safety reasons.
- Constructed a permanent storage building that houses the RTK equipment for Satellite tracking of farm equipment.
- Ridge/Pine Creek intake and screen installation. Rebuilt the old collection pond, lined and constructed a concrete intake with cleaner screen.
- Drilled and brought into production the new Kerr irrigation well.
- Removed and replaced the Kerr irrigation pipelines, improved efficiencies and direction of flow.
- Designed and constructed a sheep working facility at the Phillips Ranch.
- Designed, sourced materials and budgeted the water filtration system at Harbecke.
- Constructed a truck fill station on the Swallow spring pipeline.
- Minerva pond reconstruction. Re-built the dike, head gates, and conveyance ditches. This allows better use of the surface water that was prior to reconstruction wasted.
- McCoy domestic well. Replaced the house well because of system failure and sand in the water.
- Harbecke domestic well completion. Drilled and rebuilt the Harbecke drinking water system.
- Designed and constructed an expansion with the dog kennels.
- Removed the hazardous facilities at Huntsman headquarters. Commodity barn and topped all trees near the buildings.
- Huntsman house upgrades, remodeled bathroom, one bedroom, living room area and replaced most flooring. Added central heat and air conditioning.
- Finished construction of retention pond at feedlot. Completed and permitted the CAFO along with monitoring wells.
- Replaced the roof on the McCoy house due to wind damage and leaks.
- Completed Huntsman feedlot cattle treatment hospital, heat, lights, water, electricity, storage and bathroom facility.
- Expanded feed slab to improve the ability to batch feed.
- Sourced, purchased and installed a man-camp at Bastain Creek.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Resources & Facilities
Fiscal Year Ending June 30, 2021

- Recycled another 14 semi loads of waste created by completing upgrades to infrastructure, the running total of recycled waste is now 60 semi loads.
- Added another 907 ewe lambs and 488 bred heifers to the ranch livestock population.
- Met or exceeded the projected Ranch Revenue budget and operated within the operations budget.
- Replaced older diesel and gasoline powered vehicles with alternative fuel vehicles, lowering capital cost and reducing the Districts carbon footprint.
- Reduced Volatile Organic Compound (VOC) usage within our fleet paint and body operation by more than 50% over the past five years.
- Selected as one of the 100 Best Fleets “Top 100 Fleets in North America” and “Top Green Fleets in North America”.
- Provided environmental information and testimony related to Moapa dace as part of a Nevada State Engineer hearing process, to support SNWA’s water rights in the Lower White River Flow System.
- Monitored more than 300 fixed monitoring locations across SNWA’s Great Basin Ranch grazing allotments.
- Coordinated extensively with local ranchers and the BLM regarding management of shared grazing allotments in central-eastern Nevada; supported the filing of Freedom of Information Act request on BLM grazing use decisions.
- Conducted raptor, kangaroo mouse, sage grouse, northern leopard frog, and other sensitive species surveys.
- Prepared a historic preservation plan for stabilization of the existing 130-year old Stonehouse structure.
- Coordinated with BLM toward the completion of 10 environmental compliance documents for the Northern Resources division.
- Conducted in-depth review of 262 external projects, legislative and regulatory proposals, and submitted 9 formal comment letters.
- Finished tenant improvements for building to be used as Warm Springs operations facility and moved staff into the facility in October.
- Established volunteer program to staff the Warm Springs public use area.
- Conducted bi-annual Moapa dace counts on the upper Muddy River and documented increased dace numbers and reproduction.
- Conducted threatened and endangered bird surveys and marsh bird surveys at the Warm Springs Natural Area and monitored bird population recovery from the 2010 wildfire and habitat restoration.
- Hosted the Audubon Society Christmas Bird count that counted 12,539 birds of about 75 different species in the Upper Moapa Valley with 20 volunteers.
- Grew over 5,000 native plants at the Warm Springs greenhouse for restoration areas on both Warm Springs and the Las Vegas Wash.
- Removed 150 palm trees, trimmed 59 palm trees and mowed and maintained 9,000 feet of fire breaks to protect infrastructure and Moapa

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Resources & Facilities
Fiscal Year Ending June 30, 2021

dace streams at the Warm Springs Natural Area.

- Monitored 21 ecological restoration sites at Warm Springs Natural Area for restoration success.
- Provided public outreach to 88 students from Future Farmers of America who assisted in planting and property cleanup, 110 local fifth-graders for repotting event and World Wetlands Day information, hosted a WSNA Green Up event planting 2000 plants on 3 acres and hosted 13 Scouts service projects that installed over 2,600 native plants, installed 300 feet of trail, and cut and delivered 4 trailer loads of firewood to needy residents.
- Monitored climate change science and potential impacts to the SNWA through coordinated activities with the Water Utilities Climate Alliance and Association of Metropolitan Water Agencies.
- Facilitated the Sustainability CDT, which met more than six times to coordinate the organization's sustainability goals.
- Participated in the annual holiday drive, recycling over 4,096 Christmas trees.
- Completed LED lighting retrofits for SNWA resulting in over 50,384 Watts of lighting load reduction.
- At SNWA facilities 90 Tons of 10 SEER HVAC units with environmental harmful R22 refrigerant were replaced with 13 SEER units that utilize the environmentally compliant R410 refrigerant.
- The SNWA Grounds maintenance crew has capped or removed 2,500

redundant or no longer needed irrigation emitters. This equates to a savings of 260,000 gallons of water per year.

- The SNWA Grounds maintenance crew has replaced approximately 2,000 faulty or leaking emitters in the last calendar year. This equates to a savings of 208,000 gallons of water.
- At the Molasky building, 10 new electric vehicle charging stations were added to the parking area on the 7th floor.

Strategic Plan Goal – Ensure Organizational Efficiency and Manage Financial Resources to Provide Maximum Customer Value.

2020-21 Performance Objectives

- Without compromising safety and/or service level, reduce operating costs through standardization opportunities, inactive inventory reduction, and continuous process improvements.
- Reduce the overall cost per mile/hour of operation for the LVVWD's vehicles and equipment.
- Annual department expenditures remain within budget.
- Continue to seek grant funding and provide support to other departments who are applying for grant funding.
- Facilitate renovation projects utilizing in-house labor whenever possible.

2019-20 Major Accomplishments

- Produced 15,885 bales of forage or 10,064 tons of marketable products

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Resources & Facilities
Fiscal Year Ending June 30, 2021

- with a value of \$1.48M, presently accounts receivable of \$730,000.
- The ranch produced 1,788 beef calves, sold 1,324 head at 803,373 pounds of beef with a value of \$1.15M and added 439 beef replacement females to the inventory with a value of \$658,500.
 - The ranch produced 3500 lambs, sold 1833 at 185,200 pounds for \$275,684. Ranch added 1,500 ewe lambs valued at \$300,000. Additionally, the sheep produced 39,329 pounds of wool with a value of \$119,846.
 - Replaced older diesel and gasoline powered vehicles with alternative fuel vehicles, saving an estimated \$70,000 in capital replacement costs.
 - Replaced 51 vehicles and equipment pieces that were no longer cost effective to operate and maintain and added an additional 29 pieces for organizational growth and improve capabilities of the organization.
 - Recovered over \$523,000 in vehicle resale at auction.
 - Recovered over \$27,500 in vehicle warranty repairs through our in-house warranty programs.
 - Recovered over \$16,946 from insurance companies for the in-house repair of not at fault vehicle accident damage.
 - Reduced average vehicle cost per mile by more than \$.05 saving more than \$232,000 in operational costs.
 - Obtained \$483,800 in Federal and State grant funding to support water quality monitoring, archaeological resources, program management, revegetation, and public outreach for the Las Vegas Wash.

- Continued to provide proper care and operation of fire protection and life safety systems, climate control for personnel and mission-critical areas, repair and maintenance of plumbing systems, and integrity of facility components including lighting, building facades, sidewalks, roofs, roads, and perimeter walls.
- Internally refurbished EH&S East Admin 1st floor break area with new carpet, tile, and paint.
- Internally remodeled Backflow Office area to include new tile, carpet, paint, data and electrical.
- Internally remodeled the East Admin lower level IT office area with new tile, carpet, paint, data and electrical.
- Internally remodeled lower level East Admin restrooms.
- Internally refurbished East Admin Building Director's and EA's office areas with new paint, carpet and blinds.

Strategic Plan Goal – Strengthen and Uphold a Culture of Service, Excellence and Accountability.

2020-21 Performance Objectives

- Department average annual incident rate exhibits a downward trend, based on a five-year average.
- Ensure 90 percent of Facilities preventive maintenance work is completed by the due date.
- Ensure 98 percent or greater, fire and life safety inspections or tests are completed by the due date.
- Continue to partner with other departments to create

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Resources & Facilities
Fiscal Year Ending June 30, 2021

vehicle/equipment committees to better assess needs and improve end products provided.

- Provide comprehensive preventive and predictive maintenance.
- Team safety Zero lost-time accidents.
- Train and certify maintenance and service personnel in new technology and repair techniques.
- Maintain Automotive Service Excellence (ASE) "World Class Technician Status."
- Maintain I-CAR Platinum Class Certification for Fleet Services paint and body operations.

2019-20 Major Accomplishments

- Renovations for safer operation of El Tejon Ranch irrigation lift station; replacement of hazardous irrigation electrical CT stand at Shoshone.
- The Facilities division comprised of a team of custodians reliably maintains an orderly, clean and compliant environment at all sites.
- Created vehicle/equipment committees with key customers in order to better assess needs and improve end products provided.
- Maintained Automotive Service Excellence (ASE) "Blue Seal of Service Award."
- Maintained Automotive Service Excellence (ASE) "World Class Technician Status."
- Maintained I-CAR Platinum Class Certification for Fleet Services paint and body operation.
- Completed 11,303 work orders and over 14,570 repair tasks on vehicles

and equipment over the past 12 months.

- No lost-time accidents occurred.

Strategic Plan Goal – Develop innovative and sustainable solutions through research and technology.

2020-21 Performance Objectives

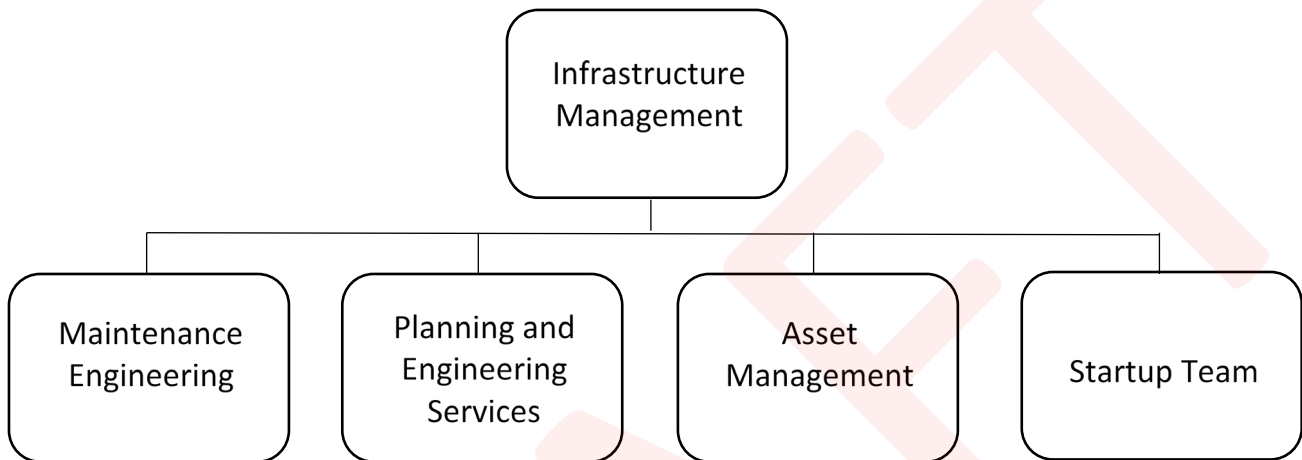
- Continue to equip fleet facilities with state-of-the-art testing and diagnostic equipment in order to properly diagnose and repair vehicle and equipment failures in a timely cost-effective manner.

2019-20 Major Accomplishments

- Equipped all fleet repair facilities with state-of-the-art manufacture specific diagnostic equipment, reducing vehicle down time and repair costs.
- Provided online technical training and diagnostic information to technicians at all repair locations.

INFRASTRUCTURE MANAGEMENT

Level: 3700



Mission

To provide world-class stewardship of the existing water system infrastructure through comprehensive asset assessment, protection, and renewal in the most fiscally responsible manner possible.

Department Description

The primary responsibility of the Infrastructure Management department is to manage the Las Vegas Valley Water District (LVVWD) and the Southern Nevada Water Authority (SNWA) assets by developing and maintaining the asset management program. To accomplish this, the Planning and Engineering Services division reviews water plan submittals for proposed development to ensure they meet the LVVWD's construction standards. They also ensure new developments have adequate water pressure and fire flow, evaluate future system requirements, and develop future capital cost projections. The Maintenance Engineering

division provides technical support and develops capital projects for the Operations, Resources and Facilities, and Water Quality and Treatment (WQ&T) departments. The Asset Management division conducts pumping unit efficiency tests, provides inspection support, tests for leaks on large diameter pipelines, and maintains the LVVWD and the SNWA cathodic protection systems. The Startup Team coordinates the safe integration of new equipment, components, and facilities in the LVVWD, SNWA, and the Big Bend Water District (BBWD) operating systems. These efforts are directly in support of the department's mission.

Budget Objectives and Highlights

The 2020-21 Infrastructure Management department budget contains a comprehensive view of ongoing efforts to maintain existing service levels, provides funding to continue the development and maintenance of the asset management program, and demonstrates a commitment to providing

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Infrastructure Management
Fiscal Year Ending June 30, 2021

daily operational support for the LVVWD's and SNWA's projects.

Infrastructure Management's total operating expense budget between the LVVWD and the SNWA increased \$1,091,274 from budget year 2019-20 to 2020-21. Contributing factors to the operating expense budget include SNWA,

BBWD, and LVVWD emergency and maintenance work, increased structural engineering analysis, innovation projects and initiatives, and increased PNID drawings that are required. The department will continue to focus efforts on infrastructure condition assessments, SCADA programming, and the 4-1-1 developer review process.

Expenditures

LVVWD Uses	Actual 2018-19	Budget 2019-20	Budget 2020-21
Materials & Supplies	\$ 243,703	\$ 387,205	\$ 332,962
Maintenance & Repairs	1,836,160	2,181,500	2,670,720
Rental & Leases	-	-	-
Other Employee Expenses	67,767	124,915	107,448
Other Expenses	113,839	378,450	487,968
Total Operating Expenses	2,261,470	3,072,070	3,599,098
Capital Expenditures	15,500,865	13,165,000	14,800,000
Payroll & Related Costs	12,234,372	13,764,330	13,968,164
Total Department Expenditures	\$ 29,996,707	\$ 30,001,400	\$ 32,367,262
FTE Positions	64.2	66.2	66.8

Department Performance

Maintenance Engineering. The Maintenance Engineering division is responsible for the engineering design enhancements and modifications needed to operate and maintain pumping stations, rate-of-flow-control stations, reservoirs, water treatment facilities, the distribution and transmission pipelines, and wells in a safe and efficient

manner. Specific responsibilities of Maintenance Engineering include PLC/HMI/SCADA programming and 24x7 support, SNWA communications network management and 24x7 support, engineering design, project management, construction management, and operations engineering support. Specific projects include THM mitigation, motor control center and switchgear upgrades, vault and pipeline

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Infrastructure Management
Fiscal Year Ending June 30, 2021

repairs/replacements, cathodic protection installations, tank re-coating, pump and valve installations and facilities improvements. The division provides engineering analysis in the form of electrical coordination studies, arc flash studies, load analyses, structural integrity evaluations, new equipment and technology evaluations, and water treatment tracer tests. The division also provides day-to-day engineering support for the LVVWD, SNWA, BBWD, Alfred Merritt Smith Water Treatment Facility (AMSWTF), River Mountains Water Treatment Facility (RMWTF), and the small systems.

The division is currently managing over 250 projects between the LVVWD and the SNWA, with a capital budget of more than \$22 million. Major projects include the LVVWD SCADA upgrade; Rice North electrical upgrade; Booster Pump Station 2 VFD replacement; BBWD 780 Zone Tank refurbishment and new electrical distribution equipment installation; BBWD raw water well installation; Jean J-8 Well installation; AMSWTF chemical tanks refurbishment, electrical distribution and engine controls upgrade at Campbell Pump Station; and the build out of the fiber optic communications network.

Startup Team. The Startup Team was formed to coordinate the safe integration of new equipment, components, and facilities into the LVVWD, SNWA, and BBWD operating systems. The team provides appropriate plans, policies, procedures, and instructions for the control and performance of the systematic testing, startup, and initial operations of new facilities, systems, and equipment. The team also established a contract 'Warranty Management' tracking

process during startup, continuing through the contract warranty period, for each project. The team is composed of one Senior Process Control Systems Engineer, a Process Control Systems Engineer, and an Engineering Technician to support LVVWD and SNWA new construction projects that require integration into the existing control systems (SCADA). The team will continue to support the increase in Maintenance Engineering projects and the Major Construction and Capitol Plan (MCCP) project expansion.

Planning and Engineering Services. The Planning and Engineering Services division provides research, analytics, statistical analytics, modeling, and forecasting to support several activities at both the LVVWD and the SNWA. The division provides long-term forecasts, estimates of customer demand curves, analysis of changing demand patterns, and conservation model results to the SNWA as inputs into regional water resource planning. The division provides economic analysis, water demand projections, population distributions, statistical support and water demand distributions to the LVVWD as inputs into financial planning and rate setting, infrastructure planning, operations planning, and small system analyses. This data is utilized for the evaluation of system additions initiated by the LVVWD and large system additions initiated by developers. The data is also used for hydraulic criticality assessment of distribution system components to ensure system reliability. The division maintains an industry leading hydraulic model of the distribution system, with cutting edge modeling capabilities, which is utilized for engineering analysis and decision support. The division locates, sizes,

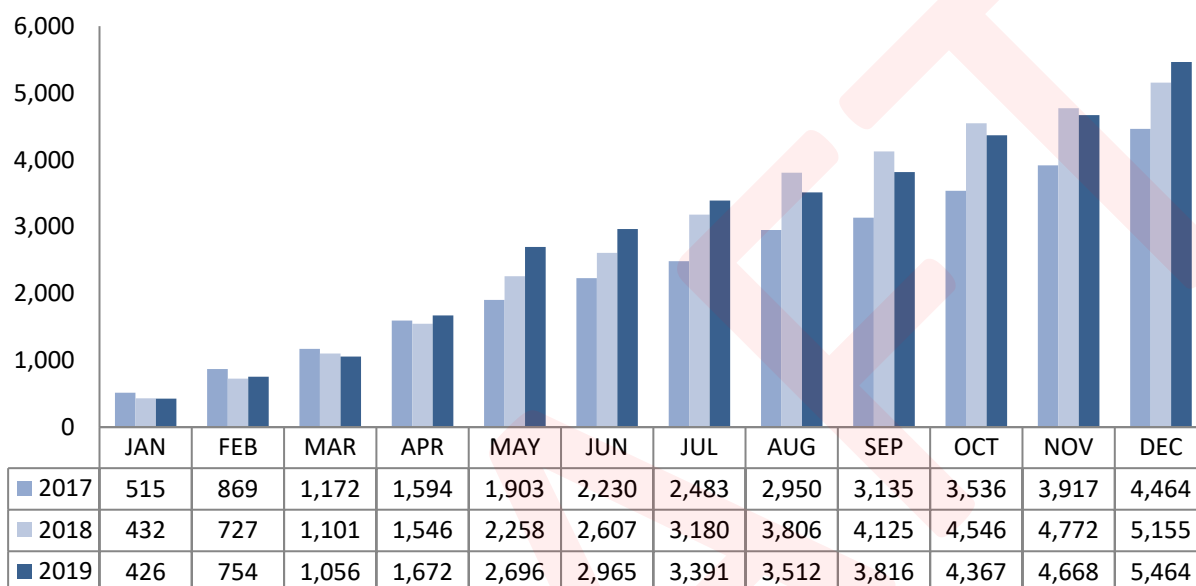
Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Infrastructure Management
Fiscal Year Ending June 30, 2021

and schedules new pumping stations, reservoirs, wells, and major pipelines. The division also maintains the Asset Management model which is used to prioritize asset renewal projects and provide capital cost projections. The division reviews pressure and fire flow availability for new developments and writes cost sharing agreements for the design and construction of major water facilities. The division collaborates with the WQ&T and Operations departments to address water quality compliance issues, to research and develop alternative technologies applicable to the LVVWD water distribution system, and to plan for capital improvements and required monitoring for regulatory compliance. The division conducts distribution system pressure and flow investigations in support of Customer Care and Field Services, Operations and Public Information. The division also performs planning for small systems, recycled water distribution systems, and out-of-valley transmission systems.

The division is also responsible for reviewing plans for additions and modifications to the systems of the LVVWD and the SNWA, initiated by developers, utilities, and public entities. The division approves the water plans for these system additions or modifications and ensures they meet the LVVWD's and the SNWA's requirements for reliability and maintainability, calculates fees, processes agreements, commit water resources to new developments, and ensures water facility construction is per the LVVWD's or SNWA's standards. The division coordinates with other public works construction to minimize both the LVVWD costs and inconvenience to the public. The division is responsible for the evaluation and testing of products for use in the water distribution system and oversees the LVVWD Approved Products List. The following chart represents the LVVWD's cumulative data representing new service points.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Infrastructure Management
Fiscal Year Ending June 30, 2021

New Service Points
2017-2019 Cumulative New Service Points Received



Asset Management. The Asset Management division assesses infrastructure conditions and forecasts short and long-term capital renewal needs to meet service level expectations. Asset Management performs condition assessments on pipelines with the latest technology such as acoustic leak detection, pipe wall measurements, and CCTV internal inspections to determine the remaining useful life of the pipelines and identify pipelines in need of rehabilitation. Reservoirs are inspected while in service with divers or the Remote Operated Vehicle (ROV) or are inspected while out of service with Magnaflux Leakage Technology (MFL) and a visual assessment. Pump performance evaluations are conducted utilizing SCADA data without the need for field testing to determine the current pump efficiency. The division is responsible for managing the corrosion control program for the LVVWD,

SNWA, and associated small systems. The goal of the corrosion control program is to extend the life of steel pipe and other steel structures by applying and maintaining cathodic protection (CP). Corrosion Control Systems Technicians collect annual corrosion data on over 3,900 CP test stations and 100 impressed current rectifiers. The division also maintains CP system components, installs new anodes and test stations, and performs corrosion assessments.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Infrastructure Management
Fiscal Year Ending June 30, 2021

Strategic Plan Objectives and Accomplishments

Strategic Plan Goal – Assure quality water through reliable and highly efficient systems.

2020-21 Performance Objectives

- Design, configure, and install communications equipment for establishment of two fiber optic sub rings that will connect to the carrier Ethernet core ring.
- Continue to develop the pipeline inspection program utilizing new CCTV pipeline equipment with a focus on increased number of planned inspections.
- Work with the Construction Management (CM) and Project team early in the course of a project to develop a workable startup plan to commission all facility/systems efficiently and with the final product having a minimum open punch list or any warranty issues at substantial completion.
- Plan capital improvement projects for the LVVWD, SNWA, and small systems to keep pace with increasing water demands and to enhance water system reliability.
- Review and approve development submittals in a timely manner, and to develop design standards for services with higher pressures.
- Continue evaluating water quality in the distribution system and collaborate with other departments for improvements in response to changing

water quality and regulatory conditions.

- Develop the PCCP inspection program for the A and B laterals.
- Replace VFD at Lamb Pump Station. This will be a safer, more reliable air-cooled unit.
- Continue to replace south valley lateral actuators. These actuators will replace obsolete units. This project will be spread over the next three years.
- Hire a water loss professional to work with purveyor members to develop a uniform approach to defining and conducting a water loss audit for compliance.
- Work with purveyor members to define the MCCP scope of the upcoming regional facilities recommended through IRPAC.

2019-20 Major Accomplishments

- Completed the integration and startup and performance testing of the new Bulk delivery system and Chlorine dilution system at the RMWTF. Worked with CM staff and the Control Systems Engineer to coordinate the integration of all the controls valves for Filters 11-15 at the AMSWTF. Integrated and completed startup and performance testing five new Sodium Hypochlorite rectifiers and generators at the RMWTF with minimum programming changes from the original vendor control system.
- Obtained Nevada Division of Environmental Protection's (NEDP's) approval and implemented 4-log inactivation of viruses for ground water production.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Infrastructure Management
Fiscal Year Ending June 30, 2021

- Assisted the Laboratory in relocating 53 water quality monitoring stations and expanded water quality monitoring framework to cover the newly developed areas and pressure zones.
- In collaboration with Maintenance Engineering, an emergency pressure relief valve (PRV) was installed at the Bruce Woodbury Pumping Station to improve emergency storage availability in the Laughlin resort corridor and the 750 Pressure Zone.
- Achieved 99.9 percent system availability of the SONET carrier communications network. Only outage was on redundant fiber so no user lost communications.
- Installed carrier ethernet core communications network that will replace the existing SONET network.
- Upgraded the BBWD SCADA system with new Wonderware System Platform.
- Installed air valves, actuators and associated programming on AMSWTF Filters 21-26. New actuators use Modbus IP for better, more reliable communications.
- Installed air cooled variable frequency drive (VFD) at Booster Pump Station 2. This 3000hp unit will allow for a safer more reliable operation of the pump.
- Installed drain valve at Regulating Tank 6. This will allow the tank to be easily drained in the future for maintenance activities.
- Replaced the LVVWD SCADA system with new Wonderware System Platform.
- Installed fiber optic cables to 60 percent of LVVWD pumping station sites. This process involved asset sharing agreements with private companies in addition to in-house design and installation of end use equipment.
- Installed new raw water well in Laughlin to help ensure the delivery of high-quality water during periods where storms have created high turbidity in the river water.
- Installed new J-8 well in Jean to replace failed J-4 well. This ensures water delivery to the community.
- Utilized the CCTV equipment to successfully locate a leak on a 20-inch pipeline. The pipeline was rehabilitated using an innovative lining technology Primus with in-house staff.
- Completed the integration and startup and performance testing of the new Bulk delivery system and Chlorine dilution system at the RMWTF. Worked with CM staff and the Control Systems Engineer to coordinate the integration of all the controls valves for Filters 11-15 at the AMSWTF. Integrated and completed startup and performance testing five new Sodium Hypochlorite rectifiers and generators at the RMWTF with minimum programming changes from the original vendor control system.
- Planned and implemented a distribution system pipeline improvement project and added a redundant pipeline to ensure reliable water transmission from western to eastern town of Searchlight.
- Completed the preliminary engineering for trihalomethanes mitigation installations at the 3090 Zone North Interim Tank, Rome 2745

**Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Infrastructure Management
Fiscal Year Ending June 30, 2021**

Zone Reservoir, Cougar 3090 Zone Reservoir and Cactus 2538 Zone Reservoir.

- Completed a study to identify facility requirements to serve future Bureau of Land Management (BLM) disposal areas throughout the LVVWD's service area, including a proposed City of Las Vegas development north of Moccasin Road, and south of Southern Highlands.

Strategic Plan Goal – Deliver an outstanding customer service experience.

2020-21 Performance Objectives

- Complete electrical distribution equipment upgrades at Well 33, and Angel Park Pump Station.
- Continue to develop relationships with Maintenance Engineering, Operations, SCADA, and the various shops to coordinate support for commissioning and be a resource to them for warranty and operation information.
- Maintain efficiency in reviewing water plan submittals, network analyses, and hydraulic grade line requests.
- Continue the 4-1-1 review process for developer projects; four-week first review, one-week resubmittal review, and one-week for final mylar review/approval; with a target success rate of 90 percent.
- Continue to work with other agencies to include water facility upgrades and replacements in road improvement projects.
- Encourage pre-submittal meetings with developers, the agency, and their engineers to identify potential issues

and/or special conditions resulting in one less plan review required per project.

- Refurbish BBWD 1130 Zone Tank. This will require preparatory work and planning to take this tank out of service for an extended time.
- Train dedicated staff to review and respond to Clark County and City of Las Vegas building permit applications in a timely manner.

2019-20 Major Accomplishments

- Approved 5,427 new water service connections, 645 hydraulic grade line and fire flow information requests, 307 water network analyses, and 600 sets of development plan requests.
- Reviewed 6,804 sets of developer, utility, and public works plans for the LVVWD and the SNWA, including brand new submittals, re-submittals, and revisions.
- Seventy-eight percent of first reviews were completed within the four-week goal (722 out of 925) for compliance with the 4-1-1 review process.
- Seventy-seven percent of secondary reviews were completed within the one-week goal (2,250 out of 2,911) for compliance within the 4-1-1 review process.
- Eighty-eight percent of mylar reviews were completed within the one-week goal (864 out of 974) for compliance within the 4-1-1 review process.
- Installed new electrical distribution equipment at Rice North Pump Station including new automation controls and communications equipment.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Infrastructure Management
Fiscal Year Ending June 30, 2021

- Coordinated multiple system/equipment integrations working with the contractors, consultants and internal staff for the benefit of our system. Completed the integration of Stewart Reservoir/Pump Station power upgrade and the Luce North THM and Power upgrade and Summerlin reservoir.

Strategic Plan Goal – Ensure organizational efficiency and manage financial resources to provide maximum customer value.

2020-21 Performance Objectives

- Continue to utilize the latest condition assessment technologies to determine the true condition and expected remaining life of the infrastructure.
- Further develop the Sedaru application to increase efficiency collecting cathodic protection and infrastructure assessment data.
- Support the update of the master specifications to consolidate LVVWD and SNWA Specifications.
- Collect additional construction cost data and update the cost estimation tool.
- Prepare an earthquake resiliency study that estimates earthquake-induced pipe damage, repairs, and service restoration for SNWA pipe network.
- Optimize pipeline replacement strategies by leveraging new technologies, including advanced hydraulic optimization and artificial intelligence (AI) for probability of failure prediction.

- Develop P&IDs and single line diagrams of RMWTF and AMSWTF. This will facilitate better and safer maintenance and make capital projects easier to plan and execute.

2019-20 Major Accomplishments

- Successfully implemented the Sedaru application to remotely input cathodic protection data with the iPhone to reduce office time.
- Submitted revised startup specifications for contract startup section to support new MCCC requirements and consolidation of LVVWD and SNWA specifications to ensure accurate and thorough integration of new facilities and upgraded equipment and systems.
- Provided and collaborated testing of an operational strategy for SNWA to deliver 370 MGD for an extended period through the Raw Water Tunnel to the RMWTF.
- Implemented living site drawing process within Maintenance Engineering and received cross departmental concurrence of their value and a commitment to develop a companywide process to ensure their development.
- Completed a work plan including sizing and cost estimation for the Blue Diamond Water System to resolve urgent leak and fire protection issues and applied the federal funding through the Army Corps of Engineers.
- Completed an earthquake resiliency study that estimates earthquake-induced pipe damage, repairs, and

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Infrastructure Management
Fiscal Year Ending June 30, 2021

service restoration for the LVVWD's pipe network.

- Completed two studies to evaluate the effectiveness of AI in pipeline failure prediction and verify the LVVWD's pipeline risk scores.

Strategic Plan Goal - Strengthen and uphold a culture of service, excellence and accountability.

2020-21 Performance Objectives

- Implement reverse osmosis process at Sloan Army Reserve Center based on recently approved NDEP submittal.
- Collaborate with Operations and Engineering on assessing and upgrading infrastructure.
- Provide Operations and Maintenance Engineering with updated O&M techniques through hands-on training and site-specific documents (Operating Manuals, Drawings and Warranty certificates) on the newly commissioned equipment and facilities.
- Aid the organization in utilizing economic research and analytics.
- Maintain an industry leading hydraulic model, with state-of-the-art modeling tools, of the distribution system for effective decision support and further automate the hydraulic model and tools for maintenance, calibration, asset rehabilitation, emergency response, shutdown analysis, and water quality applications.
- Perform grading work at multiple areas at AMSWTF to eliminate flooding during storm events. This

project is being done at the request of Facilities.

- Possibly install an isolation valve at Reg Tank 6 to allow quicker draining of the tank to support more rigorous and time-consuming maintenance activities in the future. Information obtained from this year's outage will determine what isolation valve options can be implemented.
- Collaborate with Clark County and the City of Las Vegas Fire Departments to enhance onsite fire flow analyses, and train consultants on including pertinent information in civil plans.
- Collaborate with the Cities of Henderson, North Las Vegas and Boulder City to prepare a new edition of Uniform Design and Construction Standards (UDACS).

