

A G E N D A

SOUTHERN NEVADA WATER AUTHORITY BOARD OF DIRECTORS

**REGULAR MEETING
11:00 A.M. – MAY 31, 2018**

**BOARD CHAMBERS, SOUTHERN NEVADA WATER AUTHORITY
100 CITY PARKWAY, SEVENTH FLOOR, LAS VEGAS, NEVADA
(702) 258-3100**

Board of Directors

Marilyn Kirkpatrick, Chair
Bob Coffin, Vice Chair
Jim Gibson
Peggy Leavitt
John Lee
John Marz
Steve Sisolak

*John J. Entsminger,
General Manager*

Date Posted: May 23, 2018

SOUTHERN NEVADA
WATER AUTHORITY



The Southern Nevada Water Authority makes reasonable efforts to assist and accommodate persons with physical disabilities who desire to attend the meeting. For assistance, call the Agenda Coordinator at (702) 258-3939 at least 24 hours prior to the meeting.

THIS MEETING HAS BEEN PROPERLY NOTICED AND POSTED IN THE FOLLOWING LOCATIONS:

City of Boulder City, City Hall
401 California Street
Boulder City, Nevada

City of Henderson, City Hall
240 Water Street
Henderson, Nevada

City of North Las Vegas, City Hall
2250 Las Vegas Boulevard North
North Las Vegas, Nevada

City of Las Vegas, City Hall
495 South Main Street
Las Vegas, Nevada

Clark County Government Center
500 S. Grand Central Parkway
Las Vegas, Nevada

Clark County Water Reclamation District
5857 E. Flamingo Road
Las Vegas, Nevada

Southern Nevada Water Authority
100 City Parkway, Suite 700
Las Vegas, Nevada

Las Vegas Valley Water District
1001 S. Valley View Boulevard
Las Vegas, Nevada

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

Visit our website at <http://www.snwa.com> or main office at 1001 S. Valley View Boulevard, Las Vegas, Nevada for Southern Nevada Water Authority agenda postings, copies of supporting material and approved minutes. To receive meeting information, including supporting material, contact the Agenda Coordinator at (702) 258-3939 or agendas@snwa.com.

CALL TO ORDER

COMMENTS BY THE GENERAL PUBLIC

NO ACTION MAY BE TAKEN: This is a period devoted to comments by the general public pertaining to items on this agenda. If you wish to speak to the Board about items within its jurisdiction, but not appearing on this agenda, you must wait until the "Comments by the General Public" period listed at the end of this agenda. Please limit your comments to three minutes or less and refrain from making comments that are repetitious, offensive, or amounting to personal attacks. No action may be taken upon a matter not listed on the posted agenda.

ITEM NO.

1. *For Possible Action:* Approve agenda with the inclusion of tabled and/or reconsidered items, emergency items and/or deletion of items, and approve the minutes from the regular meetings of March 15, 2018, and April 19, 2018.
2. *For Possible Action:* Approve an increase of the Wholesale Delivery Charge to \$313 per acre-foot for treated water and \$238 per acre-foot for untreated water effective July 1, 2018, an additional increase of \$10 per acre-foot for treated water and \$6 per acre-foot for untreated water effective July 1, 2019, and annual adjustments of both rates thereafter in accordance with the Consumer Price Index.
3. *For Possible Action:* Conduct a Public Hearing on the Tentative Budget for the Southern Nevada Water Authority and subsequently adopt a Final Budget for Fiscal Year 2018/19.

CONSENT AGENDA **Items 4 - 10 are routine and can be taken in one motion unless a Director requests that an item be taken separately.**

4. *For Possible Action:* Approve an assistance agreement, in substantially the same form, between the Bureau of Reclamation and the Authority to accept grant funding in the amount of \$88,599 for Lake Mead drought modeling to inform future drinking water treatment needs, with the Authority providing up to \$132,397 of in-kind contributions.

5. *For Possible Action:* Approve and authorize the General Manager to execute the first amendment to the existing lease agreement between Molasky Center Sign Company, LLC, and the Authority to extend the lease term for two sign locations on the Molasky Corporate Center building through 2022, in the amount of \$7,000 per month, and authorize an increase not to exceed 2 percent for each lease year.
6. *For Possible Action:* Approve and authorize the General Manager to sign a fiscal partnership and sponsorship agreement between the Water Education Foundation and the Authority to support funding development for the Colorado River Traveling Exhibition and associated education programs.
7. *For Possible Action:* Approve two resolutions authorizing the submission of two grant proposals to the Bureau of Reclamation's WaterSMART: Water and Energy Efficiency Grant Program, requesting \$300,000 and \$1,000,000, respectively; if either proposal is accepted, the Authority's matching contribution would be \$3,000,000 or \$10,000,000, respectively.
8. *For Possible Action:* Approve and authorize the Chair to sign an interlocal agreement among the City of Henderson, the City of Las Vegas, the City of North Las Vegas, Clark County, the Clark County Regional Flood Control District, the Clark County Water Reclamation District and the Authority to establish funding allocations and the budget for Las Vegas Wash activities in Fiscal Year 2018/19 and to approve the Authority's allocation of \$293,818.
9. *For Possible Action:* Approve and authorize the General Manager to sign an amendment to the existing agreement between CH2M HILL Engineers, Inc., and the Authority for miscellaneous civil, electrical, mechanical and control systems projects for an increase not to exceed \$300,000 annually.
10. *For Possible Action:* Approve the Southern Nevada Smart Community Vision document.

BUSINESS AGENDA

11. *For Possible Action:* Adopt the 2018 Las Vegas Wash Capital Improvements Plan.
12. *For Possible Action:* Ratify the General Counsel's intervention in Federal Energy Regulatory Commission Docket EL18-102-000 involving possible revisions to NV Energy's transmission rates to reflect the recent change in the federal corporate income tax rate.
13. *For Possible Action:* Award a contract to provide on-call operation and maintenance support services to MMC, Inc., for the amount of \$1,414,000, authorize a change order contingency amount not to exceed \$86,000, authorize renewal for four additional one-year periods, and authorize the General Manager to sign the construction agreement.
14. *For Possible Action:* Approve the Agreement Establishing Programmatic Funding for Colorado River Basin Weather Modification, in substantially the same form, among California's Six Agency Committee, Central Arizona Water Conservation District, Colorado Water Conservation Board, Utah Division of Water Resources, Wyoming Water Development Office, the New Mexico Interstate Stream Commission and the Authority for an amount not to exceed \$4,000,000 over the next eight years.
15. *For Possible Action:* Receive a conservation update; authorize conservation program rebate increases to 1) the Authority's Water Smart Landscapes Program for an amount not to exceed \$3 per square foot for the first 10,000 square feet of turf removed and \$1.50 per square foot thereafter, and an amount not to exceed \$3 per square foot for up to 2,500 square feet for well users; and 2) the Authority's Water Efficient Technologies program for amounts not to exceed \$45 per 1,000 gallons of annual consumptive use reduction and \$15 per 1,000 gallons of annual non-consumptive use reduction; authorize the General Manager to adjust rebates in the future not to exceed cumulative inflation beginning June 2018; and authorize the General Manager or his designee to execute any ministerial documents necessary to effectuate related transactions.
16. *For Information Only:* Receive an update from staff on water resources including, but not limited to, drought conditions in the Colorado River Basin, the results of the implementation of the Authority's Water Resource and Conservation Plan, activities on the Colorado River, the development of in-state water resources, and the status of construction activities near Lake Mead.

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 Southern Nevada Water Authority. Please limit your comments to three minutes or less and refrain from making comments that are repetitious, offensive, or amounting to personal attacks. No action may be taken upon a matter not listed on the posted agenda.

**SOUTHERN NEVADA WATER AUTHORITY
BOARD OF DIRECTORS
REGULAR MEETING
MARCH 15, 2018
MINUTES**

CALL TO ORDER 9:01 a.m., Board Chambers, Southern Nevada Water Authority,
100 City Parkway, Seventh Floor, Las Vegas, Nevada

BOARD MEMBERS PRESENT Marilyn Kirkpatrick, Chair
Bob Coffin, Vice Chair
Jim Gibson
Peggy Leavitt (by telephone)
John Lee
John Marz
Steve Sisolak

BOARD MEMBERS ABSENT None

STAFF PRESENT John Entsminger, Julie Wilcox, Dave Johnson, Greg Walch

OTHERS PRESENT

Unless otherwise indicated, all members present voted in the affirmative.

COMMENTS BY THE GENERAL PUBLIC

For complete comments, audio is available online at snwa.com

There were no speakers.

ITEM NO.

1. ***For Possible Action: Approve agenda with the inclusion of tabled and/or reconsidered items, emergency items and/or deletion of items, and approve the minutes from the regular meeting of February 15, 2018.***

FINAL ACTION: A motion was made by Director Sisolak to approve the agenda for this meeting and to approve the minutes from the regular meeting of February 15, 2018. The motion was approved.

BUSINESS AGENDA

2. ***For Possible Action: Award a contract to Barnard of Nevada, Inc., to construct an electrical substation for the Low Lake Level Pumping Station for the amount of \$5,746,851, authorize a change order contingency amount not to exceed \$574,685, and authorize the General Manager to sign the construction agreement.***

FINAL ACTION: Vice Chair Coffin made a motion to approve staff's recommendation. The motion was approved.

3. ***For Possible Action: Reject bids from Water Technology Resources, Inc., and Cascade Consultants LLC, and approve the award of bid for AMSWTF Filter Beds 6 through 20 Butterfly Valves to Core & Main LP for an amount not to exceed \$3,918,398.***

John Entsminger, General Manager, said that staff recommended rejection of the bids from Water Technology Resources, Inc., because they did not sign the bid package as was required by NRS, and Cascade Consultants LLC, because they added some terms and conditions to their bid; therefore, Core & Main LP was deemed the lowest responsive and responsible bidder and recommended for bid award.

Director Sisolak asked if a checklist of required documents was included in bid packages. Greg Walch, General Counsel, confirmed that bid packages include a checklist, which states the required information to be provided for bid award consideration.

Chair Kirkpatrick said that the purchasing rules were consistent across the state, and that Clark County was holding workshops to inform potential bidders.

FINAL ACTION: Director Gibson made a motion to approve staff's recommendation. The motion was approved.

4. ***For Possible Action:*** approve and authorize the General Manager to sign the Agreement for Funding the Recovery of Long-Term Storage Credits Stored on Behalf of Southern Nevada Water Authority in the Tucson Active Management Area, in substantially the same form as that attached hereto, between the Central Arizona Water Conservation District and the Authority for an amount not to exceed \$1,000,000; and authorize the General Manager to sign all ministerial documents necessary to effectuate the transaction.

FINAL ACTION: Vice Chair Coffin made a motion to approve staff's recommendation. The motion was approved.

5. ***For Information Only:*** Receive an update from staff on water resources including, but not limited to, drought conditions in the Colorado River Basin, the results of the implementation of the Authority's Water Resource and Conservation Plan, activities on the Colorado River, the development of in-state water resources, and the status of construction activities near Lake Mead.

Mr. Walch gave an update presentation on water resources. A copy of his presentation is attached to these minutes.

Vice Chair Coffin referred to an announcement that the Department of Interior was considering reopening mining activities within the Colorado River Basin. He asked if the Authority needed to reaffirm its opposition to uranium mining considering the potential for adverse impacts to the watershed.

Mr. Entsminger said that a coalition of interests have opposed uranium mining within the Grand Canyon and have frequently voiced that opposition with the Department of the Interior. He said that the Authority could discuss support of the coalition at a future meeting.

NO ACTION REQUIRED

Public Comment

There were no speakers.

Adjournment

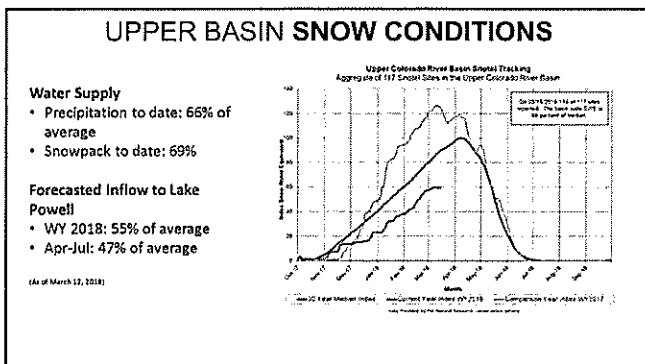
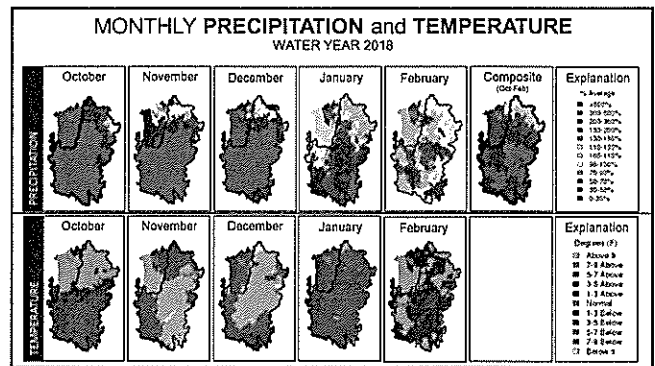
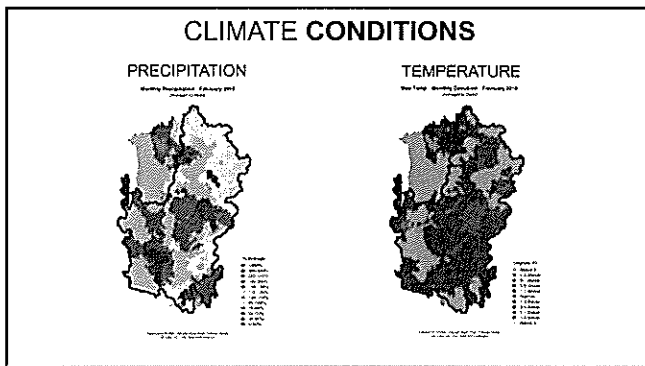
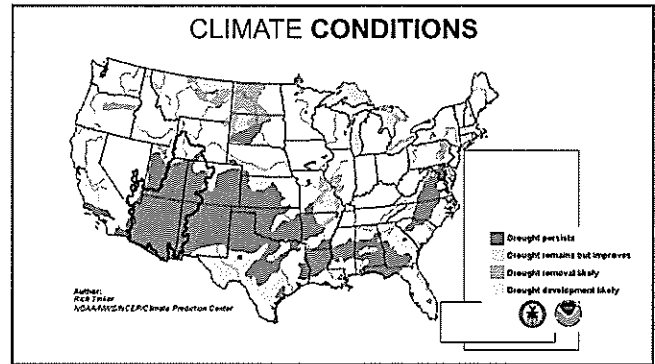
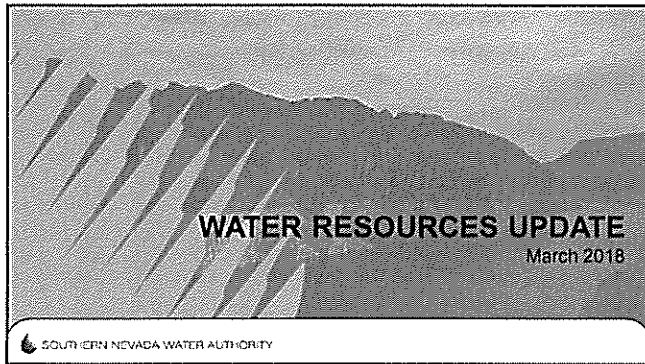
There being no further business to come before the Board, the meeting adjourned at 9:21 a.m.