2019-20 Major Accomplishments

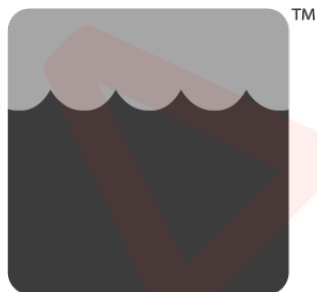
- Provided inspections support for all cathodic protection installations.
- Provided updated O&M Manuals at two newly constructed sites and four updated facilities at LVVWD and SNWA.
- New Construction Warranty program monitoring system is starting to accumulate the project/contract certificates for equipment and components. Facility and piping systems warranty are being coordinated with Asset Management.
- Used constant demand elasticity models to estimate the impact of consolidating all single-family customers on same tier sizes.
- Provided conservation data regarding local water use to assist in targeting

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Infrastructure Management
Fiscal Year Ending June 30, 2021

outreach programs and to develop new targeted conservation programs.

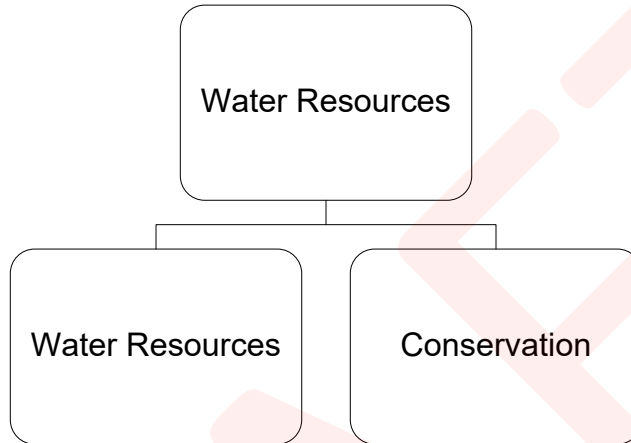
- Assisted Resources to estimate the impact of climate change on water demands over the next 50 years.
- Relined zinc and ferric chemical tanks at AMSWTF. This will provide Treatment Operators with reliable product delivery.
- Worked with the City of Henderson to install four air vacuum air release valves (AVARs) on pipeline to R-8 Tank. This simplified pipeline configuration and will reduce pressure surges.
- Refurbished both basins of the Sloan forebay including re-grouting and hole repair. This will help reduce water loss from the basins.
- Refurbished BBWD 780 Zone Tank and installed new electrical distribution equipment to improve the reliability of the water distribution system.
- Completed an update of the LVVWD's 220,000 pipe All-Pipes hydraulic model including the addition of 44,000 pipes.

This page left intentionally blank



WATER RESOURCES

Level: 3800



Mission

The mission of the Water Resources Department is to ensure adequate water resources are available to meet the community's current and future water needs in the face of climate uncertainty.

needs, assesses future water supply risks, provides technical support for the operations, construction, and rehabilitation of LVVWD and SNWA production, artificial-recharge, and irrigation wells, and administers regional water conservation programs.

Department Description

The Water Resources Department manages SNWA's water resource portfolio to ensure a reliable water supply for the community. Primary responsibilities include the management of existing water supplies, the acquisition and development of new water supplies, water demand management, and monitoring of regional hydrologic and water-quality conditions. The department supports policy initiatives on the Colorado River, conducts forward planning for water resource

Budget Objectives and Highlights

The department's budget is \$56,812,794, which represents a decrease compared to the fiscal year 2019-20 budget. Decreases are primarily attributed to a reduction in purchased water. Budgets for other ongoing Colorado River activities, and environmental compliance costs remain similar to previous years' budgets. The budget for conservation activities reflects SNWA's long-term commitment to increased water conservation.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Water Resources
Fiscal Year Ending June 30, 2021

Expenditures

LVVWD Uses	Actual 2018-19	Budget 2019-20	Budget 2020-21
Materials & Supplies	\$ 18,788	\$ 126,750	\$ 128,880
Maintenance & Repairs	-	35,000	169,920
Other Employee Expenses	3,321	17,300	38,266
Other Expenses	76,363	77,750	79,728
Total Operating Expenses	98,472	256,800	416,794
Capital Expenditures	4,471,825	2,625,000	4,125,000
Payroll & Related Costs	335,895	1,586,310	2,464,085
Total Department Expenditures	\$ 4,906,192	\$ 4,468,110	\$ 7,005,879
FTE Positions	1.6	9.4	13.4

Department Performance

Water Resources. The Water Resources Division is responsible for securing and managing regional and local groundwater and surface water resources to ensure a reliable water supply for Southern Nevada. This responsibility involves managing existing Colorado River allocations and agreements including those for river-related environmental compliance; conducting regional water resource planning, including integrated water resource planning, population forecasting, regional water demand forecasts and analyses, and water use accounting and reporting; identifying, evaluating, and developing sources of additional groundwater and surface water supplies; managing banked resources; establishing hydrologic and climatological monitoring networks; securing water rights

from the Nevada State Engineer's (NSE) Office; and ensuring all water-resource assets remain in good standing.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Water Resources
Fiscal Year Ending June 30, 2021

SNWA Permanent and Temporary Resources		
	Supply	Consumptive Use
Permanent	Colorado River (SNWA)	276,205 AFY
	Nevada Unused Colorado River (Non-SNWA)	0-13,016 AFY
	Tributary Conservation Intentionally Created Surplus	28,700 - 36,000 AFY
	Las Vegas Valley Groundwater Rights	46,961 AFY
Temporary	Southern Nevada Groundwater Bank	335,111 AF (20,000 AFY)
	Interstate Bank Arizona	613,846 AF (40,000 AFY)
	Interstate Bank California	330,225 AF (30,000 AFY)
	Intentionally Created Surplus (storage in Lake Mead)	695,341 AF (300,000 AFY)

Conservation. The Conservation Division develops and implements demand management programs and strategies with emphasis on reducing consumptive water uses. The SNWA monitors water use in terms of Gallons Per Capita per Day (GPCD) for all water consumed by the SNWA and its member agencies to meet the needs of residential and non-residential customers. SNWA calculates GPCD by dividing annual SNWA Colorado River water diverted (excluding off-stream storage) and member well production, less corresponding Colorado River return-flow credits by the total SNWA resident population served per day.

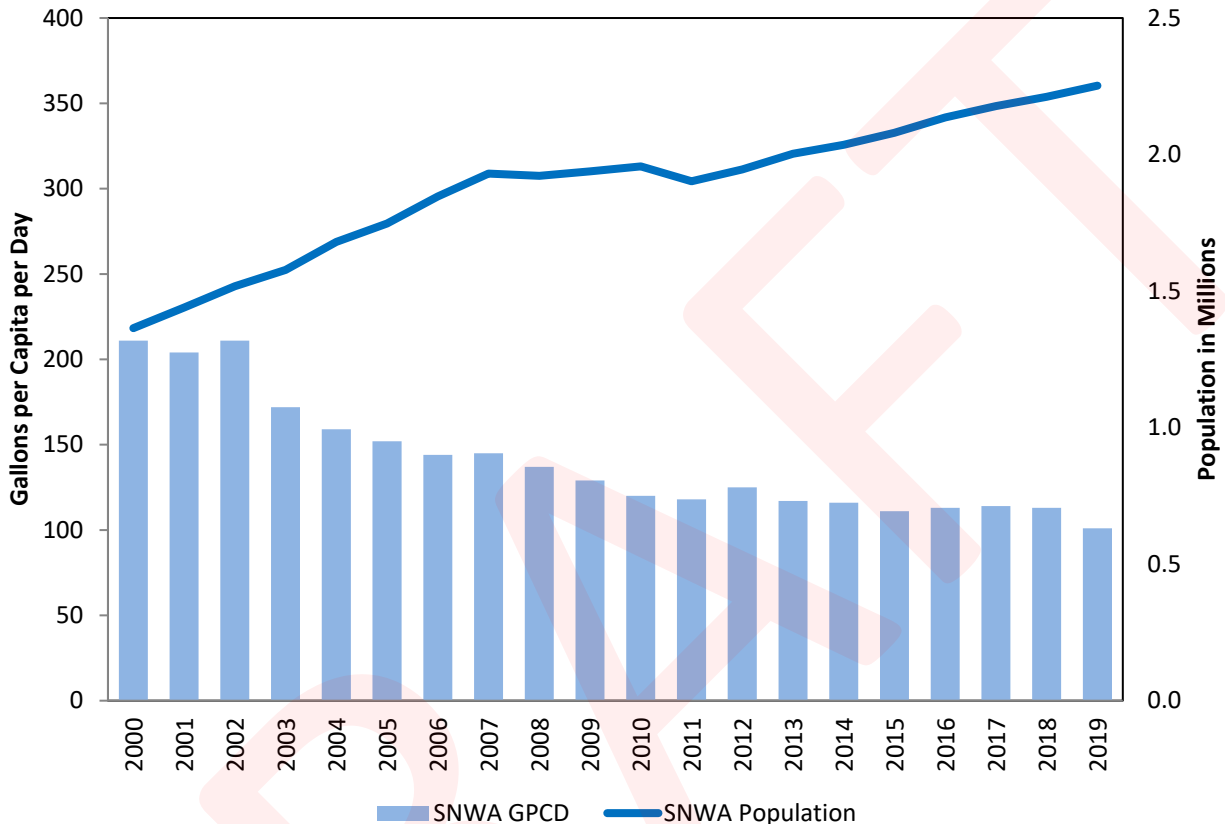
The SNWA's GPCD was 101 in 2019, a reduction from 113 in 2018 and down 52 percent since the implementation of drought policies in 2002. While 2019 results are below the SNWA conservation goal of 105 GPCD, above average precipitation and below normal temperatures were primary contributing factors. Additional efforts to sustain progress and achieve additional conservation gains remains an ongoing priority.

The SNWA supported 3,129 Water Smart landscape projects in 2019, which included the removal and replacement of nearly 4.8 million square feet of turf. These conversions will produce a perpetual annual water savings of more than 267 million gallons. To date, the cumulative benefit of landscape conversions completed since 2000 have reduced the SNWA's consumptive water use by more than 10.7 billion gallons.

The Conservation Division employs three water-efficiency strategies: education, incentives, and regulation. Education strategies include multi-media (managed through the Public Information Division), customer contacts, publications, videos, special events, demonstration projects, and a comprehensive website. The incentive strategy utilizes rebates to promote landscape conversions and use of water-efficient technology and accounts for the largest share of conservation funding. The regulatory strategy relies on coordination with other jurisdictions to implement efficient development standards, time-of-day watering requirements, water waste penalties and tiered water rate structures.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Water Resources
Fiscal Year Ending June 30, 2021

SNWA GPCD and Population



Strategic Plan Objectives and Accomplishments

Strategic Plan Goal 1 – Assure quality water through reliable and highly efficient system.

2020-2021 Performance Objectives

- Implement the Colorado River Drought Contingency plans to help protect critical elevations in Lake Powell and Lake Mead and reduce the potential magnitude of supply reductions.
- Complete actions as required under the SNWA/Department of Interior Stipulated Agreements.
- Prepare to begin negotiations with the seven Colorado River Basin states and the U.S. Bureau of Reclamation for post-2026 river operations and management
- Advance SNWA and LVVWD interests regarding the acquisition, development, and management of water rights to secure future resources.
- Ensure reliability of Colorado River supplies through active participation

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Water Resources
Fiscal Year Ending June 30, 2021

in environmental compliance and management programs.

- Inspect the SNWA and the LVVWD wells annually to ensure appropriate operational capacity for each service area. Manage, develop, and certificate water rights, as appropriate.

2019-20 Major Accomplishments

- Worked with stakeholders to implement the 2019 Lower Basin Drought Contingency Plan Agreement (DCP) to help preserve Colorado River operations for Lower Basin water users and increase the flexible use of Colorado River resources.
- Met commitments under the Colorado River Pilot System Conservation Program. Lake Mead contains approximately 32 feet of additional water from the program and other storage initiatives.
- Collaborated with international partners to implement water and environmental management programs in the Colorado River Delta.
- Led stakeholder programs to improve prediction and understand uncertainty of future water supply and demand resulting from climate and hydrologic change.
- Continued implementation of the Lower Colorado River Multi-Species Conservation Program and the Glen Canyon Dam Adaptive Management Program.
- Completed all compliance monitoring and reporting for LVVWD groundwater rights, and permits to recharge, store, and recover water

from the Southern Nevada Water Bank.

- Administered LVVWD groundwater rights to optimize operational flexibility.
- Designed and constructed a high-capacity production well for the Jean Water System, J-8, to replace well J-4.
- Designed and initiated construction of two new LVVWD production wells, W125 and W126, at the Ft. Apache and Rome reservoir sites.
- Performed an evaluation at three reservoir sites in Las Vegas Valley to determine suitability of the sites for future production wells.
- Presented expert testimony in an administrative hearing before the Nevada State Engineer regarding water availability and endangered species in the Lower White River Flow System and Muddy River.
- Maintained and perfected SNWA groundwater and surface water rights while optimizing operational flexibility.
- Provided well design, construction oversight, and project management for the Big Bend Water District Riverbank Filtration Well.
- Managed an ongoing maintenance and repair program to optimize efficiencies of irrigation wells and the development of water rights associated with the NR Ranch properties.
- Constructed a high-capacity irrigation well to replace the Phillips No. 2 irrigation well at Great Basin Ranch.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Water Resources
Fiscal Year Ending June 30, 2021

- Constructed a replacement domestic well for the Phillips and McCoy ranches.
- Implemented a groundwater monitoring program to track groundwater quality trends upgradient of selected LVVWD production wells.
- Represented Nevada as a member of the Colorado River Basin Salinity Control Forum and collaborated with other stakeholders to reduce salinity concentrations and protect Nevada Colorado River return flows by ensuring continued compliance with U.S. EPA salinity standards for the Colorado River.

Strategic Plan Goal 2 – Deliver an Outstanding Customer Service Experience.

2020-21 Performance Objectives

- Maintain a 90 percent or greater client satisfaction rating for delivery of the Water Smart Landscapes program.
- Expand single-family Site Evaluation Pilot Program to assist high water users in reducing demands.
- Increase participation in Water Smart Landscapes among Homeowner Associations (HOAs), multi-family residential developments and other non-single-family properties by cultivating relationships with community associations, property and facility managers, presenting at HOA meetings and conducting desktop water audits.
- Increase participation in Water Efficient Technologies by engaging

facility managers and industry professionals and increasing awareness of water-efficiency incentive opportunities.

- Refine understanding of consumptive water use and improve customer service within non-single-family sectors by leveraging existing and emerging information technology.

2019-20 Major Accomplishments

- Conservation customer satisfaction rating increased to 98 percent (1/5-point scale, with 80% excellent and 18% very good).
- Implemented a smart leak detection incentive program and rebated 104 units.
- Conducted site audits at select properties and provided consulting services to nearly 200 residential customers with disproportionately high-water use.
- Participated in 55 HOA meetings, made 770 new community association contacts and conducted 37 HOA desktop audits.
- Taught 28 English and Spanish landscaping and irrigation classes at the Springs Preserve and City of Henderson locations to more than 400 residents.
- Purchased and deployed four fire engineer training simulators for use in training by local fire agencies. The units replicate training scenarios while recirculating water and will save an estimated 730 million gallons of water over their useful life.
- Worked with golf industry professionals to deploy specialized

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Water Resources
Fiscal Year Ending June 30, 2021

mapping technology to assess turf play areas to help identify and prioritize opportunities for turf conversion.

Strategic Plan Goal 3 – Anticipate and Adapt to Changing Climatic Conditions while Demonstrating Stewardship of our Environment.

2020-21 Performance Objectives

- Implement the Colorado River Drought Contingency plans to protect critical elevations in Lake Powell and Lake Mead and reduce the potential magnitude of supply reductions.
- Complete actions as required under the SNWA / Department of Interior Stipulated Agreements.
- Reduce water demands and maximize use of available resources through aggressive water conservation.
- Bank conserved water and increase temporary resources that can be used flexibly to meet demands and/or offset potential supply reductions.
- Assess climate change impacts in long-term planning efforts and publish annual updates to SNWA's Water Resource Plan and Water Budget.
- Communicate water conservation goals and progress to the organization.
- Support conservation plans that benefit endangered and threatened species to ensure access to current and future water supplies.
- Monitor, and when appropriate, participate in external activities that might interfere with SNWA's access to

permanent, temporary and future water resources.

- Advance climate science information sharing and pursue research aimed at informing or enhancing predictive modeling tools.

2019-20 Major Accomplishments

- Updated SNWA's 5-year Joint Conservation Plan and LVVWD's 5-year Small Systems Conservation Plan.
- Revised SNWA GPCD metric and restated the conservation goal to reflect consumptive use. Achieved a 2019 GPCD of 101. Above average precipitation and below average temperatures were primary contributing factors.
- Issued more than 5,000 conservation rebates saving the community nearly 353 million gallons per year.
- Published the 2019 Water Resource Plan and 2019 Water Budget. Updated resource planning scenarios to reflect the latest UNLV-CBER population forecast, DCP provisions and water supply impacts under variable Colorado River inflows (average, dry, extremely dry and climate change conditions).
- Provided demand and supply analyses for evaluation of additional permanent resources and for use in the SNWA financial model for the Integrated Resource Planning Advisory Committee process.
- Developed and maintained a range of projected Colorado River consumptive use for 2019 water resource management.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Water Resources
Fiscal Year Ending June 30, 2021

- Prepared a 5-year SNWS sales forecast for SNWA financial budget and energy planning.
- Worked with stakeholders to implement the 2019 DCP to help preserve Colorado River operations for Lower Basin water users and increase the flexible use of Colorado River resources.
- Expanded SNWA water banking opportunities with a new municipal conservation and off-stream storage Intentionally Created Surplus (ICS) project authorized under the DCP agreements. SNWA stored approximately 59,000 acre-feet of water in Lake Mead under this project in 2019.
- Created 10,988 acre-feet of in-lieu storage credits in the Southern Nevada Water Bank.
- Conducted Colorado River modeling in support of ongoing negotiations and resource management activities.
- Partnered with Colorado River stakeholders to identify, prioritize and fund select research initiatives to improve the accuracy of hydrological forecasts, enhance the performance of predictive and decision support tools, and to reduce uncertainty related to future supply and demand conditions in the Colorado River Basin.
- Maintained a regional monitoring network in east central and southern Nevada to collect long-term hydrologic and climatological data.
- Designed and oversaw construction of replacement wells within the Las Vegas Valley and for the ranches.

- Implemented a uniform conservation policy for water features among all municipalities.
- Created approximately 34,844 acre-feet of Tributary Conservation ICS and over 556 acre-feet of System Conservation water from the Muddy and Virgin Rivers to Lake Mead.

Strategic Plan Goal 4 – Develop innovative and sustainable solutions through research and technology.

2020-21 Performance Objectives

- Conduct and expand pilot studies to improve landscape watering compliance through deployment and/or use of technology.
- Develop new programs and processes to improve the resolution time of customer leaks.
- Host 13th Annual WaterSmart Innovations Conference.
- Continue to collaborate with water efficiency technology incubators and accelerators, including WaterStart, ImagineH2O, the Metropolitan Water District of Southern California, the Alliance for Water Efficiency and others.
- Participate in a multi-agency, national research initiative on cooling technology and water demand.
- Collaborate with WaterStart on a study of water efficiency technology for resorts and large facility management.
- Participate in the implementation of Minute No. 323, “Extension of Cooperative Measures and Adoption of a Binational Water Scarcity

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Water Resources
Fiscal Year Ending June 30, 2021

Contingency Plan in the Colorado River Basin”.

- Explore best practices for quantifying agricultural water conservation with Colorado River Basin partners.

2019-20 Major Accomplishments

- Implemented a program to provide additional support to member agencies to enforce watering restrictions.
- Ongoing collaboration with the State of Nevada’s WaterStart program and ImagineH2O to review water efficiency technology and select award recipients.
- Partnered with the Alliance for Water Efficiency and major utilities to fund and develop a research venture to explore water conserving approaches to cooling.
- Hosted more than 1,000 attendees at the 12th Annual WaterSmart Innovations Conference and Expo, the nation’s largest event for exhibiting and presenting water efficiency programming and technology.
- Participated in the development of a scope of work to explore opportunities for desalinization of sea water along the Sonoran Coast of the Sea of Cortez and partnered with Lower Basin water users to fund a study.
- Initiated a project to compile and integrate existing well-systems and groundwater data into a Common Data Repository to enhance cross-departmental collaboration.

- Deployed Toughbook computers to increase efficiency of field data collection and reduce labor costs associated with data transcription, QA/QC, and reporting.
- Conducted a pilot study using customer meter data to identify Sunday watering offenders. Implemented direct outreach and observed a 47 percent change in customer behavior.

Strategic Plan Goal 5 – Ensure Organizational Efficiency and Manage Financial Resources to Provide Maximum Customer Value.

2021-20 Performance Objectives

- Implement hydrologic monitoring efficiencies with remote data collection.
- Leverage conservation research dollars through regional/national projects that attract funding and participation from peer utilities.
- Implement a new business system to streamline workflows, maintain accountability, reduce labor intensity through automation and expand use of electronic documents.
- Develop a Conservation Strategic Plan to guide agency and interagency work efforts.
- Develop a process to gather and share conservation-related data with internal and external stakeholders and track the performance of the Conservation Strategic Plan.
- Coordinate with SNWA member agencies to consistently implement principles of SNWA’s Non-Functional

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Water Resources
Fiscal Year Ending June 30, 2021

Turf Resolution and Out-of-Valley Water Use Policy in municipal code and/or agency service rules.

- Partner with Colorado River Basin stakeholders to jointly fund water and environmental management investigations and programs.

2019-20 Major Accomplishments

- Continued installation of Geostationary Operational Environmental Satellite telemetry systems to monitor and provide real-time access to important hydrologic sites in remote locations and reduce travel-related expenses.
- Collected \$300,000 in grant funding to support conservation programs.
- Generated investments in climate change and hydrologic forecasting investigations of more than \$1,000,000 from Colorado River Basin partners.

Strategic Plan Goal 6 – Strengthen and uphold a culture of service, excellence and accountability

2021-20 Performance Objectives

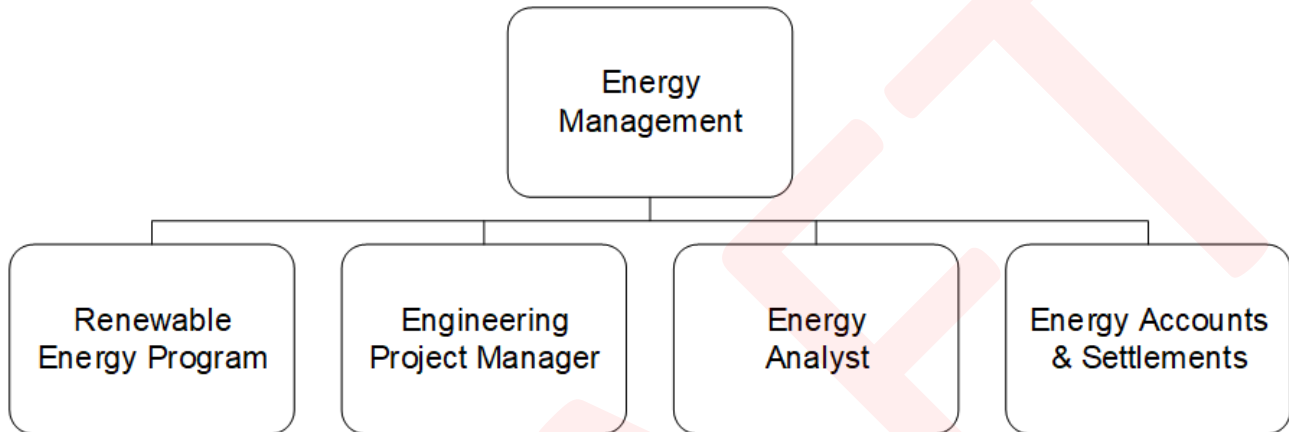
- Lead an interdepartmental team in development of a comprehensive annual groundwater management and well operations plan.
- Expand LVVWD water waste enforcement efforts to reduce water waste and improve compliance with mandatory watering restrictions.
- Meet or exceed annual benchmarks for SNWA conservation programs.

2019-20 Major Accomplishments

- Worked collaboratively with an interdepartmental team to develop a comprehensive annual groundwater management and well maintenance and operations plan.
- Established performance benchmarks for conservation programs and reported progress to internal and external stakeholders, including the SNWA Board.
- Exceeded performance benchmarks for key conservation programs and offerings, including Water Smart Landscapes program, Water Efficient Technologies program and targeted site evaluations.
- Conducted more than 16,800 water waste investigations within the LVVWD service area in 2019, a 193 percent increase over 2018.

ENERGY MANAGEMENT

Level: 3900



Mission

The mission of the Energy Management department is to manage an energy resources portfolio for the members of the Silver State Energy Association (SSEA), including the Southern Nevada Water Authority (SNWA) and its member agencies, which yields predictable prices; considering the overall value of sustainability and cost minimization.

Department Description

The Energy Management department was established in fiscal year 2005-06 to manage the procurement and utilization of energy resources necessary to pump, treat, and deliver water to the member agencies. The SNWA, in collaboration with the Colorado River Commission of Nevada (CRC), initially purchased energy supplies for its own water pumping needs and later began supplying power for the water pumping and wastewater needs of the SNWA member agencies, including the Las Vegas Valley Water District

(LVVWD), the City of Las Vegas, the City of Henderson, the Clark County Water Reclamation District and the City of North Las Vegas.

In 2007, the SNWA, along with the CRC, Lincoln County Power District No. 1, Overton Power District No. 5 and the City of Boulder City, formed the SSEA, a joint action agency charged with procuring and managing power resources for its members. Today, Energy Management personnel and CRC personnel, acting as the staff of the SSEA, manage the procurement and utilization of energy resources for the SNWA and its member agencies needs and the needs of the other SSEA members.

Key functions performed by Energy Management personnel on behalf of the SSEA include energy trading and procurement, accounting and settlements, energy risk management, forecasting, analytical support, and project planning and development. In addition to the functions performed on behalf of the SSEA, Energy Management personnel

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Energy Management
Fiscal Year Ending June 30, 2021

also support the renewable energy initiatives of the SNWA and the LVVWD.

Budget Objectives and Highlights

The fiscal year 2020-21 Energy Management department budget contains funding for all expenses associated with the procurement and management of energy resources for the SNWA's electrical loads. Expenses for the LVVWD, other SNWA member agencies, and

other SSEA members, are not included in this budget. The majority of budget funding is for energy commodities and services purchased by the SSEA from the energy and financial marketplace to meet the SNWA's needs. Other expenditures include transmission, distribution and ancillary services; operation and maintenance expenses associated with transmission and generating assets; and administrative and general expenses for CRC and the personnel of the SNWA.

Expenditures

LVVWD Uses	Actual 2018-19	Budget 2019-20	Budget 2020-21
Materials & Supplies	\$ -	\$ -	\$ -
Maintenance & Repairs	-	-	-
Rental & Leases	-	-	-
Other Employee Expenses	-	-	-
Other Expenses	-	-	-
Total Operating Expenses	-	-	-
Capital Expenditures	-	-	-
Payroll & Related Costs	(823)	-	-
Total Department Expenditures	\$ (823)	\$ -	\$ -
FTE Positions	-	-	-

Department Performance

Silver State Energy Association (SSEA). The SNWA has been instrumental in the formation and development of the SSEA, which has brought significant benefits to the SNWA, its member agencies and the SSEA members. In order to properly manage the energy needs of

the SNWA, a certain minimum size of labor and infrastructure is required. The employees and systems of the Energy Management department and the CRC Energy Services group have met this need for many years now.

Expanding the energy portfolio managed by this group to include the SNWA member

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Energy Management
Fiscal Year Ending June 30, 2021

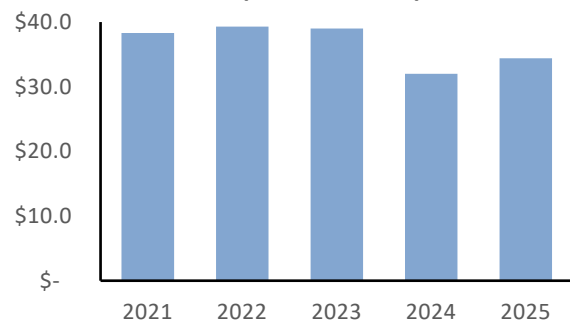
agencies and the members of the SSEA has brought significant economies of scale and portfolio synergies to each of the participants, including the SNWA. Furthermore, the energy portfolio has been able to be expanded in this way with only a minimal increase in the size of the labor and overhead required to properly manage it. Over \$1 million per year of general overhead and operating costs are now being paid for by non-SNWA entities, costs that otherwise would be paid for by the SNWA.

Some of the benefits the SNWA realizes by participating in the SSEA include 1) economies of scale when purchasing energy; 2) lower overhead costs; 3) lower balancing, imbalance and ancillary services costs due to the synergies of serving a single larger portfolio vs. serving the different load shapes of each individual entity; 4) federal hydropower optimization, which can only be realized by serving the combined portfolio; 5) economies of scale, shared resources, and shared costs of project development work; and 6) additional opportunities to work cooperatively with the other public entities in the overall energy portfolio.

Energy Price Stability. Energy Management measures its success on the basis of how well it is meeting its objective to provide energy to the SSEA members yielding stable, low and predictable prices. Consistent with the SSEA's Energy Risk Procedures the price exposure of the SNWA's energy portfolio has largely been eliminated through calendar year 2024. The SSEA locks in its energy portfolio costs by

securing a combination of physical market resources (generation assets or contracts for the delivery of electricity) as well as electric and natural gas financial products to meet the needs of its members. Physical contracts for electricity are secured whenever there are sufficient buyers and sellers to create liquid markets. Financial products are secured when physical contracts are unavailable, or market liquidity is unacceptably low. Financial products protect against price movements in the market and can be converted to physical supplies at a later time when physical power markets are more liquid. Because the SNWA portfolio cost is substantially fixed through calendar year 2024, changes in the market price of energy are expected to have little effect on the SNWA's expected costs during this period. The chart below shows the SNWA's actual and projected energy costs through fiscal year 2025 as of the end of February 2020.

SNWA 2021-2025
Fiscal Year Ending
Projected Energy Costs
(In Millions)



Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Energy Management
Fiscal Year Ending June 30, 2021

Energy Management has met its objective of providing energy at stable and predictable prices. This long-term management approach has allowed the SNWA and its members to budget for energy costs with a high degree of confidence years in advance. To ensure the commitment to long-term price stability is met, a Risk Control Committee comprised of the SNWA and its member agencies meets quarterly to review standardized reports produced by the SSEA, and to monitor the SSEA's adherence to its Risk Control Procedures.

The SNWA's energy costs are expected to be approximately \$39 million, excluding the estimated cost of capital associated with the SNWA's energy assets for the fiscal year 2020-21. This amount is recovered through the SNWA wholesale water delivery charge.

Boulder Flats Solar and 230 kV Transmission Project. SNWA is working with ibV Energy Partners on a large 130 Mega Watt (MW) solar photovoltaic (PV) energy project located in the El Dorado Valley, including a 10-mile 230 kV transmission line extension to allow for interconnection with our existing transmission system. The SNWA is planning on purchasing the majority of the energy output but all of its member agencies that receive power from us are also planning to purchase some of the output. This strategic resource will be a critical renewable energy resource for meeting our renewable energy targets and will provide a low fixed price resource for many years.

SNWA and LVVWD Sustainability Initiatives. The Nevada legislature passed a new higher energy portfolio standard in 2019 that raises the requirement of 20% renewables in 2019 to 50% renewables by 2030. The SNWA and the

LVVWD will just meet that target in 2019 and participation in the Boulder Flats Solar Project will enable the SNWA and the LVVWD to meet the increasing standard in the years to come.

Strategic Plan Objectives and Accomplishments

Strategic Plan Goal – Assure quality water through reliable and highly efficient systems.

2020-21 Performance Objectives

- Negotiate and execute a 130 MW Power Purchase Agreement and a Transmission Development Agreement with Boulder Flats Solar in support of our renewable energy goals.
- Work with SunPower and its maintenance contractor to replace solar panels under warranty on the LVVWD reservoirs to achieve expected performance levels.
- Work with Western Area Power Administration and the SNWA Operations on best practices to forecast and coordinate energy load and resource scheduling.
- Evaluate various renewable energy options to satisfy the next increment of renewable generation with the goal of reaching net zero carbon emissions.
- Work with the Middle Office to finalize a morning report for renewable assets showing performance from the prior day. The report will be used as a flag for any potential performance problems.

2019-20 Major Accomplishments

- Completed the installation of solar covered parking at the LVVWD campus covering four separate parking areas. The

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Energy Management
Fiscal Year Ending June 30, 2021

combined capacity of the project is 2 MW and will offset load at the campus.

- The SNWA signed a Memorandum of Understanding with Boulder Flats Solar outlining the efforts that will be undertaken to get to definitive power purchase and development agreements for a large solar PV project.
- Determined the correlation of power and water for L3PS, IPS1 and IPS2 with new metering and communication equipment.

Strategic Plan Goal – Deliver an outstanding customer service experience.

2020-21 Performance Objectives

- Provide advisory services to the SNWA member agencies as they evaluate various alternatives for serving their future energy needs.
- Work with the SNWA member agencies to develop and execute agreements for Boulder Flats solar power commitments.
- Analyze loads and resources for Overton Power District to evaluate full requirements service through SSEA.
- Coordinate with the SNWA member agencies to develop new methods to obtain and report renewable energy compliance obligations under new SB 358 legislation.

2019-20 Major Accomplishments

- Provided advisory and consulting services to the SNWA member agencies on the future energy landscape and their various load and resource options.
- Provided quarterly educational presentations to all network power customers on the Risk Control Committee.

- Integrated network customers' Hoover D resource allocations into monthly schedules, increasing the amount of renewable energy serving wastewater load.
- Updated and relaunched the SSEA website with enhanced document search and retrieval features.

Strategic Plan Goal – Ensure organizational efficiency and manage financial resources to provide maximum customer value.

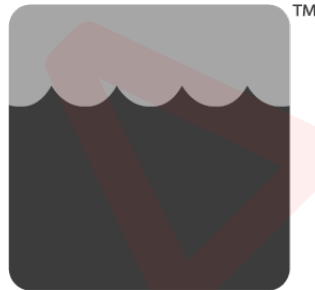
2020-21 Performance Objectives

- Maintain a managed portfolio of energy resources for all SSEA requirements within all hedge guidelines and procedures.
- Streamline and modernize the SSEA reporting tools and procedures to ensure data integrity and accuracy.
- Seek to enable additional energy trading counterparties. It is important that the SSEA maintains a list of strong counterparties to enter agreements and offset risks to the energy portfolio.

2019-20 Major Accomplishments

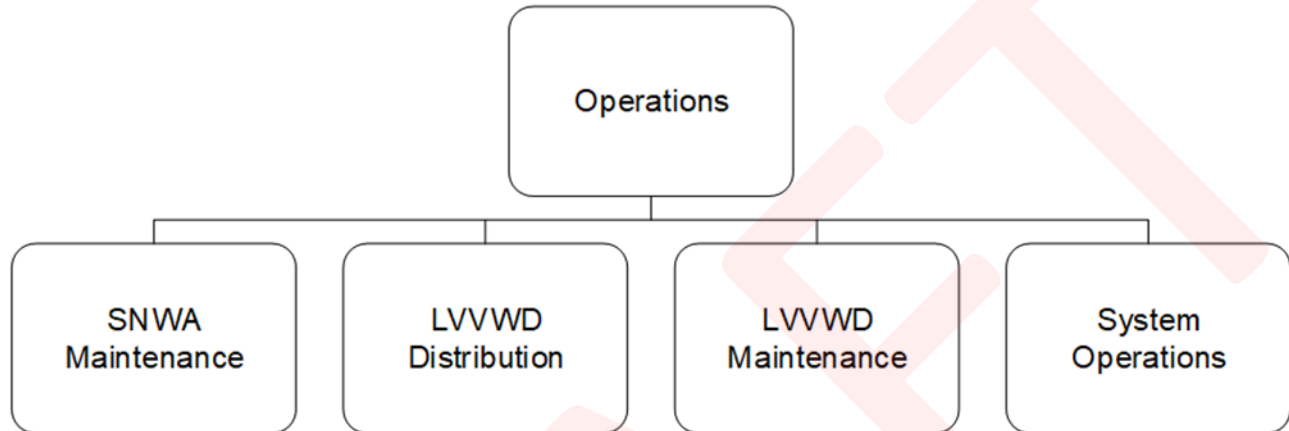
- Enhanced the energy accounting system to provide more robust cost versus actual comparison reports.
- Conducted a study of the correlation of natural gas and power prices and reevaluated the effectiveness of various hedging approaches.
- Modified the approach and coordination of Middle and Back Office for SSEA month-end financial reporting.

This page left intentionally blank



OPERATIONS

Level: 4100



Mission

To serve the Southern Nevada Water Authority (SNWA) customers by delivering high quality drinking water to the greater Las Vegas area through efficient, reliable, state-of-the-art delivery systems. To support the Las Vegas Valley Water District's (LVVWD) mission by delivering water to customers that is adequate to meet their needs and proven safe through a system that is effectively operated and maintained.

Department Description

The LVVWD system is comprised of a wide variety of facilities which include various pumping stations ranging in size from 7,500 gallon per minute (GPM) to 93,000 GPM and various reservoirs ranging in size from 10 million gallon (MG) to 50 MG, for a total storage of just over 900 MG. The LVVWD has 64 potable wells capable of producing 200 MGD, 31 specially constructed wells dedicated to recharging the groundwater

basin with treated Colorado River water during the winter months.

The SNWA system consists of 31 pumping plants, 36 rate-of-flow control stations (ROFCS) also referred to as metering sites, 163 miles of large diameter pipeline, and over 60 regulating tanks, reservoirs and surge towers.

Operations also serves customers located not only in the metropolitan Las Vegas area, but also the small service areas of Blue Diamond, Jean, Kyle Canyon, Searchlight, Eldorado Valley, Coyote Springs/Moapa, Sloan and Laughlin.

Budget Objectives and Highlights

In October 2014, the SNWA/Southern Nevada Water System (SNWS) and the LVVWD Operations department's divisions and functions were merged into a single department. Building on this action, the department was further reorganized in October 2015 to create a combined Systems Operations division with separate

**Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Operations**

Fiscal Year Ending June 30, 2021

maintenance divisions for the LVVWD and the SNWA.

Operations' divisions are responsible for the day-to-day and long-term operations of a complex network of pumping stations, reservoirs, ROFCS, sodium hypochlorite facilities, and ground water wells necessary to meet water delivery demands. Wholesale customers of the SNWA include the LVVWD, City of Henderson, City of North Las Vegas, Boulder City, Nellis Air Force Base, and the National Park Service. Retail customers of the LVVWD receiving water from Lake Mead include residents of unincorporated Clark County and the City of Las Vegas. The department also operates small ground water systems for the communities of Blue Diamond, Jean, Mt. Charleston, Searchlight, the Sloan Army Reserve Center, and the Moapa Water Treatment Plant.

Equipment and Project Budget. The Operations department combined equipment and project budget reflects the new items to establish improved maintenance practices, replacement of existing equipment items no longer supportable by the manufacturer, and capital projects the divisions manage. The total request is \$14,536,000 for the fiscal year 2020-21 Budget Plan between the LVVWD and the SNWA.

Operating Expense Budget. The department's Operating Expense budget continues to focus on Reliability Centered Maintenance (RCM) aspects of keeping the overall water delivery system fully operational and reliable. The Operating Expenses for fiscal year 2020-21 Budget Plan are shown on the following table.

Operations' fiscal year 2020-21 overall budget totals \$80,536,042 between the LVVWD and the SNWA.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Operations
Fiscal Year Ending June 30, 2021

Expenditures

LVVWD Uses	Actual 2018-19	Budget 2019-20	Budget 2020-21
Purchased Water	\$ 18,422	\$ 39,000	\$ 39,000
Energy	9,106,323	10,056,500	10,009,000
Materials & Supplies	5,788,463	4,371,802	4,345,250
Maintenance & Repairs	597,487	2,107,000	2,019,840
Rental & Leases	24,591	-	-
Other Employee Expenses	236,131	251,150	250,416
Other Expenses	24,103	396,600	381,216
Total Operating Expenses	15,795,520	17,222,052	17,044,722
Capital Expenditures	1,539,728	4,904,500	5,185,000
Payroll & Related Costs	30,408,948	31,888,045	34,184,944
Total Department Expenditures	\$ 47,744,196	\$ 54,014,597	\$ 56,414,666
FTE Positions	193.3	190.0	195.4

Department Performance

SNWA Maintenance. The SNWA Maintenance division is responsible for the repair and maintenance of the production facilities and distribution system. The division ensures the system, facilities and equipment are maintained at a level to fulfill the SNWA's contracted water delivery commitments. This is a large, complex system consisting of 32 pumping plants, 36 metering sites called rate-of-flow control stations (ROFCS), 163 miles of large diameter pipeline, and over 60 regulating tanks, reservoirs and surge towers.

The Electrical/Electronics section consists of two teams of technicians responsible for all levels of reactive, preventive and predictive maintenance, emergency repair, new construction, retrofitting and installation, and upgrading of all equipment and process control systems belonging to the SNWS. All the SNWS pumping stations and ROFCS are fully automated and remotely controlled. This allows the SNWS to operate a 900 million-gallon per day water system with minimal staff. The Electrical/Electronics section is comprised of a workforce to maintain systems from 24 VDC to 13.8KV, working closely with the Colorado River Commission (CRC).

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Operations
Fiscal Year Ending June 30, 2021

The Mechanical section, consisting of two teams, is responsible for the maintenance and repair of the large pumping units, pneumatic/hydraulic valve actuating systems for the pump discharge control valves, the rate of flow valves and operators at the system pumping stations delivery points. These sections are also responsible for the heavy support maintenance and repair of all the in-valley and out-valley SNWS mechanical equipment consisting of motors and gear reduction units, valves and valve actuators, canal gates, air compressors and chemical feed systems utilized by treatment. A full capacity machine shop provides for in-house repair and fabrication of equipment needed to support the mission.

LVVWD Distribution. The Distribution division (Distribution) is responsible for maintaining 6,847 miles of pipeline and laterals, 132,907 valves, 401,112 service laterals, 40,495 fire hydrants, and all related appurtenances comprising the LVVWD's distribution system. In fiscal year 2018-19, Distribution crews completed 8,549 work orders consisting of repairs to pipelines, and the repair and replacement of valves and fire hydrants; additionally, 1,914 leaking service laterals were replaced. Distribution is in the process of replacing the estimated 80,000 polyethylene services installed within the LVVWD's distribution system between 1971 and 1989. These services have been problematic and very unreliable, with multiple failures. Approximately 64,909 of these services have been replaced, leaving 15,091 in unreliable service. Distribution also assists other departments, such as Asset Management and Inspections, by installing cathodic test stations, valve corrections, and water quality.

Distribution continues the preventive maintenance valve program which locates, operates, and maintains valves within the distribution system. Distribution located and exercised 13,271 valves in fiscal year 2018-19, keeping them in good working order and improving Distribution staff's ability to quickly perform main shutdowns in case of a leak or large emergency. This has helped Distribution staff lower the average time to shut down a leaking water main in an emergency and reduce non-revenue water losses.

The Backflow Prevention section administers the LVVWD's Backflow Prevention Program. This is a service protection program involving annual testing and repair of all backflow assemblies in the LVVWD distribution system. An active backflow program ensures contaminated water cannot enter the potable water system if a backflow, backpressure or back siphonage condition exists. The backflow technicians are certified by the California/Nevada section of the American Water Works Association (AWWA). They are currently managing approximately 31,480 backflow prevention devices.

LVVWD Maintenance. The LVVWD Maintenance division is comprised of five sections:

Field Booster Pump/Valve Repair
Pump System Repair Shop
Electrical
Telemetry
Well Crew

The Field Booster Pump/Valve Repair section maintains, repairs, and installs mechanical equipment found at major pumping stations, select small system sites, and recycled water systems. The section also implements the

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Operations
Fiscal Year Ending June 30, 2021

predictive maintenance tool of vibration analysis on the LVVWD's motors.

The Pump System Repair Shop expedites repair of major pumps and motors. This is accomplished using machining, mechanical, and coating and painting skills of the section members. This section also maintains the natural gas industrial engines at the Campbell Pumping Station and field deployed emergency generators.

The Electrical section maintains, repairs, and installs electrical equipment for pump stations, well sites, and other LVVWD locations. This involves performing preventive maintenance as determined by the Reliability Centered Maintenance process, implementing infrared predictive maintenance technology, maintaining the controls, power and mechanics of the water system, and having a working knowledge of the LVVWD's pumping strategies.

The Telemetry section maintains and repairs all instrumentation pertaining to water system operation and security, including monitoring water pressure, flow, level, drawdown, and chlorination instrumentation and systems, field computer systems, and associated devices for the SCADA system, multiple address and spread spectrum radios and repeater systems, microwave radio communications equipment, and security equipment in support of field sites.

The Well Crew section performs predictive, preventive, and corrective maintenance on all well pumps, artificial injection wells, and control valves. This section further plays a significant role in the evaluation of pump efficiencies and works in concert with Maintenance Engineering within

Infrastructure Management to recommend well rehabilitation schedules for the well bore and pumping equipment.

Systems Operations. The Systems Operations division is comprised of the management team, LVVWD Systems Operations, SNWS Systems Operations, the Disinfection Reservoir shop, and a Small Systems section.

The Management team is responsible for ensuring the sections have the necessary resources to accomplish their specific functions. Along with the section supervisors, the team consists of a manager, administrative staff, and two senior operations analysts. The analysts are integral in compiling the monthly water usage for which the SNWA bills its customers, tracking energy costs, monitoring non-revenue water trends, and liaising with other departments and divisions.

The LVVWD SCADA Operations section provides around-the-clock monitoring and control of all retail water distribution systems using the SCADA computer system. Daily tasks include coordinating water deliveries from SNWS and operating pumps and wells to maintain reservoir levels and water system pressure. This section remains dedicated to preparing daily pumping plans to fine tune pumping decisions which improve distribution system water quality and save electricity costs.

The SNWS SCADA Operations section provides around-the-clock monitoring and control of wholesale water transmission and distribution system equipment using the SCADA computer system. Daily tasks include coordinating water and power orders from the LVVWD. They also operate pumps and

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Operations
Fiscal Year Ending June 30, 2021

valves at all pumping stations, and monitor flows, tank levels, system pressures, chlorine residuals and other information through the SCADA network. Purveyor, wholesale customer demands are met by pumping water through the distribution system to the ROFCS, where the water is metered for billing. The SCADA system data is used to develop trends, reports and statistical information required for effective system operation.

The Disinfection and Reservoir section is a vital part of the potable delivery system for the LVVWD. They manage reservoir networks that represent most assets of a water utility. Their principal responsibilities are the management and disinfection of the potable water storage network of reservoirs and wells to meet standards required for human consumption. These networks are managed to achieve long-term sustainability of the LVVWD's critical assets. They continually find ways to incorporate innovative water technologies to optimize operational performances of the disinfection systems, including injection principles and methods to reduce or eliminate current water quality concerns. Just as important are the sodium hypochlorite storage and delivery systems that are maintained and operated to a standard that meets or exceeds current AWWA and National Sanitation Foundation standard 60 protocols.

The Small Systems section oversees operations and maintenance of the rural water systems located in Blue Diamond, Coyote Springs (Moapa), Jean, Kyle Canyon, Searchlight, and Sloan. This group is comprised of two rural systems operators

(RSOs) and a Small Systems Superintendent. The RSOs perform daily inspections of rural sites to operate, maintain, and repair water distribution mains, service lines, meters, tanks, reservoirs, chemical feed systems and other related appurtenances. The Superintendent handles the day-to-day administrative aspects of the rural areas, including planning, budgeting, supervising the RSOs and correlating the Small Systems' needs with other maintenance work groups. The Superintendent also leads the Small Systems Cross Departmental Team (CDT) which is comprised of personnel from the LVVWD and SNWA organizations. The CDT's purpose is to ensure sound decision-making and transparency for each of the rural water systems.

Strategic Plan Objectives and Accomplishments

Strategic Plan Goal – Assure quality water through reliable and highly efficient systems.

2020-21 Performance Objectives

- Both SCADA groups will continue to collaborate on the final SCADA system alarm philosophy, displays, and control strategy to allow for the installation of a common SCADA system for both groups.
- Systems Operations will chair a CDT to improve the balance between water conservation and daily demands. The team, consisting of Conservation, Public Services, Planning, and Operations, will balance usage during the winter one-day per week watering period to ensure water flows through the system more than once per week. This will improve water quality

**Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Operations**

Fiscal Year Ending June 30, 2021

- without reducing conservation efforts.
- LVVWD SCADA operations will receive training on the new WonderWare SCADA system to successfully transition to its use to control the water delivery.
- SNWS SCADA operations will accept L3PS pumping equipment for use in extracting Lake Mead water to deliver to the treatment plants.
- The Disinfection Shop will adhere to the plan of standardizing another five sodium rooms. This will raise the total to 16 and leave a small number to complete in future years.
- Small Systems will partner with Maintenance Engineering and contractors to complete the installation of a reverse osmosis system at the Sloan Army Reserve Center. This will bring total dissolved solids into compliance for this system.
- Small Systems will participate with Nevada Energy (NVE) and Clark County Office of Emergency Management to ensure NVE's Public Safety Outage Management (PSOM) efforts are successful. PSOM is a legislative mandate for NVE to deenergize electrical circuits in the Mt. Charleston service when conditions are prime for forest fires to start.
- LVVWD Maintenance will complete a multi-year effort to install fiber optic and security camera upgrades at all primary LVVWD locations.
- SNWA Maintenance will establish temporary generator power emergency preparedness program for all in-valley ROFCS.
- Valve actuator replacement project on the South Valley Lateral.
- PP2A Unit No. 2 pump rebuilds.

- Remove and reinstall IPS2 Unit No. 6 pump.
- Install new Venturis at Unit No. 6B.
- Install final control valve and REXA operator at Flamingo ROFCS.
- Install new isolation valves at Horizon Ridge ROFC.
- Install automatic transfer switch (ATS) at Foothills Pumping Station to provide redundant power to critical items within the station.
- Refurbish Motor No. 4 at Pumping Station No. 6.
- Install new ROTORK control valve actuators on South Valley Lateral.
- BC Lateral motor refurbishments (PS 1-ABC, PS04, and PS05)
- Replace failing VFD Nos. 1 and 10 at BPS2.
- Replace failed VFD No. 8 at PS2C.

2019-20 Major Accomplishments

- The two SCADA operations superintendents authored Risk and Resiliency Reports for certification by the General Manager. These assessments are required by the America's Water Infrastructure Act of 2018.
- LVVWD SCADA operations worked in tandem with SNWS operations to support several main lateral outages lasting more than seven days. Water orders were adjusted, and internal pumping plans were altered to ensure no impact to customers. The seven-day South Valley Lateral outage supported repair work involving the replacement of several valves. It also supported an inspection of the regulating tank interior to prepare for repairs in future years. The 14-day

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Operations

Fiscal Year Ending June 30, 2021

North Valley Lateral outage supported the relocation of approximately 500 feet of 72-inch piping for a residential development.

- LVVWD SCADA operations welcomed two new storage sites into the system. One above-ground steel tank supplies a significant portion of the Skye Canyon development area. The other, a typical below-grade concrete reservoir, eliminated one closed zone pumping station, and the approximate 5,000 customers are now reliably fed by gravity from this new reservoir.
- SNWS SCADA operations oversaw the planning and execution of 54 individual site and equipment outages. These included a first-time inspection of the South Valley Regulating Tank, which required a seven-day South Valley Lateral outage; a once-in-a-lifetime relocation of a portion of 72-inch piping in the North Valley Lateral as part of a home development project; and, the grout replacement and repairs to the Sloan Forebay over the span of 90 days.
- Disinfection Shop staff restored an underdrain pumping system at Broadbent designed to remove nuisance groundwater from underground piping and components. The water is flushed to the street at this time until a permanent connection to a storm drain system is constructed.
- Small Systems staff alerted NVE to two different pole mounted transformer fires. The early notice reduced the response and repair time to less than four hours for each event.
- Small Systems worked with Maintenance Engineering and Planning staff to complete over \$300,000 of improvements to the

Searchlight water system at virtually no cost to the community. Army Corp of Engineering reimbursed the projects at a 100 percent rate.

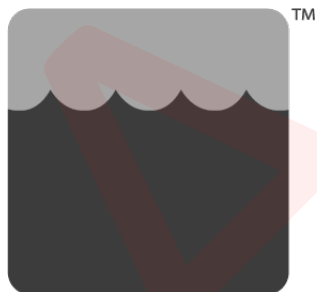
- Distribution installed 1,100 feet of Primus liner as part of a leaking pipeline rehabilitation project between LVSP and Bonanza Road.
- Replaced multiple valves and poly services and installed test stations on Nellis Boulevard from Owens to Boulder Highway prior to NDOT's paving project along Nellis.
- Coordinated with Maintenance Engineering and Las Vegas Paving to replace approximately 700 feet of pipe following a high-profile, emergency 24-inch main break at Valley View Boulevard and Nevso Drive.
- Installed 250 feet of pipe for future commercial water service relocation as part of a main extension project at Spring Mountain Road and Decatur Boulevard.
- Installed 800 feet of pipe for the Leon Avenue/Turkey Lane main extension/well conversion project.
- Replaced 1,000 feet of main in Searchlight.
- LVVWD Maintenance completed the installation of permanent power service to the Cliff's Edge site.
- SNWA Maintenance finished motor refurbishments on the A and C Laterals.
- Replaced the failing variable frequency drive at IPS2 Unit No.1.
- Completed Foothills Pumping Station Unit No. 7 cone valve rebuild.
- Installed flow control valves at Hacienda ROFCS.
- Removed and installed a replacement VFD at BPS2.

**Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Operations**

Fiscal Year Ending June 30, 2021

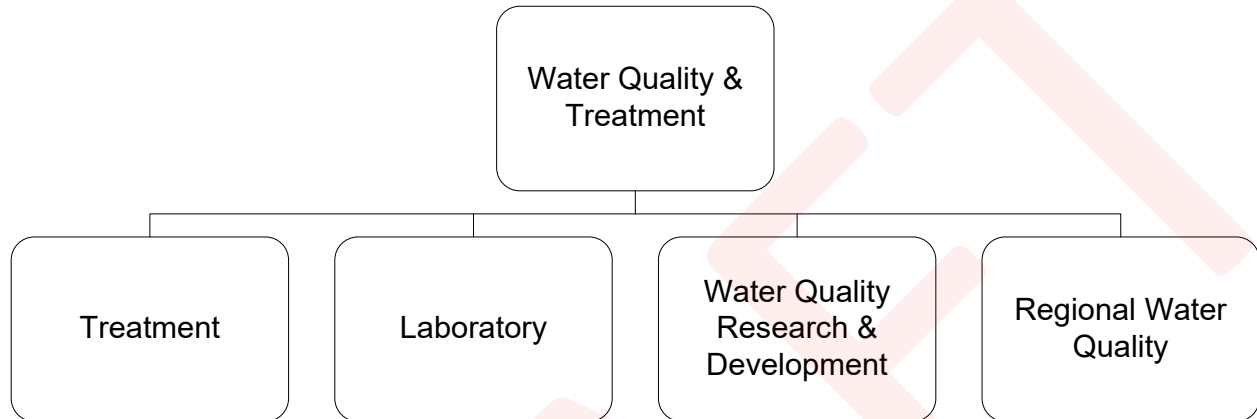
- Installed ATS at PS1C to provide redundant power to critical items within the station.
- Replaced RTU/PLC cabinet at Sloan Pumping Station.
- Completed BPS2 Unit No. 9 rebuild.
- Installed new Venturis at Unit Nos. 6A and 6C.
- Replaced 23-year-old Ronzone Pumping Station valve actuators.
- Replaced the Blue Diamond well pumping equipment and upgraded well site to meet State requirements and provide for a more reliable source of water for the community.
- Refurbished the Jean Midway well to provide backup well capacity.
- Replaced Carlton Square 3000 kVa electrical transformer due to age and oil condition.

This page left intentionally blank



WATER QUALITY & TREATMENT

Level: 4500



Mission

To provide world-class water service through innovative and effective water quality stewardship and reliable and efficient treatment operations.

Department Description

The functions under the Water Quality and Treatment (WQ&T) department include: Treatment, Laboratory, Water Quality Research and Development, and Regional Water Quality. The primary responsibility of the WQ&T department is to ensure the water quality provided to the Southern Nevada Water Authority (SNWA) purveyor members meets or surpasses all Safe Drinking Water Act (SDWA) standards. In order to do this, each of the divisions in the WQ&T department have

specific roles. The Treatment division is responsible for the operation and maintenance of the treatment process to supply high quality drinking water to the Las Vegas Valley. The Laboratory division is responsible for ensuring the finished water quality is compliant with the SDWA monitoring and reporting requirements. The Research and Development (R&D) division is responsible for performing research and process optimization studies to ensure the Treatment division is prepared for changing and emerging water quality challenges. The Regional Water Quality division is responsible for monitoring and coordinating water quality in the SNWA source waters. All these efforts are in support of the primary responsibility for the department.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Water Quality & Treatment
Fiscal Year Ending June 30, 2021

Expenditures

LVVWD Uses	Actual 2018-19	Budget 2019-20	Budget 2020-21
Materials & Supplies	\$ 1,882	\$ -	\$ -
Maintenance & Repairs	-	-	-
Rental & Leases	-	-	-
Other Employee Expenses	5,384	-	-
Other Expenses	(1,422)	-	-
Total Operating Expenses	5,845	-	-
Capital Expenditures	-	-	-
Payroll & Related Costs	185,630	173,139	225,004
Total Department Expenditures	\$ 191,475	\$ 173,139	\$ 225,004
FTE Positions	0.8	0.4	0.5

Department Performance

Treatment. The Treatment division is responsible for the operation and maintenance of three treatment facilities: the Alfred Merritt Smith Water Treatment Facility (AMSWTF); the River Mountains Water Treatment Facility (RMWTF); and the Big Bend Water District (BBWD). The three facilities have the capacity to treat one billion gallons of water per day.

Laboratory. The Laboratory division is responsible for routine water quality monitoring, testing, and reporting. The analytical capabilities of the Laboratory cover a broad spectrum including: trace organic, trace inorganic, macro constituent, physical, wet-chemical, bacteriological, virological,

protozoan, amoebas, and limnological analyses. With 37 employees, approximately 56,719 samples were collected, and 301,973 analyses performed in 2019. The number of analyses can fluctuate year-to-year depending on the year's monitoring requirements.

Water Quality Research and Development. The R&D division is involved in cutting-edge investigations of low-level environmental contaminants and water treatment plant processes. The low-level environmental contaminant research is generally in support of existing or future compliance monitoring requirements mandated by the U.S. Environmental Protection Agency (EPA) under the SDWA. The water treatment plant process

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Water Quality & Treatment
Fiscal Year Ending June 30, 2021

research involves bench or pilot plant investigations to optimize existing treatment or evaluate alternative treatment technologies to meet future regulatory requirements. The R&D division is comprised of Research and Development, Analytical Research and Development, and Applied Water Quality Research sections.

Regional Water Quality. The Regional Water Quality division is responsible for monitoring and coordination of regional water quality issues within the SNWA and other local, state, and federal agencies. To accomplish this, the division also collects data in the Muddy and Virgin Rivers and the Las Vegas Wash; compiles, validates, and analyzes all water quality data collected in these water bodies, as well as the data collected from Lake Mead and Lake Mohave by other agencies and the SNWA. All data collected is uploaded into the Lower Colorado River Regional Water Quality Database (Database) available at: www.snwawatershed.org/members.

Strategic Plan Objectives and Accomplishments

Strategic Plan Goal – Assure quality water through reliable and highly efficient systems

2020-21 Performance Objectives

- Complete follow-up of The NELAC Institute (TNI) gap audit by incorporating practices that are beneficial to the laboratory.
- Investigate Haloacetic Acid (HAA) analysis by EPA Method 557.0 with updated instrumentation.
- Finalize development and validation testing of a linked model to predict

water quality in Lake Mead and the treatment of this water through the drinking water treatment process. This work is being done utilizing grant funding from the USBR WaterSMART program. This work will allow for the exploration of potential future conditions and changes to the water treatment system that may be required.

- Complete refurbishment of AMSWTF Filters 11-15, including replacing all filter valves, underdrains, and deeper filtration media, and begin Filters 1-5.
- Complete an engineering evaluation of the AMSWTF and RMWTF Ozone Systems and plan for refurbishment and/or replacement of the major components.

2019-20 Major Accomplishments

- No major findings during The NELAC Institute (TNI) gap analysis of the laboratory's Quality Program.
- Obtained certification for Legionella analysis from the State of Nevada. Received Nevada Division of Environmental Protection (NDEP) certification for EPA method 326.0 for bromate and EPA method 551.1 for 1,2-Dibromo-3-chloropropane and 1,2-Dibromoethane.
- Met or surpassed Safe Drinking Water Act (SDWA) monitoring requirements for Southern Nevada Water System, Las Vegas Valley Water District, North Las Vegas, Henderson, Boulder City, Nellis Air Force Base, Big Bend Water District, Blue Diamond, Kyle Canyon, Jean, Searchlight, Sloan Army Reserve, and Kapex. Completed Phase IV of the

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Water Quality & Treatment
Fiscal Year Ending June 30, 2021

AWWA Partnership for Safe Drinking Water for both the AMSWTF and the RMWTF for the “Excellence in Water Treatment” award.

- Upgraded the RMWTF Sodium Hypochlorite System which included five new generators, new tank liners, and a new bulk dilution system.
- Continued to analyze Lake Mead and Mohave water quality data and to advise Water Quality and Treatment staff on possible environmental impacts to the treatment system.

Strategic Plan Goal – Deliver an outstanding customer service experience

2020-21 Performance Objectives

- Fulfill all emergency laboratory supply requests within one working day. Provide outstanding customer service to external customers requesting water quality investigations by responding in a timely manner (within one business day) and educating customers about water quality.
- Continue support of various ongoing research projects by providing quality data in a timely manner, including extensive lake and sources monitoring, complex storage/distribution system trihalomethane (TTHM) monitoring, as well as ad-hoc water quality monitoring requests.
- Continue serving the International Ozone Association – Pan American Group (IOA-PAG) as President and Administrative Communications Officer.
- Implement updated water quality monitoring equipment and real-time

data transfer capabilities for the Las Vegas Wash and Lake Mead to support the activities of the Las Vegas Valley Watershed Advisory Committee.

2019-20 Major Accomplishments

- Laboratory staff fulfilled all emergency lab supply requests within one working day.
- Water Quality Monitoring Plans (WQMPs) submitted and tracked for all member agencies. Unregulated Contaminant Monitoring Rule 4 (UCMR4) monitoring completed for North Las Vegas, Boulder City, and Nellis Airforce Base.
- The Laboratory supported R&D projects: WRF Nitrogenous and carbonaceous DBP precursor leach, WRF 4711, Big Bend WTP Conversion & follow up, Ketos-Searchlight on-line arsenic analyzer comparison, PFAS Electrocoagulation, Bromide Removal strategies, WR 17-05 Phase I and phase II, CSWB DPR-4, and Spiked challenge for on-line analyzers for SNWA, SFPUC, WRF 4912.
- The Water Quality Monitoring and Microbiology sections worked together to implement a new instrument, Endetec TECTA detection system, allowing for early detection of total coliform (TC) and *E. coli* (EC) in a sample. This new procedure allows the laboratory to provide customers with quicker results than current TC and EC procedures.
- Supported the LVVWD Operations and Rainbow Canyon residents with quick-turn analysis for various analytical

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Water Quality & Treatment
Fiscal Year Ending June 30, 2021

parameters related to corrosion control and lead and copper issues.

Strategic Plan Goal – Anticipate and adapt to changing climatic conditions while demonstrating stewardship of our environment

2020-21 Performance Objectives

- Use the AEM3D Lake Mead water quality model to evaluate changes in the quality of water leaving Lake Mead and entering Lake Mohave at various lake surface elevations.
- Operate, maintain, and perform challenge testing for water quality instrumentation at the AMSWTF Star Lab. Develop standard operation procedures for the online instrumentation.
- Supply data and attend the project meeting to discuss the final report for Water Research Foundation (WRF) Project 4636 titled “An Integrated Modeling and Decision Framework to Evaluate Adaptation Strategies for Sustainable Drinking Water Utility Management Under Drought and Climate Change.”

2019-20 Major Accomplishments

- Awarded a US Bureau of Reclamation (USBOR) grant through WaterSMART Drought Response Program: “Building long-term resiliency to drought by employing riverbank filtration to improve water quality”.
- Regional Water Quality continued to analyze Lake Mead water quality data

in the context of changing climactic conditions.

- Operated and maintained five remote sampling platforms, each containing a suite of on-line water quality monitoring sensors, in Lake Mead.

Strategic Plan Goal – Develop innovative and sustainable solutions through research and technology

2020-21 Performance Objectives

- Laboratory staff will investigate methods to improve turn-around time of Legionella results to support Research & Development (R&D) groundwater disinfection project.
- Complete development of a linked model to describe water quality in Lake Mead and the treatment of this water through the drinking water treatment process. This work will be done in conjunction with UNLV utilizing grant funding from the USBR WaterSMART program.
- Investigate the use of Dissolved Air Flotation (DAF) to enhance filter performance.
- Investigate use of Next Generation Sequencing of Deoxyribonucleic acid (DNA) to differentiate between the types of microorganism present in our source waters.
- Continue work on externally funded projects by WRF (Projects 4691, 4719, 4716, 4711, 4912, 4913, 4914, 17-05), NSF, DOD SERDP and US Department of Agriculture (USDA).