APPROVED:

Marilyn K. Kirkpatrick, Chair

John J. Entsminger, General Manager

Copies of all original agenda items and minutes, including all attachments, are on file in the General Manager's office at the Las Vegas Valley Water District, 1001 South Valley View Boulevard, Las Vegas, Nevada.



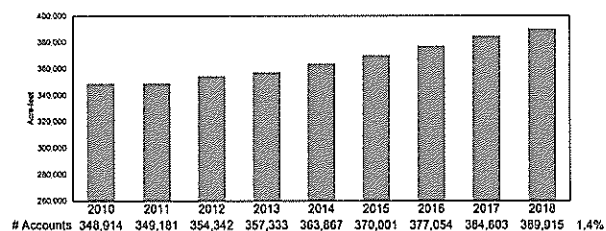
RESERVOIR STATUS

Reservoir	Percent Full	Current Contents (1,000 acre-feet)	Current Elevation
Lake Powell	54%	13,221	3,614.81
Lake Mead	41%	10,712	1,088.32

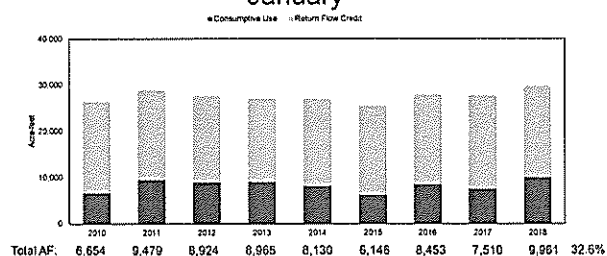
RESERVOIR PROJECTIONS

Reservoir	Current Elevation	Projected Elevation Jan. 1, 2019	Projected Elevation Jan. 1, 2020
Lake Powell	3,614.81	3,593.17	3,601.99
Lake Mead	1,088.32	1,077.24	1,072.81

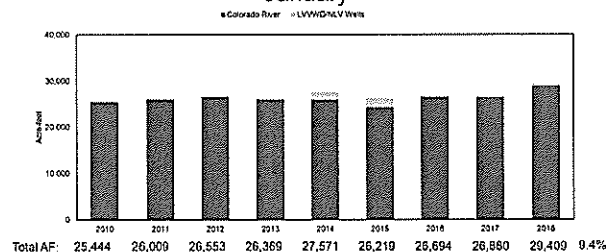
LVVWD ACTIVE ACCOUNTS January



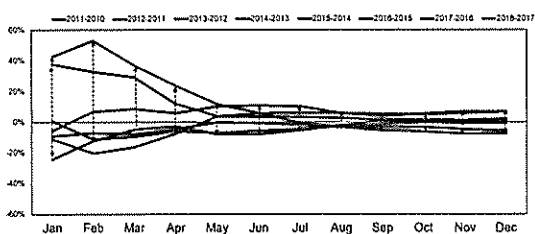
COLORADO RIVER CONSUMPTIVE USE January



SNWA Water Use January



COLORADO RIVER CONSUMPTIVE USE Cumulative YTD Percent Change from Prior Year



**SOUTHERN NEVADA WATER AUTHORITY
BOARD OF DIRECTORS
REGULAR MEETING
APRIL 19, 2018
MINUTES**

CALL TO ORDER 9:00 a.m., Colorado River Conference Rooms, Southern Nevada Water Authority, 100 City Parkway, Seventh Floor, Las Vegas, Nevada

BOARD MEMBERS PRESENT

Marilyn Kirkpatrick, Chair
Bob Coffin, Vice Chair
Jim Gibson
Peggy Leavitt
John Lee
John Marz
Steve Sisolak

BOARD MEMBERS ABSENT	None
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STAFF PRESENT John Entsminger, Dave Johnson, Greg Walch, Brian Thomas

OTHERS PRESENT

Unless otherwise indicated, all members present voted in the affirmative.

COMMENTS BY THE GENERAL PUBLIC

For complete comments, audio is available online at snwa.com

There were no speakers.

ITEM NO.

1. ***For Possible Action:*** Approve agenda with the inclusion of tabled and/or reconsidered items, emergency items and/or deletion of items.

FINAL ACTION: A motion was made by Director Gibson to approve the agenda for this meeting. The motion was approved.

2. ***For Information Only:*** Receive an overview and discuss the Fiscal Year 2018/2019 Tentative Budget.

John Entsminger, General Manager, gave an overview presentation of the tentative budget. A copy of his presentation is attached to these minutes.

Chair Kirkpatrick asked if changes in construction costs were factored into budget projections for infrastructure projects like the Low Lake Level Pumping Station and Eastern Nevada Transmission Project. Dave Johnson, Deputy General Manager – Engineering & Operations, said that project budgets included escalation of construction costs.

Director Sisolak asked if utilities in other states have looked to the Authority for advice on conservation programs. Mr. Entsminger said that some areas in the Colorado River Basin, such as Southern California, had discussed conservation programs with the Authority.

Vice Chair Coffin asked if the Authority was creating additional water conservation advertisements. Mr. Entsminger said that the Authority's ad campaigns had been effective in promoting conservation, and that the Authority would continue to run similar ads in the future.

Director Sisolak said that the Integrated Resource Planning Advisory Committee's recommendations regarding rates and infrastructure funding had benefitted the Authority and the community. Mr. Entsminger said that the committee's recommendations, which were adopted by the Board, provided guidance for the Authority and increased rate stability for the future.

Director Marz asked if there was a recommended best practice for the amount of reserves a water utility should have. Brian Thomas, Chief Financial Officer, said that the Authority's reserve policy reflected industry best practices.

Vice Chair Coffin asked if the new filters being proposed for the treatment plant would help against invasive species, such as quagga mussels. Mr. Johnson said that chemical feedlines located within the Authority's intakes protect the treatment system from quagga mussels and prevent invasive species from reaching the filters.

NO ACTION REQUIRED

Public Comment

There were no speakers.

Adjournment

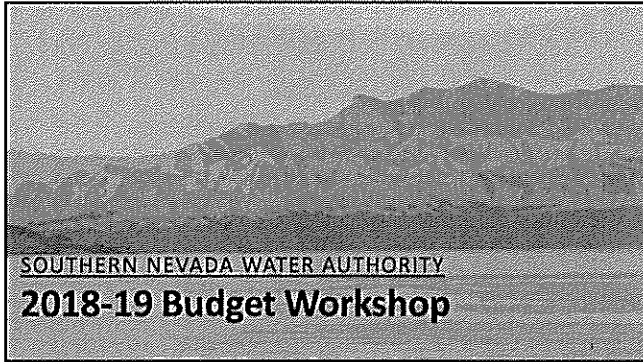
There being no further business to come before the Board, the meeting adjourned at 9:51 a.m.

APPROVED:


Marilyn K. Kirkpatrick, Chair

John J. Entsminger, General Manager

Copies of all original agenda items and minutes, including all attachments, are on file in the General Manager's office at the Las Vegas Valley Water District, 1001 South Valley View Boulevard, Las Vegas, Nevada.



2017-18 HIGHLIGHTS & ACHIEVEMENTS



- Low Lake Level Pumping Station (L3PS) construction continues on schedule
- Final weir under construction in the upper Las Vegas Wash
- Implemented mandatory Sundays Off within watering schedule across all jurisdictions
- Partnered with other Colorado River Basin States and country of Mexico to execute Minute 323
- Opened the Warm Springs Natural Area to the public

Warm Springs Natural Area

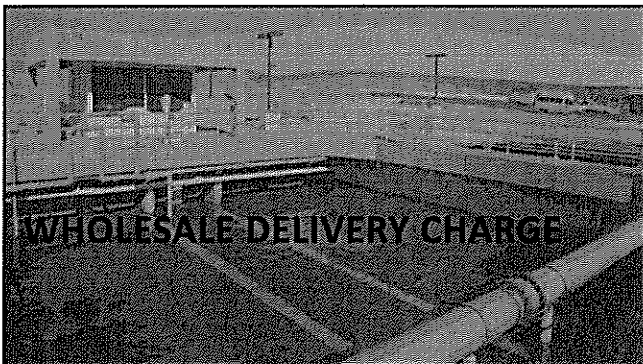
SNWA CREDIT RATING

In March, S&P raised the SNWA's credit rating to AA from AA-, with a stable outlook. Reasons for their increase include:

- The SNWA's critical role as the region's water resource and conservation planning agency
- Extremely strong liquidity position
- Flexibility to fund future capital improvements on a pay-as-you-go basis in lieu of increasing leverage

2018-19 INITIATIVES

- Update conservation programs to achieve further savings
- Update the SNWA Conservation Plan
- Continue construction of L3PS
- Move the Eastern Nevada Transmission Project forward
- Continue water storage and banking efforts
- Engage with Colorado River Basin partners to address declining reservoir levels
- Evaluate opportunities for innovation



SNWA WHOLESALE DELIVERY CHARGE

The Wholesale Delivery Charge is a charge for Colorado River water delivered by the SNWA to its purveyor members

- Only SNWA Purveyors pay the charge
- Enacted in 1995
- Represents approximately 25% of total SNWA revenues

SNWA WHOLESale DELIVERY CHARGE

Revenues generated from the Wholesale Delivery Charge fund:

- Operations and maintenance costs
- Energy costs
- Asset management costs for the SNWA facilities
- Administrative costs
- Maintenance of reserve funds
- Debt service related to SNWS facilities

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SNWA WHOLESale DELIVERY CHARGE

Recent Rate History

Date Enacted	Treated (Per Acre-foot)	Raw (Per Acre-foot)
July 2013	\$303	\$232
July 2011	\$293	\$226
July 2010	\$283	\$220
July 2009	\$270	\$204
July 2008	\$262	\$192

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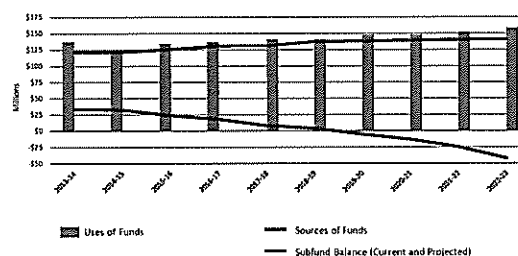
SNWA WHOLESale DELIVERY CHARGE

- Rates have not kept pace with inflation
- Other operating costs increase at approximately 3 percent annually
- Current projections indicate that the Wholesale Delivery Operations Subfund will fall below \$10 million this year if no action is taken

9

SNWA WHOLESale DELIVERY CHARGE

Current Subfund Projections



10

SNWA WHOLESale DELIVERY CHARGE

The SNWA met with members of the SNWA Financial Workgroup to make recommendations on the best way to close the gap.

Their recommendation:

- Increase the Wholesale Delivery Charge for treated water by \$10 annually (\$6 for raw water) for the next two years
- After two years, increase the charge by CPI (limited to a range of 1.5 – 4.5% increases)
- If the Subfund's projection exceeds \$20 million by June 30 of any year, defer the CPI adjustment

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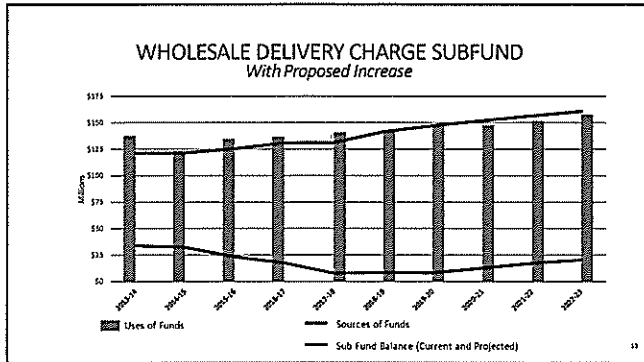
SNWA WHOLESale DELIVERY CHARGE

Proposed Rates:

Date	Treated (Per Acre-foot)	Raw (Per Acre-foot)
Current	\$303	\$232
July 2018	\$313	\$238
July 2019	\$323	\$244

In future years, the rate would be adjusted by CPI, unless the Subfund exceeded \$20 million by June 30 in the year prior.

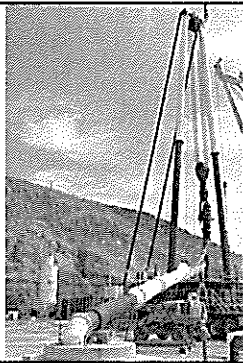
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OVERVIEW

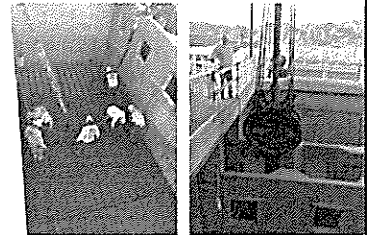
The 2018-19 Budget includes \$188.5 million for capital expenditures, a decrease of approximately \$25 million from last year's budget.

The decrease is largely due to weir construction in the upper Las Vegas Wash nearing completion, which is expected at the end of 2018.



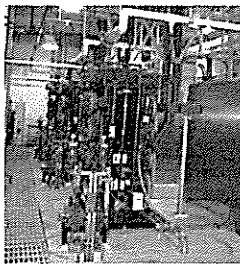
WATER TREATMENT FACILITY - FILTER REHABILITATION

Filter media, media blocks and valves will be replaced, and concrete and ancillary systems will be repaired for 20 of 26 existing filters at the Alfred Merritt Smith Water Treatment Facility



WATER TREATMENT FACILITY REHABILITATION

Five sodium hypochlorite generators installed at River Mountains Water Treatment Facility have reached the end of their useful life.

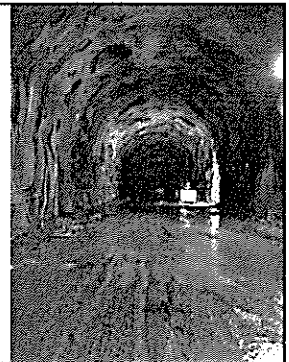


LOW LAKE LEVEL PUMPING STATION

Construction continues on the Low Lake Level Pumping Station.

Major activities this upcoming fiscal year:

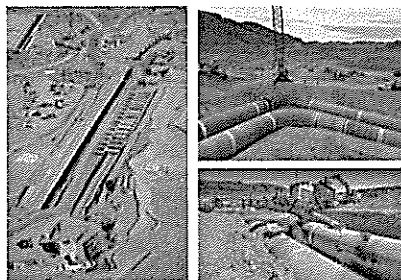
- Complete underground construction
- Complete electrical construction
- Continue above ground construction activities and begin installation of pumps



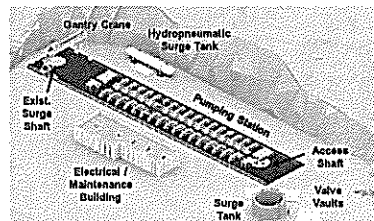
LOW LAKE LEVEL PUMPING STATION

Connector pipelines were installed from L3PS to feed AMSWTF and RMWTF.

The 144-inch pipeline construction installation was completed in Dec. 2017

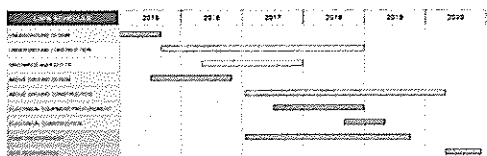


LOW LAKE LEVEL PUMPING STATION



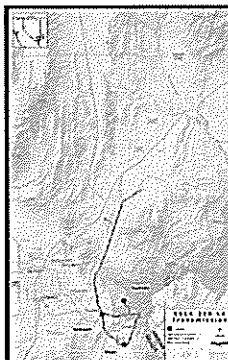
Above ground construction continues, which includes piping, valving, surge, gantry crane, electrical/maintenance building and electrical substation.

LOW LAKE LEVEL PUMPING STATION



\$115 million is budgeted for 2018-19.
Project is scheduled to be completed in 2020.