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Water Quality & Treatment
Fiscal Year Ending June 30, 2021

2019-20 Major Accomplishments

- Laboratory staff organized an onsite evaluation of automated microbiology method with treatment plant staff.
- Laboratory staff worked to develop methods for analyzing samples using Next Generation Sequencing to identify organisms that impact our source waters, raw water, and finished water.
- Laboratory staff implemented the Horizon Laboratory Information Management System's electronic logbooks, eliminating hard bound logs and their storage requirements.
- Awarded new externally funded projects WRF 4958, 4960, 5031, 5035, 5053, WRF/CA-SWB, NSF CRISP 2.0, DOD SERDP, and Bureau of Reclamation.

Strategic Plan Goal – Ensure organizational efficiency and manage financial resources to provide maximum customer value

2020-21 Performance Objectives

- Enhance cross-training efforts of staff at RMWTF and AMSWTF.
- Pursue solicited and unsolicited externally funded research grants from the WRF, US EPA, National Science Foundation, and the USBOR.
- Maintain Phase IV AWWA Partnership for Safe Drinking Water standards at both the AMSWTF and the RMWTF.

2019-20 Major Accomplishments

- Laboratory staff worked with Purchasing staff to streamline

procuring of materials and service contracts that include improved discounts and tracking of services.

- The laboratory collaborated with procurement to negotiate a significant five-year discount for quality control standard and samples from its proficiency testing vendor.
- Received over \$450,000 from external grants.
- Awarded the Phase IV AWWA Partnership for Safe Drinking Water for both the AMSWTF and the RMWTF for the "Excellence in Water Treatment" award.

Strategic Plan Goal – Strengthen and uphold a culture of service, excellence and accountability.

2020-21 Performance Objectives

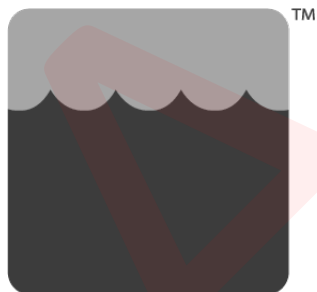
- Assessment of laboratory's quality program by an independent party against TNI ISO/IEC 17025 standard every two years for continuous quality improvement.
- Continued stewardship and support of changes proposed to the EPA's Lead and Copper Rule.
- Ensure a safe workplace and encourage the Laboratory's safety culture by promoting and supporting suggestions that help maintain an incident and accident-free work environment.
- Complete all monitoring requests and data reporting for customers in timely manner.

Las Vegas Valley Water District
Operating and Capital Budget
Department Budgets
Water Quality & Treatment
Fiscal Year Ending June 30, 2021

2019-20 Major Accomplishments

- Laboratory staff expanded participation in the Performance Evaluation Program by developing a quarterly chlorine meter validation program for the Operations group.
- The Southern Nevada Water Authority (SNWA) Water Quality Laboratory participated in a third-party audit to evaluate the current laboratory's Quality Assurance program against The National Environmental Laboratory Accreditation Conference (NELAC) Institute's quality program requirements. Findings and deficiencies found during the audit have been addressed.
- The Water Quality Monitoring team drove 93,632 miles in 2019 with no incidents and/or accidents recorded.
- NDEP completed annual sanitary survey and found no deficiencies in the treatment process.
- Published 11 articles in scientific journals. Presented six papers at the 2019 American Water Works Association (AWWA) Water Quality Technology Conference. Presented two papers at the 2019 IOA World Congress. Submitted three papers at the 2019 AWWA Annual Conference and Exposition.

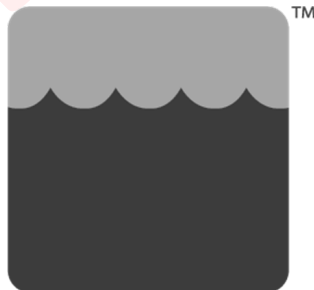
This page left intentionally blank



SECTION 6

CAPITAL PLANS

Capital Budget	6-1
Capital Improvement Plan	6-10



LAS VEGAS VALLEY WATER DISTRICT
FISCAL YEAR 2020-21
OPERATING AND CAPITAL BUDGET

Capital Budget

The Las Vegas Valley Water District (LVVWD) maintains a long-range facility planning process to determine the type, size and location of water distribution facilities needed to meet the water services demands of the areas in Clark County served by the LVVWD. As water system facilities are defined, they are added to the LVVWD's overall construction program. The ongoing capital equipment and construction program is a dynamic program, with projects added, changed, or deleted as necessary to meet the changing conditions in the LVVWD's Service Areas. The construction program consists of new pumping stations, reservoirs and wells, land acquisition, new water pipelines, and other distribution system facilities. The capital equipment budget consists of vehicles, Information Technology equipment, water works and diverse industrial equipment. The LVVWD is planning to acquire over \$5.8 million in capital equipment during the next fiscal year. Some of the capital projects will become operational by the end of fiscal year 2020-21, while other projects will be completed in subsequent fiscal years.

In January 2017, the LVVWD Board of Directors approved a 10-year Capital Improvement Plan (CIP) that will guide decisions related to asset management, necessary water system expansion and water quality compliance activities. The plan represents an investment of \$616 million (2016 dollars) over a 10-year planning horizon to construct new facilities and make improvements to key system components, ensuring a reliable water system for the LVVWD's customers.

Impact of Construction Program on Operation and Maintenance Expenses

For the LVVWD water distribution facilities, in the near term, the LVVWD does not anticipate any impact on maintenance expenses and only minimal expenses associated with the operation of the new facilities added to the LVVWD's water distribution system through its overall construction program. This is due to the following three factors:

- First, the facilities being added to the LVVWD's system are new and typically require minimal maintenance.
- Second, the facilities are designed and constructed with the latest available technology and are not accepted by the LVVWD until they are fully inspected and tested and ready for operation.
- Third, over the past several years the LVVWD has conducted numerous process improvement investigations and adopted recommendations that have resulted in significant on-going operational and maintenance efficiencies and savings.

Over the long term, the LVVWD anticipates incurring maintenance expenses for the rehabilitation of facilities such as reservoirs, pump stations, and pipelines. However, these costs are minimized through the LVVWD's use of state-of-the-art diagnostic equipment and testing procedures, which significantly lower maintenance costs and reduces the rate of catastrophic failures. Finally, these facilities were, and are being constructed, for new customers who generate additional operating

Las Vegas Valley Water District
Operating and Capital Budget
Capital Plans
Fiscal Year Ending June 30, 2021

revenues. These revenues in the past have offset, and in the future are anticipated to continue to offset, the added long-term maintenance expenses.

Projecting long-term additional operating expenses driven by the addition of capital assets to the LVVWD's water system is not easily quantified.

The LVVWD's overall construction program is funded by debt proceeds and pay-as-you-go

funding sources. The projects consist of new pumping stations, reservoirs and wells, land acquisition, new water pipelines and recycled water distribution system facilities. The LVVWD capital project-related expenditures are estimated to be approximately \$142 million.

The tables on the following pages show a listing of the specific capital equipment and capital projects included in the LVVWD's capital expenditures for the next fiscal year.

Las Vegas Valley Water District
Operating and Capital Budget
Capital Plans
Fiscal Year Ending June 30, 2021

LVVWD: CAPITAL BUDGET 2020-21

CAPITAL EQUIPMENT

2300 - Information Technology

Tape Library Replacement	\$ 210,000
General Infrastructure Improvement	240,000
Subtotal	\$ 450,000

2500 - Public Services

Replacement of Cafe Kitchen Equipment - Tilt Skillet	\$ 20,000
Replacement of Cafe Kitchen Equipment - Ovens	30,000
Replacement of Cafe Kitchen Equipment - Dishwasher	30,000
Subtotal	\$ 80,000

2800 - Customer Care & Field Services

GPS Base Station Receivers and Total Stations	\$ 400,000
Subtotal	\$ 400,000

3600 - Resources & Facilities

16' Flatbed Trailer with 8,000 lbs. Capacity	\$ 10,000
48 Volt Electric Utility Cart	13,000
Two Seat UTV with Dump Bed	22,000
Compact Cargo Van	30,000
Mid-Size Sedan Hybrid Vehicle	30,000
Mid-Size SUV 4X4	33,000
Shure Wireless Microphone System - VV Mead Rooms	37,500
3 Ton Forklift	43,000
1 Ton Extended Cab Long Bed 4X2 Pickup SRW.	45,000
1 Ton Extended Cab Utility Truck SRW 4X2	52,000
11' Aluminum Fiber Splice Trailer	55,000
2 Each 3/4 Ton Extended Cab Utility 4X2 Pickups	88,000
3 Each Mid-Size Sedan Hybrid Vehicles	90,000
19,500 lb. Backflow Maintenance Utility Service Truck	172,000
Reg Cab Sodium Hypochlorite Tanker Truck	202,988

Las Vegas Valley Water District
Operating and Capital Budget
Capital Plans
Fiscal Year Ending June 30, 2021

Reg Cab Utility with Crane 6X4	219,520
Bucket Truck With 60' Working Height	221,134
Extended Cab Utility with Crane	236,052
33,000 lb. Service Truck with Crane and Welder	244,000
1 Lot of 8 Replacement Equipment Pieces	438,500
1 Lot of 18 Replacement Vehicles	2,240,000
Subtotal	\$ 4,522,694

4100 - Operations

50 Ton Spreader Bar	\$ 85,000
Replace Cliff's Edge THM System Diesel Generator	250,000
Subtotal	\$ 335,000

TOTAL CAPITAL EQUIPMENT	\$ 5,787,694
--------------------------------	---------------------

Las Vegas Valley Water District
Operating and Capital Budget
Capital Plans
Fiscal Year Ending June 30, 2021

CAPITAL PROJECTS

2300 - Information Technology

Big Springs Theater Audio/Video Upgrade	\$ 150,000
C2M - Advanced Metering Systems	2,996,007
AMI - Advanced Metering Systems	10,900,000
Subtotal	\$ 14,046,007

2500 - Public Services

Springs Preserve Design for New Animal Quarantine/Holding Facility	\$ 10,000
Springs Preserve Water Fountain Replacement	10,000
Springs Preserve Door Replacement	15,000
Door Replacement	30,000
Guest Services Office and Ticket Window Remodel	50,000
Springs Preserve Art for Upper Parking Lot	65,000
Springs Preserve Exhibit Upgrades	75,000
Springs Preserve Origen Loading Dock Safety Upgrades	75,000
Springs Preserve Native American Exhibit/Ethnobotanical Garden	75,000
Garden Lighting	80,000
Springs Preserve Misc. Capital	100,000
Springs Preserve Outdoor Speaker Installation	150,000
Springs Preserve Gardens Speakers and Low Voltage Wiring Installation	150,000
Living Machine Decommissioning	200,000
Springs Preserve Garden Pathway Paving	250,000
Springs Preserve Wayfinding	750,000
Springs Preserve Gardens Electrical Service Expansion, Phase II	1,050,000
Spring Preserve Event Site	1,250,000
Subtotal	\$ 4,385,000

3400 - Engineering

2150 Zone & Christy Lane Emergency Prvs	\$ 25,000
3665 Zone North Pipeline Phase 1	25,000
Miscellaneous Large Backflow Installations, Phase VI	25,000
Miscellaneous Small Backflow Installations, Phase XVI	25,000
Miscellaneous Large Backflow Installations, Phase XI	25,000
3665 Zone North Pipeline Phase II	25,000

Las Vegas Valley Water District
Operating and Capital Budget
Capital Plans
Fiscal Year Ending June 30, 2021

4125 Zone Pumping Station Discharge Pipeline, Phase I	25,000
RMWTF - Reseal AHU's on the Lab @ RMWTF	25,000
RMWTF - Impound Dam Concrete Repairs	25,000
3435 Zone North Pipeline, Phase V	25,000
East Admin Roof Replacement	50,000
Miscellaneous Large Backflow Installations Phase VIII	50,000
Miscellaneous Large Backflow Installations Phase IX	50,000
Miscellaneous Large Backflow Installations Phase X	50,000
3435 Zone North Pipeline, Phase IV	50,000
Miscellaneous Pipe Installations	100,000
Reservoir Sliding Hatch Replacement	100,000
Miscellaneous Reservoir Modifications	100,000
Miscellaneous Main Replacement, The Dales Subdivisions	100,000
On-Call Pavement Replacement Services - 2019-2020	110,000
Well Derrick Restoration	160,000
Miscellaneous Pipeline Replacements, Phase III	200,000
Francisco Park Pipeline Replacement	250,000
Pavement Replacement Services - Residential Pavement Replacement Phase V	300,000
Las Vegas Boulevard Improvements Phase I	350,000
4125 Zone North Reservoir	375,000
East Admin IT Area Plumbing Upgrade	450,000
4125 Zone Pumping Station	750,000
Operations Building Power Improvements	800,000
Miscellaneous Vaults, Reconstruction And Repair, Phase XXIII	800,000
Pipeline Installation in Hacienda Avenue and Pecos Road	819,000
Rancho Drive Pipeline Installation	828,800
Rehab Sccp in Sahara Avenue	900,000
Pipeline Install in Tropicana Ave between Mojave Rd/Sandhill Rd	960,000
Rome Facilities Pipelines	1,000,000
Miscellaneous Pipeline Replacements, Phase II	1,040,000
Miscellaneous Pipeline Replacements, Phase I	1,160,000
Pavement Replacement Services, Phase III, 2017-2019	1,200,000
Miscellaneous Pipeline Installations, Phase II	1,296,000
Fayle Reservoir Perimeter Fence Improvements	1,340,000
Skye Canyon 2860 Zone Pipeline	1,360,000
Miscellaneous Pipeline Replacements, Phase V	1,512,000
Pavement Replacement Services, Phase I, 2017-2019	1,552,000
Oversizing Project	1,600,000
Miscellaneous Pipeline Replacements, Phase IV	1,680,000

Las Vegas Valley Water District
Operating and Capital Budget
Capital Plans
Fiscal Year Ending June 30, 2021

East Admin Human Resources Renovation	1,760,000
Replace Sccp & Acp On Flamingo Road	1,760,000
Shaumber 3205 North Pipeline Phase II and Prv	1,916,000
Egan Crest 3090 Zone North Pipeline Phase III	2,129,600
Richmar 2860 Zone Reservoir and 2975 Zone Pumping Station	2,312,000
Medical District Zone Conversion	2,400,000
Cougar 3090 Zone Inlet/Outlet Pipeline	2,400,000
Pipeline Replacement in Paradise Road Between Twain Avenue and Karen Avenue	2,400,000
West Admin Renovation	3,200,000
Backflow Retrofit Program	3,800,000
Cougar 3090 Zone Reservoir	4,000,000
Backflow Retrofit Survey and ROW Support	4,000,000
Pavement Replacement Services, Phase II, 2017-2019	4,240,000
Rome 2745 Reservoir, 2975 Zone Pumping Station & 2975-2860 Zone Prv	8,800,000
Centennial 2635 Zone Reservoir And 2745 Zone Pumping Station	11,200,000
Las Vegas Boulevard Improvements, Phase III	16,000,000
Subtotal	\$ 96,010,400

3600 - Resources & Facilities

Springs Preserve Energy Conservation	\$ 25,000
Valley View Sodium Hypo Bldg HVAC Upgrades	70,000
Springs Preserve Building C2 AC Upgrade	100,000
LVVWD Miscellaneous Projects	100,000
Springs Preserve Miscellaneous	100,000
Valley View Warehouse Mezzanine Floor Replacement	125,000
Valley View Warehouse Preliminary Design	150,000
Springs Preserve - Renovation of 3 Sets of Restrooms on the Springs Preserve Campus	150,000
Broadbent Pumping Station Roof Replacement	200,000
Springs Preserve Replacement A/C Units Buildings A,B1,B2,C1	250,000
Fleet Services Paint Booth Replacement	260,000
LVVWD VV Campus East Admin Security Offices Renovation Lower Level	295,000
West Admin Valley View Cooling Tower Replacement	300,000
Remodel Operations Building Lab Space	350,000
LVVWD VV Campus Asphalt Repair	350,000
West Admin Roof Replacement	800,000
Subtotal	\$ 3,625,000

Las Vegas Valley Water District
Operating and Capital Budget
Capital Plans
Fiscal Year Ending June 30, 2021

3700 - Infrastructure Management

High Lot P5 Motor Starter Replacement	\$ 30,000
Campbell Site - Roof Fall Protection Installation	35,000
Meranto Site - Pump Station Upgrades	40,000
District Service Area - PRV 196 and 197 - Install Data Monitoring	50,000
Charleston Heights Site - Evaporative Cooler Upgrade	75,000
Campbell Site - Campbell 2168 Zone Discharge Valve	80,000
Multi-Site Transformer Replacements	100,000
LVVWD Campus Site - Design and Install HVAC Unit in Pump Repair Shop	100,000
LVVWD SCADA PC/Server Hardware Upgrades	100,000
LVVWD Network Switch Upgrades	100,000
Developer Assisted Service Upgrades	100,000
Multi-Site - Install Redundant Chlorine Monitors	120,000
LVVWD Campus Site - Replace Operations SCADA Room Ductwork	120,000
Broadbent Site - Broadbent Pump Station Crane Upgrade	120,000
Sloan Army Reserve Center Site - Reverse Osmosis Equipment Installation	130,000
Jean Well J4 Midway Well Site - Equip New Well J-8	150,000
District Service Area - Impressed Current Cathodic Protection System for CO 272 and CO 383	150,000
Gowan Site - MCC Upgrades	150,000
Carlton Square Site - Replace Pump Control Valves and Actuators	180,000
Multi-Site - Multi-Site Vault Pipe Coating	200,000
District Service Area - Misc. Vault Repair	200,000
Springs Preserve Site Landscape Lighting Improvement	200,000
District Service Area - Multi-Site Fence Installations	200,000
Miscellaneous Concrete and Restoration	200,000
LVVWD ControlLogix Hardware Upgrades	200,000
District Service Area - Cathodic Protection Test Station Installation/Repair 2018-2019	220,000
District Service Area - Multi-Site Large Backflow Installations	250,000
LVVWD Campus Site - Welders Shop Ventilation Improvements	250,000
LVVWD - Replace PLC 5 Remote Racks from Sites	300,000
Install PRVs to Support SVL Outages	350,000
Angel Park 480V MCC Replacement	350,000
Replace Fiber Vault Lids from Carlton Square to Fort Apache	400,000
LVVWD - Multi-Site - Fiber Optic Cable Installation	750,000
District Service Area - Replace and Equip Wells at End of Service Life	800,000

Las Vegas Valley Water District
Operating and Capital Budget
Capital Plans
Fiscal Year Ending June 30, 2021

Pipeline Replacement in Paradise Road between Twain Avenue and Convention Center Drive	2,000,000
Pipeline Participation Projects (City/County)(NON - LV Blvd)	6,000,000
Subtotal	\$ 14,800,000

3800 - Water Resources

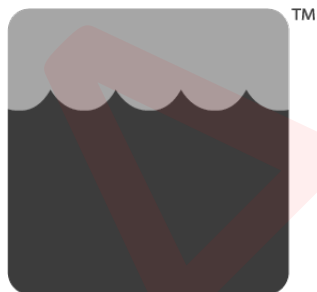
Construct New Well to Replace LVVWD Production Well W026	\$ 625,000
4125 Zone North Reservoir Inlet/Outlet Pipeline	1,500,000
Land Acquisition for New LVVWD Production Well Sites	2,000,000
Subtotal	\$ 4,125,000

4100 - Operations

Electric Motors Repair or Replace	\$ 50,000
Repair or Replace System Valves	50,000
Motor Control Center, Starters, Transformers, and Other Repairs	50,000
Replace Large Magnetic Flow Meters	50,000
Annual Pump Repair	75,000
Rehabilitate 1350 ft of 18 in ACP at I-15 and Shelbourne	275,000
Replace Aging/Failed Surveillance and Networking Equipment	500,000
Well and Pump Rehabilitation	1,000,000
Service Line Replacement (PRIMUS LINER)	2,800,000
Subtotal	\$ 4,850,000

TOTAL CAPITAL PROJECTS	\$ 141,841,407
TOTAL CAPITAL BUDGET	\$ 147,629,101

This page left intentionally blank



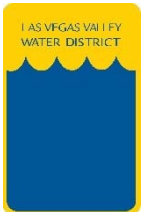


LAS VEGAS VALLEY WATER DISTRICT CAPITAL IMPROVEMENTS PLAN 2017



LAS VEGAS VALLEY
WATER DISTRICT

DRAFT



LAS VEGAS VALLEY WATER DISTRICT
Capital Improvement Plan 2017-2027

About the Las Vegas Valley Water District

The Las Vegas Valley Water District (LVVWD) is a subdivision of the State of Nevada. The agency was created by a special act of the Nevada Legislature in 1947 to acquire and distribute water, primarily in the Las Vegas Valley. The not-for-profit LVVWD commenced operations in July 1954 and has served as the Southern Nevada region's largest municipal water provider since that time. As of 2017, the water distribution system comprises more than 6,500 miles of pipeline, 53 pumping stations, 70 reservoirs/tanks, 76 production wells, approximately 400,000 water meters and a 3.1 megawatt solar-electric system.

Vision

The Las Vegas Valley Water District's aims to be a global leader in service, innovation and stewardship.

Mission

The Las Vegas Valley Water District's strives to provide world class water service in a sustainable, adaptive and responsible manner to our customers through reliable, cost effective systems.



Page intentionally left blank.

CAPITAL IMPROVEMENT PLAN

EXECUTIVE SUMMARY

The Capital Improvement Plan (CIP) outlines the District's plan for achieving organizational goals and objectives. The plan outlines the projected capital needs over a 10-year period.

Doing Business

For much of its past, the District focused on developing new facilities to meet the evolving needs of the community. Between 1980 and 1998, Clark County was among the fastest-growing communities in the nation, which necessitated major capital investments in new infrastructure. However, beginning in late 2007, these conditions changed significantly when much of the nation began to experience significant economic disruption. Local expansion efforts halted abruptly and many projects in progress were put on hold.

During this time and continuing today, the Water District's focus shifted from system expansion to asset management, with an increased emphasis on customer care. In accordance with its mission, the District works to provide a safe, reliable water supply to more than 1.4 million residents within the City of Las Vegas and unincorporated portions of Clark County, Nevada. All functions in support of this mission—from maintaining infrastructure to ensuring accurate metering and protecting water quality—require properly functioning physical assets.

Capital Improvement Plan

Capital improvements are needed to reliably operate and maintain the District's extensive water distribution system, as well as to address state-mandated water quality issues and new development needs. This 10-Year Capital Improvement Plan serves to guide decisions related to maintaining and, as required, replacing those assets, as well as necessary water system expansion and water quality compliance activities.

The following provides a brief introduction to system needs, which are further detailed in the latter portions of this document. Costs represented herein are intended only to detail the size and scope of improvements needed over the 10-year planning

horizon. Cost authorizations for improvements will be considered by the Board of Directors annually as part of the organization's regular budget process.

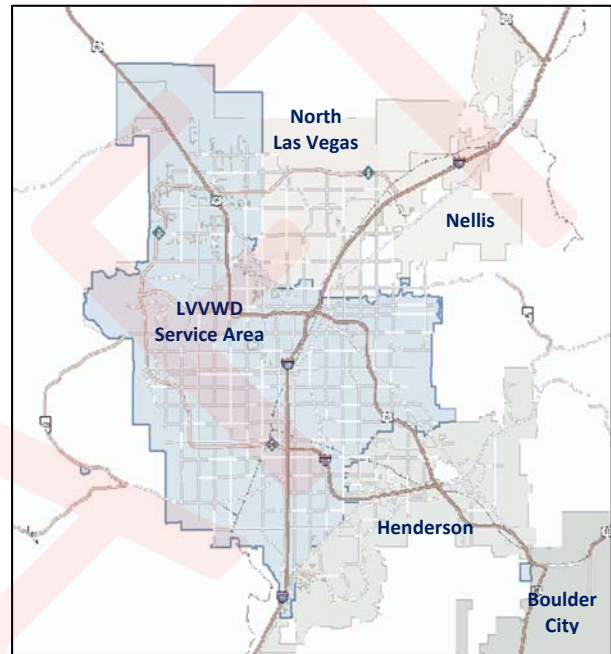


Image: LVVWD Service Area

Asset Management Improvements

The Infrastructure Management department is primarily responsible for overseeing the organization's physical assets, with considerable input and support from the Engineering, Operations, Water Quality and Finance work groups. Because the service life of individual components comprising a large water system can vary by decades, Infrastructure Management uses sophisticated planning tools to develop repair/replacement schedules, allowing for orderly and fiscally prudent implementation.

The agency's infrastructure management strategy is based on five foundational principles:

- Extend infrastructure life and prevent failures through timely maintenance and repairs
- Protect system assets through continual condition assessments
- Assess and prioritize projects to ensure critical

system operations remain functional

- Minimize financial impacts through orderly, phased implementation
- Minimize financial outlays by maximizing asset life cycle

A substantial percentage of the community's water system was constructed in the 1980s to address increasing demands. As a result, numerous facilities now exceed 30 years of age. Research has demonstrated that replacing or repairing utility components under emergency conditions—for instance, a broken water main—is both more expensive and disruptive to customers than affecting maintenance through a systematic approach. Key system components that must be addressed during the 10-year planning horizon include:

- Reservoirs
- Pumping Stations
- Pipelines and Service Laterals
- Valves and Vaults
- Meters
- Water Quality Systems
- Groundwater Wells
- Facilities and Building Improvements
- Electrical Systems
- Communication Systems

Cumulative costs associated with the repair and/or replacement of these hundreds of thousands of components—measures necessary to maintain current service levels, system reliability and water quality—are projected to be approximately \$390 million over the next decade.

Maintaining Water Quality

As a Public Water System, the LVVWD is responsible for ensuring compliance with all water quality regulations, enforced by the Environmental Protection Agency and the Nevada Division of Environmental Protection's Bureau of Safe Drinking Water. In addition to rigorous testing for more than 100 constituents—the Water District collects more than 33,000 water samples annually for analysis—it must comply with mandates from these agencies designed to protect water quality.

Chief among these mandates is what is termed "backflow protection," a mechanism that prevents the reintroduction of water from private properties into the

municipal water system. Compliance with this State requirement will entail the installation of approximately 35,000 backflow prevention devices on meters throughout the District's service area.

New Development Improvements

During the recession, the District deferred all non-essential construction projects. While this decision was fiscally prudent, it required engineers to devise mid-term solutions that could provide access to the municipal water supply for residents and businesses in newly developed areas without investing in additional reservoirs and pumping stations. While those solutions proved effective, the absence of core infrastructure in affected areas undermines system reliability and subjects customers to vulnerability that is inconsistent with organizational standards.



Image: LVVWD Field Repair

To address this issue and ensure these customers receive the same level of reliability as their counterparts in other parts of the valley, the District plans to construct a total of four reservoirs, four pumping stations and associated appurtenances during the planning horizon. The District anticipates to expend approximately \$125.7 million to design and construct these facilities, which will both serve existing customers and support additional development. Additional costs associated with facilities needed to support new communities will be borne by developers.

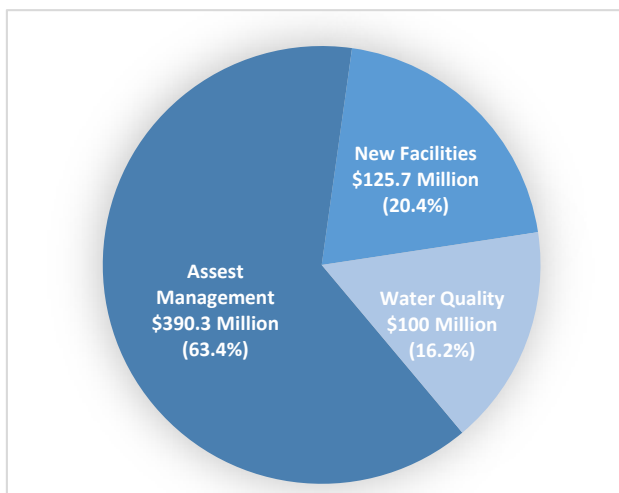


Figure 1.2: Cost Distribution by Improvement Type

10-Year Capital Planning

In total, the asset management, water quality protection and system expansion activities outlined in this document represent an investment of \$616 million over the 10-year planning horizon. These improvements will help the District to maintain current service and water quality standards, ensuring continued reliability for the residents and businesses that depend upon this vital resource.

CAPITAL IMPROVEMENT PLAN

ORGANIZATIONAL OVERVIEW

Introduction

The Nevada State Legislature created the Las Vegas Valley Water District in 1947 to help manage local groundwater supplies. The newly-formed agency acquired the assets of its predecessor and began operations in 1954 as the municipal water provider for Las Vegas and unincorporated Clark County.

Transition and Growth

In the period between its creation and the early 1970s, the District got to work repairing and expanding the water system to meet the growing needs of the community. These efforts included installing more than 800 linear miles of pipeline and increasing reservoir storage to approximately 160 million gallons. At the same time, the District also entered into an agreement with what is now known as Basic Management Inc. for expansion of its small industrial line to deliver Colorado River water to the District's service area. These efforts decreased the community's reliance on groundwater supplies and marked the organization's first major initiative to help stabilize the local water table.

Post-war expansion paled in comparison to the unprecedented population growth that occurred over the years that followed. In the 1980s and '90s, Las Vegas ranked as the nation's fastest-growing city virtually every year. In response and to fulfill its mission of meeting the community's water needs, the District engaged in an infrastructure construction initiative without parallel in the United States. At the same time, water demands soared, necessitating a cohesive, regional approach to resource management. This resulted in the creation of the Southern Nevada Water Authority (SNWA), of which the District serves as the administrative entity.

Current Environment and Operating Priorities

Beginning in 2007, the nation began to experience the most significant economic downturn since the Great Depression. Southern Nevada was hit harder than almost any other region in the nation, and this period of recession marked the first time in decades

that the Las Vegas area experienced a sustained period of little or no growth. During this time, most new residential and commercial development projects came to a halt. While economic recovery is occurring, the massive booms of prior decades have not returned. As a result, the District's operational priorities have changed in response to meet the evolving needs of the community. While expanding the water system to accommodate new customers remains a core responsibility, the emphasis has shifted to ongoing operations and infrastructure management.

Today, the District provides water service to an area approximately 300 square miles in size, serving more than 375,000 residential and commercial customers through a network of approximately 6,500 linear miles of pipelines and service laterals. Accomplishing this task requires the agency to maintain millions of individual components, ranging in size from the small service laterals that deliver water to individual homes to massive pumping stations and reservoirs.

Strategic Approach

As a public, not-for-profit water agency, the District is committed to managing its finances and assets responsibly. The system represents a significant community investment; in total, the agency's capital assets were valued at \$1.7 billion as of the last fiscal year. As with all capital assets, depreciation is inevitable, although the rate and degree thereof are influenced by many factors. The responsibility for optimizing the value of these assets—maximizing service life while maintaining the reliability of water delivery—rests with the LVVWD's infrastructure management and maintenance programs.

Calculating the necessary rate of replacement for water facilities is the responsibility of the District's Infrastructure Management department, which maintains an inventory of water system components categorized by type, age and material. The service life of a given pipeline, pump or valve is influenced by a variety of factors, but knowing when to replace assets is the key to operational efficiency, as well as minimizing leaks and service interruptions. These engineering professionals also work to optimize

infrastructure value by refurbishing equipment when possible instead of prematurely replacing it.

Given that the community's water system comprises millions of discrete components—from small 5/8" laterals serving individual homes to massive pumping stations that move water to the Las Vegas Strip—fully accounting for the entirety of an infrastructure network is a significant challenge. Infrastructure Management, Operations and Engineering work in concert to ensure that facilities are maintained in working condition and upgraded or replaced when needed.

As shown in Figure 1.3, the LVVWD evaluates the condition of its assets to identify potential issues, manage operational risks and reduce costs. By maintaining a comprehensive infrastructure inventory and reflecting factors such as age, material type, operating environment and historical failure rates, LVVWD is able to project capital reinvestment needs over decades, phasing projects to minimize spikes in financial outlays while maintaining the system's integrity. This strategy has proven highly effective; LVVWD customers enjoy one of the nation's most reliable water systems, with a leak rate far below the national average and an efficiency rating that has been classified as "world-class" by the International Water Association.

As with all systems, age is becoming a factor for the LVVWD infrastructure network. Some system components are now approaching or are more than 50 years old. The issue of aging infrastructure is hardly unique to Southern Nevada. To the contrary, the LVVWD's system is relatively young compared to other metropolitan communities. It is incumbent upon the LVVWD to undertake strategically guided rehabilitation and replacement initiatives in order to assure that Las Vegas does not experience similar service outages and leak rates such as have befallen other metropolitan communities. In total, current estimates by the American Water Works Association indicate that communities in the United States will need to collectively invest more than \$1 trillion over the next 25 years to restore and expand public water systems.