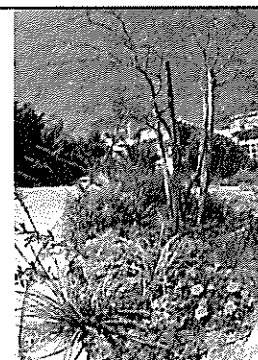
EASTERN NEVADA TRANSMISSION PROJECT



\$6.1 million is budgeted for 2018-19 to fund project design and continued permitting activities.

CONSERVATION

\$17.5 million is budgeted for Conservation Programs, which reflects a committed effort to improve participation within existing programs.



CONSERVATION UPDATE

CONSERVATION

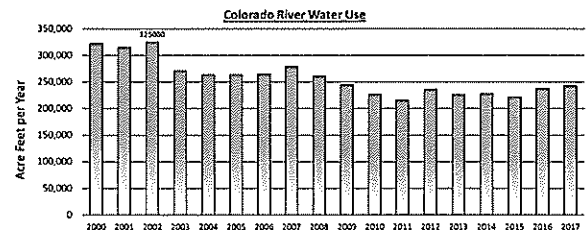
Nevada is facing the threat of a shortage declaration in the near term.

Reservoir	Current Elevation	Projected Elevation Jan. 1, 2019	Projected Elevation Jan. 1, 2020
Lake Mead	1,088 ft.	1,077 ft.	1,072 ft.

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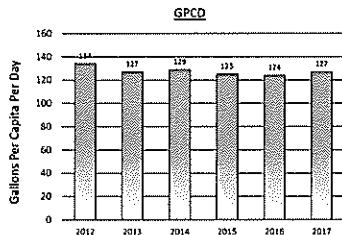
WATER USE

Annual water use is up.



WATER USE

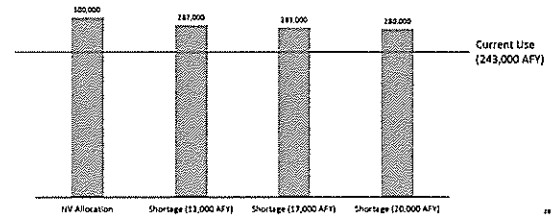
Weather influences how Southern Nevada uses water.



- 2017 was the warmest year on record
- 2017 annual precipitation total was 2.38 inches (1.81 inches below normal)
- There was no precipitation at McCarran Airport for a record 116 consecutive days

CONSERVATION

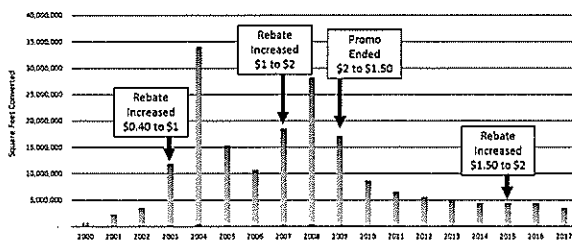
SNWA's conservation achievements have helped buffer impacts of shortage declarations.



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CONSERVATION

Landscape conversions have declined in recent years.



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CONSERVATION

Program enhancements are needed to maintain progress.

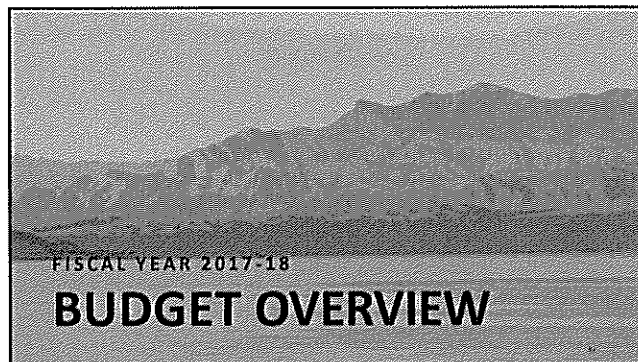
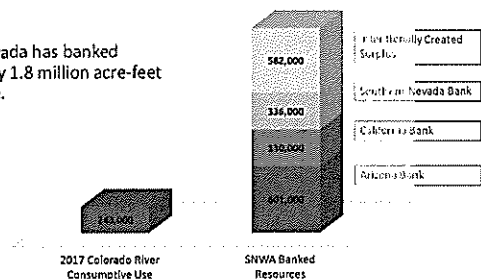
Goals to Enhancing the Conservation Program:

- Invest in programs that are working
- Increase participation
- Keep incentives compelling
- Pilot new programs

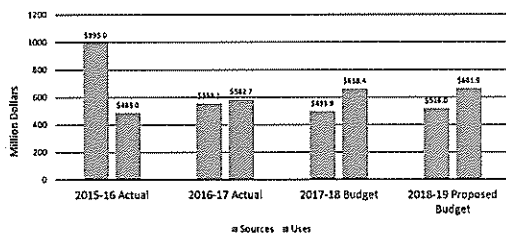
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PLANNING FOR THE FUTURE

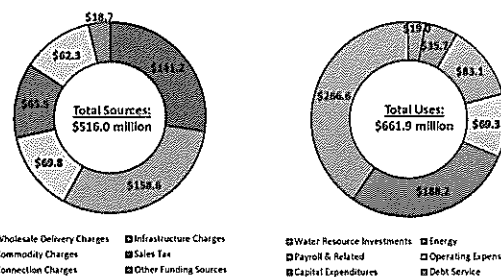
Southern Nevada has banked approximately 1.8 million acre-feet for future use.



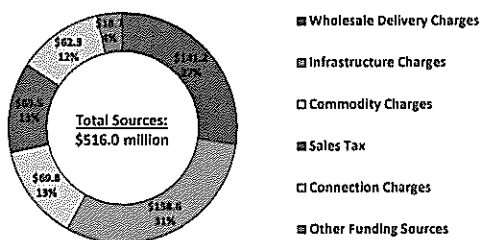
SOURCES AND USES SUMMARY



SOURCES AND USES OVERVIEW

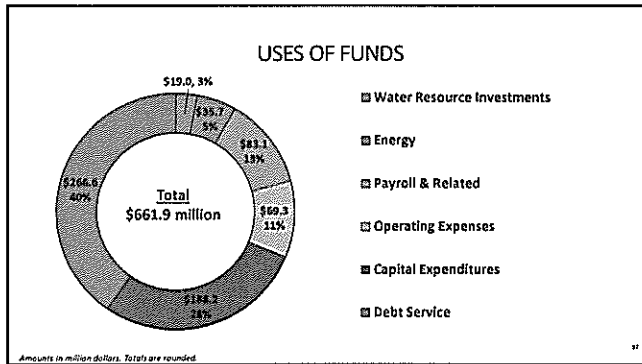


FUNDING SOURCES



FUNDING SOURCES

Sources	Actual 2016-17	Budget 2017-18	Proposed Budget 2018-19	Budget-to- Budget Variance
Wholesale Delivery Charge	\$ 130.1	\$ 130.8	\$ 141.2	\$ 10.4
Infrastructure Charge	132.5	149.1	158.6	9.5
Commodity Charge	65.4	68.5	69.8	1.3
Connection Charge	57.0	63.3	62.3	(1.0)
Reliability Surcharge	5.3	5.3	5.6	0.3
Sales Tax	60.9	62.3	65.5	3.2
Investment Income	4.9	3.8	5.9	2.0
Groundwater Management Fees	0.9	0.9	0.9	(0.0)
LV Wash Program Fees	0.4	0.4	0.4	(0.0)
Grant Proceeds	1.4	4.7	0.4	(4.3)
Other Revenues	94.4	4.2	5.4	0.2
Subtotal	\$ 553.1	\$ 493.9	\$ 516.0	\$ 22.1
Debt Issuance Proceeds	-	-	-	-
Total Sources	\$ 553.1	\$ 493.9	\$ 516.0	\$ 22.1



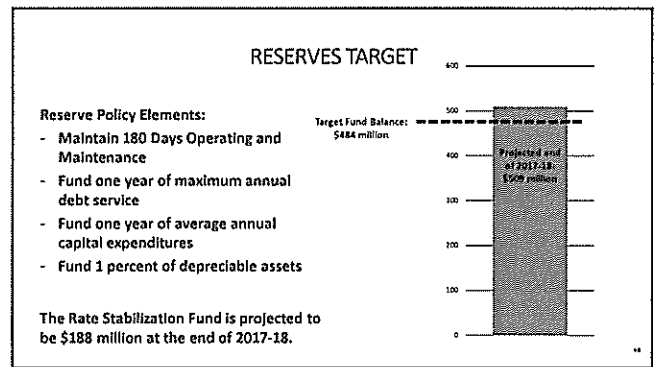
USES OF FUNDS

Uses	Actual 2016-17	Budget 2017-18	Proposed Budget 2018-19	Budget-to- Budget Variance
Water Resource Investments	\$ 3.5	\$ 12.1	\$ 19.0	\$ 6.9
Energy	36.6	37.0	35.7	(1.3)
Payroll & Related	69.8	77.2	83.1	5.9
Operating Expenses	41.4	54.5	69.3	14.8
Capital Expenditures	166.4	213.7	188.2	(25.5)
Debt Service	265.0	264.0	266.6	2.7
Total Uses	\$ 582.7	\$ 658.4	\$ 661.9	\$ 3.6

Amounts in million dollars. Totals are rounded.

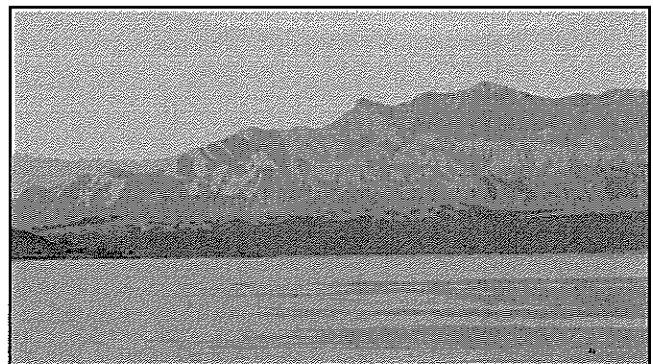
SNWA Budget Summary

	Actual 2016-17	Budget 2017-18	Proposed Budget 2018-19	Budget-to- Budget Variance
Sources				
Wholesale Delivery Charge	\$ 130.1	\$ 130.8	\$ 141.2	\$ 10.4
Infrastructure Charge	132.5	149.1	158.6	9.5
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Subtotal	\$ 553.1	\$ 493.9	\$ 516.0	\$ 22.1
Debt Insurance Proceeds				
Total Sources	\$ 553.1	\$ 493.9	\$ 516.0	\$ 22.1
Uses				
Water Resource Investments	\$ 3.5	\$ 12.1	\$ 19.0	\$ 6.9
Energy	36.6	37.0	35.7	(1.3)
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Capital Expenditures	166.4	213.7	188.2	(25.5)
Debt Service	265.0	264.0	266.6	2.7
Total Uses	\$ 582.7	\$ 658.4	\$ 661.9	\$ 3.6
Total Net Surplus/(Deficit)	\$ (29.6)	\$ (164.5)	\$ (146.0)	



2018-19 BUDGET SUMMARY

- Total uses are up \$3.6 million (Less than 1%)
- Total revenues are up \$22.1 million (approximately 4%)
- Budget supports increased investments in conservation and water resource management activities for drought protection
- Healthy reserves will be used to fund capital in upcoming years, likely eliminating the need to issue debt for the next three years



**SOUTHERN NEVADA WATER AUTHORITY
BOARD OF DIRECTORS
AGENDA ITEM**

May 31, 2018

Subject: Wholesale Delivery Charge	Director's Backup
Petitioner: Brian G. Thomas, Chief Financial Officer	
Recommendations: That the Board of Directors approve an increase of the Wholesale Delivery Charge to \$313 per acre-foot for treated water and \$238 per acre-foot for untreated water effective July 1, 2018, an additional increase of \$10 per acre-foot for treated water and \$6 per acre-foot for untreated water effective July 1, 2019, and annual adjustments of both rates thereafter in accordance with the Consumer Price Index.	

Fiscal Impact:

If the above recommendation is approved, the Authority anticipates generating approximately \$4.5 million in additional Wholesale Delivery Charge revenue in fiscal year 2018-19.

Background:

Authority purveyor members that receive treated and/or untreated water through the Southern Nevada Water System (System) pay a Wholesale Delivery Charge (Charge) to fund the operations and maintenance of the System. The annual budgets of purveyor members are adjusted to reflect increases in the Charge.

The Charge has not been adjusted since July 1, 2013, when it was increased to its current rate of \$303 per acre-foot for treated water and \$232 per acre-foot for untreated water. Since that time, operating costs have increased and revenue generated from the Charge is now insufficient to cover System costs.

In January 2018, Authority staff met with members of the SNWA Financial Workgroup (Workgroup), which consists of utility directors and finance staff from each of the Authority's purveyor members, to discuss the revenue shortfall. The Workgroup recommended increasing the Charge by \$10 for treated water and \$6 for untreated water annually for two years, with inflationary increases (limited to a range of 1.5 – 4.5 percent per year) thereafter. The Workgroup also recommended forgoing the annual inflation adjustment if, during the preparation of the budget for any succeeding fiscal year, the Charge sub-fund is projected to exceed \$20 million by June 30 of the then-current fiscal year.

Approval of this item will authorize an increase in the Charge from \$303 to \$313 per acre-foot for treated water and from \$232 to \$238 per acre-foot for untreated water, effective July 1, 2018, and additional increase of \$10 and \$6 per acre-foot, respectively, effective July 1, 2019. Approval will further authorize annual inflation adjustments to the Charge beginning July 1, 2020, at a rate equal to the change in the Consumer Price Index, All Items, All Urban Consumers (CPI-U), Pacific Cities, West Size Class A (limited to an increase between 1.5 – 4.5 percent); provided, however, that the Charge will not be adjusted for inflation if, at the time the Authority submits its tentative budget for any succeeding fiscal year, the Authority projects the Charge sub-fund balance will exceed \$20 million by June 30 of the then-current fiscal year.

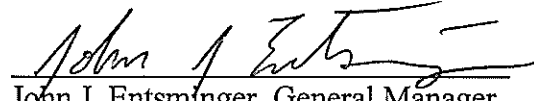
Wholesale Delivery Charge

May 31, 2018

Page Two

This action is authorized pursuant to Section 6(c) of the SNWA 1995 Amended Cooperative Agreement and Section 7.5 of the 2012 Amended Facilities and Operations Agreement. The office of the General Counsel has reviewed and approved this item.

Respectfully submitted:

A handwritten signature in black ink, appearing to read "John J. Entsminger", written over a horizontal line.

John J. Entsminger, General Manager
JJE:BGT:MC:kh

**SOUTHERN NEVADA WATER AUTHORITY
BOARD OF DIRECTORS
AGENDA ITEM**

May 31, 2018

Subject: Conduct Public Hearing	Director's Backup
Petitioner: John J. Entsminger, General Manager	
Recommendations: That the Board of Directors conduct a Public Hearing on the Tentative Budget for the Southern Nevada Water Authority and subsequently adopt a Final Budget for Fiscal Year 2018/19.	

Fiscal Impact:

The approval of a Final Budget will establish revenue and expenditure levels for the Southern Nevada Water Authority (Authority) for Fiscal Year 2018/19.

Background:

Pursuant to NRS 354.596, the Authority filed a Tentative Budget with the State of Nevada Department of Taxation on or before April 15, 2018. The Tentative Budget has been reviewed by the Department of Taxation for compliance with state statutes, regulations, and guidelines. A delineation of budget components was provided to the Southern Nevada Water Authority Board of Directors (Board) in General Manager's Information Report Number 40. A budget workshop was held on April 23, 2018, with Board members to review the Tentative Budget.

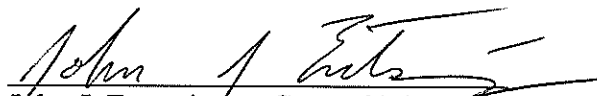
NRS 354.596(4) requires that the Board conduct a Public Hearing on the Tentative Budget not sooner than the third Monday in May, and no later than the last day in May. Notice of this hearing has been published in the *Las Vegas Review-Journal* in accordance with law.

Subsequent to conducting the Public Hearing, NRS 354.598 requires the Board to adopt a Final Budget for the Authority no later than June 1, 2018, and transmit it to the Department of Taxation.

The Board is being asked to conduct a Public Hearing on the Authority's Tentative Budget and adopt a Final Budget for Fiscal Year 2018/19.

This action is authorized pursuant to NRS 354.596, NRS 354.598, and Section 22 of the SNWA 1995 Amended Cooperative Agreement. The office of the General Counsel has reviewed and approved this agenda item.

Respectfully submitted:


John J. Entsminger, General Manager
JJE:BT:MC:nf
Attachment

AGENDA
ITEM #

3

Southern Nevada Water Authority

Operating & Capital Budget Fiscal Year Ending June 30, 2019



SOUTHERN NEVADA WATER AUTHORITY®

Board of Directors

**Marilyn Kirkpatrick, Chair, Clark County Commissioner
(representing Las Vegas Valley Water District)**

Bob Coffin, Vice Chair, City of Las Vegas Councilman

**James Gibson, Clark County Commissioner
(representing Clark County Water Reclamation District)**

Peggy Leavitt, City of Boulder City Councilwoman

John Lee, City of North Las Vegas Mayor

John Marz, City of Henderson Councilman

**Steve Sisolak, Clark County Commissioner
(representing Big Bend Water District)**

**John J. Entsminger
General Manager**

**Brian G. Thomas
Chief Financial Officer**

**Matt J. Chorpening
Assistant Chief Financial Officer**

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 2018-19 budget document.

CERTIFICATE OF ACHIEVEMENT

The Government Finance Officers Association of the United States and Canada (GFOA) presented an award of Distinguished Presentation to the **Southern Nevada Water Authority for its annual budget for the fiscal year beginning July 1, 2017.**

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 Authority 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

**Southern Nevada Water Authority
Nevada**

For the Fiscal Year Beginning

July 1, 2017

Christopher P. Morill

Executive Director

Southern Nevada Water Authority
Operating and Capital Budget
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Fiscal Year Ending June 30, 2019

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SOUTHERN NEVADA WATER AUTHORITY®

SECTION 1

GENERAL MANAGER'S INFORMATION REPORT

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SOUTHERN NEVADA WATER AUTHORITY®

FISCAL YEAR 2018-19
OPERATING AND CAPITAL BUDGET

SOUTHERN NEVADA WATER AUTHORITY

GENERAL MANAGER'S INFORMATION REPORT

DATE: April 17, 2018

NO. 40

SUBJECT: SOUTHERN NEVADA WATER AUTHORITY
PROPOSED OPERATING AND CAPITAL BUDGET FOR FISCAL YEAR 2018-19

The Tentative Operating and Capital Budget of the Southern Nevada Water Authority (SNWA) for fiscal year 2018-19 was submitted by April 15, 2018, to the State of Nevada Department of Taxation in accordance with NRS 354.596. Attached for your review is the General Manager's Information Report.

Executive Summary

The SNWA's top priority is to provide Southern Nevada with a high quality, reliable water supply. To that end, the organization continues to implement varying approaches to drought, conservation and the identification of technology to address present and future infrastructure and resource needs.

Community investment plays a vital role in combating drought and promoting conservation practices. Improvements in infrastructure and technology; collaboration on local, regional and federal levels; and continued community conservation efforts have enabled the SNWA to meet conservation goals and further secure a reliable water supply for Southern Nevada.

While these efforts have yielded considerable progress, Lake Mead water levels are projected to continue to decline and future shortages on the Colorado River are probable. Therefore, fiscally-responsible planning for additional resources and infrastructure continues to be a priority moving forward.

The fiscal year 2018-19 Budget Plan reflects the maintenance of SNWA's financial position, continued conservation efforts, and the development and protection of water resources for Southern Nevada.

Drought and Water Resources

Southern Nevada obtains 90 percent of its water supplies from the Colorado River. More than 18 years of persistent drought conditions, the worst in the basin's recorded history, have affected supply and forced stakeholders and the community to change the way water is utilized in Southern Nevada. The SNWA has worked extensively with partners throughout the Colorado River Basin to develop and implement programs to mitigate drought impacts on a regional level.

In early January 2018, Lake Mead's elevations hovered around 1,083 feet—a decline of 131 feet since the onset of the drought. There was slight improvement due to above average runoff and interstate collaborations during 2017. However, snowfall and runoff into the Colorado River Basin have stayed well below normal between 2000 and 2017, resulting in the lowest 18-year average inflow to the Colorado River system since 1906. Current projections indicate a 15 percent chance of a declared shortage in 2019, in which case the amount of Colorado River water available to Arizona and Nevada will be reduced.

Because of long-standing community conservation practices, Southern Nevada

Southern Nevada Water Authority
Operating and Capital Budget
General Manager's Information Report
Fiscal Year Ending June 30, 2019

finds itself in a position in which water demands would still be met, even under a shortage declaration. Moreover, investments made in the regional water system will help Southern Nevada reliably deliver water even during the most severe drought conditions.

Water Resource Plan

The Water Resource Plan provides a comprehensive overview of water resources and projected demands in Southern Nevada. The plan is reviewed and adjusted on an annual basis, and in 2017, the SNWA Board of Directors approved an update to Southern Nevada's Plan that extends water supply and demand planning scenarios through the year 2068.

The scenario-based planning approach examined a wide range of conditions that may be experienced over the 50-year planning horizon. The scenarios represent the demand for water in Southern Nevada and the available supply under variable conditions. The 2017 Water Resource Plan also emphasizes the importance of public involvement early in the planning process, and frequently reassessing the plan as drought conditions continue to change.

Other updates to this plan include:

- The impacts of Minute 323, which was approved in 2017.
- Updated the methodology for gallons per capita per day (GPCD) accounting. The SNWA changed its approach to report GPCD information for the 2017 Water Resource Plan and translated water use figures and goals into net GPCD (net of return flow credits). This approach, recommended by the Integrated Resource Planning Advisory Committee (IRPAC),

more accurately communicates the water resource implications associated with conservation progress and provides a more consistent comparison with other communities.

- Colorado River modeling performed by the Bureau of Reclamation in 2017 projects an approximately 15-50 percent chance of a shortage declaration on the Colorado River in years 2019 to 2022. The probability of a shortage declaration ranges between 60 to 70 percent in years 2023-2068. The short-term outlook improved slightly from the 2015 Water Resource Plan due to above-average inflows in 2017. However, the high likelihood of shortage remains the same in the longer-term planning horizon.

Minute 323

On August 17, 2017, the SNWA Board of Directors approved six agreements, among Colorado River water users in the United States and the country of Mexico, that will boost reservoir levels by adding billions of gallons of water to Lake Mead. The agreements will also support water conservation projects, expand wildlife habitat and environmental restoration. The agreements relate to Minute 323, which built upon the binational operating agreement under the 1944 water treaty between the United States and Mexico.

Under the terms of Minute 323, Mexico will be permitted to create a "water reserve" by deferring delivery of its portion of the Colorado River. The deferred water will remain in Lake Mead, and help maintain elevation levels and avoid shortage declarations. Mexico has also agreed to absorb a share of shortages should Lake Mead fall below specific elevation levels.

Southern Nevada Water Authority
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In the agreement, the SNWA Board of Directors authorized up to \$7.5 million in contributions for conservation projects in Mexico. These projects could potentially yield 35 billion gallons of water. In return, a portion of this water has been designated for Nevada's use. On September 21, 2017, Minute 323, the agreement between the U.S and Mexico, was officially executed and became effective.

Low Lake Level Pumping Station

Construction of the Low Lake Level Pumping Station (L3PS) at Lake Mead continues to meet milestones and progress towards its 2020 completion date.

Workers recently completed construction on a pair of discharge aqueducts that will feed water to the Alfred Merritt Smith and River Mountains water treatment facilities. Contractors also finished work on 34 deep well shafts, each 6 feet in diameter and plunging 500 feet into the ground, which will house pumping units that will draw water from the lake.

Underground, work is finished on the top half of the pumping stations forebay — a 12,500-square-foot underground cavern. Work on the forebay's bottom half is expected to be completed within the year.

Once complete, the L3PS will help Southern Nevada maintain reliable access to its primary water supplies even if drought conditions worsen.

Pilot System Conservation Program

The SNWA, the Metropolitan Water District of Southern California, Denver Water, and the Central Arizona Water Conservation District

signed an agreement with the Bureau of Reclamation in 2014, to jointly fund voluntary water conservation projects to benefit the Colorado River. Under the funding agreement, federal and non-federal partners have the authority to provide more than \$30 million in funding to support projects in both the Upper and Lower Colorado River Basins.

The SNWA continues to partner with the Bureau of Reclamation and water users in the Upper and Lower Colorado River Basins on the System Conservation Pilot program. By the end of 2017, the SNWA and its partners had supported 10 projects in the Lower Colorado River Basin and 45 projects in the Upper Basin, with additional projects anticipated to be completed in 2018. There continues to be broad interest in this voluntary program from water users in both basins and preliminary findings indicate it will continue to yield substantial water conservation achievements.

Groundwater Hearings

As recommended by IRPAC, the SNWA continues to maintain the Clark, Lincoln and White Pine Counties Groundwater Development Project as part of its water resource portfolio. While the project is unlikely to be needed in the short-term, it will help meet the community's future demands and provide a water supply separate from the Colorado River.

In September 2017, the Nevada State Engineer held a continuation of the public-hearing process to review water rights associated with the SNWA's Clark, Lincoln and White Pine Counties Groundwater Development Project. The hearings focused on monitoring, management and mitigation plans for protection of existing water rights and the environment, as well as verification

Southern Nevada Water Authority
Operating and Capital Budget
General Manager's Information Report
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that specified quantities of groundwater can be sustainably developed. A decision from the State Engineer is expected in 2018.

Conservation

The efforts of the SNWA and the community play a pivotal role in the conservation of water in Southern Nevada. The SNWA continues to tackle conservation from different angles by collaborating with the private and public sectors, maintaining existing infrastructure and looking for and investing in innovation and available technology.

Policy changes, incentive programs and outreach efforts to encourage community participation have cumulatively saved more than 386,000 acre feet of water (about 126 billion gallons) in the past 16 years. Southern Nevada has come together and embraced water conservation initiatives, which will continue to make a positive impact on the way water is utilized in the community.

Smart Irrigation Controllers. The fastest-growing conservation program in 2017 was an incentive for smart irrigation controllers. In 2017, there were nearly 924 participants in the program; a 14 percent increase from the prior year. Through this program, traditional set-time watering controllers are replaced or augmented with devices that adjust irrigation based upon weather conditions or soil moisture levels. These controllers can save significant volumes of water by reducing irrigation when it is not needed.

Technology and Business Development Efforts. The SNWA partnered with the Governor's Office of Economic Development (GOED) WaterStart Program and MGM Resorts International to review innovative

technologies from companies that may have the opportunity to relocate to Nevada. This partnership affords the SNWA access to emerging water efficiency technologies that can be piloted in Southern Nevada.

The SNWA also continued its partnership with the Metropolitan Water District of Southern California in support of its Innovative Conservation Program, a multi-agency initiative that evaluates potential of various water efficiency technologies and techniques.

WaterSmart Landscapes. The WaterSmart Landscapes program has been very successful and proven to yield great conservation benefits. The amount of square feet of turf that has been converted utilizing the program is sufficient to roll an 18-inch-wide strip of sod 96 percent of the circumference of the Earth. Since the program began in 1999, 118 billion gallons of water have been saved by converting 188 million square feet of turf to desert landscaping.

Sunday Watering. In 2017, the SNWA member agencies restricted watering on Sunday's during the summer. It is estimated turning off landscape watering on Sundays saves the community up to 900 million gallons of water each year.

Environmental Stewardship

Warm Springs Natural Area

The Warm Springs Natural Area (WSNA) opened to the community on December 9, 2017. It will be open from Labor Day to Memorial Day during the year for local residents and visitors from everywhere to enjoy, learn and explore at no cost.

Southern Nevada Water Authority
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WSNA was purchased by SNWA in 2007 with a \$72.9 million grant from the Southern Nevada Public Land Management Act (SNPLMA) to serve as a park, trail and natural area. Improvements for public access were funded by two additional SNPLMA grants. A condition of the purchase was that the site remain a natural area with low-impact public use.

The WSNA is one of the most significant environmental resources in Southern Nevada. The area contains a number of perennial springs that form the headwaters to the Muddy River. These flows play a critical role in the regional watershed. In addition, biological work, archeological and cultural assessments have been conducted, which have led to some interesting discoveries. These archeological resources are available for viewing at the site, as they have been restored to preserve the historic aspects of the property.

Community relationships have improved significantly, and the public facilities have been well received by the neighbors and town board. High school students in the Future Farmers of America Program at Moapa Valley High School help with plant propagation, picnic table construction and fence installation. Local Boy Scouts also have conducted over 50 Eagle Scout Projects at the WSNA.

The development of the site was divided into two phases. In 2011, the SNWA received \$275,000 in SNPLMA funds for Phase I of the public use improvements. The project was completed in 2013. Phase I improvements consisted of:

- Conceptual design of a trail system and interpretative elements
- Engineering design
- Native landscaping

- Construction of a trail
- Interpretative kiosks
- Stream viewing platform
- Rebuild historic entrance stone gate

In 2016, the SNWA received \$875,000 in SNPLMA funds for Phase II of the public use improvements. Construction was completed in August 2017. Phase II consisted of:

- A restroom
- Drinking fountain
- Paved parking area
- Spring viewing platform
- Construction of additional trail
- Construction of a shaded overlook
- Benches and tables
- An amphitheater
- Native landscaping
- Fencing

Las Vegas Wash

After nearly two decades of efforts dedicated to building and revegetation, Sunrise Mountain Weir, the final weir of the Comprehensive Adaptive Management Plan (CAMP) is under construction, and expected to be completed by 2019. This weir will aid in efforts to stabilize head-cutting that has formed within the Las Vegas Wash. Correcting this head-cut is of critical importance as it threatens downstream water quality, habitat restoration efforts, recreational amenities and nearby public facilities.

The completion of the project will facilitate the re-establishment of wetlands habitat, protect Southern Nevada's water supply from sedimentation, directly support the Clark County Wetlands Park recreational amenities, and satisfy the goals established in the Las Vegas Wash's CAMP.

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Financial Considerations/ Capital Funding

Key initiatives for fiscal year 2018-19 include the continuation of Major Construction and Capital Plan (MCCP) projects and water resource management efforts.

Financial Stability

In January 2016, the SNWA Board of Directors established a policy for maintaining adequate reserves of unrestricted cash and investments. This policy serves as an important tool in long-term financial planning, as credit rating agencies consider the availability of reserves in their evaluations of continued creditworthiness. The policy also aids in mitigating the risks of significant or unexpected fluctuations in funding and helps to ensure stable services, rates and fees.

Infrastructure Charge

Due to potential impacts on water delivery and availability if Lake Mead's elevation fell below 1,000 feet, IRPAC recommended the construction of a new low lake level pumping station. This project would be funded through fixed charges based on meter size and phased in over three years. The first two increases were implemented in 2016 and 2017, and the third and final increase occurred in January 2018.

Fiscal Year 2018-19 Objectives

- Treat and deliver high quality drinking water supplies to customers in Southern Nevada.
- Continue to work with basin partners to protect Lake Mead water levels.