To finance capital projects associated with system maintenance and expansion, the LVVWD uses funds generated through a combination of bond proceeds, water rate revenue and low-interest loans from the State Revolving Fund for drinking water systems. These three revenue streams provide access to funds for necessary improvements and save ratepayers money by reducing interest costs, a benefit of the LVVWD's AA Standard & Poor's rating and Aa1 Moody's rating.

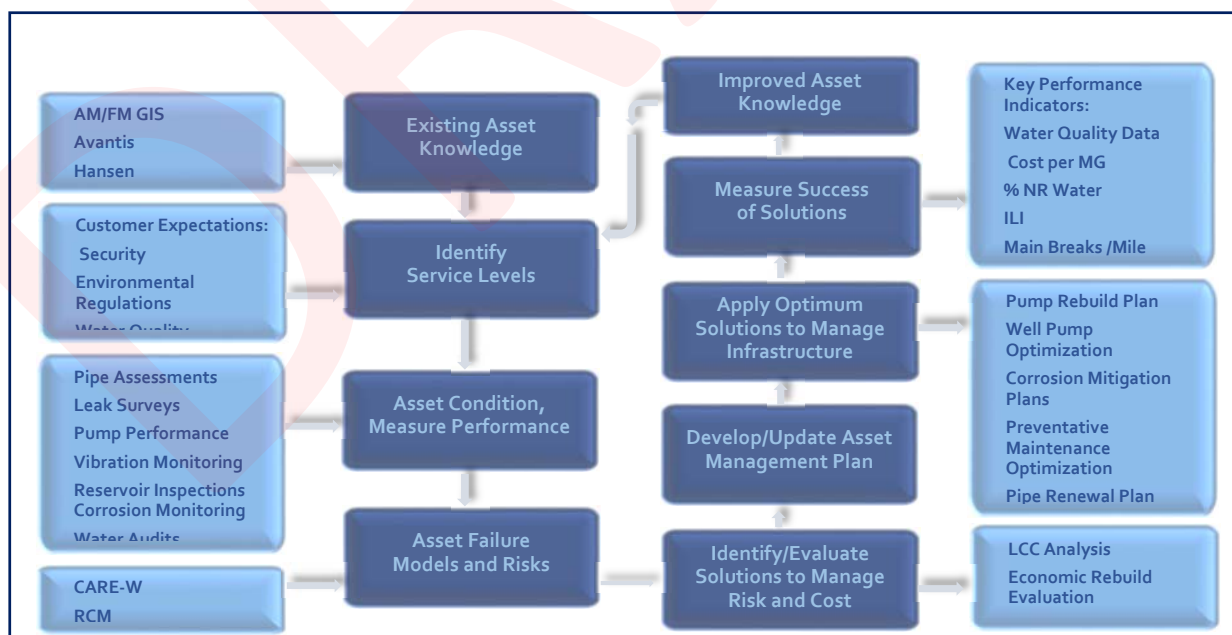


Figure 1.3: LVVWD Asset Management Life Cycle

Maintaining a fiscal balance between the “pay-as-you-go” approach and long-term financial instruments is key. Overuse of bonds can negatively impact the agency’s credit rating, resulting in higher interest rates, while funding all projects as they occur results in financial instability and significant rate fluctuations. Another important aspect related to project financing is maintaining appropriate reserves; strong reserves positively impact credit ratings and improve the agency’s ability to respond to short-term capital needs or economic fluctuations.

This Capital Improvement Plan is intended to reflect projected capital improvement needs in the LVVWD service area over a 10-year planning horizon (2017 – 2027). The precise timing and cost of individual elements will be prioritized from year to year based on need and accounted for as part of the LVVWD’s annual budget process. The following section provides an overview of purpose and need, and estimated cost in the areas of asset management, new facilities and water quality improvements.

CAPITAL IMPROVEMENT PLAN

ASSET MANAGEMENT

Introduction

In the context of a public water system, asset management refers to the proactive approach employed by utilities to reduce the life-cycle cost of infrastructure while maintaining high levels of reliability and meeting water-quality standards. At the District, this initiative is spearheaded by the Infrastructure Management department with considerable support and input from the Engineering, Operations and Finance work groups. Given the millions of individual water system components that must be evaluated based upon age, materials and projected service life, the District's asset management process is complex. However, the objective is simple: optimize system efficiency and the use of ratepayer dollars.

Achieving this goal requires the District to balance several factors, including cost, quality, reliability and safety. An excessively conservative approach could result in higher cost, particularly if equipment and facilities are replaced well before the end of their useful life cycle. Conversely, too little vigilance opens the door to frequent service outages, high leak rates and compromised water quality.

The LVVWD's infrastructure management strategy is based on several foundational principles:

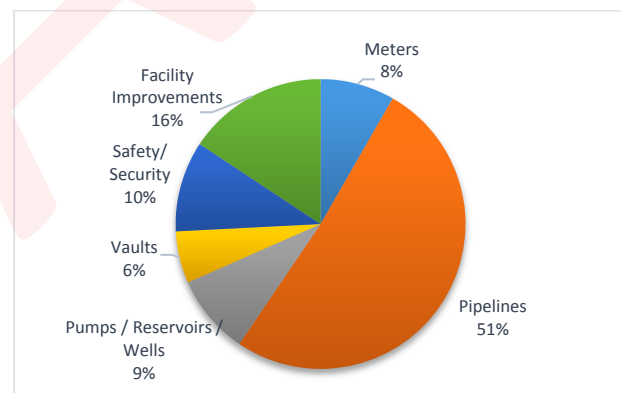
- Extend infrastructure life and prevent failures through timely maintenance and repairs
- Protect system assets through continual condition assessments
- Assess and prioritize projects to ensure critical system operations remain functional
- Minimize financial impacts through orderly, phased implementation
- Minimize financial outlays by maximizing asset life cycle

While it is not unusual to implement numerous asset management-related projects simultaneously, the overall program must be managed on a longer-term basis to execute activities in an orderly manner. For the LVVWD, that means anticipating needs and

scheduling work over a 10-year planning horizon. On an annual and ongoing basis, the LVVWD will conduct assessments to gauge progress and identify any necessary course adjustments.

The agency projects that an investment of approximately \$390 million will be required over the planning horizon to maintain system infrastructure in a manner that meets current service levels and water quality standards. As shown in the Figure 1.5, key projects include: reservoir and pumping station maintenance and rehabilitation; replacement and renewal of vaults and valves; pipeline and service lateral replacement; cyclical water meter replacement; upgrades to the Supervisory Control and Data Acquisition (SCADA) operations control system and improvements to existing facilities throughout the valley.

Figure 1.5: Cost Distribution (%) by Asset Type



Asset Management Activity Detail

A detailed overview of major asset management activities included in the District's 10-year Capital Improvement Plan is provided below. While this plan reflects long-term projected expenditures, it does not represent a blanket authorization of funding for these improvements. Projected expenditures will be considered before the Board of Directors through an annual budgeting process for consideration and authorization. Each individual project also requires further authorization, with a majority of the projects requiring Board approval. This ensures that the Board is provided timely and complete information about asset management priorities and associated annual

costs, and has the opportunity to assess progress related to the plan's implementation.

Reservoirs

The Las Vegas Valley's bowl-like topography features approximately 2,000 feet of elevation change from downtown to the far reaches of the community, effectively precluding a "direct delivery" water system. Instead, water is pumped to higher-elevation storage reservoirs and delivered to customers via gravity. Reservoirs provide far greater reliability than direct-delivery systems, which are vulnerable to service interruptions caused by outages. In total, the District maintains more than 70 reservoir basins and tanks throughout the Las Vegas Valley. Collectively, these facilities hold nearly a billion gallons of water for delivery to customers.



Image: Alta Reservoir

District reservoirs are typically constructed of concrete and installed below ground. This design protects them from the elements, helps safeguard water quality, stabilizes temperatures and provides for an exceptionally long service life if properly maintained. The District also maintains a small number of above-ground steel tanks as dictated by operating conditions and location. In addition to regular inspections of reservoir components critical to protecting water quality, these facilities are fully assessed every five years and serviced as needed. Typical capital reinvestment needs associated with these facilities include replacement of basin inlet and outlet valves, cathodic protection anodes, valve actuators, mixers, aeration systems, vent screening and back-up electrical generators. Over the next 10 years, the District projects that annual costs associated with maintaining reservoirs will be less than \$500,000, bringing the cumulative 10-year total to approximately \$4.65 million.

Pumping Stations

Most of Southern Nevada's drinking water comes from the Colorado River, drawn from pipelines within Lake Mead. The regional entity responsible for treating this water, the Southern Nevada Water Authority, sells water to local purveyors like the District at a wholesale rate and delivers it through facilities called Rate-of-Flow-Control Stations into receiving reservoirs.



Image: LVVWD Pumping Station

For most customers, this is only the beginning of their water's journey. From these receiving reservoirs, water is pumped to dozens of District-operated reservoirs located

throughout the valley. During summer months, when water use is highest, the District delivers more than 400 million gallons a day to its customers. To accomplish this, the agency operates more than 50 pumping stations that collectively produce 90,000-plus horsepower and have the capacity of 1.2 million gallons of water per minute. This is sufficient to meet even the highest "peak" demand. The ability to move water quickly around the valley is especially critical for fire suppression; there are approximately 30,000 fire hydrants within the District service area.

While variables such as the manufacturer and usage patterns affect the service life of individual pumps and ancillary equipment, a full pumping station is estimated to have a 100-year service life. The District evaluates pump performance semiannually by using an analysis of SCADA data to identify any issues. Major rehabilitation is typically performed at intervals of 35 and 65 years, while individual pumps undergo regular preventative maintenance. Performance monitoring systems automatically shut pumps down if anomalies occur, minimizing the impact of a failure. Several of the LVVWD's major pumping stations are

at or beyond the 35-year threshold and require refurbishment.

Expenditures associated with pumping stations are expected to be relatively modest given the District's successful ongoing maintenance activities. The cumulative 10-year cost associated with asset management on these facilities will be approximately \$6.7 million.

Pipelines and Service Laterals

If pumping facilities represent the water system's heart, pipelines and service laterals are the veins that keep the community's lifeblood flowing. From the 5/8" service laterals that connect homes to the water mains beneath neighborhood streets to enormous 7-foot pipelines, the District must maintain approximately 6,500 miles of pipes, all constructed during different decades from a variety of materials.

The type of material from which pipelines are manufactured largely dictates their service life. In many parts of the District's service area, water mains are more than 40 years old. Where feasible, engineers incorporate auxiliary interconnections into the design that allow water to be rerouted to a property in the event of a pipeline break. Areas without such interconnections are most vulnerable to service outages, making their maintenance or replacement an even greater priority.

Given the immensity of the pipeline and service lateral network, it is not surprising that this category of infrastructure represents the largest reinvestment need for the organization. The pipeline system consists primarily of ACP (cement), PVC, steel and ductile-iron, while service laterals are fabricated largely from copper with a small percentage of polyethylene lines. Service life projections vary dramatically by material. For instance, polyethylene (an industry standard during the 1970s and '80s) has a far shorter service life than copper, exemplified by a failure rate 50 times that of copper. As a result, the District is aggressively replacing these laterals, which pose an unacceptable risk to the organization's high service reliability standards.

The District uses an array of tools—including acoustic wave technology—to perform pipe condition assessments, often without excavation. Based upon data collected in the field and service life status, the

Asset Management team prioritizes replacement activities. To minimize disruption to customers and commuters during replacement, the District coordinates with other entities that may be executing construction projects such as road repaving or sewer system upgrades. For example, the District has developed a comprehensive master plan for replacement of the major pipelines serving the Las Vegas Strip; given the implications of major construction-related traffic impacts to employees and businesses in that corridor, the District will work in tandem with other agencies to minimize the duration of construction windows.



Image: LVVWD Pipeline Repair

Throughout the distribution system, the LVVWD is scheduling replacement of older sections of pipeline based upon leak incidence, breakage history and direct assessments. Addressing these issues systematically and proactively is critical given the implications of a prolonged service interruption for residential and commercial customers. Over the next decade, the LVVWD projects pipeline replacement costs of \$130 million, with an additional \$70 million required for service lateral replacements.

Valves

Most people are familiar with the water valves used in their landscape irrigation system. Within the context of a community water system, valves serve much the same function, but on a far larger scale—allowing water to be quickly shut off or rerouted in the event of a pipeline break or other failure. Given the importance of an uninterrupted water supply in this desert community, the ability to isolate a failed pipeline or appurtenance does more than simply reduce water loss. It also expedites the repair or replacement of the faulty component, minimizing the duration of service interruptions. Operations crews work to ensure that

the system's approximately 120,000 valves are maintained in working condition, "cycling" them periodically to prevent seizing and replacing them as necessary. Valves are also systematically changed out when the water main they serve is replaced. As a result of these efforts, the average elapsed time between notification of a pipeline break and shutdown is less than one hour.

Valves associated with large-diameter pipelines are housed in below-ground concrete structures called vaults; within the District's service area, there are approximately 2,300 vaults, which allow working access to underground equipment for testing, maintenance and replacement without excavating streets or private property. There are two categories of vaults: system vaults and meter vaults. System vaults house the isolation valves and are installed in public rights-of-way. Meter vaults, which house equipment used for accounts with meters sized 3" and larger, are located on individual properties. While both types of vaults are structurally designed to withstand traffic and soil loadings, they do have a finite service life. Inspections are conducted on a three-year cycle, with repair/replacement conducted as warranted by conditions.

On average, the District anticipates the need to replace 240 valves and execute 40 vault rehabilitation projects per year, in addition to "cycling" nearly 10,000 valves annually to ensure that they remain functional. The total cost associated with these activities is cumulatively projected at \$22.5 million during the next decade.

Meters

In the early days of the District, the introduction of meters to measure water use was controversial, which is not surprising given that the average person used more than 600 gallons per day. Today, our community is among the world's leaders in water conservation, and meters are the foundation of a system that rewards efficiency by directly linking costs with water consumption. In addition to providing an equitable way to share costs for both the water and the infrastructure necessary to deliver it, metering encourages water efficiency. Allowing customers to track their water consumption is one of the tools Southern Nevada has used to cumulatively save more than half a trillion gallons of water during the current Colorado River drought.

The LVVWD is responsible both for installing meters at new services and for maintaining approximately 375,000 water meters already installed in the LVVWD service area. There are currently 11 different meter sizes in the system, ranging from the 5/8" units that serve many homes to 12" meters that support large-scale water users such as resort properties. New technology allows meter reading to be performed remotely, saving on labor costs.

However, as with all mechanical devices, meters have a finite service life and must be replaced

periodically. Additionally, because meter technology has changed significantly over time, many meters—particularly large meters serving businesses—can no longer be repaired because the parts have become obsolete and are no longer

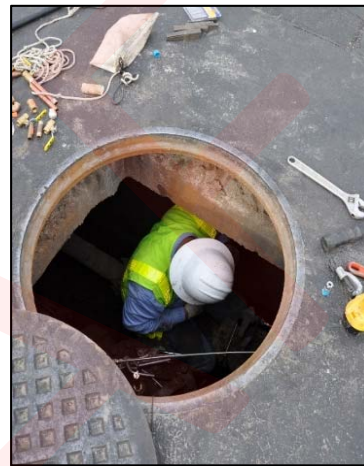


Image: Valve/Vault Repair

manufactured. As meters age, they can begin to under-report usage, resulting in customers using more water than is accounted. Potential revenue loss associated with this is estimated to be as much as \$1 million annually.

To address failing meters, the District has implemented a Preventative Maintenance Program to replace aging metering equipment. In addition to ensuring that customers' bills are commensurate with their demand, replacing high-volume meters with new technology—such as turbine meters—mitigates pressure loss, improving those properties' level of service. The LVVWD anticipates that costs associated with this program will be approximately \$3.25 million annually over the next decade. A portion of those outlays will be recovered as those customers' water use is more accurately billed through the new meters.

Water Quality Controls

Although water delivered to the District from the Southern Nevada Water Authority and groundwater wells has been treated and tested to ensure it meets all state and federal health standards, the integrity of customers' drinking water must be maintained and carefully monitored all the way to the tap. For instance, chlorine levels dissipate over time, requiring periodic rechlorination to prevent bacteria from entering the water. Conversely, levels of chlorination byproducts—which themselves can have harmful effects—must be carefully managed.

To maintain water quality in the distribution system, the District operates scores of sampling stations, from which more than 30,000 samples are drawn annually for analysis. Additionally, the centralized Supervisory Control and Data Acquisition (SCADA) center allows operators to monitor the water system 24 hours a day, including the use of in-line sensors to detect subtle changes in water quality.

Costs associated with this critical function are relatively modest. The high-tech SCADA center, for instance, is projected to require approximately \$6 million in upgrades over the planning horizon—much of it associated with upgrades to rapidly-advancing computer hardware and software. Other investments in water quality are embedded in broader facility maintenance initiatives that cover security enhancements and a host of other water quality protection-oriented projects.



Image: Supervisory Control and Data Acquisition (SCADA) center.

Groundwater Wells

Originally the sole source of water for Las Vegas residents, groundwater today represents about 10 percent of the District's supply. Despite its relatively modest role as a resource, groundwater is integral to meeting summer peak demand. The ability to supplement water from Lake Mead with this renewable supply reduces the strain on the region's water treatment facilities and extends our community's Colorado River allocation. Additionally, wells—which can be operated if necessary by generators—represent an excellent emergency water source.

To prevent adverse hydrologic impacts associated with withdrawals, groundwater pumping is distributed through more than 70 wells, largely located in the central and western parts of the Las Vegas Valley. Some of these wells are also used to store water saved through the community's successful conservation efforts; by reversing the powerful pumps, water can be injected into the aquifer for storage and future use.

A well system is comprised of two major components: the pumping equipment, and the wellbore itself. The service life expectancy of a wellbore can vary significantly depending upon its composition. Newer



Image: LVVWD Groundwater Well window.

wells have an expected lifespan of 75 years, while older wells typically last between 40 and 60 years. Pumping equipment has a far shorter service life, rarely exceeding 13 years. Technicians monitor pumping efficiency to determine the optimal replacement or refurbishment

Over the next 10 years, 13 wellbores will require significant rehabilitation or redrilling, while five well pumps require replacement or rebuilding annually. During the 10-year planning horizon, the District anticipates that well- and pump-related costs will be approximately \$15.6 million.

Facilities and Capital Improvements

Treating and delivering water requires a tremendous amount of electrical energy; from pumping stations and reservoirs to well facilities and the LVVWD's main campus, maintaining the reliability of the power supply is critical to the agency's operations. This entails assessing and servicing transformers and electrical panels throughout the valley. In support of its sustainability initiatives, the LVVWD also operates several solar photovoltaic generation facilities, which are co-located with existing infrastructure and provide electrical power to support operations.

Information systems also play a crucial role in ensuring that the community's water supply remains both reliable and safe. As noted above, the SCADA control center—which monitors water quality and production levels in virtually real-time—relies upon an extensive communications network. In addition, electronic facility intrusion detection and cyber-security are central to the ongoing protection of the community's water system.

The District maintains a fleet of more than 600 automotive vehicles and a similar number of heavy machines, including cranes, used to support facility maintenance and replacement, respond to emergency service outages, and conduct routine functions like valve cycling and meter reading. This award-winning fleet is housed at the District's main campus on Valley View Boulevard, which also serves as the base for the agency's customer service center,

equipment warehouse, fleet maintenance center, administrative offices and other core functions. This 300,000-square-foot complex encompasses numerous buildings with all of the associated electrical, HVAC, communications and office infrastructure, and equipment.

Security, safety and fleet-related expenditures are projected at approximately \$3.9 million annually over the next decade. Costs associated with electrical, telemetry and other related infrastructure is budgeted at \$3.45 million per year over the next 10 years, with an additional \$2.7 million annually for repair, replacement, and upgrades to infrastructure and equipment housed at the primary campus.

Asset Management Summary

A summary of forecasted Asset Management activities and associated costs over the 10-year planning horizon is detailed in Figure 1.6. Costs are represented in aggregate; however, LVVWD work efforts will be executed in a phases based on asset assessment results and need. Proposed expenditures to support this work will be presented to the Board of Directors for consideration and authorization as part of the annual budget process.

Figure 1.6: Projected Asset Management Activity and Cost by Asset Type

ACTIVITY	10-YEAR	PERCENTAGE
Meter Program	\$32.4 million	8%
Vault Program	22.5 million	6%
Service Laterals	70.0 million	18%
Pipeline Rehabilitation and Replacement	130.0 million	33%
Facilities Improvements	27.0 million	7%
SCADA	6.0 million	2%
Pump Stations	6.7 million	2%
Reservoirs	4.65 million	1%
Wells	15.6 million	4%
Reclaimed Water	1.7 million	<1%
Fleet, Safety and Security	39.3 million	10%
Misc. Capital	34.5 million	9%
TOTAL	\$390.3 million	

CAPITAL IMPROVEMENT PLAN

WATER QUALITY

The District is responsible for ensuring that municipal water supplies meet strict state and federal health standards. To accomplish this, the agency collects more than 33,000 water samples a year and analyzes them for more than 100 regulated and unregulated contaminants. The instrumentation used to test water quality can detect some compounds at one part per trillion, the equivalent of one teaspoon of water in 2,100 Olympic-size swimming pools. Additionally, the LVVWD's high-tech SCADA operations center uses advanced instrumentation to detect minute changes in water quality, providing a greater degree of protection.

To support its mission of providing customers with a safe, reliable water supply, the District works closely with the State of Nevada to identify and reduce any potential vulnerabilities to water contamination, including conditions known as backsiphonage or backpressure, more commonly referred to as backflow. This occurs when negative pressure in the system causes water to reverse its flow. There are a number of situations that can potentially cause this to occur. For example, a sudden decrease of water pressure due to a main break or a significant draw on hydrants for firefighting efforts can potentially cause backflow conditions. When this occurs, water from an individual property's plumbing system can be drawn back into the public portion of the water distribution network.

To prevent this from occurring, the State of Nevada in the mid-1990s began requiring the installation of backflow prevention devices on all new properties except single-family homes. These valve-like devices protect the community's drinking water system by preventing water from being siphoned back into water mains from private properties. This mandatory program is managed by the Nevada Division of Environmental Protection and requires that all backflow devices be tested annually by a certified technician.

System Needs

Approximately 35,000 meters within the District's service area require backflow protection. To fulfill state requirements, the District prioritized backflow installations based on their degree of risk to the system and has begun systematically retrofitting properties that require backflow protection. An annual cost of \$10 million is needed over the 10-year planning horizon to implement its backflow retrofit program. The cost of individual retrofits varies by meter size and range from approximately \$3,000 for small meters to more than \$33,000 for 10" meters. The projected cost is anticipated to address approximately one-third of outstanding retrofit needs over the next decade. The quantity of devices involved and labor-intensive nature of the installations precludes a more aggressive approach.



Image: Commercial Backflow Assembly

CAPITAL IMPROVEMENT PLAN

NEW FACILITIES

Since its inception, the District has worked to develop, operate and maintain its water distribution system in a manner that meets the needs of the community. This includes ensuring the reliable delivery of high-quality water to all customers. Over the decades, this has required the agency to install thousands of miles of water mains, hundreds of millions of gallons worth of reservoir storage and massive pumping stations necessary to move water around the valley.

When the recession that began in 2007 brought commercial and residential development to a virtual standstill, the District quickly responded by curtailing facility expansion and reliability enhancement projects, and by deferring many of the major asset management needs discussed in the preceding section. In total, hundreds of millions of dollars' worth of construction activities were postponed, which increased the strain on the community's water system. Given the uncertain financial climate, it was determined this action to be in the best interest of both ratepayers and the organization.

System Needs

Today, development activity has resumed in Southern Nevada, although certainly not to the degree experienced in the decades prior to the recession. Accordingly, the LVVWD has resumed planning activities associated with expansion of the community's water delivery system. This action is necessary for the organization to fulfill its mission of providing a safe, reliable water system to all municipal water customers in its service area.

Below is a summary of three major system improvement projects planned for development within the 10-year planning horizon. None of these projects are being constructed exclusively for prospective development; rather, all simultaneously benefit existing customers while facilitating access to the municipal water supply for planned developments.

NEW FACILITIES

Northwest Major Facilities (NW)

Within the northwest portion of the Las Vegas Valley, approximately 21,000 customers in three separate pressure zones are serviced by a single pumping

station and a single reservoir; a major development currently under construction is anticipated to bring that number to nearly 30,000 customers. In the event of a service interruption, current reservoir storage is inadequate to support customers for extended periods of time. New facilities are needed to address the strain on existing infrastructure and to reduce residents' vulnerability to service interruptions associated with scheduled or emergency outages.

New facilities planned for construction include the development of two new water storage reservoirs—one with a capacity of 10 million gallons, the other with a capacity of 5 million gallons—along with two pumping stations and associated appurtenances. The estimated cost of these improvements is \$61.8 million.

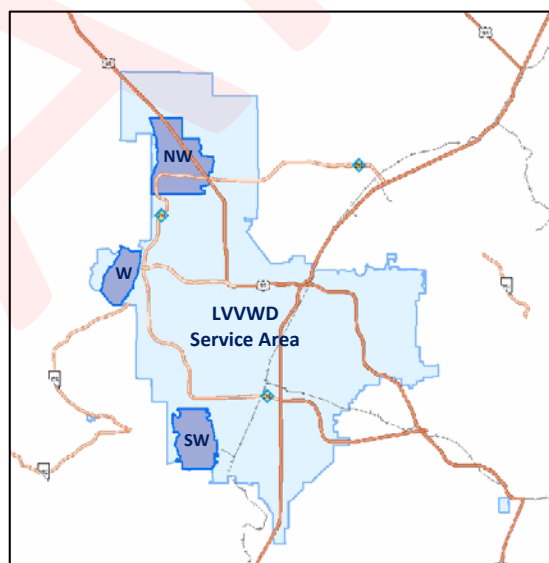


Figure 1.7: Customers to be served by new facilities

West Major Facilities (W)

Unlike the vast majority of customers in the District's service area, residents and businesses in this portion of the valley depend on direct delivery for their water service. As discussed previously, direct delivery is less reliable and impacts could arise in the event of scheduled and unanticipated outages, such as a water main break. Without storage or other redundant systems, customers could experience immediate service impacts.

New facilities planned for construction in this service area include the development of a 10-million-gallon water storage reservoir, a pumping station and associated appurtenances. Constructing this long-planned but deferred reservoir will reduce vulnerability and enhance overall system reliability. Additionally, it will provide additional capacity and emergency storage for any additional residential or commercial expansion that may occur in the area. The estimated cost of these improvements is \$30.1 million.

Southwest Major Facilities (SW)

Within the southwest portion of the valley, there are more than 6,600 customers served by a single water storage reservoir and pumping station. These facilities are located approximately 3 miles away from

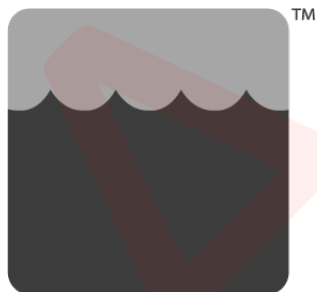
their furthestmost service connection. In the event of a service interruption, current reservoir storage is inadequate to support customers for extended periods of time. New facilities are needed to address the strain on existing infrastructure and reduce residents' vulnerability to service interruptions associated with scheduled or emergency outages.

New facilities planned for construction include a 10-million-gallon water storage reservoir, pumping station and associated appurtenances. In addition to providing an emergency water supply in close proximity to customers, the proposed reservoir will alleviate pressure variability issues associated with the current engineering configuration. This benefits existing customers not only in terms of reliability, but in service quality as well. The estimated cost of these improvements is \$33.8 million.

Figure 1.8: Projected Activity and Cost by Asset Type

ACTIVITY	COST
Northwest Facilities	
5 MG Reservoir & Associated Inlet/Outlet Pipeline	\$10.6 million
10 MG Reservoir & Associated Inlet/Outlet Pipeline	26.0 million
Pumping Station & Discharge Pipeline	13.6 million
Pumping Station & Discharge Pipeline	10.9 million
Pressure Reducing Valves	700,000
<i>Subtotal</i>	<i>\$61.8 million</i>
Summerlin Facilities	
10 MG Reservoir & Inlet/Outlet Pipeline	\$22.5 million
Pumping Station	7.6 million
<i>Subtotal</i>	<i>\$30.1 million</i>
Southwest Facilities	
10 MG Reservoir	\$20.8 million
Pumping Station	12.3 million
Pressure Reducing Valves	700,000
<i>Subtotal</i>	<i>\$33.8 million</i>
TOTAL	\$125.7 million

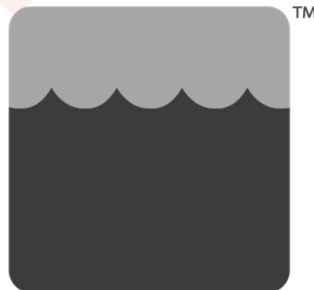
This page left intentionally blank



SECTION 7

DEBT MANAGEMENT POLICY

Table of Contents	7-2
Introduction	7-3
Affordability of Debt.....	7-5
Supported by Water System Pledged Revenues	7-5
Supported by the SNWA Pledged Revenues	7-8
Debt Capacity	7-9
Debt Comparison (per capita and assessed valuation)	7-9
Policy Statement for Sale of Debt.....	7-10
Operation Costs and Revenue Sources for	
Projects in Capital Improvement Plan	7-12
Miscellaneous Items.....	7-13
Chief Financial Officer Information.....	7-16
Appendix	7-17



LAS VEGAS VALLEY WATER DISTRICT
FISCAL YEAR 2020-21
OPERATING AND CAPITAL BUDGET

Debt Management Policy

In Accordance With
NRS 350.013



**LAS VEGAS VALLEY
WATER DISTRICT™**

June 30, 2020

Las Vegas Valley Water District
Operating and Capital Budget
Debt Management Policy
Fiscal Year Ending June 30, 2021

Table of Contents

Introduction	7-3
Affordability of Debt	7-5
Supported by Water System Pledged Revenues	7-5
Supported by the SNWA Pledged Revenues.....	7-8
Debt Capacity	7-9
Debt Comparison (per capita and assessed valuation).....	7-9
Policy Statement for Sale of Debt.....	7-10
Operation Costs and Revenue Sources for Projects in Capital Improvement Plan.....	7-12
Miscellaneous Items.....	7-13
Chief Financial Officer Information	7-16
Appendix - Debt Service and Pledged Revenue Tables.....	7-17

Debt Management Policy

NRS 350.013 Subsection 1(c)

Introduction

The Las Vegas Valley Water District (LVVWD) is a quasi-municipal corporation created by the State of Nevada (State) pursuant to a Special Act (the Act) of the Legislature in March 1947. The Las Vegas Valley Water District Act is available online at:

<https://www.leg.state.nv.us/SpecialActs/65-LasVegasValleyWater.html>

The LVVWD was created for the purpose of obtaining and distributing water, primarily in the Las Vegas Valley, which includes the metropolitan area of Clark County (County) and the City of Las Vegas. Because the County Board of Commissioners serves as the LVVWD Board of Directors (Board), the LVVWD is included as a blended component unit within the County's Comprehensive Annual Financial Report. A component unit can be a legally separate organization for which the elected officials of the primary government are financially accountable. For purposes of this report, the LVVWD alone is the reporting entity.

The LVVWD's current debt structure is presented in the Appendix. The LVVWD has three options to issue debt:

- The LVVWD can issue debt in its own name. Standard & Poor's rates the LVVWD bonds "AA+", and Moody's Investors Service rates them "Aa1". This rating makes the LVVWD Bonds

"high investment" grade.

- The LVVWD can issue debt through the Clark County Bond Bank. Standard & Poor's rates County bonds "AA+", and Moody's Investors Service rates them "Aa1".
- The LVVWD can issue debt through the State Bond Bank. Standard & Poor's rates State bonds "AA", and Moody's Investors Services rates them "Aa2".

By contract, the LVVWD operates the Southern Nevada Water Authority (SNWA), and the LVVWD has issued debt for the SNWA, which is additionally secured by the SNWA's Pledged Revenues. See the Appendix for a listing of the LVVWD debt secured by the LVVWD revenues, and debt the LVVWD has issued for the SNWA, additionally secured by the SNWA's Pledged Revenues.

The proceeds of debt issued by the LVVWD is restricted for the purchase and/or construction of capital assets. The LVVWD Capital Improvement Plan (CIP) is a phased construction program outlining current construction expenditures, as well as projected future expenditures for construction of capital assets. In addition to issuing debt to fund the purchase and/or construction of capital assets, the LVVWD also budgets a portion of operating revenues to fund capital assets on a pay-as-you-go basis.

This document is not intended to review the LVVWD's total financial position. In addition to being required by state law, this analysis

Las Vegas Valley Water District
Operating and Capital Budget
Debt Management Policy
Fiscal Year Ending June 30, 2021

of the LVVWD's debt position is important for capital asset planning purposes, and to determine if the LVVWD rates and charges are sufficient to cover current and future operating expenses and debt service. Decisions regarding the use of debt will be based in part on the long-term needs of the LVVWD and the amount of funds dedicated in a given year to capital expenditures.

Below are excerpts from Nevada Law which requires local governments to submit a debt management policy:

NRS 350.013 Municipalities to submit annually statement of current and contemplated general obligation debt and special elective taxes, statement of debt management policy, plan for capital improvement or alternate statement and certain information regarding chief financial officer; update of information; exceptions.

(1) Except as otherwise provided in this section, on or before August 1 of each year, the governing body of a municipality which proposes to issue or has outstanding any general obligation debt, other general obligations or special obligations, or which levies or proposes to levy any special elective tax, shall submit to the department of taxation and the commission:

(c) A written statement of the debt management policy of the municipality, which must include, without limitation;

(1) A discussion of its ability to afford existing general obligation debt, authorized future general obligation debt and proposed future general obligation debt;

(2) A discussion of its capacity to incur

authorized and proposed future general obligation debt without exceeding the applicable debt limit;

(3) A discussion of its general obligation debt that is payable from property taxes per capita as compared with such debt of other municipalities in the state;

(4) A discussion of its general obligation debt that is payable from property taxes as a percentage of assessed valuation of all taxable property within the boundaries of the municipality;

(5) Policy regarding the manner in which the municipality expects to sell its debt;

(6) A discussion of its sources of money projected to be available to pay existing general obligation debt, authorized future general obligation debt and proposed future general obligation debt; and

(7) A discussion of its operational costs and revenue sources, for the ensuing 5 fiscal years, associated with each project included in its plan for capital improvement submitted pursuant to paragraph (d), if those costs and revenues are expected to affect the tax rate.

(d) Either:

(1) Its plan for capital improvement for the ensuing 5 fiscal years, which must include any contemplated issuance of general obligation debt during this period and the sources of money projected to be available to pay the debt; or

(2) A statement indicating that no changes are contemplated in its plan for capital improvement for the ensuing 5 fiscal years.

Las Vegas Valley Water District
Operating and Capital Budget
Debt Management Policy
Fiscal Year Ending June 30, 2021

(e) A statement containing the name, title, mailing address and telephone number of the chief financial officer of the municipality.

(2) The governing body of a municipality may combine a statement or plan required by subsection 1 with the corresponding statement or plan of another municipality if both municipalities have the same governing body or the governing bodies of both municipalities agree to such a combination.

(3) Except as otherwise provided in subsection 4, the governing body of each municipality shall update all statements and plans required by subsection 1 not less frequently than once each fiscal year.

(4) In a county whose population is 100,000 or more, the governing body of each municipality shall update all statements and plans required by subsection 1 not less often than once each fiscal year and not more often than twice each fiscal year, except that a municipality may update a statement or plan required by subsection 1 more often than twice each fiscal year.

Affordability of Debt

Response to NRS 350.013 1(c):

(1) A discussion of its ability to afford existing general obligation debt, authorized future general obligation debt and proposed future general obligation debt; and

(6) A discussion of its sources of money projected to be available to pay existing

general obligation debt, authorized future general obligation debt and proposed future general obligation debt

Existing, Authorized and Proposed General Obligation/Revenue Supported Bond Indebtedness of the LVVWD Supported by Water System Pledged Revenues ("LVVWD Water Bonds")

The LVVWD Water Bonds constitute direct and general obligations of the LVVWD, and the full faith and credit of the LVVWD is pledged to the payment of principal and interest due thereon. The LVVWD Water Bonds are payable from general property taxes on all taxable property in the LVVWD service area, subject to Nevada constitutional and statutory limitations on the aggregate amount of property taxes. The LVVWD Water Bonds are secured additionally by certain pledged revenues described below. The LVVWD has never levied a property tax because the LVVWD's revenues have been sufficient to pay debt service on all of the LVVWD's bonds and obligations secured by such revenues.

In any year in which the total property taxes levied within the LVVWD service area by all applicable taxing units (e.g. the State of Nevada, Clark County, the Clark County School District, any city, or any special district including the LVVWD) exceed such property tax limitations, the reduction to be made by those units must be in taxes levied for purposes other than the payment of their bonded indebtedness, including interest on such indebtedness.

Nevada statutes provide that no act

Las Vegas Valley Water District
Operating and Capital Budget
Debt Management Policy
Fiscal Year Ending June 30, 2021

concerning the LVVWD Water Bonds or their security may be repealed, amended, or modified in such a manner as to impair adversely the Bonds or their security until all of the Bonds have been discharged in full or provision for their payment and redemption has been fully made.

The payment of the LVVWD Water Bonds is not secured by an encumbrance, mortgage or other pledge of property of the LVVWD, and no property shall be liable to be forfeited or taken in payment of the LVVWD Water Bonds, provided the payment of the bonds is secured by the proceeds of general (*property*) taxes and the LVVWD's revenues, which are pledged for the payment of the Bonds. Furthermore, section 350.606 of the Bond Act provides that no recourse shall be had for the payment of principal or interest, or any prior redemption premiums due in connection with municipal securities such as the LVVWD Water Bonds, or for any claim based thereon or otherwise upon the resolution authorizing their issuance, against any individual trustee, officer, employee or other agent of the LVVWD, past, present or future, either directly or indirectly by virtue of any statute or rule of law.

Pledged Revenues. The LVVWD Water Bonds are additionally secured by the revenue received from the sale and distribution of water, connection charges or otherwise derived from the works or property of the LVVWD, after payment of reasonable and necessary costs of the operation and maintenance expenses of the water system (Water System) and the general expenses of the LVVWD (Net

Pledged Revenues). Operation expenses generally include the costs of the purchase of water from the SNWA, power and pumping, purification, transmission and distribution, materials and supplies, maintenance and repairs, purchased and professional services, and customer accounting and collection.

The LVVWD Act authorizes the Board to establish, from time to time, reasonable rates and charges for the products and services furnished by the LVVWD's works and properties. Subject to the limitation that rates and charges must be reasonable, the Board must fix rates and charges which will produce sufficient revenues to pay (1) operating and maintenance expenses of the Water System, (2) the general expenses of the LVVWD, and (3) the principal of and interest on the LVVWD's first lien bonds and second lien bonds (the "Superior Lien Bonds") including any required sinking fund payments, and (4) debt service on all other securities payable from Net Pledged Revenues. It is the general intent of the LVVWD Act and policy of the Board that rates and charges be adequate to provide for all costs and that reliance on property taxes is to be avoided. There has, historically, been no reliance on property taxes to support the LVVWD's operations and there is no current plan or intention to call upon property taxes to support the LVVWD's financial requirements.

Authorized and Proposed Future LVVWD Water Bonds.

The LVVWD plans to issue \$100 million of

Las Vegas Valley Water District
Operating and Capital Budget
Debt Management Policy
Fiscal Year Ending June 30, 2021

new money debt in fiscal year 2020-21. This debt issuance is intended to primarily fund the LVVWD's CIP. In addition, the bond market is constantly monitored for savings opportunities via refunding or restructuring existing debt issues.

Bonded Indebtedness. The following table sets forth the LVVWD's outstanding general obligation bonded indebtedness supported by water system pledged revenues as of June 30, 2020.

Debt Service Requirements. See Appendix for a table showing the debt service to maturity on the LVVWD Water Bonds.

Property Tax Rate Impact. Principal and interest on the LVVWD Water Bonds is payable from the Water System pledged revenues. There will be no direct impact on the property tax rate as long as pledged revenues are sufficient to pay debt service on the outstanding bonds. See Appendix for a table illustrating the LVVWD's historic pledged revenues and debt service coverage.

EXISTING GENERAL OBLIGATION INDEBTEDNESS
SUPPORTED BY WATER SYSTEM PLEDGED REVENUES
Las Vegas Valley Water District, Nevada
As of June 30, 2020

Description	Issued	Original Amount	Outstanding
LVVWD 2008 Clean Energy	Jul-08	\$ 2,520,000	\$ 504,000
LVVWD 2010A BABS	Jun-10	75,995,000	75,995,000
LVVWD 2011D	Oct-11	78,680,000	43,440,000
LVVWD 2012A	Sep-12	39,310,000	39,310,000
LVVWD 2014 SRF Loan #1	Dec-14	19,929,329	17,506,988
LVVWD 2015A	Jun-15	172,430,000	109,285,000
LVVWD 2016B	Apr-16	108,220,000	94,310,000
LVVWD 2016 SRF Loan #2	Sep-16	15,000,000	14,759,788
LVVWD 2017 SRF Loan #3	May-17	15,000,000	14,624,674
LVVWD 2017A	Mar-17	130,105,000	121,400,000
LVVWD 2018A	Jun-18	100,000,000	96,590,000
LVVWD 2020B	Feb-20	22,240,000	22,240,000
LVVWD 2020D	Mar-20	98,080,000	98,080,000
			<u>\$ 748,045,450</u>

SOURCE: Las Vegas Valley Water District

Las Vegas Valley Water District
Operating and Capital Budget
Debt Management Policy
Fiscal Year Ending June 30, 2021

Existing Authorized and Proposed General Obligation Indebtedness of the LVVWD Supported by the SNWA Pledged Revenues ("SNWA Water Bonds").

The LVVWD has issued general obligation bonds for the SNWA. The SNWA Water Bonds constitute direct and general obligations of the LVVWD, and the full faith and credit of the LVVWD is pledged to the payment of principal and interest due thereon. The SNWA Water Bonds are payable from property taxes on all taxable property within the LVVWD service area, subject to Nevada constitutional and statutory limitations on the aggregate amount of property taxes. The SNWA Water Bonds are additionally secured by certain pledged revenues (the "SNWA Pledged Revenues") as set forth in NRS 350.13 (4). The SNWA Pledged Revenues currently consist of fees and charges for water imposed by the SNWA upon its wholesale water customers (the LVVWD, Henderson, North Las Vegas, and Boulder City). Under the SNWA Revenue Act, the SNWA is required to maintain its fees and charges for water at a level sufficient to allow it to meet its obligations to the LVVWD to pay the LVVWD's SNWA Water Bonds.

Nevada statutes provide that no act concerning the SNWA Water Bonds or their security may be repealed, amended, or modified in such a manner as to impair adversely the Bonds or their security until all of the Bonds have been discharged in full or provision for their payment and redemption has been fully made.

The payment of the SNWA Water Bonds is not secured by an encumbrance, mortgage or other pledge of property of the SNWA (other than the SNWA Pledged Revenues) and no property shall be liable to be forfeited or taken in payment of the SNWA Water Bonds, provided the payment of the Bonds is secured by the proceeds of general (property) taxes and the SNWA Pledged Revenues, which are pledged for the payment of the Bonds. Furthermore, section 350.606 of the Bond Act provides no recourse shall be had for the payment of the principal of, interest on, or any prior redemption premiums due in connection with municipal securities such as the SNWA Water Bonds, or for any claim based thereon or otherwise upon the resolution authorizing their issuance, against any individual trustee, officer, employee or other agent of the LVVWD, past, present or future, either directly or indirectly by virtue of any statute or rule of law.

The LVVWD has never levied a property tax to pay the SNWA Water Bonds because SNWA Pledged Revenues have always been sufficient to pay debt service on all of the LVVWD's bonds and obligations secured by such revenues.

Debt Service Requirements. See Appendix for a table that shows the debt service to maturity for the SNWA Water Bonds.

Property Tax Rate Impact. Principal and interest on the SNWA Water Bonds are payable from the SNWA Pledged Revenues. There will be no direct impact on the property tax rate as long as pledged

Las Vegas Valley Water District
Operating and Capital Budget
Debt Management Policy
Fiscal Year Ending June 30, 2021

revenues are sufficient to pay debt service on the outstanding bonds.

The following table sets forth the LVVWD's bonds issued for the SNWA as of June 30, 2020.

EXISTING GENERAL OBLIGATION INDEBTEDNESS
SUPPORTED BY SNWA PLEDGED REVENUES
Las Vegas Valley Water District, Nevada
As of June 30, 2020

Description	Issued	Original Amount	Outstanding
SNWA Tax-Exempt Commercial Paper	Mar-04	\$ 250,000,000	\$ 250,000,000
SNWA 2011A	May-11	58,110,000	35,100,000
SNWA 2011B	Oct-11	129,650,000	80,690,000
SNWA 2011C	Oct-11	267,815,000	187,235,000
SNWA 2012B	Jul-12	360,000,000	316,465,000
SNWA 2015 Refunding Bonds	Jan-15	332,405,000	332,405,000
SNWA 2015B	Jun-15	177,635,000	131,900,000
SNWA 2015C	Jun-15	42,125,000	30,960,000
SNWA 2016A	Apr-16	497,785,000	456,745,000
SNWA 2017B Refunding Bonds	Mar-17	22,115,000	20,510,000
SNWA 2018B Refunding Bonds	Mar-18	79,085,000	62,175,000
SNWA 2019A Refunding Bonds	Feb-19	107,975,000	105,560,000
SNWA 2019B Refunding Bonds	Oct-19	90,280,000	90,280,000
SNWA 2020A Refunding Bonds	Mar-20	123,860,000	123,860,000
			<u>\$ 2,223,885,000</u>

SOURCE: Las Vegas Valley Water District

Debt Capacity

Response to NRS 350.013 1(c):

(2) A discussion of its capacity to incur authorized and proposed future general obligation debt without exceeding the applicable debt limit.

The LVVWD does not have a specific debt limit dollar amount threshold. The LVVWD has no power to incur debt in excess of

express authorization granted by the Nevada Legislature in Chapter 167, Statutes of Nevada 1947, as amended. The LVVWD's ability to issue debt is a function of its capital needs and revenues generated from LVVWD facilities.

Debt Comparison (per capita and assessed valuation)

Response to NRS 350.013 1(c):

Las Vegas Valley Water District
Operating and Capital Budget
Debt Management Policy
Fiscal Year Ending June 30, 2021

(3) A discussion of its general obligation debt that is payable from property taxes per capita as compared with such debt of other municipalities in the state.

(4) A discussion of its general obligation debt that is payable from property taxes as a percentage of assessed valuation of all taxable property within the boundaries of the municipality.

Currently, the LVVWD does not have any outstanding bonds payable directly from property taxes. The existing LVVWD Water Bonds and SNWA Water Bonds are payable from pledged water revenues.

Policy Statement for Sale of Debt

Response to NRS 350.013 1(c):

(5) Policy regarding the manner in which the municipality expects to sell its debt.

There are two ways bonds can be sold: competitive (public) or negotiated sale. NRS 350.105 to 350.195 sets forth the circumstances under which a local government will sell its bonds at a competitive or negotiated sale. The LVVWD will follow the statutory requirements in determining the method of sale for its bonds. The Government Finance Officers Association also urges “competitive sales should be used to market debt whenever feasible”.

Competitive and negotiated sales provide for one or more pricings, depending upon market conditions or other factors. Either method can provide for changing sale dates,

issue size, maturity amounts, term, bond features, etc. The timing of any sale is generally related to the requirements of the Nevada Open Meeting Law.

Competitive Sale.

In a competitive sale, all underwriter(s) are invited to submit a proposal to purchase an issue of bonds. The bonds are awarded to the underwriter(s) presenting the best bid according to stipulated criteria set forth in the notice of sale. The best bid is determined based on the lowest overall interest rate.

Negotiated Sale.

In a negotiated sale, an exclusive arrangement is made between the issuer and an underwriter or underwriting syndicate. At the end of successful negotiations, the issue is awarded to the underwriter.

A negotiated underwriting may be considered based upon one or more of the following criteria:

- Extremely large issue size.
- Complex financing structure (i.e. new security feature, variable rate financings, new derivatives, and certain revenue issues, etc.) which provides a desirable benefit to the LVVWD.
- Difficulty in marketing due to credit rating or lack of bids.
- Private placement, or sale to a municipality, to the state, or a federal agency.

Las Vegas Valley Water District
Operating and Capital Budget
Debt Management Policy
Fiscal Year Ending June 30, 2021

- Other factors which lead the LVVWD to conclude that competitive sale would not be effective, including market conditions.

It is the policy of the LVVWD to provide minority owned business enterprises, women owned business enterprises and all other business enterprises an equal opportunity to participate in the performance of all LVVWD contracts. At a competitive sale, bidders are requested to assist the LVVWD in implementing this policy by taking all reasonable steps to ensure all available business enterprises, including minority and women business enterprises, have an equal opportunity to participate in the LVVWD contracts.

Underwriter Selection for Negotiated Sale.

- The Chief Financial Officer (CFO) will establish a list of pre-qualified underwriters when a negotiated sale is anticipated. The list will be based, in part, on the firms who have submitted bids for LVVWD's competitive issues over the prior five years. In addition, the list may contain firms that have participated in other financings in Nevada (in competitive bids or negotiated sales), demonstrated ability and interest in LVVWD financings, or have submitted financing ideas and concepts for LVVWD's consideration over the past five years.
- The CFO will distribute, or request that LVVWD's Financial Advisors distribute on behalf of LVVWD, a

Request for Proposal (RFP) to underwriting firms on the list. The RFP will include, at a minimum, information regarding the firm's qualifications, staffing and personnel assigned to LVVWD, fees (including takedown and management fee - if any), debt structuring, marketing, expected yield, and credit strategies. Before selecting a firm or firms, the CFO may, but is not required, conduct interviews of firms who submit responses to the RFP.

- The selection of underwriter(s) will be based on the overall quality of the response, qualifications of the firm, demonstrated success in pricing bonds, understanding of LVVWD's objectives, qualifications of the banking and underwriting team to be assigned to LVVWD, fees, applicability of the marketing and credit strategy, and relevance and quality of structuring proposals.
- The CFO will designate the senior manager and book-running senior manager if there are co-senior managers, as well as the co-managers from the firms selected through the RFP process. The CFO will determine the length of time that the selected firms will serve as the syndicate for LVVWD. Such a selection can be for a single transaction or multiple transactions, but the syndicate will be reviewed, and a new RFP will be issued at intervals not greater than every five years.

**Las Vegas Valley Water District
Operating and Capital Budget
Debt Management Policy**
Fiscal Year Ending June 30, 2021

Syndicate Policies.

- The CFO will establish designations and liabilities. At a minimum, in a syndicate with three or more firms serving as co-managers, the designation rules will include a minimum of three firms to be designated, with a minimum of 5 percent to any firm. The CFO will also determine the maximum amount to be designated to single firm (typically 50 percent, but this can be higher or lower, depending upon the size of the syndicate and the par amount of the transaction.) In addition, the CFO will determine the appropriate allocation of liabilities and equivalent share of compensation for group net orders.
- Prior to the sale of the bonds, the senior book-running manager will submit a Syndicate Policy Memo to the CFO for approval. At a minimum, the Syndicate Policy Memo will include:
 - Average Takedown and takedown by maturity.
 - Details of Underwriter expenses, including the cost of Underwriter's Counsel.
 - Designation rules.
 - Liabilities.
 - Order priority (unless otherwise agreed by the CFO, the order priority will be Nevada Retail, National Retail, Group Net or Net Designated, Member).
 - Definition of a retail order (unless otherwise determined by the

CFO) will include orders placed by individuals, bank trust departments, financial advisors and money managers acting on behalf of individuals with a maximum of \$1 million per account.

- Assignment of SDC Credit.
- The Syndicate Policy Memo may include other relevant information (e.g., management fee or other fees, description of the sale timeline, etc.).

Selling Group.

The CFO may establish a selling group to assist in the marketing of the bonds as warranted (based on market conditions and size of the transaction.)

Allocation of Bonds.

The book-running senior manager is responsible for allotment of bonds at the end of the order period. The CFO and the LVVWD's Financial Advisors will review allotments to ensure the senior manager distributes bonds in a balanced and rational manner.

**Operation Costs and Revenue
Sources for Projects in Capital
Improvement Plan**

Response to NRS 350.013 1(c):

(7) A discussion of its operational costs and revenue sources, for the ensuing 5 fiscal years, associated with each project included in its plan for capital improvement submitted

Las Vegas Valley Water District
Operating and Capital Budget
Debt Management Policy
Fiscal Year Ending June 30, 2021

pursuant to paragraph (c), if those costs and revenues are expected to affect the tax rate.

As illustrated in the Net Pledged Revenues table in the Appendix of this document, operational costs are funded with water revenues. It is the LVVWD's intent to finance future operational costs with water revenues and will therefore have no effect on property taxes. New capital improvement projects will allow the LVVWD to expand the service area, thereby expanding the revenue base. New capital improvement projects will be funded with water revenues or bonds payable from water revenues.

Miscellaneous Items

Refundings.

A refunding is generally the underwriting of a new bond issue whose proceeds are used to redeem an outstanding issue. Key definitions are described as follows:

- **Advance Refunding** - A method of providing for payment of debt service on a bond until the first call date or designated call date from available funds. Advance refundings are done by issuing a new bond or using available funds and investing the proceeds in an escrow account in a portfolio of U.S. government securities structured to provide enough cash flow to pay all debt service on the refunded bonds.
- **Current Refunding** - The duration of the escrow is 90 days or less.

- **Gross Savings** - Difference between debt service on refunded bonds less debt service on refunding bonds less any contribution from LVVWD's reserves or debt service fund.
- **Present Value Savings** - Present value of gross savings discounted at the refunding bond arbitrage yield to the closing date plus accrued interest less any contribution from LVVWD's reserves or debt service fund.

Prior to beginning a refunding bond issue the LVVWD will review an estimate of the savings achievable from the refunding. The LVVWD may also review a pro forma schedule estimating the savings assuming that the refunding is done at various points in the future.

The LVVWD will generally consider refunding outstanding bonds if one or more of the following conditions exist:

Las Vegas Valley Water District
Operating and Capital Budget
Debt Management Policy
Fiscal Year Ending June 30, 2021

- For advance refundings, present value savings are estimated to be at least 5 percent of the par amount of the refunded or refunding bonds (whichever is greater) when initially presented to the Board and escrow efficiency is at least 60 percent.
- Escrow efficiency is defined as net present value savings divided by the sum of net present value savings and negative arbitrage in the escrow.
- For current refundings, present value savings are at least 3 percent of the par amount of refunded or refunding bonds.
- The bonds to be refunded have restrictive or outdated covenants.
- Restructuring debt is deemed to be desirable.

The LVVWD may pursue a refunding not meeting the above criteria if:

- Present value savings exceed the costs of issuing the bonds and the date of the option to call is 3 years or less.

Debt Structure.

Maturity Structures. The term of the LVVWD debt issues will not extend beyond the useful life of the project or equipment financed. As appropriate, debt issued by the LVVWD should be structured to provide for level debt service. Deferring the repayment of principal should generally be avoided except in instances where it will take a period of time before project or other revenues of the LVVWD are sufficient to pay debt service, or

where the deferral of principal allows the LVVWD to achieve combined level debt service on all outstanding bonds.

Bond Insurance. The purchase of bond insurance may be considered as part of the structure of a bond issue. A bond insurance policy may be purchased by either an issuer or by an underwriter for either an entire issue or specific maturities to guarantee the payment of principal and interest. While this security provides a higher credit rating and thus a lower borrowing cost for an issuer, such cost savings must be measured against the premium required for such insurance. The decision to purchase insurance directly versus bidder's option is based on:

- Market volatility
- Current investor demand for insured bonds
- Level of insurance premiums
- Ability of the LVVWD to purchase bond insurance from bond proceeds

Bond insurance can be purchased directly by the LVVWD prior to the bond sale (direct purchase) or at the underwriter's option and expense (bidder's option).

When insurance is purchased directly by the LVVWD, the present value of the estimated debt service savings from insurance should be greater than the insurance premium. The bond insurance company will usually be chosen based on an estimate of the greatest net present value insurance benefit (present value of debt service savings less insurance premium).

Las Vegas Valley Water District
Operating and Capital Budget
Debt Management Policy
Fiscal Year Ending June 30, 2021

Fixed and Variable Rate Debt.

The LVVWD may issue fixed rate debt or variable rate debt, including (but not limited to) Commercial Paper, Variable Rate Demand Obligations, Index Bonds, or Extendible Commercial Paper.

- Fixed rate debt includes bonds that are issued generally for terms of 1 year to 30 years at a rate that does not change over the life of the bond.
- Variable rate debt includes debt that will pay an interest rate which varies, and is generally reset either daily, weekly or monthly. This rate may be based on remarketing or on a generally accepted index, such as LIBOR or SIFMA. In most markets, the interest rate on variable rate debt will be lower than the interest rate on fixed rate debt since the interest rate is based on a shorter term. But, variable rate debt has more interest rate risk as the interest rate is not set for the life of the bonds. In times of market stress, short-term interest

rates have suffered significant increases, albeit for short periods of time.

Since variable rate debt has more interest rate risk, the LVVWD will not issue more than 25 percent of its debt in the form of variable rate debt. The CFO, in consultation with the General Counsel and the LVVWD's Financial Advisors, will determine the appropriate form of variable rate debt, subject to the approval of the Board.

Financing Sources. The LVVWD will evaluate available State and County bond financing programs before choosing the financing source. The LVVWD will consider utilizing a State or County program if bonds can be sold by the State or County in a manner meeting the LVVWD's timing needs and if it is determined by the CFO that such program is the most cost-effective financing vehicle, and such determination is approved by the Board.

Las Vegas Valley Water District
Operating and Capital Budget
Debt Management Policy
Fiscal Year Ending June 30, 2021

Chief Financial Officer Information

NRS 350.013 Subsection 1(e)

A statement containing the name, title, mailing address and telephone number of the chief financial officer of the municipality.

NAME: E. Kevin Bethel
TITLE: Chief Financial Officer
ADDRESS: 1001 South Valley View Boulevard
Las Vegas, NV 89153
TELEPHONE: (702) 822-8809

Appendix

Debt Service and Pledged Revenue Tables

1. Five Year Schedule of Debt Service Requirements
2. Combined Schedules of Debt Service Requirements
3. Net Pledged Revenues
4. Existing and Proposed Debt Service
5. Existing Debt Service by Company

Las Vegas Valley Water District
Operating and Capital Budget
Debt Management Policy
Fiscal Year Ending June 30, 2021

Five Year Schedule of Debt Service Requirements
As of June 30, 2020

Type of Debt	Fiscal Year				
	2021	2022	2023	2024	2025
G/O Revenue/LVVWD ¹	\$ 76,347,958	\$ 78,189,031	\$ 78,211,397	\$ 78,083,055	\$ 78,120,305
G/O Revenue/SNWA ^{2,3}	437,869,492	199,445,700	199,723,397	199,727,469	190,218,722
Total	\$ 514,217,450	\$ 277,634,731	\$ 277,934,795	\$ 277,810,524	\$ 268,339,027

¹ This is debt service on \$848,054,450 existing and proposed outstanding principal balance of LVVWD debt secured by LVVWD water system revenues.

² This is debt service on \$2,223,885,000 outstanding principal balance of LVVWD debt secured by SNWA pledged revenues in accordance with interlocal agreements.

³ Fiscal year 2020-21 debt service includes \$250,000,000 of tax-exempt commercial paper notes. When these notes mature, interest is paid and typically principal is rolled into a new TECP note at the current interest rate

Las Vegas Valley Water District
Operating and Capital Budget
Debt Management Policy
Fiscal Year Ending June 30, 2021

Combined Schedule of Debt Service Requirements
As of June 30, 2020

Fiscal Year	Principal	Interest	Total
2021	\$ 374,725,810	\$ 134,662,750	\$ 509,388,561
2022	146,897,940	124,106,292	271,004,231
2023	154,371,408	116,932,387	271,303,795
2024	161,818,247	109,360,027	271,178,274
2025	160,334,490	101,370,537	261,705,027
2026	168,387,171	93,270,253	261,657,424
2027	145,116,323	84,888,854	230,005,177
2028	99,206,982	78,112,749	177,319,730
2029	90,774,183	73,567,667	164,341,850
2030	94,217,965	69,174,458	163,392,423
2031	88,103,364	64,601,911	152,705,275
2032	108,665,420	60,515,735	169,181,155
2033	116,964,172	55,470,114	172,434,285
2034	122,254,660	50,177,623	172,432,283
2035	114,904,959	44,807,888	159,712,847
2036	119,368,934	39,613,345	158,982,279
2037	107,493,422	34,177,209	141,670,631
2038	135,465,000	29,119,194	164,584,194
2039	162,790,000	22,618,605	185,408,605
2040	63,480,000	14,514,675	77,994,675
2041	48,360,000	11,319,000	59,679,000
2042	50,675,000	9,004,950	59,679,950
2043	29,495,000	6,579,750	36,074,750
2044	30,920,000	5,149,950	36,069,950
2045	32,425,000	3,650,650	36,075,650
2046	33,995,000	2,078,000	36,073,000
2047	5,255,000	428,800	5,683,800
2048	5,465,000	218,600	5,683,600
Totals	<u>\$ 2,971,930,450</u>	<u>\$ 1,439,491,972</u>	<u>\$ 4,411,422,422</u>

Secured by:

LVVWD Water

Revenues	\$ 748,045,450	\$ 333,926,352	\$ 1,081,971,802
----------	----------------	----------------	------------------

SNWA Pledged

Revenues	\$ 2,223,885,000	\$ 1,105,565,620	\$ 3,329,450,620
----------	------------------	------------------	------------------

Las Vegas Valley Water District
Operating and Capital Budget
Debt Management Policy
Fiscal Year Ending June 30, 2021

Net Pledged Revenues
For the Fiscal Years Ended June 30

Fiscal Year	2017	2018	2019	Budgeted 2020	Budgeted 2021
Revenues					
Operating Income	\$ 354,888,515	\$ 372,308,125	\$ 374,569,273	\$ 406,970,406	\$ 415,062,611
Facilities Connection Charges	12,241,154	16,171,119	18,185,794	16,727,513	17,173,241
Investment Income ¹	1,042,888	2,256,083	18,957,469	4,721,991	6,559,432
Total Revenues	368,172,557	390,735,327	411,712,536	428,419,910	438,795,283
Operating Expenses	250,732,755	255,815,010	261,516,852	328,292,799	338,067,084
Net Pledged Revenues	112,490,231	117,439,802	134,920,318	111,215,873	100,127,111
Annual Debt Service ²	62,150,502	61,471,883	68,351,975	70,457,009	76,347,958
Net Pledged Revenues After Debt Service	<u>\$ 50,339,729</u>	<u>\$ 55,967,919</u>	<u>\$ 66,568,343</u>	<u>\$ 40,758,864</u>	<u>\$ 23,779,153</u>
Debt Coverage Ratio	1.81	1.91	1.97	1.58	1.31

¹ Includes realized investment earnings on unrestricted assets only. Does not include unrealized gains or losses.

² LVVWD has issued debt for SNWA that is supported by a pledge of SNWA revenues. Debt service reported here is only for debt directly supported by LVVWD operating revenues. It does not include debt issued for SNWA and supported by SNWA pledged revenues.