- Monitor declining Lake Mead water levels for impacts to water quality.
- Maintain sufficient water resources to meet near and long-term projected water demands.
- Continue assessments of critical assets.
- Continue construction of the L3PS.
- Continue to seek grant funding to support activities in the areas of drought management, resource development, water quality, infrastructure and environmental management.

Financial Summary

The table on the following page contains a summary of sources and uses of funds for the SNWA's fiscal years 2016-17, 2017-18 and 2018-19.

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Budget Summary
(\$ Millions)

	Actual 2016-17	Budget 2017-18	Tentative Budget 2018-19	Budget-to-Budget Variance	
				\$	%
Sources					
Wholesale Delivery Charge	\$ 130.1	\$ 130.8	\$ 141.2	\$ 10.4	8%
Infrastructure Charge	132.5	149.1	158.6	9.5	6%
Commodity Charge	65.4	68.5	69.8	1.3	2%
Connection Charge	57.0	63.3	62.3	(1.0)	-2%
Reliability Surcharge	5.3	5.3	5.6	0.3	5%
Sales Tax	60.9	62.3	65.5	3.2	5%
Investment Income	4.9	3.8	5.9	2.0	53%
Groundwater Management Fees	0.9	0.9	0.9	(0.0)	-1%
LV Wash Program Fees	0.4	0.4	0.4	(0.0)	-1%
Grant Proceeds	1.4	4.7	0.4	(4.3)	-91%
Other Revenues	94.4	4.7	5.4	0.7	16%
Subtotal	\$ 553.1	\$ 493.9	\$ 516.0	\$ 22.1	4%
Debt Issuance Proceeds	-	-	-	-	
Total Sources	\$ 553.1	\$ 493.9	\$ 516.0	\$ 22.1	4%
Uses					
Water Resource Investments	\$ 3.5	\$ 12.1	\$ 19.0	\$ 6.9	57%
Energy	36.6	37.0	35.7	(1.3)	-3%
Payroll & Related	69.8	77.2	83.1	5.9	8%
Operating Expenses	41.4	54.5	69.3	14.8	27%
Capital Expenditures	166.4	213.7	188.2	(25.5)	-12%
Debt Service	265.0	264.0	266.6	2.7	1%
Total Uses	\$ 582.7	\$ 658.4	\$ 661.9	\$ 3.6	1%
Total Net Surplus/(Deficit)	\$ (29.6)	\$ (164.5)	\$ (146.0)		

Sources

The 2018-19 Budget Plan's total sources of funds are projected to be \$516.0 million, or a 4 percent increase compared to the 2017-18 Adopted Budget Plan. The increase is primarily attributable to growth in the Wholesale Delivery Charge and the Infrastructure Charge.

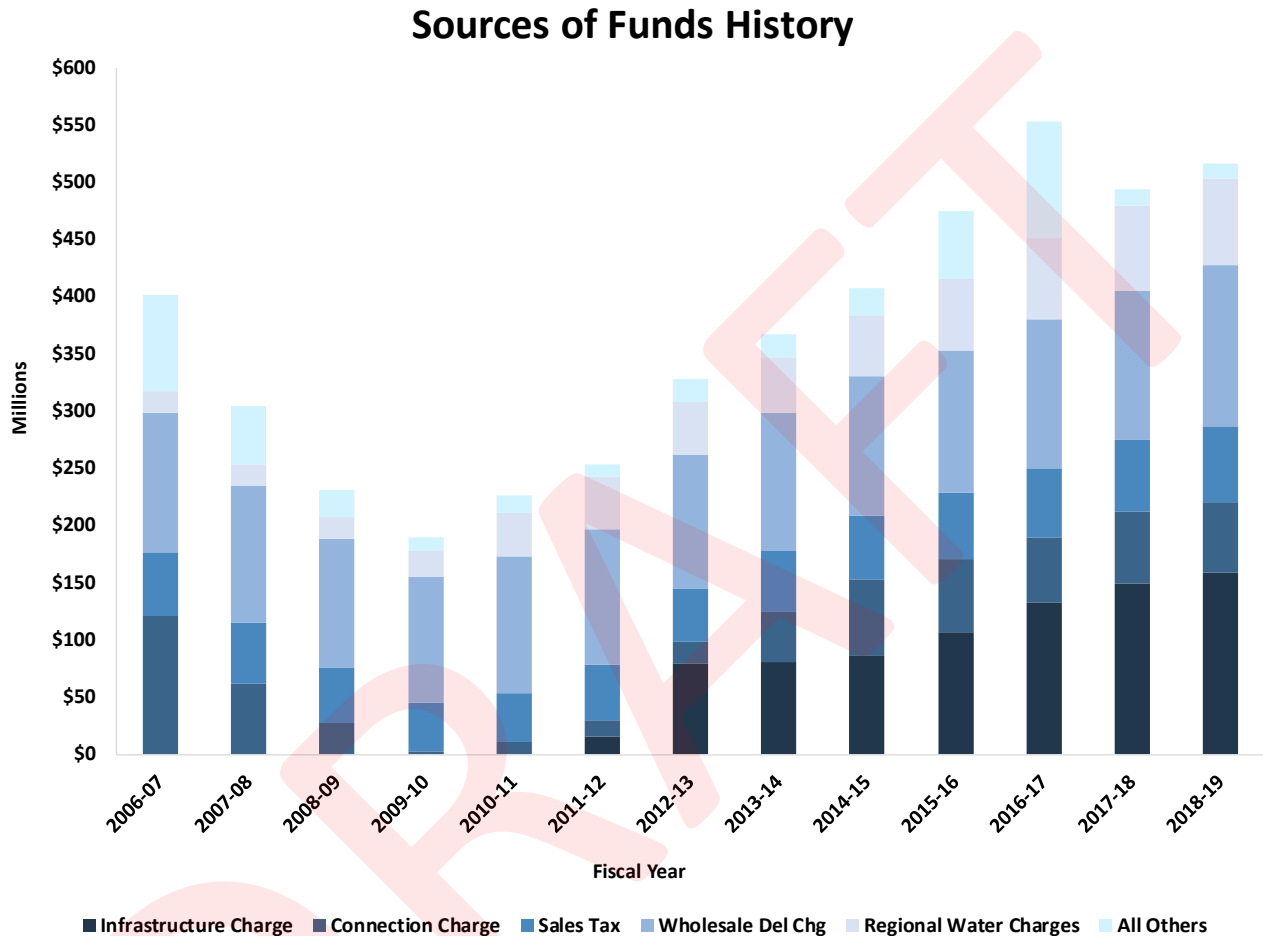
The Wholesale Delivery Charge and Infrastructure Charge are budgeted to increase \$10.4 million and \$9.5 million

respectively, as compared to the 2017-18 Adopted Budget Plan. The increase in the Wholesale Delivery Charge is due to a rise in the quantity of water sold and the projected Wholesale Delivery Charge rate increase of \$10 per acre foot. The increase in the Infrastructure Charge is a result of 2018-19 being the first fiscal year of the completely phased-in rate, with the final increase having occurred in January 2018. With the infrastructure charge becoming the largest revenue component, the SNWA's sources of

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funds have increased stability over past years
with reduced dependence on more volatile

growth related Connection Charge revenue,
as illustrated in the chart below.



Uses

The 2018-19 Budget Plan's total uses of funds are projected to be \$661.9 million, a \$3.6 million increase compared to the 2017-18 Adopted Budget Plan.

Water Resource Investments are budgeted to increase \$6.9 million, primarily due to water banking costs with Arizona. Energy costs are projected to decrease by 3 percent. Payroll costs are anticipated to increase by \$5.9 million, or 8 percent, compared to the 2017-

18 Adopted Budget Plan. Demands to secure and protect water resources, ensure efficient use of existing resources, and provide a safe and reliable water supply under current operational conditions have resulted in increased staffing requirements for the SNWA.

Non-payroll operating expenses are projected to increase \$14.8 million, or 27 percent. The rise in budgeted costs is due to increased operations and maintenance costs, including increased conservation efforts and an

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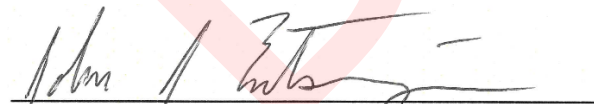
organizational shift to more “cloud-based” software solutions. Capital expenditures are budgeted to decrease \$25.5 million. The L3PS, in its fourth year of construction, remains the largest component of capital expenditures. Debt service is projected to increase \$2.7 million. Debt service costs are projected to remain relatively stable for the next ten years, then decline thereafter. In addition, there may be savings from future debt refundings, depending on market conditions.

Summary

The SNWA's fiscal year 2018-19 Budget Plan presents a stable outlook, with total uses of funds increasing by 1% and sources of funds expected to rise by 4%. Capital expenditures will be largely funded by existing bond proceeds.

Approval

The public hearing on the SNWA's 2018-19 Tentative Budget, and adoption of the Final Budget, is scheduled for 11:00 a.m., Thursday, May 31, 2018. The public hearing will be held in the Colorado River Conference Rooms, 100 City Parkway, Seventh Floor, Las Vegas, Nevada.



John J. Entsminger, General Manager

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SOUTHERN NEVADA WATER AUTHORITY®

SECTION 2

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SOUTHERN NEVADA WATER AUTHORITY®

FISCAL YEAR 2018-19
OPERATING AND CAPITAL BUDGET

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Introduction

Purposes and Powers.

The Southern Nevada Water Authority (SNWA) is a political subdivision of the State of Nevada created on July 25, 1991, pursuant to Nevada Revised Statutes Chapter 277.080 to 277.180, inclusive, by a cooperative agreement among the Big Bend Water District, the City of Boulder City, the City of Henderson, the City of Las Vegas, the City of North Las Vegas, the Clark County Water Reclamation District, and the Las Vegas Valley Water District (LVVWD). The Cooperative Agreement has been amended on November 17, 1994; January 1, 1996; February 18, 2010; and June 21, 2012.

The SNWA was created to secure additional supplies of water for Southern Nevada and to effectively manage existing supplies of water through the cooperative action of its member agencies. Because the SNWA is governed equally by a seven-member Board of Directors (SNWA Board) composed of one director from each member agency, and the SNWA operations are autonomous from its member agencies, its financial statements are not included in the financial statements of another entity.

The SNWA Board appoints a General Manager (GM). In January 1993, the LVVWD's GM was also appointed GM of the SNWA, and the LVVWD was named Operating Agent for the SNWA. The GM has two Deputy General Managers (DGM's), a Chief Financial Officer (CFO) and General Counsel overseeing the operations of the LVVWD and the SNWA.

Since October 1993, the LVVWD has been paying many expenses on behalf of the SNWA. The SNWA reimburses the LVVWD for those expenses, including the cost of the LVVWD employees allocated to the SNWA. The SNWA has no employees of its own.

The Board of the SNWA has the power to periodically assess the member agencies directly for operating and capital budgets and for the satisfaction of any liabilities imposed against the SNWA. Each member made an initial contribution to the SNWA for operating and administrative expenses in the amount of \$15,000. Assessments for additional funds needed by the SNWA, in accordance with operating and capital budgets, have been apportioned to member agencies on the basis of water deliveries to those agencies. Funding received by the SNWA from its member agencies for operations is recorded as operating revenue, while funding received for capital purchases is recorded as capital contributions. Member agencies who are not water purveyors, i.e., the City of Las Vegas and the Clark County Water Reclamation District, each contributes towards the SNWA operations for the fiscal year 2018-19.

Transfer Act.

Pursuant to the Transfer Act, Assembly Bill No. 542, approved June 28, 1995 by the Nevada Legislature, the assets of the Southern Nevada Water System (SNWS), as well as responsibility for operations of the system, were transferred from the Colorado River Commission (CRC) to the SNWA effective January 1, 1996. Along with the assets, the CRC transferred all books and records in its possession relating to the project and its facilities. In addition to the assets, all

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liabilities of the CRC related to the SNWS were to be transferred to the SNWA.

The transfer was a non-cash transaction. In order to affect the transfer, CRC prepared from its SNWS accounting records an unaudited trial balance as of January 1, 1996, which was given to the SNWA. To record the transfer, the SNWA posted the entire CRC trial balance to its General Ledger as of January 1, 1996. The accuracy of that trial balance was verified by the June 30, 1996, audits of both the SNWA and CRC. The CRC detail property listing was posted to the SNWA Property Ledger.

Intergovernmental Relationships.

In addition to its members, the SNWA also works with other agencies of state and federal government. The following outlines some of those intergovernmental relationships.

Major Water Purveyors. The SNWA diverts Colorado River water from Lake Mead, treats it to federal Clean Drinking Water Act standards, and delivers treated water to the facilities of water purveyors in the Las Vegas Valley and Boulder City. The major water purveyors and their percentage of total SNWA water deliveries are as follows: Boulder City (2.5 percent), Henderson (15.8 percent), North Las Vegas (12.0 percent), the LVVWD (69.5 percent) and others (0.2 percent).

Wastewater Treatment Agencies. Wastewater treatment agencies in the SNWA service area are the Cities of Las Vegas, Henderson, and Boulder City, and the Clark County Water Reclamation District.

Colorado River Commission. The CRC is an agency of the State of Nevada created in 1935

to acquire and hold in trust Nevada's right to water and power resources from Colorado River water apportioned among the seven Colorado River Basin states and Mexico. The seven member CRC Board is made up of four members appointed by the Governor (including the Chairperson) and three SNWA Board members.

U.S. Bureau of Reclamation (Bureau). The Bureau is a division of the U.S. Department of the Interior. It is charged with the responsibility of managing the Colorado River for the benefit of the users with rights to Colorado River water. Any changes to laws governing the Colorado River benefiting Nevada will require the cooperation and approval of the federal government via the Bureau and all seven of the Colorado River Basin states.

Southern Nevada Water System. The SNWS is the regional water system diverting raw Colorado River water from Lake Mead, treats it to federal Clean Drinking Water Act standards, pumps it through the River Mountains, and delivers potable water to the facilities of the water purveyors in the Las Vegas Valley and Boulder City. The SNWS was built in two stages (1971-first stage, and 1983-second stage) by the federal government acting through the Bureau, and the State of Nevada acting through its CRC. The Bureau built the transmission facilities, which are referred to as the Robert B. Griffith Water Project. The CRC built the treatment facility, which is known as the Alfred Merritt Smith Water Treatment Facility. The SNWS was owned by CRC and operated under contract by the LVVWD. On January 1, 1996 the assets and liabilities of the SNWS as well as responsibility for operations were transferred

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from CRC to the SNWA. The LVVWD continues to operate the SNWS under contract with the SNWA. The projects in the SNWA's Major Construction and Capital Plan (MCCP) are expansions or improvements of the SNWS.

Robert B. Griffith Water Project Title Transfer.

The SNWS was built in two stages by the State of Nevada acting through the CRC and the Bureau. CRC funded its portion by issuing State of Nevada general obligation bonds. The Bureau funded its portion from federal budget appropriations. After completion of each phase, the Bureau determined total reimbursable costs for constructing its portion of the SNWS and the CRC entered into a water delivery and repayment contract with the Bureau to repay those costs plus interest. The terms of the repayment contract required 50 annual payments at 3.25 percent interest. According to the terms of the repayment contract, the federal government would retain title to the facilities it built, even after the repayment contract was fully paid.