**Las Vegas Valley Water District
Operating and Capital Budget
Debt Management Policy
Fiscal Year Ending June 30, 2021**

**Existing and Proposed Debt Service
As of June 30, 2020**

Existing Debt ¹				Proposed Debt \$100 Million New Money Debt ²			
Fiscal Year	Principal	Interest	Total	Fiscal Year	Principal	Interest	Total
2021	\$ 37,205,810	\$ 34,313,259	\$ 71,519,069	2021	\$ 1,190,000	\$ 3,638,889	\$ 4,828,889
2022	39,662,940	31,895,591	71,558,531	2022	1,690,000	4,940,500	6,630,500
2023	41,586,408	29,993,989	71,580,397	2023	1,775,000	4,856,000	6,631,000
2024	43,458,247	27,992,558	71,450,805	2024	1,865,000	4,767,250	6,632,250
2025	45,594,490	25,891,815	71,486,305	2025	1,960,000	4,674,000	6,634,000
2026	47,782,171	23,740,947	71,523,118	2026	2,055,000	4,576,000	6,631,000
2027	41,026,323	21,410,257	62,436,580	2027	2,160,000	4,473,250	6,633,250
2028	34,456,982	19,418,174	53,875,155	2028	2,270,000	4,365,250	6,635,250
2029	36,099,183	17,783,592	53,882,775	2029	2,380,000	4,251,750	6,631,750
2030	37,807,965	16,068,770	53,876,735	2030	2,500,000	4,132,750	6,632,750
2031	39,613,364	14,270,461	53,883,825	2031	2,625,000	4,007,750	6,632,750
2032	41,390,420	12,483,385	53,873,805	2032	2,755,000	3,876,500	6,631,500
2033	34,119,172	10,683,364	44,802,535	2033	2,895,000	3,738,750	6,633,750
2034	35,384,660	9,421,173	44,805,833	2034	3,040,000	3,594,000	6,634,000
2035	35,959,959	8,123,188	44,083,147	2035	3,190,000	3,442,000	6,632,000
2036	36,558,934	6,789,795	43,348,729	2036	3,350,000	3,282,500	6,632,500
2037	20,638,422	5,403,859	26,042,281	2037	3,515,000	3,115,000	6,630,000
2038	19,875,000	4,593,894	24,468,894	2038	3,695,000	2,939,250	6,634,250
2039	20,230,000	3,766,155	23,996,155	2039	3,880,000	2,754,500	6,634,500
2040	21,320,000	2,678,325	23,998,325	2040	4,070,000	2,560,500	6,630,500
2041	4,155,000	1,531,000	5,686,000	2041	4,275,000	2,357,000	6,632,000
2042	4,320,000	1,364,800	5,684,800	2042	4,490,000	2,143,250	6,633,250
2043	4,495,000	1,192,000	5,687,000	2043	4,715,000	1,918,750	6,633,750
2044	4,670,000	1,012,200	5,682,200	2044	4,950,000	1,683,000	6,633,000
2045	4,860,000	825,400	5,685,400	2045	5,195,000	1,435,500	6,630,500
2046	5,055,000	631,000	5,686,000	2046	5,455,000	1,175,750	6,630,750
2047	5,255,000	428,800	5,683,800	2047	5,730,000	903,000	6,633,000
2048	5,465,000	218,600	5,683,600	2048	6,015,000	616,500	6,631,500
2049	-	-	-	2049	6,315,000	315,750	6,630,750
Totals	\$ 748,045,450	\$ 333,926,352	\$ 1,081,971,802	Totals	\$ 100,000,000	\$ 90,534,889	\$ 190,534,889

Existing & Proposed Combined			
Fiscal Year	Principal	Interest	Total
2021	\$ 38,395,810	\$ 37,952,148	\$ 76,347,958
2022	41,352,940	36,836,091	78,189,031
2023	43,361,408	34,849,989	78,211,397
2024	45,323,247	32,759,808	78,083,055
2025	47,554,490	30,565,815	78,120,305
2026	49,837,171	28,316,947	78,154,118
2027	43,186,323	25,883,507	69,069,830
2028	36,726,982	23,783,424	60,510,405
2029	38,479,183	22,035,342	60,514,525
2030	40,307,965	20,201,520	60,509,485
2031	42,238,364	18,278,211	60,516,575
2032	44,145,420	16,359,885	60,505,305
2033	37,014,172	14,422,114	51,436,285
2034	38,424,660	13,015,173	51,439,833
2035	39,149,959	11,565,188	50,715,147
2036	39,908,934	10,072,295	49,981,229
2037	24,153,422	8,518,859	32,672,281
2038	23,570,000	7,533,144	31,103,144
2039	24,110,000	6,520,655	30,630,655
2040	25,390,000	5,238,825	30,628,825
2041	8,430,000	3,888,000	12,318,000
2042	8,810,000	3,508,050	12,318,050
2043	9,210,000	3,110,750	12,320,750
2044	9,620,000	2,695,200	12,315,200
2045	10,055,000	2,260,900	12,315,900
2046	10,510,000	1,806,750	12,316,750
2047	10,985,000	1,331,800	12,316,800
2048	11,480,000	835,100	12,315,100
2049	6,315,000	315,750	6,630,750
Totals	\$ 848,045,450	\$ 424,461,241	\$ 1,272,506,691

¹ Excludes debt issued on behalf of SNWA

² Planned \$100 million debt issuance in fiscal year 2020-21

Las Vegas Valley Water District
Operating and Capital Budget
Debt Management Policy
Fiscal Year Ending June 30, 2021

Existing Debt Service by Company
As of June 30, 2020

Supported by LVVWD Pledged Revenues			
Fiscal Year	Principal	Interest	Total
2021	\$ 37,205,810	\$ 34,313,259	\$ 71,519,069
2022	39,662,940	31,895,591	71,558,531
2023	41,586,408	29,993,989	71,580,397
2024	43,458,247	27,992,558	71,450,805
2025	45,594,490	25,891,815	71,486,305
2026	47,782,171	23,740,947	71,523,118
2027	41,026,323	21,410,257	62,436,580
2028	34,456,982	19,418,174	53,875,155
2029	36,099,183	17,783,592	53,882,775
2030	37,807,965	16,068,770	53,876,735
2031	39,613,364	14,270,461	53,883,825
2032	41,390,420	12,483,385	53,873,805
2033	34,119,172	10,683,364	44,802,535
2034	35,384,660	9,421,173	44,805,833
2035	35,959,959	8,123,188	44,083,147
2036	36,558,934	6,789,795	43,348,729
2037	20,638,422	5,403,859	26,042,281
2038	19,875,000	4,593,894	24,468,894
2039	20,230,000	3,766,155	23,996,155
2040	21,320,000	2,678,325	23,998,325
2041	4,155,000	1,531,000	5,686,000
2042	4,320,000	1,364,800	5,684,800
2043	4,495,000	1,192,000	5,687,000
2044	4,670,000	1,012,200	5,682,200
2045	4,860,000	825,400	5,685,400
2046	5,055,000	631,000	5,686,000
2047	5,255,000	428,800	5,683,800
2048	5,465,000	218,600	5,683,600
Totals	\$ 748,045,450	\$ 333,926,352	\$ 1,081,971,802

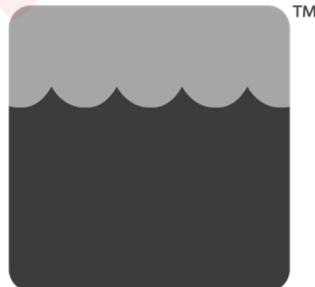
Supported by SNWA Pledged Revenues			
Fiscal Year	Principal	Interest	Total
2021	\$ 337,520,000	\$ 100,349,492	\$ 437,869,492
2022	107,235,000	92,210,700	199,445,700
2023	112,785,000	86,938,397	199,723,397
2024	118,360,000	81,367,469	199,727,469
2025	114,740,000	75,478,722	190,218,722
2026	120,605,000	69,529,306	190,134,306
2027	104,090,000	63,478,596	167,568,596
2028	64,750,000	58,694,575	123,444,575
2029	54,675,000	55,784,075	110,459,075
2030	56,410,000	53,105,688	109,515,688
2031	48,490,000	50,331,450	98,821,450
2032	67,275,000	48,032,350	115,307,350
2033	82,845,000	44,786,750	127,631,750
2034	86,870,000	40,756,450	127,626,450
2035	78,945,000	36,684,700	115,629,700
2036	82,810,000	32,823,550	115,633,550
2037	86,855,000	28,773,350	115,628,350
2038	115,590,000	24,525,300	140,115,300
2039	142,560,000	18,852,450	161,412,450
2040	42,160,000	11,836,350	53,996,350
2041	44,205,000	9,788,000	53,993,000
2042	46,355,000	7,640,150	53,995,150
2043	25,000,000	5,387,750	30,387,750
2044	26,250,000	4,137,750	30,387,750
2045	27,565,000	2,825,250	30,390,250
2046	28,940,000	1,447,000	30,387,000
2047	-	-	-
2048	-	-	-
Totals	\$ 2,223,885,000	\$ 1,105,565,620	\$ 3,329,450,620

LVVWD & SNWA Combined Debt Service			
Fiscal Year	Principal	Interest	Total
2021	\$ 374,725,810	\$ 134,662,750	\$ 509,388,561
2022	146,897,940	124,106,292	271,004,231
2023	154,371,408	116,932,387	271,303,795
2024	161,818,247	109,360,027	271,178,274
2025	160,334,490	101,370,537	261,705,027
2026	168,387,171	93,270,253	261,657,424
2027	145,116,323	84,888,854	230,005,177
2028	99,206,982	78,112,749	177,319,730
2029	90,774,183	73,567,667	164,341,850
2030	94,217,965	69,174,458	163,392,423
2031	88,103,364	64,601,911	152,705,275
2032	108,665,420	60,515,735	169,181,155
2033	116,964,172	55,470,114	172,434,285
2034	122,254,660	50,177,623	172,432,283
2035	114,904,959	44,807,888	159,712,847
2036	119,368,934	39,613,345	158,982,279
2037	107,493,422	34,177,209	141,670,631
2038	135,465,000	29,119,194	164,584,194
2039	162,790,000	22,618,605	185,408,605
2040	63,480,000	14,514,675	77,994,675
2041	48,360,000	11,319,000	59,679,000
2042	50,675,000	9,004,950	59,679,950
2043	29,495,000	6,579,750	36,074,750
2044	30,920,000	5,149,950	36,069,950
2045	32,425,000	3,650,650	36,075,650
2046	33,995,000	2,078,000	36,073,000
2047	5,255,000	428,800	5,683,800
2048	5,465,000	218,600	5,683,600
Totals	\$ 2,971,930,450	\$ 1,439,491,972	\$ 4,411,422,422

SECTION 8

STATISTICAL INFORMATION

Table of Contents	8-1
Demographic Statistics	8-2
Top Ten Employers	8-3
Residential Real Estate	8-4
Secured Tax Roll	8-5
Temperature & Rainfall	8-6
Average Monthly Consumption per Active Service	8-7
Average Annual Water Billed per Active Service by Class of Service	8-8
Percent of Total Water Billed by Class of Service	8-9
Average Consumption and Monthly Revenue from Water Sales per Active Account	8-10
Water Billed by Month	8-11



LAS VEGAS VALLEY WATER DISTRICT
FISCAL YEAR 2020-21
OPERATING AND CAPITAL BUDGET

**Las Vegas Valley Water District
Statistical Summary**

<u>Page</u>	<u>Description</u>
8-1	Cover Page
8-2	Demographic Statistics
8-3	Top Ten Employers
8-4	Residential Real Estate
8-5	Secured Tax Roll
8-6	Temperature & Rainfall
8-7	Average Monthly Consumption Per Active Service
8-8	Average Annual Water Billed per Active Service By Class of Service
8-9	Percent of Total Water Billed by Class of Service
8-10	Average Consumption and Revenue from Water Sales
8-11	Water Billed by Month

**Las Vegas Valley Water District
Operating and Capital Budget
Statistical Information**

Fiscal Year Ending June 30, 2021

**Demographic Statistics
Clark County, Nevada
Five Calendar Years**

Calendar Year	Clark County Population ⁽¹⁾	Per Capita Income ⁽²⁾	Clark County Personal Income (In Million \$) ⁽²⁾	Median Household Income ⁽³⁾
2019	2,325,798	N/A	N/A	N/A
2018	2,284,616	47,090	105,088	56,802
2017	2,248,390	45,087	98,439	54,882
2016	2,205,207	43,573	93,269	52,629
2015	2,147,641	42,771	89,737	51,575

Calendar Year	LVVWD Service Area Population	School Enrollment ⁽⁴⁾	Total Labor Force ⁽⁵⁾	Unemployment Rate ⁽⁶⁾
2019	1,551,304	N/A	N/A	N/A
2018	1,527,068	321,695	1,098,114	4.8%
2017	1,502,604	321,991	1,069,544	5.3%
2016	1,475,458	320,186	1,046,103	5.9%
2015	1,436,617	317,759	1,033,990	6.8%

Sources:

(1) Clark County Comprehensive Planning Department.

(2) U.S. Bureau of Economic Analysis as reported for the Las Vegas-Paradise MSA (which is comprised of Clark County).

(3) U.S. Census Bureau, American Community Survey.

(4) Clark County School District, Average Daily Membership.

(5) The Department of Employment, Training & Rehabilitation.

(6) Bureau of Labor Statistics (annual averages).

Las Vegas Valley Water District
Operating and Capital Budget
Statistical Information
Fiscal Year Ending June 30, 2021

Top Ten Employers⁽¹⁾
Clark County, Nevada
Calendar Year 2019

Employer Trade name	Employees ⁽²⁾	Ranking
Venetian Hotel & Casino	10,000 or More	1
US Air Force Base	5,000 to 9,999	2
Las Vegas Metropolitan Police	5,000 to 9,999	3
MGM Grand	5,000 to 9,999	4
Flamingo Hotel	5,000 to 9,999	5
Orleans Hotel & Casino	5,000 to 9,999	6
Las Vegas Sands Corp	5,000 to 9,999	7
Mandalay Bay	5,000 to 9,999	8
Caesars Palace Las Vegas Hotel	5,000 to 9,999	9
Las Vegas Metro Police Dept	5,000 to 9,999	10

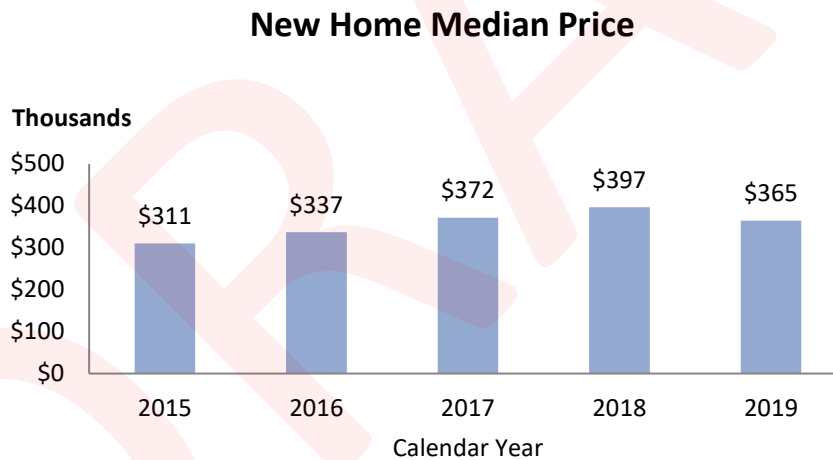
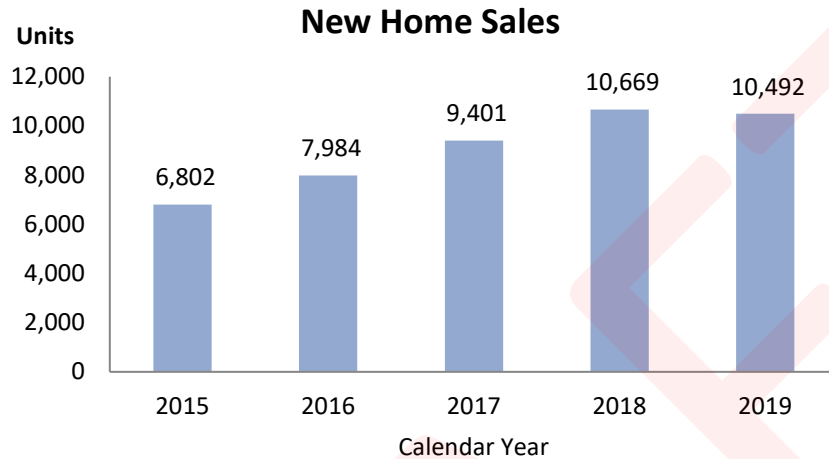
Total Labor Force 1,098,114

Sources:

(1) Nevada Department of Employment, Training & Rehabilitation (DETR). The data is for the second half of the calendar year 2019. In 2018, DETR changed the data source from internally created to a third party provider (Infogroup). Infogroup collects the data at the establishment level not rolled up into a collective whole. For example in the current method, the data set lists each school and/or department separately instead of aggregating it.

(2) Nevada law prohibits the disclosure of exact employee counts. All employee counts are shown in ranges.

Residential Real Estate Clark County, Nevada



Sources:

(1) New Home Sales are sourced from the Home Builders Research, Inc. - The Las Vegas Housing Market Letter.

(2) New Home Median Prices are as of December of each year and are sourced from the Home Builders Research, Inc. - The Las Vegas Housing Market Letter.

**Las Vegas Valley Water District
Operating and Capital Budget
Statistical Information**

Fiscal Year Ending June 30, 2021

**Secured Tax Roll
Clark County, Nevada
2019 - 20**

<u>Taxpayer</u>	<u>Taxable Assessed</u>	<u>Taxable Appraised</u>
1. MGM Resorts International	\$ 3,017,309,566	\$ 8,620,884,474
2. NV Energy	1,731,766,793	4,947,905,123
3. Caesar's Entertainment Corp.	1,681,232,388	4,803,521,109
4. Las Vegas Sands Corporation	891,045,100	2,545,843,143
5. Station Casinos LLC	693,210,814	1,980,602,326
6. Wynn Resorts Limited	691,051,639	1,974,433,254
7. Howard Hughes Corporation	399,140,230	1,140,400,657
8. Boyd Gaming Corporation	384,194,472	1,097,698,491
9. The Blackstone Group	285,411,002	815,460,006
10. Hilton Grand Vacations	283,829,116	810,940,331
	<u>\$ 10,058,191,120</u>	<u>\$ 28,737,688,914</u>

Source: Clark County Assessor's Report Dated April 1, 2019

Las Vegas Valley Water District
Operating and Capital Budget
Statistical Information
Fiscal Year Ending June 30, 2021

Temperature and Rainfall

Average Maximum and Minimum Daily Temperature
in Degrees Fahrenheit and Monthly Rainfall in Inches

Month	2014			2015			2016		
	Temperature			Temperature			Temperature		
	Max.	Min.	Rainfall	Max.	Min.	Rainfall	Max.	Min.	Rainfall
January	64	42	0.0	62	44	0.9	57	40	0.5
February	68	46	0.3	71	49	0.5	70	46	0.1
March	74	52	0.0	78	56	0.3	75	53	0.0
April	81	59	0.0	80	58	0.3	79	58	2.3
May	90	67	0.0	85	64	0.2	86	65	0.0
June	101	77	0.0	104	80	0.0	105	81	0.5
July	105	83	0.2	101	80	0.2	107	84	0.2
August	99	78	0.4	104	82	0.7	102	80	0.2
September	96	74	0.6	98	76	0.0	93	71	0.0
October	86	63	0.0	84	65	1.2	84	64	0.2
November	70	49	0.0	64	45	0.2	71	51	0.0
December	58	44	0.3	56	38	0.0	57	40	0.8
Average Annual Temperature/ Total Rainfall	82.6	61.3	1.8	82.2	61.3	4.5	82.1	61.0	4.8

Month	2017			2018			2019		
	Temperature			Temperature			Temperature		
	Max.	Min.	Rainfall	Max.	Min.	Rainfall	Max.	Min.	Rainfall
January	57	42	0.9	63	44	1.5	59	42	1.0
February	65	49	0.6	64	44	0.0	56	39	2.1
March	77	54	0.0	70	50	0.3	70	51	0.4
April	81	59	0.0	84	61	0.0	82	60	0.4
May	89	66	0.1	90	68	0.2	82	61	0.8
June	105	79	0.0	103	79	0.0	99	77	0.0
July	107	85	0.1	107	85	0.8	105	83	0.0
August	103	81	0.2	105	84	0.1	107	82	0.0
September	92	72	0.5	100	77	0.0	95	73	0.2
October	84	60	0.0	79	61	0.1	78	55	0.0
November	73	53	0.0	68	48	0.2	69	48	1.1
December	63	42	0.0	55	40	0.2	56	43	0.9
Average Annual Temperature/ Total Rainfall	82.9	61.7	2.4	82.3	61.5	3.4	79.7	59.4	6.8

Las Vegas Valley Water District
Operating and Capital Budget
Statistical Information
Fiscal Year Ending June 30, 2021

**Average Monthly Consumption Per Active Service
Thousands of Gallons**

Month	2015	2016	2017	2018	2019	Average
January	13.3	14.8	13.6	15.1	14.1	14.2
February	14.2	13.5	12.3	13.3	13.2	13.3
March	17.6	19.3	17.1	17.6	14.6	17.3
April	22.8	22.2	22.7	20.3	20.2	21.6
May	25.8	21.7	25.6	26.0	24.0	24.6
June	29.5	30.7	33.0	31.0	26.6	30.2
July	34.3	33.6	34.0	32.7	31.5	33.2
August	31.6	33.1	34.7	32.3	32.9	32.9
September	28.1	29.7	29.6	30.2	29.4	29.4
October	23.5	25.5	24.1	25.9	23.1	24.4
November	20.6	17.3	19.5	18.4	18.5	18.9
December	14.2	14.5	15.3	15.3	12.6	14.4
Total for Year	275.5	275.9	281.5	278.1	260.7	274.3
Average Month	23.0	23.0	23.5	23.2	21.7	22.9
Maximum Month	34.3	33.6	34.7	32.7	32.9	33.2
Minimum Month	13.3	13.5	12.3	13.3	12.6	13.3

Las Vegas Valley Water District
Operating and Capital Budget
Statistical Information
Fiscal Year Ending June 30, 2021

Average Annual Water Billed Per Active Service By Class of Service
Thousands of Gallons

Class of Service	2015	2016	2017	2018	2019
Residential - single service	133	131	133	133	126
Residential - duplex/tri&fourplex	242	240	248	242	233
Apts. Condos, & townhomes	3,475	3,587	3,747	3,837	3,819
Residential, other	6,535	3,990	5,144	5,184	5,292
Hotels	39,408	40,893	40,962	40,558	37,998
Motels	4,716	4,797	4,780	4,781	4,680
Community facilities	1,828	1,922	2,144	2,105	1,988
Schools	2,503	2,510	2,627	2,532	2,442
Fireline	107	119	97	100	100
Irrigation	2,114	2,117	2,245	2,133	1,995
Commercial/business	991	1,021	1,048	1,056	1,059
Recreational	3,139	2,983	3,190	3,187	3,059
Industrial	997	1,033	1,077	1,114	1,106
Construction water	299	310	294	395	414
Other	2,261	1,723	1,900	1,368	2,012
TOTAL ALL CLASSES	68,748	67,375	69,636	68,725	66,321

Las Vegas Valley Water District
Operating and Capital Budget
Statistical Information
Fiscal Year Ending June 30, 2021

Percent of Total Water Billed by Class of Service

Class of Service	2014	2015	2016	2017	2018	2019
Residential - Single Service	44.6%	44.1%	43.5%	43.3%	43.6%	43.1%
Residential - Duplex/Triplex/Fourplex	0.7%	0.7%	0.7%	0.6%	0.6%	0.6%
Apts. Condos, & Townhomes	14.4%	14.8%	15.0%	15.1%	15.4%	15.9%
Residential, Other	1.9%	1.7%	1.0%	1.0%	1.0%	1.0%
Subtotal (Residential)	61.6%	61.3%	60.2%	60.0%	60.7%	60.6%
Hotels	9.0%	9.1%	9.4%	9.0%	9.0%	9.0%
Motels	1.0%	1.2%	1.2%	1.1%	1.1%	1.1%
Community Facilities	1.8%	1.9%	1.9%	2.1%	2.0%	2.0%
Schools	1.6%	1.6%	1.6%	1.7%	1.6%	1.6%
Fireline	0.5%	0.5%	0.6%	0.5%	0.5%	0.5%
Irrigation	13.8%	13.3%	13.4%	14.0%	13.4%	13.2%
Commercial/Business	8.0%	8.1%	8.3%	8.2%	8.3%	8.6%
Recreational	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Industrial	1.2%	1.2%	1.3%	1.3%	1.3%	1.3%
Construction Water	0.9%	1.0%	1.4%	1.5%	1.4%	1.3%
Other	0.6%	0.5%	0.6%	0.6%	0.6%	0.5%
Subtotal (Non-Residential)	38.4%	38.7%	39.8%	40.0%	39.3%	39.4%
TOTAL	100%	100%	100%	100%	100%	100%

Las Vegas Valley Water District
Operating and Capital Budget
Statistical Information
Fiscal Year Ending June 30, 2021

Average Consumption and Monthly Revenue from Water Sales
Per Active Account (kgal - million)

Month	2014		2015		2016	
	<u>Avg. Use</u>	<u>Avg. Revenue</u>	<u>Avg. Use</u>	<u>Avg. Revenue</u>	<u>Avg. Use</u>	<u>Avg. Revenue</u>
January	13.9	\$65.5	13.3	\$65.0	14.8	\$72.3
February	15.0	67.7	14.2	64.6	13.5	72.4
March	18.1	79.1	17.6	79.4	19.3	89.7
April	22.3	92.2	22.8	95.6	22.2	98.4
May	26.3	106.7	25.8	106.7	21.7	97.7
June	33.8	142.0	29.5	131.7	30.7	140.8
July	34.3	132.5	33.6	127.3	34.0	135.4
August	31.6	129.8	33.1	137.1	34.7	149.4
September	28.1	116.0	29.7	123.8	29.6	128.3
October	23.5	96.7	25.5	105.5	24.1	105.8
November	20.6	86.5	17.3	77.4	19.5	89.7
December	14.2	65.5	14.5	68.0	15.3	75.7
Monthly Average	23.5	\$98.3	23.1	\$98.5	23.3	\$104.6

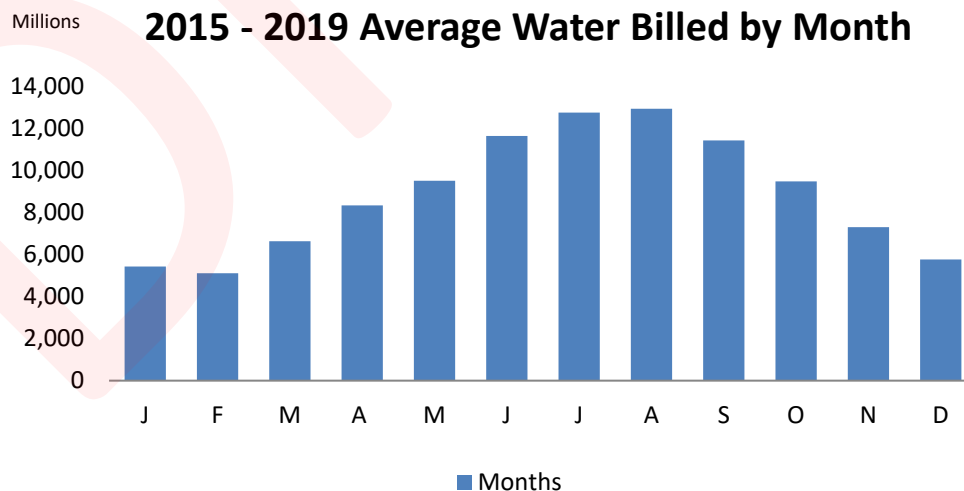
Month	2017		2018		2019	
	<u>Avg. Use</u>	<u>Avg. Revenue</u>	<u>Avg. Use</u>	<u>Avg. Revenue</u>	<u>Avg. Use</u>	<u>Avg. Revenue</u>
January	13.5	\$73.1	15.1	\$83.8	14.1	\$83.5
February	12.3	71.0	13.3	78.4	13.2	79.3
March	17.1	88.7	17.6	93.9	14.6	86.5
April	22.7	105.6	20.3	102.8	20.2	104.7
May	25.6	118.8	26.0	124.0	24.0	119.7
June	33.0	150.8	31.0	151.6	26.6	140.9
July	33.2	145.3	32.7	147.1	31.5	141.5
August	34.0	154.5	32.3	153.1	32.9	157.7
September	28.5	133.3	30.2	142.8	29.4	143.2
October	23.4	110.8	25.9	124.7	23.1	114.8
November	20.2	97.3	18.4	95.4	18.5	98.2
December	16.5	85.0	15.3	85.7	12.6	78.6
Monthly Average	23.3	\$111.2	23.2	\$115.3	21.7	\$112.4

Las Vegas Valley Water District
Operating and Capital Budget
Statistical Information
Fiscal Year Ending June 30, 2021

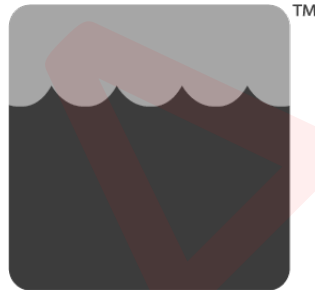
Water Billed by Month
Millions of Gallons

Month	2015	2016	2017	2018	2019
January	4,928	5,577	5,205	5,880	5,577
February	5,275	5,107	4,749	5,217	5,234
March	6,546	7,302	6,602	6,900	5,803
April	8,487	8,448	8,786	7,961	8,013
May	9,618	8,231	9,927	10,207	9,539
June	10,988	11,681	12,783	12,169	10,559
July	12,534	12,956	12,873	12,856	12,535
August	12,373	13,272	13,214	12,699	13,082
September	11,138	11,319	11,079	11,918	11,708
October	9,594	9,242	9,105	10,196	9,226
November	6,495	7,486	7,880	7,249	7,404
December	5,475	5,881	6,425	6,031	5,034
Total	103,451	106,502	108,628	109,283	103,713

2015 - 2019 Average Water Billed by Month



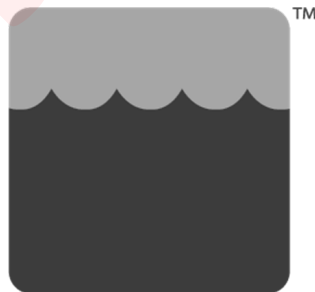
This page left intentionally blank



SECTION 9

FINANCIAL POLICIES

Financial Policy	9-2
Reserve Policy	9-5
Capitalization Policy	9-7



LAS VEGAS VALLEY WATER DISTRICT
FISCAL YEAR 2020-21
OPERATING AND CAPITAL BUDGET

Financial Policy

The Las Vegas Valley Water District (LVVWD) conducts a process to update and improve its operating policies and procedures on an ongoing basis. The attached financial policies represent a portion of the approved operating policies of the LVVWD.

LAS VEGAS VALLEY WATER DISTRICT DEPARTMENT POLICY	SUBJECT: FINANCIAL POLICY	NUMBER: 1
	APPROVED BY: <i>Lina Neilson</i>	ISSUE: 1
ISSUING DEPARTMENT: FINANCE	DIRECTOR OF FINANCE June 1, 2015	PAGE: 1 OF 3

I. PURPOSE

The purpose of this policy is to establish guidelines for the planning and monitoring of financial activities in a responsible manner.

II. SCOPE

This policy applies to the Las Vegas Valley Water District (LVVWD) and other entities for which the LVVWD has fiduciary responsibility i.e., Southern Nevada Water Authority (SNWA).

III. FINANCIAL PLANNING

- A. BALANCED BUDGET – Under normal circumstances, the organization shall strive to prepare and adhere to a balanced operating budget, meaning sources of funds are greater than or equal to the uses of funds.
- B. LONG-TERM PLANNING – A long-term, entity-wide Strategic Plan shall be adopted and maintained to guide the decisions of the organization. Preparation of operating and capital budgets, as well as other financial planning activities, shall consider their long-term financial implications and reflect the Strategic Plan. Also, the organization shall strive to obtain the highest credit ratings.
- C. ASSET INVENTORY – The organization shall maintain an inventory of major capital assets and periodically assess the condition of those assets to plan for ongoing financial commitments necessary to ensure services in support of the Strategic Plan.

IV. REVENUE

- A. REVENUE DIVERSIFICATION – To the extent reasonable, revenues shall be diversified in order to improve the ability to handle fluctuations in individual sources.
- B. FEES AND CHARGES – Fees and charges are set to cover the cost of the services provided. For example:
- Water Rates pay for current water system operation and maintenance.
 - Connection Fees pay for water system infrastructure expansion to support population growth.
 - Fees pay for the annual inspection and maintenance of system facilities.
 - Fees pay for any additional administrative or operating cost burden generated by certain customer activities.
 - Deposits assure customer payment of financial obligations.
- C. USE OF ONE-TIME REVENUES – One-time revenues shall generally be matched to one-time expenditures. Ongoing financial commitments shall not be dependent upon anticipated one-time revenues.
- D. USE OF UNPREDICTABLE REVENUES – Ongoing programs or expenditure commitments shall not be dependent upon revenues that cannot be reasonably predicted. Reasonable prediction involves the use of historical data, projected data, and prudent judgment.

V. EXPENDITURES

- A. DEBT CAPACITY – The organization has no fixed aggregate monetary debt limit. The ability to issue debt is governed by state law allowing for the pledge of revenues and the assessment of ad valorem taxes with the requirement that the Board of Directors establish reasonable rates and charges for the products and services provided. The assessment of ad valorem taxes shall be avoided and emphasis shall be placed on the reliance of revenues to pay debt obligations.

- B. DEBT ISSUANCE AND MANAGEMENT – Debt shall be issued by either negotiated or competitive sale in accordance with Nevada law. Competitive sale awards shall be made to the underwriter(s) presenting bids resulting in the lowest interest rate. Negotiated sales may be utilized and underwriters will be selected in accordance with specific criteria specified in the Debt Management Policy. The Debt term shall not exceed the useful life of the project or equipment being financed and bond insurance may be utilized.
- C. RESERVES – The organization shall maintain sufficient reserves to protect against the need to reduce service levels or raise rates and fees due to temporary revenue shortfalls or unpredicted one-time expenditures. ‘Sufficient reserve’ is defined as 180 days of operating expenditures. A reserve study shall be conducted at least once every five years to determine if 180 days remains sufficient.
- D. OPERATING/CAPITAL EXPENDITURE ACCOUNTABILITY – Actual expenditures shall be periodically compared to the budget. Each department Director shall be primarily responsible for keeping their actual expenditures from exceeding their budget. Department Directors shall provide timely notification to the Director of Finance when it appears that their actual expenditures for the fiscal year will exceed their budget. Also, the Director of Finance shall monitor the actual expenditures of the entire organization and provide timely notification to the General Manager when it appears that the actual expenditures for the fiscal year may exceed the Board approved budget.

LAS VEGAS VALLEY WATER DISTRICT BOARD POLICY	SUBJECT: LAS VEGAS VALLEY WATER DISTRICT RESERVE POLICY	NUMBER: 11
	APPROVED BY: BOARD OF DIRECTORS	ISSUE: 1
ISSUING DEPARTMENT: FINANCE	January 5, 2016	PAGE: 1 OF 2

Purpose

The purpose is to establish a policy for maintaining adequate reserves of cash and investments. Maintaining adequate and prudent cash reserves is an important tool in mitigating the risks of significant and unexpected decreases in sources of funds and/or increases in the uses of funds. The benefits include stable services and fees. This policy applies to all unrestricted cash and investments of the Las Vegas Valley Water District (LVVWD).

Authority

The Government Finance Officers Association (GFOA) recommends local governments adopt a target amount of working capital to maintain in each of their enterprise funds. Because the purposes, customers, and other characteristics of enterprise funds can vary widely, the GFOA recommends that governments develop a target amount of reserves that best fits local conditions for each fund. The following are some of the key considerations for the LVVWD's reserve policy:

1. Volatility in Sources of Funds – Some of the LVVWD's sources of funds have experienced significant volatility; for example, connection charges and sales tax, in periods where the local economy suffers.
2. Likelihood of Successful Rate Increases – Although the LVVWD has enjoyed tremendous support from its Board of Directors and the community, it is possible that these conditions could change in the future, thus impacting the LVVWD's ability to adjust rates to meet increasing costs.
3. Asset Age and Condition – As the infrastructure ages, maintenance and replacement costs will increase. Also, there is the possibility of unexpected failures that can be quite expensive. Such failures could result from age-related causes, terrorism, or natural disasters.

4. Control Over Expenses – Although most of the LVVWD's expenses are predictable, there remains the possibility of large, unexpected expenditures; for example, litigation, natural disasters, increases in water, energy and chemical costs.

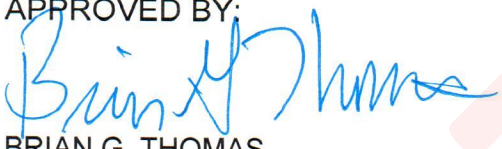
Reserve Components

The following four components identified for the LVVWD's reserves listed by funding priority:

1. Base Operating Reserve – Adequate reserves to fund 180 days of operating and maintenance expenses. This will help insulate the LVVWD and its customers from volatility in operating revenues and expenses, as well as from other casual factors that could interrupt cash flow or impose unforeseen costs.
2. Debt Service Reserve – Adequate reserves to fund one year of the maximum annual debt service. For both credit rating considerations and prudent financial practices, the LVVWD should strive to achieve this level of reserves to ensure access to lower cost capital in future years, help mitigate the impact of disruptions in the credit markets on operations, and provide assurances to investors that the LVVWD has the financial resources necessary to make its ongoing debt service payments.
3. Capital Related Reserve – Adequate reserves to fund a one year average of future capital needs. As a method to determine future capital needs, a capital improvement plan may be used. This reserve will fluctuate over time as projects change. This level of capital reserve will enable the LVVWD to better react to capital needs as they may arise and to properly address the timing of infrastructure improvements relative to system needs. This reserve will also enable the LVVWD to continue with uninterrupted critical capital improvements during times of difficulty within the capital markets.
4. Unforeseen Events Reserve – Adequate reserves to fund one percent of assets subject to depreciation. This is to mitigate one-time, unforeseen infrastructure or major capital equipment failures and other significant non-recurring impacts to operating revenues and expenses.

Reporting

The General Manager shall notify the Board of Directors of the status of reserves at least annually and more often as significant changes occur.

LAS VEGAS VALLEY WATER DISTRICT DEPARTMENT POLICY	SUBJECT: CAPITALIZATION POLICY	NUMBER: 1
	APPROVED BY:  BRIAN G. THOMAS CHIEF FINANCIAL OFFICER Effective Date: July 1, 2018	ISSUE: 2018
ISSUING DEPARTMENT: FINANCE		PAGE: 1 OF 3

I. PURPOSE

The purpose of this policy is to define what costs are capitalized and depreciated/amortized (if applicable).

II. SCOPE

This policy applies to the Las Vegas Valley Water District (LVVWD), the Southern Nevada Water Authority (SNWA) and other entities for which the LVVWD has fiduciary responsibility.

III. CAPITAL ASSETS

- A. All land, land improvements, buildings, building improvements, vehicles, machinery, equipment, works of art and historical treasures, infrastructure, and all other tangible or intangible assets (assets that lack physical substance, such as easements, water rights, etc.) that are used in operations, with an initial individual cost greater than \$10,000 and an estimated useful life of at least three years are capitalized. Cost includes installation and delivery, but not training. The cost of designing and constructing facilities includes all direct and indirect expenditures.

Generally, the capitalization threshold is applied to individual items rather than groups of items. However, groups of assets with individual unit costs equal to or less than \$10,000 have been identified as integral to our operations and are capitalized regardless of individual unit cost. These groups are meters, service laterals, and pipelines. Assets / asset groups deemed integral may be revised only with written approval of the Chief Financial Officer.

- B. The cost of normal maintenance and repairs (any outlay that does no more than return a capital asset to its original condition, regardless of amount) are expensed and not capitalized. See Attachment A for a decision-tree to assist in defining whether expenditures are capital or operating and maintenance.

IV. COMPUTER SYSTEM SOFTWARE

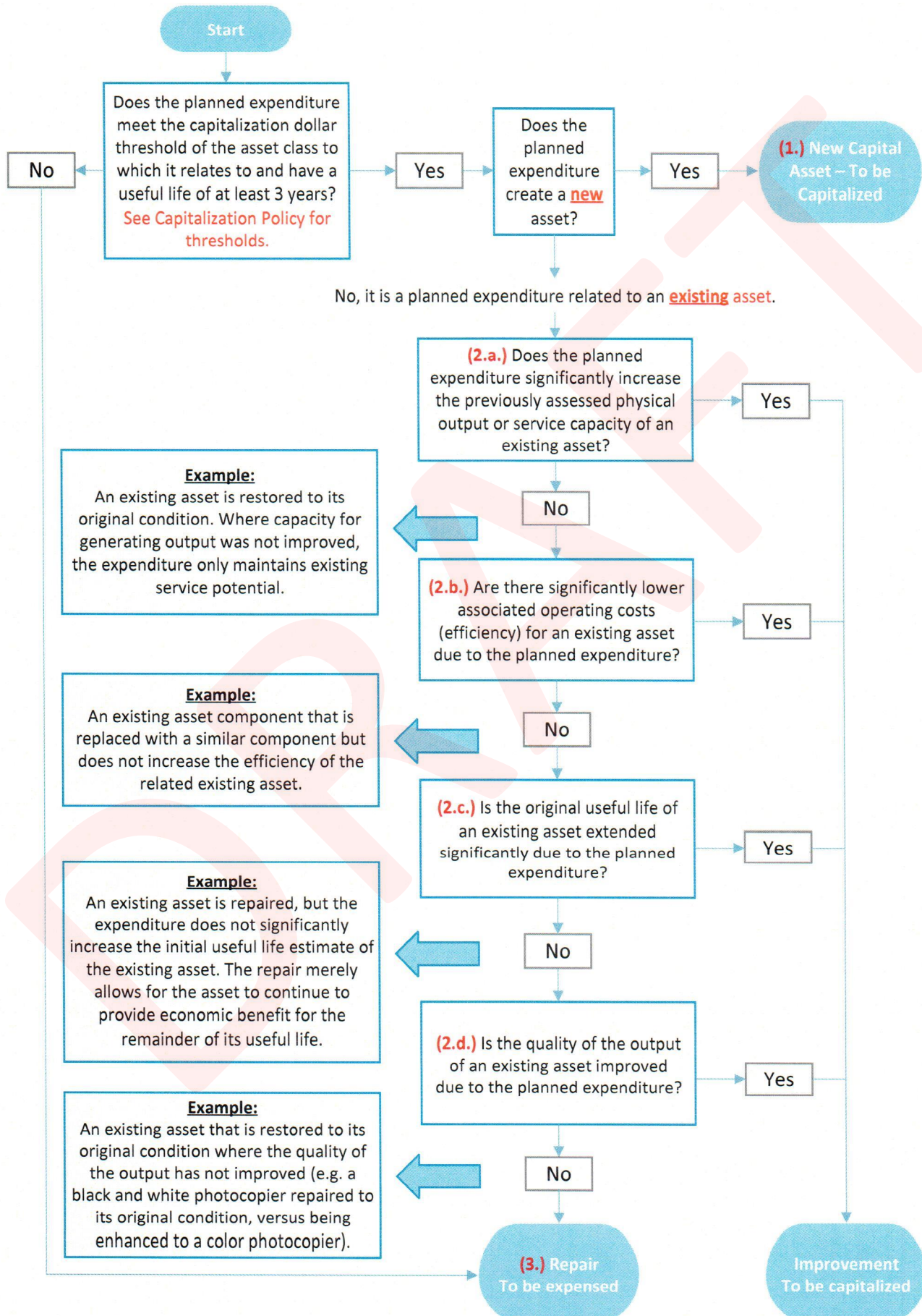
Major on-premises computer systems software and software modifications, whether purchased or internally developed, are capitalized if the total cost exceeds \$100,000 and the useful life is at least three years. Cost includes direct and indirect expenditures within the application development stage of implementation. Training on the operation and use of software is expensed and not capitalized. Costs that take place before the final selection of the software, such as due diligence and the evaluation of alternatives, are expensed and not capitalized.

Software-as-a-Service (SaaS) will generally be expensed as a service contract and does not qualify as a capital asset unless the SaaS includes a software license component that allows both the contractual right to take possession of the software at any time during the hosting period without significant penalty, and the ability to run the software on our own hardware or contract with another party unrelated to the vendor to host the software.

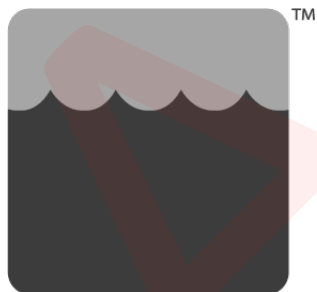
V. DONATED FACILITIES

Donated developer facilities are capitalized at the engineering estimates of acquisition value at the time the assets are donated.

New Asset vs. Improvement vs. Repair Decision Tree



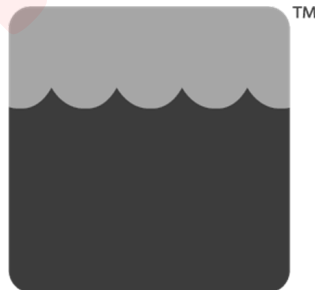
This page left intentionally blank



SECTION 10

GLOSSARY

Glossary.....	10-1
---------------	------



LAS VEGAS VALLEY WATER DISTRICT
FISCAL YEAR 2020-21
OPERATING AND CAPITAL BUDGET

**Las Vegas Valley Water District
Operating and Capital Budget**

Glossary

Fiscal Year Ending June 30, 2021

Accrual Basis Accounting. An accounting method that measures the performance and position of a company by recognizing revenue or expense events regardless of when cash transactions occur.

Acre-Foot (AF). A water measurement equating to 325,851 gallons or 43,560 cubic feet. An acre foot will supply the annual water needs of approximately 2 single family homes in the LVVWD's service area.

Advanced Metering Infrastructure. (AMI)

Alfred Merritt Smith Water Treatment Facility (AMSWTF). Built in 1971, the Alfred Merritt Smith Water Treatment Facility currently treats most of the Las Vegas Valley's drinking water. The facility can treat up to 600 million gallons a day (MGD).

American Water Works Association (AWWA). A 50,000-member nonprofit dedicated to science, technology, education and the managing and treating of water.

Amortization. Amortization is paying off a debt with a fixed repayment schedule in incremental installments over a period of time.

Association of Metropolitan Water Agencies (AMWA). An organization of the largest publicly owned water utilities in the USA speaking on water policy issues and programs that foster sustainable innovation.

Automated Mapping / Facilities Management (AM/FM). The term AM/FM/GIS mostly refers to Geographic Information Software (GIS) that allows utility users to digitize, manage and analyze their utility network data. This data is stored in an

underlying GIS database which also maintains the associations between the graphical entities and the attributes.

Automatic Transfer Switch (ATS). An electrical switch that switches a load between two sources.

Automatic Vehicle Locator (AVL). An automatic vehicle locator (AVL) is a device that makes use of a Global Positioning System (GPS) to enable a business or agency to remotely track the location of its vehicle fleet by using the Internet.

Balanced Budget. A budget where sources of funds are equal to uses of funds. The LVVWD is not required to issue a balanced budget.

Big Bend Water District (BBWD). A general improvement district created in 1983 to supply water to Laughlin, Nevada.

Beginning Balance. Cash and cash equivalent balances at the beginning of an accounting period. For budget years this amount is an estimate. For actual years this amount is the actual amount of cash either in demand deposits or investments.

Bond. A certificate of debt issued by a government or corporation guaranteeing payment of the original investment plus interest by a specified future date.

Bond Funds. Monies raised through debt issuance that are used for the acquisition or construction of capital assets.

Budget. Proposed financial plan over a given period of time, usually one year.

Las Vegas Valley Water District
Operating and Capital Budget
Glossary
Fiscal Year Ending June 30, 2021

Budget Calendar. The schedule of key dates or milestones the LVVWD follows in the preparation and adoption of the budget.

Budgetary Control. The management or control of a governmental unit or enterprise in accordance with an approved budget to keep expenditures within limitations of available appropriations and available revenues.

Budget Document. The official written document prepared by the LVVWD and approved by the LVVWD's Board of Directors.

Budgeted Positions. A position that has been authorized (created by action of the LVVWD Board of Directors) and may be specifically funded through the budget process.

Bureau of Labor Statistics (BLS). A unit of the United States Department of Labor, serves as a statistical resource to the United States Department of Labor, and conducts research into how much families need to earn to be able to enjoy a decent standard of living.

Bureau of Reclamation (BOR). A federal agency under the U.S. Department of the Interior, which oversees water resource management, specifically as it applies to the oversight and operation of the diversion, delivery, and storage projects that it has built throughout the western United States for irrigation, water supply, and attendant hydroelectric power generation.

Cathodic Protection (CP). A technique used to control the corrosion of a metal surface by making it the cathode of an electrochemical cell.

Capital Budget. Used to evaluate potential investments or expenditures for specific projects or purposes. Fixed assets to be acquired during a fiscal year, with a value of over \$10,000 and an estimated life of over three years.

Capital Expenditure. Funds used by a company to acquire, upgrade, and maintain fixed assets during a fiscal year, generally with a value of over \$10,000 and an estimated life of over three years.

Capital Improvement Plan (CIP). A multi-year plan, which identifies capital projects and equipment purchases, provides a planning schedule and identifies options for financing the plan.

Citizens Advisory Committee (CAC). A group of citizens convened to seek recommendations and help guide decision-making of the organization.

Clark County Water Reclamation District (CCWRD). Nevada's largest wastewater agency, treating wastewater from 248,000 accounts with over 2,000 miles of pipeline and 27 pumping stations.

Closed-circuit Television (CCTV). Also known as video surveillance, is the use of video cameras to transmit a signal to a specific place, on a limited set of monitors.

Colorado River Commission (CRC). The CRC is an executive agency of the State of Nevada responsible for acquiring and managing Nevada's share of water and hydropower resources from the Colorado River.

Las Vegas Valley Water District
Operating and Capital Budget
Glossary
Fiscal Year Ending June 30, 2021

Comprehensive Annual Financial Report. (CAFR). A set of U.S. government financial statements comprising the financial report of a state, municipal or other governmental entity that complies with the accounting requirements promulgated by the Governmental Accounting Standards Board (GASB).

Computer Maintenance Management System. (CMMS)

Computerized Work Order Maintenance Management System. (CWOMMS)

Conservation. The act of reducing demands for water in the most efficient manner. Encompassing policies, strategies and activities to manage water as a sustainable resource and protect the environment while meeting current and future demands. The LVVWD achieves the benefits of conservation through education of the end user, promoting water efficient hardware, and pricing signals.

Construction Expenditures. Generally, expenses made to build, supervise, or provide materials used in the construction of capital assets.

Consumer Price Index. (CPI)

Coyote Springs Water Resources General Improvement District (CSWRD). Created in 2006 to provide necessary water and wastewater services to the Coyote Springs community.

Cross Departmental Team. (CDT)

Customer to Meter System. (C2M)

Debt Issuance Proceeds. Principal amount or face value of debt issues. These proceeds are used to pay for major construction expenditures incurred by the LVVWD.

Debt Service Payments. Funds used for the repayment of annual principal and interest charges on debt the LVVWD has issued.

Department. A basic organizational unit of the LVVWD that is functionally unique in its delivery of services.

Depreciation. A reduction in the value of a physical asset with the passage of time.

Deoxyribonucleic Acid (DNA). A self-replicating material which is present in nearly all living organisms as the main constituent of genetic information.

Disbursements. Funds actually expended.

Dissolved Air Flotation (DAF). A water treatment process that clarifies wastewaters (or other waters) by the removal of suspended matter such as oil or solids.

Division. Organizational component of a department.

Drought Contingency Plan (DCP). Due to the historic drought conditions since 2000, the Department of the Interior requested State Governors along the Colorado River to submit Drought Contingency Plans (DCPs) to reduce the risks the Colorado River Basin is facing for Lake Powell and Lake Mead.

Eastern Nevada Transmission Project (ENTP). A 230 kV transmission system that would allow for the interconnection of SSEA members' electrical systems with each other and with the mead substation.

Las Vegas Valley Water District
Operating and Capital Budget

Glossary

Fiscal Year Ending June 30, 2021

Escherichia coli (EC). A bacterium commonly found in the intestines of humans and other animals, some strains of which can cause severe food poisoning.

Emergency Response Plan (ERP). A plan created by the EHS&CS department to prepare for and mitigate risk.

Endangered Species Act (ESA). Signed into law by President Richard Nixon on December 28, 1973, it was designed to protect critically imperiled species from extinction as a "consequence of economic growth and development un-tempered by adequate concern and conservation."

Ending Balance. Cash and cash equivalent balances at the ending of an accounting period. For budget years this amount is an estimate. For actual years this amount is the actual amount of cash either in demand deposits or investments.

Energy. Collective name for electricity and natural gas purchases used to treat and distribute water throughout the LVVWD's service area as well as power office buildings and other ancillary locations.

Engineering Department Management System. (EDMS)

Engineering Project Management. (EPM)

Engineering Project Scheduling and Management System. (EPSM)

Enterprise Funds. Funds used to account for operations: 1) that are financed and operated in a manner similar to private business enterprises - where the intent of the governing body is that the costs (expenses, including depreciation) of

providing goods and services to the general public on a continuing basis be financed or recovered primarily through user charges; or 2) where the governing body has decided that periodic determination of revenues earned, expenses incurred, and/or net income is appropriate for capital maintenance, public policy, management control, accountability, or other purposes.

Environmental, Health, Safety & Corporate Security (EHS&CS). A department of the LVVWD and SNWA. Also abbreviated as EHS.

Environmental Protection Agency (EPA). An agency of the U.S. federal government which was created for the purpose of protecting human health and the environment by writing and enforcing regulations based on laws passed by Congress.

Expenditure. The payment of cash on the transfer of property or services for the purpose of acquiring an asset, service or settling a loss.

Fiscal Year (FY). For the Las Vegas Valley Water District, the 12-month period begins with July 1, and ends with June 30 of the designated fiscal year; e.g. FY 2020-21 ends on June 30, 2021.

Fringe Benefits. Various types of non-wage compensation provided to employees in addition to their normal wages or salaries.

Full-Time Equivalent (FTE). The number of positions that equate to a 40-hour work week for 52 weeks, or one full year. For example, two part-time positions, each working 20 hours per week, equals one FTE.

Las Vegas Valley Water District
Operating and Capital Budget

Glossary

Fiscal Year Ending June 30, 2021

Full-Time Equivalent Employee (FTE). A person employed in the capacity of a Full-Time Equivalent.

Fund. A fiscal and accounting tool with a self-balancing set of accounts to record revenue and expenditures.

Fund Balance. Also known as beginning balance and ending balance. This represents the estimated cash balance in a specific fund at the beginning or ending of an accounting period.

Fund Equity. The excess of an entity's assets over its liabilities.

Gallons Per Minute (GPM). Also known as 'flow rate', GPM is a measure of how many gallons of water flow out of your shower head each minute.

General Obligation Debt. Bonds where the full faith and credit of the issuer is pledged to the repayment of the bonds.

Generally Accepted Accounting Principles (GAAP). A body of accounting and financial reporting standards set by the Governmental Accounting Standards Board (GASB) for state and local governments, and by the Financial Accounting Standards Board (FASB) for private sector organizations.

Geographical Information Systems (GIS). Geographical Information System is a system designed to capture, store, manipulate, analyze, manage, and present all types of spatial or geographical data.

Global Positioning System (GPS). The Global Positioning System is a space-based navigation system that provides location and time information in all weather

conditions, anywhere on or near the Earth where there is an unobstructed line of sight to four or more GPS satellites

Government Finance Officers Association (GFOA). A professional association of approximately 17,500 state, provincial, and local government finance officers in the United States and Canada. In 1984, the GFOA signed an agreement with the Financial Accounting Foundation that gave them a voice and appointments in the creation of the Governmental Accounting Standards Board (GASB).

Governmental Funds. The General Fund, Special Revenue Funds, Debt Service Funds, and Capital Projects Funds.

Grant. A contribution by a government or other organization to support a particular function. Grants may be classified as categorical or block, depending upon the amount of discretion allowed the grantee.

Great Recession. A global economic decline which began after 2005 and lasted roughly through the end of 2010.

Groundwater Management Fees. Fees imposed on municipalities and individual well owners. The proceeds of these fees are used to implement artificial recharge to benefit well users, provide financial assistance to well owners who are required to connect to municipal water by the Nevada State Engineer, and pay for general maintenance costs of the groundwater management program.

Home Owner Association (HOA). An organization in a subdivision, planned community or condominium that makes and

Las Vegas Valley Water District
Operating and Capital Budget

Glossary

Fiscal Year Ending June 30, 2021

enforces rules for the properties within its jurisdiction.

Intake No. 3. One of the largest municipal water projects in the United States constructed to draw water from Lake Mead at levels as low as 1,000 feet, 75 feet lower than SNWA's highest intake.

Intentionally Created Surplus. A type of surplus water that has been created or credited to a water agency through actions that conserve water and increase Lake Mead storage.

Interest Earned. Monies earned by investing idle funds in the open market.

Intergovernmental Revenue. Revenue received from other governments in the form of grants, entitlements, shared revenues or payments in lieu of taxes.

International Ozone Association – Pan American Group (IOA-PAG). A nonprofit educational and scientific organization dedicated to the collection and dissemination of information on, and to promote research in, any and all aspects of ozone and related oxygen species technologies.

Investment. Securities and real estate purchased and held for the production of income in the form of interest, dividends, rentals or base payments.

Labor. A budget category that includes all LVVWD employee salaries including overtime, longevity pay, and benefits. Labor can either be paid by operating funds or capital funds according to then activity/project in which it was expended.

Laboratory Information Management System (LIMS). A laboratory information management system is a software-based laboratory and information management system with features that support a modern laboratory's operations.

Las Vegas Metropolitan Statistical Area (MSA). Las Vegas metropolitan area, is in the southern part of the U.S. state of Nevada, coextensive since 2003 with Clark County, Nevada. A central part of the metropolitan area is the Las Vegas Valley, a 600 sq. mi (1,600 km²) basin that includes the metropolitan area's largest city, Las Vegas

Las Vegas Valley Groundwater Management Program (LVVGMP). In 1997, the Nevada Legislature directed the Southern Nevada Water Authority (SNWA) to develop the Las Vegas Valley Groundwater Management Program to protect and manage the valley's primary groundwater supply. The program protects the local groundwater basin from over-drafting and potential sources of contamination.

Las Vegas Valley Water District (LVVWD). The major water retailer in southern Nevada. The LVVWD is the operating agent of the Southern Nevada Water Authority although the two companies are autonomous and produce financial records and statements independent of each other.

Las Vegas Wash Comprehensive Adaptive Management Plan. (LVWCAMP)

Leading Utilities of the World (LOUW). A global network of the world's most

Las Vegas Valley Water District
Operating and Capital Budget
Glossary
Fiscal Year Ending June 30, 2021

successful and innovative water and wastewater utilities.

Line Item. Unique identification number and title for an expenditure category; represents the most detailed level of budgeting and recording expenditures.

Lower Colorado River Multi-Species Conservation Program. (LCRMSCP)

Low Lake Level Pumping Station (L3PS). A significant component of the entire Intake No.3 Project, this portion includes the construction of a pumping station which will facilitate drawing water from lower levels of Lake Mead.

Maintenance Improvement Team. (MIT)

Major Construction and Capital Program (MCCP). A schedule of approved capital projects for SNWA, their estimated costs, and funding sources.

Major Construction and Program (MCP). A schedule of approved capital projects, their estimated costs, and funding sources.

Megawatt Hour (MWh). A unit of power equal to one million watt hours. Energy in watt hours is the multiplication of power in watts and time in hours.

Million-Gallon per Day (MGD). A unit of flow measurement. MGD is a standard measurement in the water utility industry.

Mission. A description of the basic purpose and responsibility of an organizational unit.

Mobile Data Dispatch System and Mobile Data Terminals. (MDT)

Mobile Workforce Management System. (MWFMS)

Mobile Workforce Management Team. (MWM)

Modified Accrual Accounting. A basis of accounting in which expenditures are accrued when liability is incurred, but revenues are recognized only when they are measurable and available as net current assets. This method of accounting is statutorily required in Nevada.

National Environmental Policy Act (NEPA). A United States environmental law that established a U.S. national policy promoting the enhancement of the environment.

Net Gallons per Capita per Day (GPCD). Measurement of water used in comparison between communities.

Net Position. Financial liabilities minus cash and cash equivalents. Net position was formerly known as fund equity until the application of GASB 65.

Nevada Division of Environmental Protection (NDEP). State of Nevada agency whose mission is to preserve and enhance the environment of the State in order to protect public health, sustain healthy ecosystems, and contribute to a vibrant economy.

Nevada Revised Statutes (NRS). The current codified laws of the State of Nevada.

Nevada State Engineer (NSE). Leader of the Nevada Division of Water Resources and responsible for administering and enforcing Nevada Water Law.

Las Vegas Valley Water District
Operating and Capital Budget

Glossary

Fiscal Year Ending June 30, 2021

Occupational Health and Safety Administration (OSHA). An agency of the United States Department of Labor. OSHA's mission is to "assure safe and healthful working conditions for working men and women by setting and enforcing standards and by providing training, outreach, education and assistance".

Operating Budget. Authorized expenditures for on-going day-to-day services; e.g., maintenance, materials, supplies, etc.

Operating Expenses. This classification contains expenses such as professional services, rental expenses, research and studies, etc. that are projected to be spent in the course of operations. On a GAAP prepared financial statement, these costs will appear on the Statement of Revenues, Expenses and Changes in Net Position.

Other Post Employment Benefits. (OPEB)

Payroll and Related. A budget category that includes all LVVWD employee salaries including overtime, longevity pay, and benefits. Labor can either be paid by operating funds or capital funds according to then activity/project in which it was expended.

Period. The date (usually a 12 month span) that expenditures, encumbrances, etc. are recorded for reporting purposes.

Period Ending. The last date any expenditures, encumbrances, etc. are recorded for reporting purposes. Any data received after this date will be reflected in the next report. A Period Ending may be the end of a pay period, the end of the last pay

period of a month, or the end of a calendar month.

Polymerase Chain Reaction (PCR). A method widely used in molecular biology to make many copies of a specific DNA segment.

Positions. Authorized (created by the LVVWD Board of Directors) employee slots (either currently filled or vacant) that are specifically funded through the budget process.

Potable Water. Water that has been treated and meets or exceeds standards set by the Safe Water Drinking Act.

Power. Electricity and natural gas costs that are used for the transportation and transmission of water throughout the LVVWD distribution system.

Proprietary Funds. Enterprise Funds and Pension Funds.

Rate-of-Flow Control Systems (ROFCS). Flow control in a hydraulic system is to regulate speed. The device controls the speed of an actuator by regulating the flow rate.

Recharge. Lake water injected directly into the aquifer by wells to store it for future use.

Reclaimed Water Distributions (RWDS). This is wastewater that has been treated to specific standards.

Reliability Centered Maintenance. (RCM)

Remote Operated Vehicle (ROV). Unoccupied, highly maneuverable underwater robots, typically operated by at, or above, the water surface.

Las Vegas Valley Water District
Operating and Capital Budget

Glossary

Fiscal Year Ending June 30, 2021

Remote Terminal Unit, Programmable Logic Controller (RTU/PLC). A microprocessor-controlled electronic device that interfaces objects in the physical world to a distributed control system or SCADA.

Research and Development (R&D). Work directed toward the innovation, introduction, and improvement of products and processes.

Revenues. Funds received from various sources and treated as income to LVVWD to finance expenditures.

Revenue Bonds. Bonds where pledges are made to dedicate specific revenue sources to repay the bonds.

Right-of-Way (ROW). A right of way is a type of easement granted or reserved over the land for transportation purposes, this can be for a highway, public footpath, rail transport, canal, as well as electrical transmission lines, oil and gas pipelines.

Risk Management. An organized attempt to protect organization's assets against accidental loss in the most economical method.

River Mountains Treatment Plant (RMTP). Facility treats up to 300 million gallons of water per day. The facility provides additional reliability and capacity to Southern Nevada's municipal water treatment and distribution capabilities. It began delivering treated water in October 2002.

Rural System Operator. (RSO)

Safe Drinking Water Act (SDWA). Act is the principal federal law in the United States

intended to ensure safe drinking water for the public. Pursuant to the act, the Environmental Protection Agency (EPA) is required to set standards for drinking water quality and oversee all states, localities, and water suppliers who implement these standards.

Significant Financial Impact. Five years immediately following when a capital item is placed into service. The term is required by the Government Finance Officers Association.

Silver State Energy Association (SSEA). A cooperative association created to purchase energy for members consisting of the SNWA, City of Boulder Nevada, Overton Power District, Lincoln County Power District and the Colorado River Commission of Nevada.

Southern Nevada Water Authority (SNWA). Formed in 1991 to manage Southern Nevada's water needs on a regional basis. The Authority comprises seven member agencies including the city of Henderson, city of Las Vegas, city of North Las Vegas, Big Bend Water District (Laughlin), the Clark County Water Reclamation District and the Las Vegas Valley Water District. SNWA provides wholesale water treatment and delivery for the greater Las Vegas Valley and is responsible for acquiring and managing long-term water resources for Southern Nevada.

Southern Nevada Water System (SNWS). Refers to the system of distribution facilities that delivers raw Colorado River water from Lake Mead and delivers potable water to Southern Nevada's municipal water providers.

Las Vegas Valley Water District
Operating and Capital Budget
Glossary
Fiscal Year Ending June 30, 2021

Solar Photovoltaic (PV). A technology that converts sunlight (solar radiation) into direct current electricity by using semiconductors.

Special Assessments. Fees that are charged to property owners in certain geographical areas for improvements. A fee is levied only to those property owners that receive direct benefit.

State Revolving Fund (SRF). A fund administered by a U.S. state for the purpose of providing low-interest loans for investments in water and sanitation.

Streamlined Reliability Centered Maintenance (SRCM). A systematic evaluation of plant equipment and maintenance requirements.

Supervisory Control and Data Acquisition (SCADA). Water operations control systems.

Tax Exempt Commercial Paper Program. (TECP). Tax-exempt commercial paper is short-term debt for which the interest payments are tax-exempt at the federal, state or local level.

Total Coliform (TC). A group of related bacteria that are (with few exceptions) not harmful to humans.

Uniform Design and Construction Standards (UDACS). The Uniform Design and Construction Standards for Potable Water Distribution Systems represent the minimum design and construction criteria for water distribution systems within the participating Agency's jurisdiction.

Water Smart Landscape (WSL). The SNWA's rebate of \$3 per square foot of grass removed and replaced with desert

landscaping up to the first 10,000 square feet converted per property, per year.

Warm Springs Natural Area (WSNA). A facility opened in 2017 that includes public access walking trails and interpretive signage to educate and inform the public about its environmental resources.

Water Quality Process Improvement Team. (WQPIT)

Water Quality and Treatment (WQ&T). A department of the LVVWD/SNWA that ensures the quality of the water meets or surpasses SDWA standards.

Wholesale Delivery Charge (WDC). The per acre-foot charge that SNWA charges purveyor members for the treatment and delivery of treated, potable water.

Variable Frequency Drive (VFD). A type of motor controller that drives an electric motor by varying the frequency and voltage supplied to the electric motor.