The role of the federal government in financing improvements of the SNWS has been declining. When the first phase of the SNWS was completed in 1971 at a total cost of \$62 million, 85 percent of that cost was provided by the federal government. After completion of the second phase in 1983, the ratio provided by the federal government had dropped to 71 percent. In 1995 the SNWA began work on its \$2.1 billion Capital Improvement Plan to expand and improve the

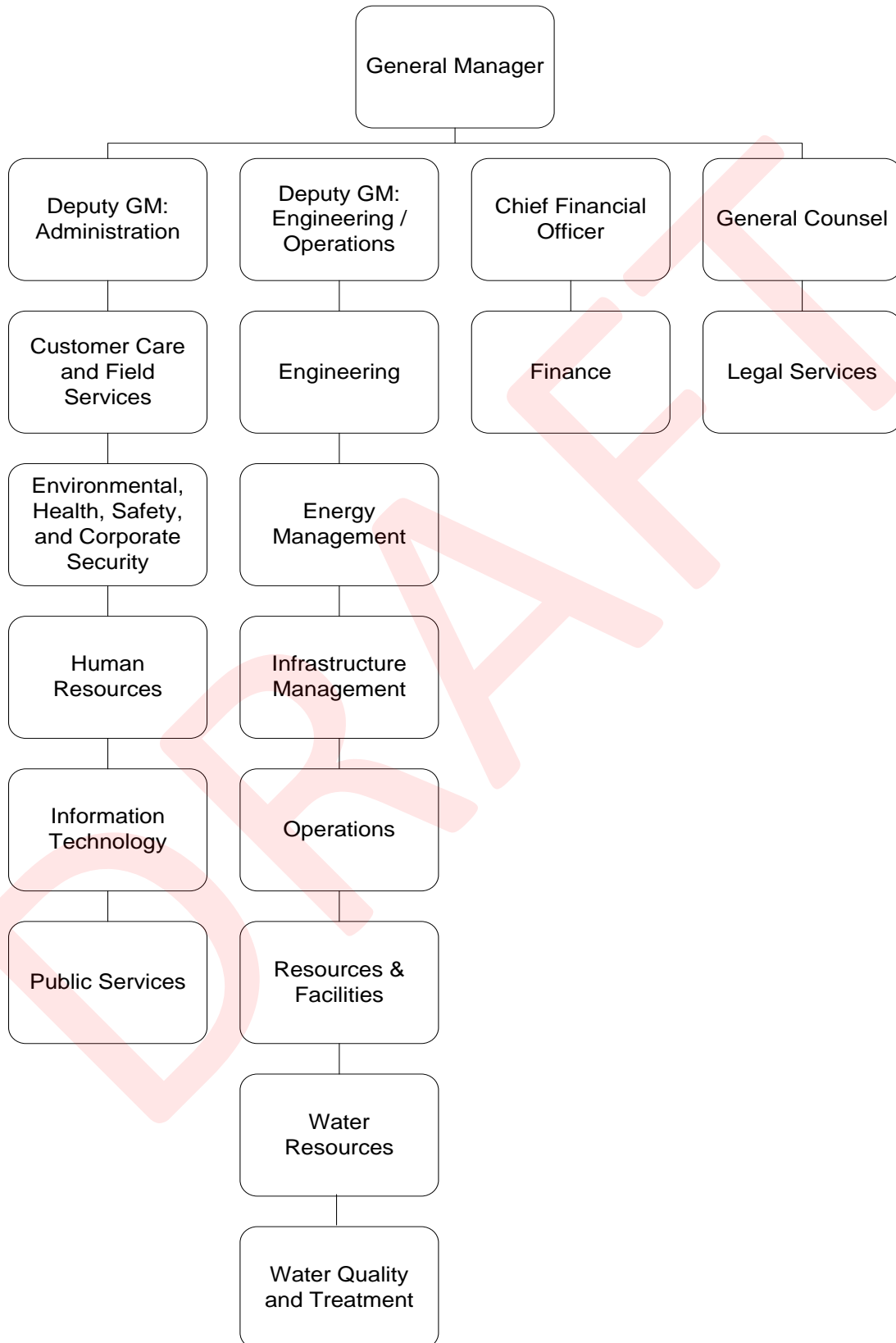
SNWS. Because the Bureau was, and always would be, the owner of the facilities built with federal funding, the SNWA would always be required to obtain Bureau approval to maintain, modify, or improve the federal facilities which are an integral, but increasingly smaller, part of the total system.

In July 2000, the U.S. Congress passed, and President Clinton signed, into law the Griffith Project Prepayment and Conveyance Act (Public Law 106-249), which directed the Secretary of the Interior to transfer title to the Robert E. Griffith Project to the SNWA, subject to prepayment of the Project's federal repayment obligation. According to guidelines published by the Office of Management and Budget, the price of the title transfer was set at \$121.2 million, plus accrued interest, less any principal payments made subsequent to September 30, 1999.

Organizational Structure.

The LVVWD operates the SNWA under contract; however, the two entities are legally separate. The LVVWD pays substantially all expenses on behalf of the SNWA, including the cost of employees allocated to the SNWA and is reimbursed monthly for these costs. SNWA has no employees of its own. The organizational chart shows the SNWA organization and how the different departments are arranged. For a further breakdown per department, please see Section 5, Department Budgets.

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Financial Structure and Controls.

Proprietary Fund Type - Enterprise Fund. The SNWA's operations are accounted for as a single Enterprise Fund. A fund is a fiscal and accounting entity with a set of self-balancing accounts comprising its assets, liabilities, fund equity, revenues, and expenses. Enterprise Fund operations are presented using the full accrual basis of accounting wherein revenues are recognized in the accounting period in which they are earned and expenses are recognized in the period incurred, regardless of when payments for such revenues or expenditures are actually made. In this regard, the SNWA operations are accounted for in a manner similar to a private business enterprise, where the intent of the governing body is that the costs of providing goods and services to the general public on a continuing basis are financed or recovered primarily through user charges, and its financial measurement focus is on determination of net income, financial position, and cash flows.

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 the balance of bond proceeds 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 are also considered restricted.

Internal Controls. In developing the SNWA's accounting system, consideration focused on the adequacy of internal accounting controls. Internal accounting 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 judgment by management. All internal control evaluations occur within the above framework. The SNWA's internal accounting controls safeguard assets and provide reasonable assurance of proper recording of financial transactions. The SNWA will continue to identify ways in which it can strengthen its control procedures.

Debt Administration. It is the general intent of the SNWA that rates and charges are adequate to provide for all costs, and reliance on property taxes is to be avoided. Ad valorem taxes have never been needed to support the SNWA's operations or debt service. For a full discussion of debt objectives and guidelines see section 7, Debt Management Policy.

The State of Nevada operates a Municipal Bond Bank Program, which is designed to assist municipalities in undertaking local projects for the protection and preservation of the property and natural resources of the state. In May 1997, the SNWA was authorized to sell bonds directly to the state bond bank. Additionally the SNWA issues bonds through the Clark County bond bank and through the LVVWD. As a result of legislation approved by the 1999 Legislature, Clark County established a bond bank to assist municipalities within Clark County. The LVVWD issues short-term

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or variable rate debt for the SNWA in addition to standard debt issues.

The State of Nevada general obligation debt is rated "Aa2" by Moody's and "AA" by Standard & Poor's. Clark County's general obligation debt is rated "Aa1" by Moody's and "AA+" by Standard and Poor's. The LVVWD's general obligation debt is rated "Aa1" by Moody's and "AA+" by Standard & Poor's. It is expected that the SNWA will still utilize the state and county bond banks and the LVVWD to issue debt. The SNWA obtained the credit rating primarily at the request of parties who wished to enter into long term purchased power agreements with the SNWA and needed an evaluation of the SNWA's credit worthiness.

As of July 1, 2018, the SNWA has \$3.36 billion in outstanding debt, excluding unamortized premiums and discounts. All debt is backed by a pledge of the SNWA's revenues. All applicable bond covenants such as ratios of net income to debt service, sinking funds, and insurance coverage have been met or exceeded.

Cash Management. Funds not immediately required for paying operating or capital expenditures are invested in U.S. Government and agency securities and other money market instruments. Nothing in the Cooperative Agreement creating the SNWA or the Facilities and Operations Agreement governing the SNWA's relationship with its purveyor members dictates permitted investments. Also, there is no applicable Nevada law. However, the SNWA chooses to comply with Nevada Revised Statutes (NRS) 355.170, which governs permitted investments for counties, cities, and school

districts in Nevada. NRS 355.170 limits investments to obligations of the federal government and its agencies, commercial bank certificates of deposit, obligations of state and local governments rated A or above, bankers' acceptances, repurchase agreements, and money market mutual funds. All investments are held by a commercial bank's trust department in the name of the SNWA and are insured or collateralized with securities held by a third party in the name of the SNWA.

Risk Management. The SNWA employs a multifaceted approach to risk management, which includes the transfer, elimination, avoidance, reduction and/or assumption of risk of loss. The SNWA 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 SNWA self-insures the first \$1 million for its automobile and general liability exposure and purchases \$30 million of excess liability insurance.

In contracts, the SNWA obtains indemnification and hold-harmless agreements, and requires that contractors name the SNWA as an additional insured under the indemnitor's insurance coverage,

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usually \$1 million to \$10 million for commercial general and auto liability insurance. The SNWA provides builders risk insurance for all construction projects with a blanket limit of \$100 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.

Capital Project Structure and Controls.

Identification of Capital Project Need. Capital projects for the SNWA are proposed in response to identified needs for improvements to the facilities providing for delivery of community water supplies to the members of the SNWA. These improvements may be either 1) new facilities to expand or enhance capabilities or 2) repair, upgrade or replace existing facilities no longer functioning as required.

Identification of proposed new facilities to meet expanding water delivery requirements is accomplished through a process involving continuing assessment of current and projected future community water demands. The SNWA works with its purveyor members to establish both short-range and long-range projections of future water demands. These water demands are compared to the capacities of the existing SNWA water facilities. Where facility capacities are insufficient to meet projected demands, the SNWA undertakes efforts to plan potential new facilities to address the projected shortfall. New facilities may also be proposed to enhance the reliability of the water delivery facilities, or to enhance the quality of the water provided to the community.

Identification of existing facilities requiring repair, upgrade or replacement comes about through continuous monitoring and assessment of facility performance. To the extent possible, major repair, upgrade or replacement projects are identified in time to allow for planning and scheduling of the projects to minimize costs and interruptions to operations of other facilities.

The SNWA meets periodically with its purveyor members to discuss water demand projections, compare those projections to existing system capacities, review operational issues, define an annual operating plan, discuss progress on approved capital projects under design and construction, and consider proposals for new capital projects. Proposals for new capital projects are presented to the Southern Nevada Water System Work Group (Work Group), a formal advisory committee composed of representatives of the SNWA and the SNWA Purveyor Members. Upon endorsement by the Work Group, new projects are incorporated into amendments to the SNWA's capital plans and are presented to the SNWA Board for approval. If the amended capital plan requires an increase in the total cost of the plan, then the amended capital plan must also be approved by the governing body of each Purveyor Member.

Execution of Capital Plan. After approval of the capital plan by the SNWA Board, the Engineering department assembles a staging plan for each project and develops specifications to be used as criteria during the competitive bidding process. Major construction portions are then let to an open competitive bidding process. All bids are reviewed and the lowest qualifying bid is

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presented to the Board for their approval. At the approval date, the Finance department (Finance) and the Engineering department encumber the total amount of the contract. Change orders are submitted to the SNWA Board as needed with full explanations as to why the change is necessary.

The Engineering department issues capital plans annually. The most recent capital plans can be viewed in Section 6 of this 2018-19 Budget Plan document. The capital plan reflects all capital projects, their projected start and end dates, their projected costs, the gross amount of expended or encumbered funds per project, projected future cash requirements, and the budget variance of each project. Finance also tracks expenditures and encumbrances for capital projects and plans future debt service issues on these calculations.

Upon completion of a project, the Engineering department presents a summary of the project to the SNWA Board for their review and approval. The project is then moved from construction work in progress to property, plant and equipment by Finance.

Budget Controls and Process

Basis of Accounting.

The SNWA's audited Comprehensive Annual Financial Report (CAFR) is presented on the full accrual basis of accounting wherein revenues are recognized in the accounting period in which they are earned, and expenses are recognized in the period incurred, regardless of when payments are actually

made. However, the budget is presented on a modified cash basis. In addition, the budget is broken into sub funds of the single proprietary fund, which shows beginning balance, sources of funds, uses of funds, and ending balance. The SNWA is an enterprise fund; the sub funds are an internal cost control aiding management in insuring revenues and expenses for major projects are properly matched. The SNWA maintains six separate sub funds. Three track the financial activity of SNWA's capital programs while the other three track day-to-day operations.



Sub fund balances are reconciled to the audited CAFR. For budget preparation and presentation, the Las Vegas Wash Capital and Las Vegas Wash Operating sub funds are combined into one sub fund for simplification purposes.

Budgetary Controls.

By State statutes, the SNWA's budget is approved annually, following a public hearing by the SNWA Board, and a copy is submitted to the State Department of Taxation. Budgetary controls are established at the levels of total estimated operating and non-

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

The SNWA is encouraged, but is not required by law, to adopt a balanced budget. A balanced budget is defined as a budget where sources of funds are equal to, or exceed, uses of funds. Throughout the budget process, the SNWA examines projected financial needs and determines whether or not rates, fees and charges should be adjusted to make funds available for those needs.

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 Finance 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 (IT). Finance 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 staffing is controlled by the Human Resources department (HR).

Budget Process.

The SNWA's budget process starts in December of each year, and proceeds with a series of meetings with the department directors. Financial analysis is done to project the revenues under current rate structures. Wholesale Delivery Charge revenue projections are based on the estimated water the SNWA is planning to deliver in the coming year. The budget reflects the strategies and goals adopted by the SNWA.

Budget staff disseminates current and historical information to managers to assist them in preparation of future budgets within budgeting guidelines. The budget process consists of three major phases. The first phase includes preparing new requests for capital 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 of the departments' budgets have been reviewed and approved by Executive Management, the budget is consolidated 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 non-compliance with the statutory laws of the State of Nevada.

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On the fifth Thursday in May, the SNWA's Board conducts a public hearing to allow the public an opportunity to discuss the proposed budget. During the public hearing, the GM requests final approval from the Board. The approved final budget document is filed with the State of Nevada. Once approved and filed, departments are provided copies of their budgets. 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 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 SNWA Board must adopt a resolution providing for an augmentation at a regular meeting of the SNWA 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 Department of Taxation.

FISCAL YEAR 2018-19 BUDGET CALENDAR

All Departments	Financial Services	Executive Management	Human Resources
Dec	Tue Dec 12 Budget instructions and calendar sent to departments		Dec December organization charts distributed to departments. Adjustments to organization charts due to Human Resources by Wednesday, January 17, 2018
	Wed Dec 13 Operating expense files sent and departments assistance begins		Thu Dec 21 List of existing interns and summer hire positions distributed to departments. Updates, corrections and new requests due to Human Resources by Wednesday, January 17, 2018
	Wed Dec 13 Coordination of budget process and schedule begins		
Jan	Wed Jan 17 Adjustments to organization charts submitted to Human Resources		Thu Jan 18 List of existing interns and summer hire position renewals sent to Financial Services
	Wed Jan 17 Final requests for interns and summer hire positions submitted to Human Resources		
	Thu Jan 25 Final 2018-19 capital budget requests and operating expense budgets submitted to Financial Services		

FISCAL YEAR 2018-19 BUDGET CALENDAR

	All Departments	Financial Services	Executive Management	Human Resources
Feb	Mon Feb 5 Budget narrative instructions received	Mon Feb 5 Budget narrative instructions sent to departments		
		Mon Feb 26 Summaries and detail of operating expense & capital expenditure budgets sent to departments		
		Mon Feb 26 Assisting departments in preparation for the Senior Management Team (SMT) budget meeting presentations begins		
Mar		Tue Mar 6 Budget overview briefing with Executive Management (E-team)	Tue Mar 6 Budget overview briefing with Executive Management (E-team)	
	Tue Mar 13 Department proposed budget meetings with SMT	Tue Mar 13 Department proposed budget meetings with SMT	Tue Mar 13 Department proposed budget meetings with SMT	
	Mon Mar 19 Budget narratives submitted to Financial Services		Tue Mar 13 – Mon Mar 19 Final budget decisions made by Executive Management	
Apr		Thu Apr 5 Proposed draft budgets completed for Budget Workshops with Boards of Directors	Thu Apr 19 Board of Directors Budget Workshops for SNWA	
		Thu Apr 12 Preliminary Budgets filed with the Nevada State Department of Taxation	Mon Apr 23 Board of Directors Budget Workshops for LVVWD (including BBWD & Coyote Springs)	

FISCAL YEAR 2018-19 BUDGET CALENDAR



All Departments	Financial Services	Executive Management	Human Resources
May	<p>Thu May 3 SNWA Public hearing notice published in LVRJ</p> <p>Tue May 8 LVVWD, BBWD, and Coyote Springs Public hearing notice published in LVRJ</p>	<p>Thu May 17 SNWA Board of Directors public hearing conducted on the proposed budget for possible adoption</p> <p>Mon May 21 LVVWD Board of Directors public hearings conducted on proposed budgets of LVVWD, Big Bend, and Coyote Springs for possible adoption</p>	
	<p>Thu May 24 Adopted budgets sent to the Nevada Department of Taxation</p>		
	<p>Thu Jun 21 LVVWD, SNWA, BBWD & Coyote Springs annual summary fiscal reports published in LVRJ</p>		
	<p>Thu Jul 26 Proof of publication of fiscal reports submitted to the Nevada State Department of Taxation</p>		
Jun			
Jul			
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Southern Nevada Water Authority
Operating and Capital Budget
Introduction and Strategic Plan
Fiscal Year Ending June 30, 2019

Southern Nevada Water Authority Strategic Plan

Strategic Plan Background.

The SNWA's Strategic Plan represents the latest iteration in the SNWA's long-standing commitment to self-assessment, continuous improvement, and comprehensive planning. The Strategic Plan provides future direction for the SNWA, 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 SNWA, senior management and employees of the SNWA, with policy guidance from the SNWA Board, completed a comprehensive Strategic Plan in 1993. The SNWA's Strategic Plan identified forces influencing decision-making and formulated goals and strategies to guide the SNWA in responding to the challenges, and evolve into a dynamic, responsive and effective organization. In 1997, the SNWA 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 SNWA's Strategic Plan, and a revised plan with new goals and strategies was presented to and adopted by the SNWA 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 SNWA and the member agencies.

In fall 2012, the Senior Management Team began meeting to update the strategic plan. This strategic planning process allows the SNWA and the member agencies 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 2018-19 Budget Plan Preparation.

The SNWA's Strategic Plan serves as a guide in the development of the SNWA'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 2017-18 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 SNWA has a long-standing commitment to self-assessment, continuous improvement, customer service and comprehensive planning, and has undergone several strategic planning initiatives over the past two 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 challenges of 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 recent

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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, 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 and mission 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.

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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 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.

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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 and 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.

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.

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SOUTHERN NEVADA WATER AUTHORITY®

SECTION 3

OPERATING AND CAPITAL BUDGET PLAN

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SOUTHERN NEVADA WATER AUTHORITY®

FISCAL YEAR 2018-19
OPERATING AND CAPITAL BUDGET

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The fiscal year 2018-19 Budget Plan reflects the continued commitment of the Southern Nevada Water Authority (SNWA) to provide water resources and services to meet the demands of Southern Nevada. The SNWA utilizes its Strategic Plan as a guide in shaping its annual Budget Plan. The fiscal year 2018-19 Budget Plan's total sources of funds are projected to be \$516.0 million, or a 4

percent increase compared to the fiscal year 2017-18 Adopted Budget Plan. The fiscal year 2018-19 Budget Plan's total uses of funds are projected to be \$661.9 million, or a 1 percent increase compared to the fiscal year 2017-18 Adopted Budget Plan. The table below shows the Sources and Uses Summary for the fiscal years 2016-17, 2017-18, and 2018-19.



Budget Summary

	Actual 2016-17	Budget 2017-18	Budget 2018-19	Budget-to-Budget Variance	
				\$	%
Sources					
Wholesale Delivery Charge	\$ 130,115,594	\$ 130,773,096	\$ 141,151,263	\$ 10,378,167	8%
Infrastructure Charge	132,471,445	149,098,164	158,564,232	9,466,068	6%
Commodity Charge	65,382,163	68,539,517	69,814,797	1,275,280	2%
Connection Charge	57,024,817	63,284,557	62,298,684	(985,872)	-2%
Reliability Surcharge	5,268,565	5,312,719	5,569,153	256,434	5%
Sales Tax	60,856,934	62,294,313	65,506,404	3,212,091	5%
Investment Income	4,917,264	3,849,077	5,880,785	2,031,708	53%
Groundwater Management Fees	886,929	906,481	896,494	(9,987)	-1%
LV Wash Program Fees	356,365	429,845	426,040	(3,806)	-1%
Grant Proceeds	1,430,863	4,685,046	420,165	(4,264,882)	-91%
Other Revenues	94,416,821	4,690,094	5,436,366	746,272	16%
Subtotal	\$ 553,127,761	\$ 493,862,910	\$ 515,964,384	\$ 22,101,474	4%
Debt Issuance Proceeds	-	-	-	-	
Total Sources	\$ 553,127,761	\$ 493,862,910	\$ 515,964,384	\$ 22,101,474	4%
Uses					
Water Resource Investments	\$ 3,491,404	\$ 12,137,045	\$ 19,016,798	\$ 6,879,753	57%
Energy	36,631,385	36,987,491	35,727,002	(1,260,489)	-3%
Payroll & Related	69,759,148	77,173,738	83,096,589	5,922,851	8%
Operating Expenses	41,443,135	54,461,097	69,263,847	14,802,750	27%
Capital Expenditures	166,442,141	213,684,051	188,228,615	(25,455,437)	-12%
Debt Service	264,956,748	263,950,998	266,611,625	2,660,627	1%
Total Uses	\$ 582,723,961	\$ 658,394,419	\$ 661,944,475	\$ 3,550,056	1%
Total Net Surplus/(Deficit)	\$ (29,596,200)	\$ (164,531,509)	\$ (145,980,091)		

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Sources

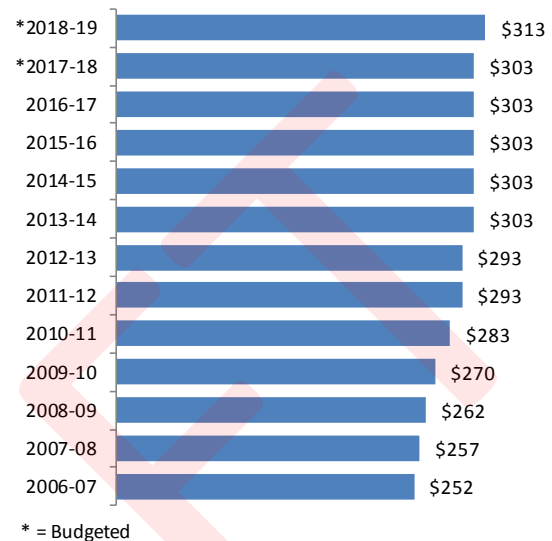
The fiscal year 2018-19 Budget Plan's total sources of funds are projected to be \$516.0 million, which is a 4 percent increase compared to the 2017-18 Adopted Budget Plan. The increase is primarily attributable to increases in the wholesale delivery charge, infrastructure charge, and sales tax.

Wholesale Delivery Charge.

The wholesale delivery charge is the revenue generated from Colorado River water delivered by the SNWA to its purveyor members. Those purveyor members then sell the purchased water to end-users. The SNWA has no retail customers. For fiscal year 2018-19, the wholesale delivery charge will rise by \$10 per acre-foot for treated water. This increases the charge from \$303 to \$313 per acre-foot.

Periodic rate increases have kept the wholesale delivery charge revenue relatively stable during periods of flat-to-declining usage. The increase of \$10.4 million (8 percent) in fiscal year 2018-19 is the result of the rate increase, as well as growth in water sales to purveyor members. As the following chart illustrates, the SNWA makes a concerted effort to keep the wholesale delivery per acre-foot charge economical for its purveyor members.

Wholesale Delivery Charge Rate (\$ per Acre Foot)



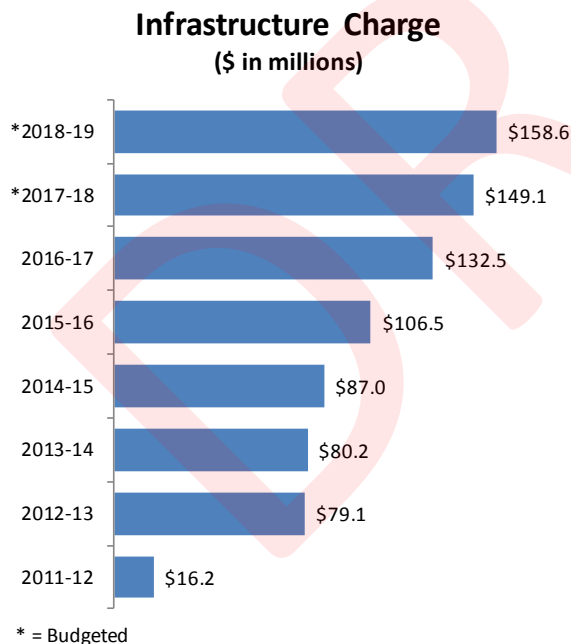
Infrastructure Charge.

In October 2011, the Board authorized an extensive rate study and a public outreach process to study various alternative rate structures to service the SNWA's outstanding debt. In February 2012, the Board approved an infrastructure charge. This charge is applied by the SNWA purveyor members, typically to retail bills, and is a fixed charge assessed based on meter size and customer class. Consumption is not considered in the application of the charge. Revenue is remitted to the SNWA, from its purveyor members, on a monthly basis. At the same time in 2012, the SNWA Board of Directors (Board) appointed a 21-member Integrated Resource Planning Advisory Committee (IRPAC). The IRPAC reviewed financial projections of the SNWA and recommend strategies concerning the financial commitments. IRPAC's Phase 1 recommended, with subsequent Board approval, a four-year step-in increase of the infrastructure charge beginning January 1,

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2014, and increased annually through January 1, 2017.

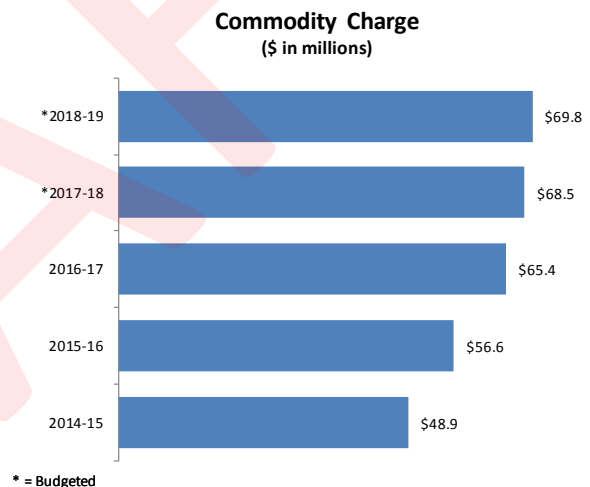
In addition to IRPAC's Phase 1 recommended increases to the infrastructure charge, IRPAC's Phase 2 recommended, with subsequent Board approval in December 2014, to increase the fixed monthly charges. This charge was called the Drought Protection Charge and was added to the infrastructure charge. IRPAC Phase 2 had a three-year step-in increase of the infrastructure charge beginning January 1, 2016, and increased annually through January 1, 2018. Infrastructure Charges are budgeted to increase \$9.5 million compared to the 2017-18 Adopted Budget Plan. This increase is primarily due to 2018-19 being the first fiscal year of the fully stepped-in charge.



Commodity Charge.

The commodity charge went into effect in November 1996. This charge is typically collected by purveyor members and remitted

to the SNWA monthly. The commodity charge is applied to retail water bills. In addition to the infrastructure charge mentioned earlier, IRPAC's Phase 1 recommended, with subsequent Board approval, the commodity charge be increased annually through the same duration as the Phase 1 increases to the infrastructure charge. The \$0.30 per 1,000 gallons rate increased to \$0.34 in January, 2014, to \$0.38 in January, 2015, to \$0.44 in January, 2016, with the final increase to \$0.48 in January, 2017.

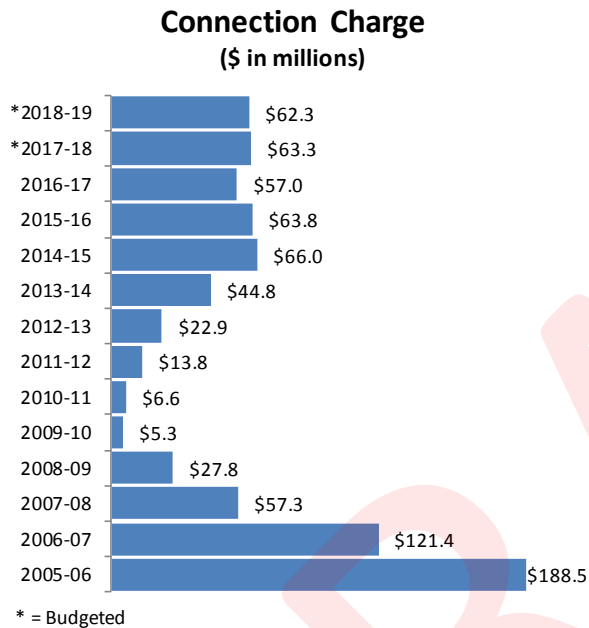


Connection Charge.

The connection charge is a charge assessed for new connections to the potable water system and is based on customer type, land usage, and meter size. The SNWA's purveyor members collect these charges when customers apply for new water services and they are remitted to the SNWA monthly. The fiscal year 2018-19 projection of connection charge revenue is \$62.3 million, which is lower (2 percent) than the 2017-18 Adopted Budget Plan. Connection charge collections were one of the SNWA's largest sources of funds in the mid-2000s. However, during the subsequent recession, this revenue fell

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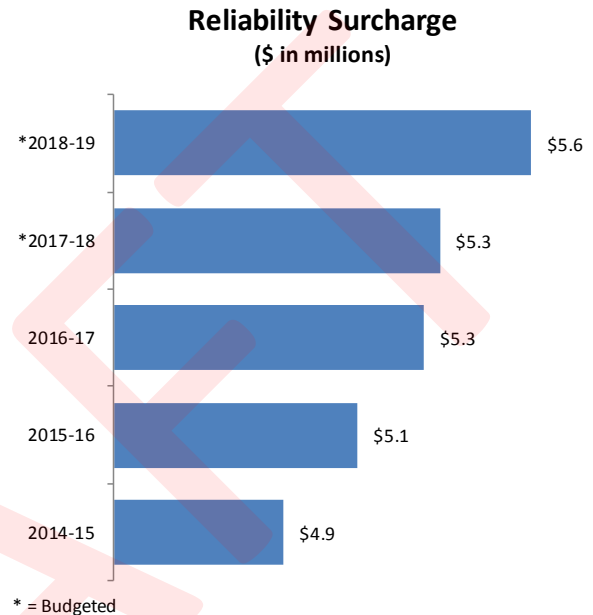
sharply with the lack of construction activity in the SNWA's service area. Since reaching a low in fiscal year 2009-10, connection charges have increased steadily, however the fiscal year 2018-19 is projecting a decrease is due to pace of new service connections moderating recently.



Reliability Surcharge.

The reliability surcharge went into effect in April 1998 and is based on the total water bill, excluding the infrastructure charge, of the SNWA's purveyor members. The rate is 0.25 percent for residential customers and 2.5 percent for non-residential customers. These revenues are collected by purveyor members from retail billings and are remitted to the SNWA monthly. The fiscal year 2018-19 reliability surcharge is projected to increase \$0.3 million, or 5 percent. Because this surcharge is based on the total water bill charged to an end user by a purveyor, less the infrastructure charge, the reliability surcharge will increase when a purveyor approves a retail rate increase, when the

SNWA increases the commodity charge and when additional customers are added to the system.



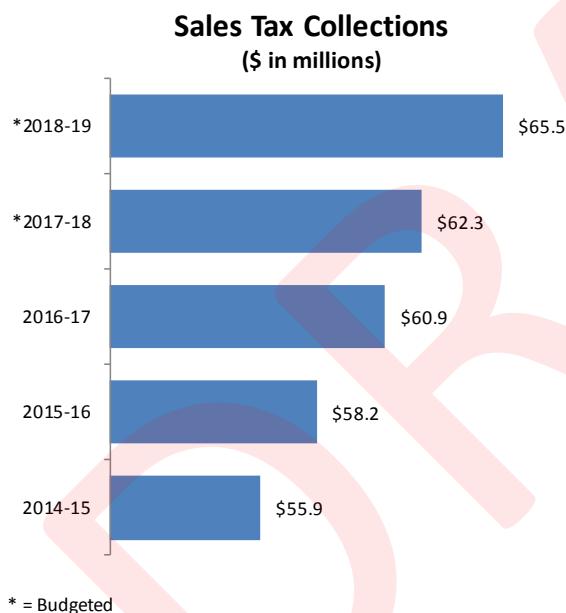
Sales Tax.

The only taxes the SNWA receives are sales taxes. The SNWA does not levy taxes on its own. The Clark County Water and Wastewater Infrastructure Sales Tax went into effect on April 1, 1999. At that time, this increased the sales tax rate in Clark County from 7.0 percent to 7.25 percent. The tax is collected by the Nevada Department of Taxation (DOT) and remitted to the SNWA monthly. Of the gross amount received from the DOT, approximately 3.3 percent is forwarded to rural areas in the county and 4.0 percent is held in reserve by the SNWA to fund needed capital improvements in the Las Vegas Wash. The Las Vegas Wash is the primary channel through which excess water returns from Las Vegas to Lake Mead. The water flowing through the wash comprises less than 2 percent of the water in Lake Mead and consists of urban runoff, shallow

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groundwater, storm water and releases from the three water reclamation facilities within the Las Vegas area.

By agreement with the wastewater agencies in the service area, the SNWA received 100 percent of the remaining sales tax proceeds for the first two years. Since then, the remainder has been split between water and wastewater based on the relative size of their capital improvement plans. The fiscal year 2018-19 projection of sales tax revenue is \$3.2 million, or 5 percent, higher than the 2017-18 Adopted Budget Plan, due to an improving economy.



Investment Income.

Investment income includes both interest from bank accounts and investment earnings. The primary objectives of such investments are, in order of importance, safety of principal, maintenance of liquidity, and return on investment (ROI). Investment income is projected to increase \$2.0 million (53 percent) over the 2017-18 Adopted Budget Plan. This increase is primarily

attributable to the increases in interest rates and return on investments.

Groundwater Management Program Fees.

The groundwater management program fees consist of an annual fee of \$30 per acre-foot of permitted groundwater rights or \$30 per domestic well. The fee consists of \$13 reserved for operation and maintenance expenses and \$17 reserved for recharge water purchases. The SNWA will have no recharge water available for purchase for the groundwater management program in fiscal year 2018-19. Consequently, for the sixth year in a row, the SNWA will not charge the \$17 portion of the groundwater management fee. Revenue is projected to be fairly consistent with the fiscal year 2017-18 Adopted Budget Plan.

Las Vegas Wash Program Fees.

The SNWA, along with the City of Henderson, Clark County Water Reclamation District, City of Las Vegas, Clark County, and the Clark County Regional Flood Control District, has entered into an interlocal agreement establishing funding for annual operations of the Las Vegas Wash. Each participant will be billed for budgeted costs according to the interlocal agreement. The program fees of \$0.4 million are projected to remain relatively flat in fiscal year 2018-19 as compared to the 2016-17 Adopted Budget Plan.

Grant Proceeds.

The SNWA attempts to secure grant monies from federal and state sources to help defray some construction, research, and operation costs. These proceeds are expected to be \$0.4 million in fiscal year 2018-19. This is a

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decrease of \$4.3 million compared to the 2017-18 Adopted Budget Plan. The decrease is largely due to weir construction in the upper Las Vegas Wash, which was the basis for a significant portion of the grants, nearing completion. Final construction work is expected to be completed by the end of December 2018.

Other Revenues.

Other revenues are budgeted to increase \$0.7 million (16 percent) from the fiscal year 2017-18 Adopted Budget Plan. The increase is largely due to a rise in revenues related to the operations of the SNWA Ranches.

Debt Issuance Proceeds.

The SNWA is not projected to issue any new money debt in 2018-19.

Uses

The fiscal year 2018-19 Budget Plan's total uses of funds are projected to be \$661.9 million, a 1 percent increase compared to the 2017-18 Adopted Budget Plan. The uses remained fairly constant from the prior year due to increases in water resource investments, payroll and related, and operating expenses being offset by decreases in capital expenditures.

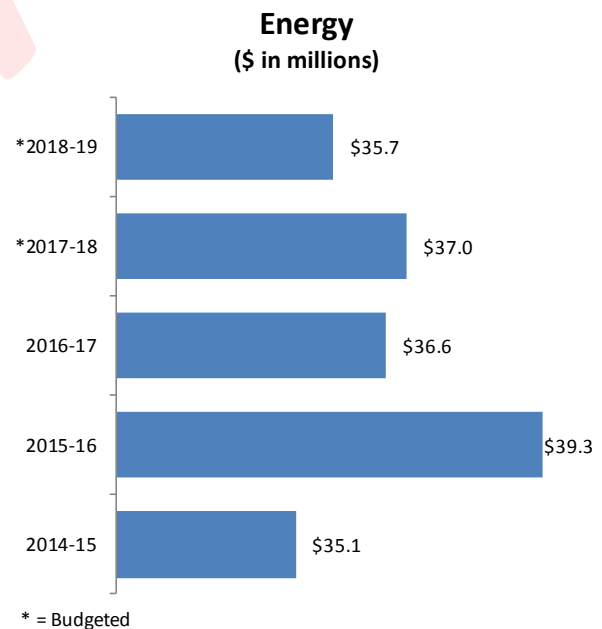
Water Resource Investments.

Southern Nevada obtains 90 percent of its water supplies from the Colorado River. Since the year 2000, persistent drought conditions, the worst in the basin's recorded history, have affected supply and forced stakeholders and the community to change the way water is utilized in Southern Nevada. Because of long-standing community conservation

practices, Southern Nevada finds itself in a position in which water demands would still be met, even under a shortage declaration. Moreover, investments made in the regional water system will help the SNWA reliably deliver water even during the most severe drought conditions. The 2018-19 Budget plan reflects these investments, which are expected to be \$19.0 million, a \$6.9 million (57%) increase compared to the 2017-18 Adopted Budget Plan.

Energy.

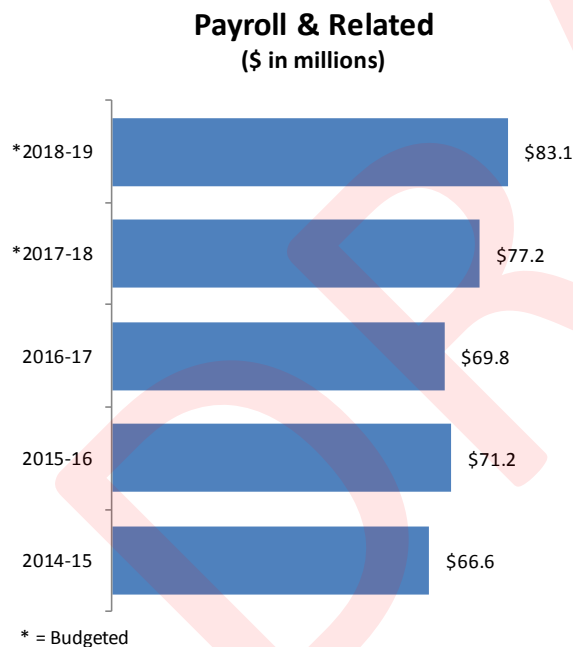
Treating raw water from Lake Mead and delivering it to the Las Vegas area is energy intensive. The cost of energy for fiscal year 2018-19 is projected to decrease \$1.3 million (3 percent) over the fiscal year 2017-18 Adopted Budget Plan. This decrease is primarily due to lower anticipated energy prices.



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Payroll & Related.

The SNWA does not have any employees. As described in the introduction section of this budget document, the Las Vegas Valley Water District (LVVWD) is the operating agent for the SNWA. A significant portion of the SNWA's operating expenses, including payroll costs, are initially paid by the LVVWD and then reimbursed by the SNWA. Payroll and related includes wages, salaries and benefits. For fiscal year 2018-19, payroll and related expenses are anticipated to be \$83.1 million. This represents an increase of \$5.9 million, or 8 percent, compared to the 2017-18 Adopted Budget Plan.



Full-time equivalent (FTE) is a unit of measurement which represents the workload of one full-time employed person. The SNWA's FTE count is expected to increase by approximately 8 employees over the fiscal year 2017-18 Adopted Budget Plan. Demands to secure and protect water

resources, ensure efficient use of existing resources, and provide a safe and reliable water supply under current operational conditions has resulted in increased staffing requirements for the SNWA. The following chart summarizes the number of equivalent FTE positions by department charging time to the SNWA.

FTE Summary

Department	Actual 2016-17	Budget 2017-18	Budget 2018-19
Executive Management	7.0	5.0	5.5
Legal Services	6.1	8.0	8.5
Finance	21.1	23.0	24.2
Information Technology	24.8	39.6	40.1
Human Resources	4.6	3.5	4.6
Public Services	31.3	40.3	39.8
Environmental, Health, Safety & Corporate Security	15.4	18.6	19.7
Customer Care & Field Services	4.7	2.9	2.9
Engineering	23.7	24.8	23.3
Resources & Facilities	63.5	75.8	78.9
Infrastructure Management	17.0	24.6	23.6
Water Resources	40.3	41.5	40.5
Energy Management	6.0	6.0	6.0
Operations	52.6	54.0	57.3
Water Quality & Treatment	82.8	85.8	86.4
Total	400.9	453.1	460.8

**Totals may be off slightly due to rounding*

Operating Expenses.

Operating expenses include all normal operating costs of the SNWA except energy, payroll and related, capitalized expenditures, and debt service, which are presented separately. Examples include, but are not limited to, materials and supplies, maintenance and repairs, rental and leases, water treatment chemicals, research and studies, legal fees, and office supplies. Operating expenses are projected to increase \$14.8 million (27 percent) as compared to the 2017-18 Adopted Budget Plan. The rise in operating expenses is due to increased

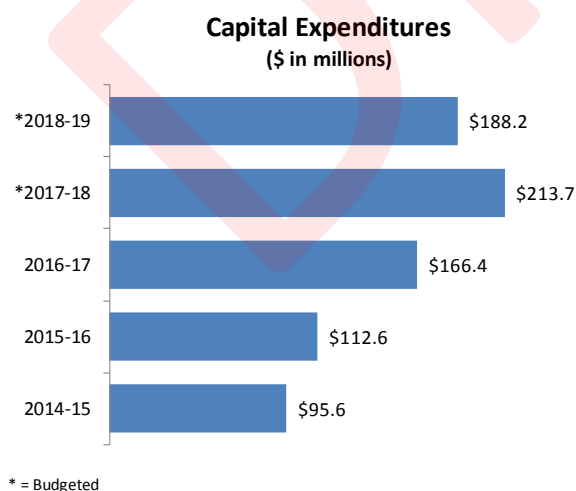
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operation and maintenance costs, including increased conservation efforts and an organizational shift to more “cloud-based” software solutions.

Capital Expenditures.

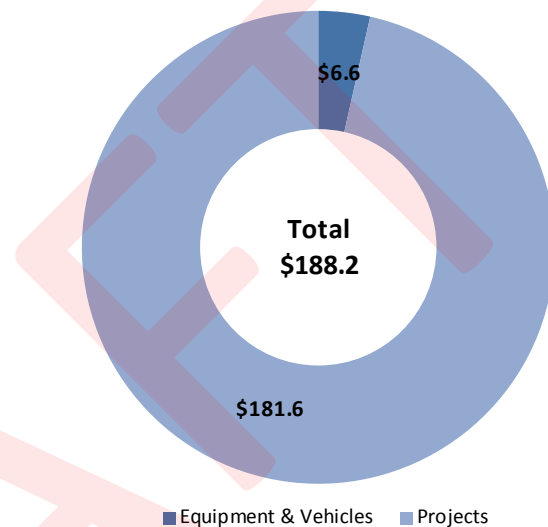
Capital expenditures are projected to decrease \$25.5 million (12 percent), compared to the fiscal year 2017-18 Adopted Budget Plan. The decrease is largely due to weir construction in the upper Las Vegas Wash nearing completion, which is expected at the end of 2018.

Capital expenditures are different from operating expenses in that they are generally related to assets and those assets have useful lives extending beyond three years and surpass an internally established dollar threshold. Typically, capital expenditures of the SNWA are related to infrastructure assets, but can be related to water rights. Examples include, but are not limited to, construction of water treatment and distribution infrastructure, water resource acquisitions, vehicles, and some computer equipment.



The majority of the SNWA’s capital expenditures project related.

Capital Expenditures in
Fiscal Year 2018-19 Budget Plan
 (\$ in millions)



The capital projects are generally accounted for in the SNWA’s two approved capital improvement plans (CIP):

- Major Construction and Capital Plan (MCCP). The projects of this CIP are mainly for the water treatment and delivery infrastructure or the acquisition and retention of water resources. It is funded primarily with publicly issued municipal debt.
- Las Vegas Wash Capital Plan. The projects of this CIP are related to the improvement of the Las Vegas Wash. It is funded primarily with sales tax proceeds.

The following is a brief description of the most significant MCCP project:

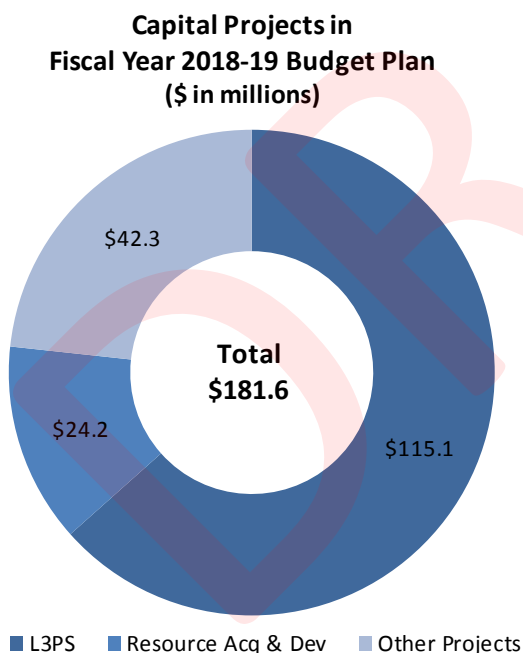
- Intake No.3 Project – Low Lake Level Pumping Station (L3PS). The construction

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of a 900 million gallons per day L3PS continues in order to eventually convey water from the new Intake No. 3 tunnel to the existing treatment facilities, 600 million gallons per day (MGD) to the Alfred Merritt Smith Water Treatment Facility and 300 MGD to the River Mountains Water Treatment Facility. The L3PS will function to replace the lost capacities of the existing Intake Pumping Stations No. 1 and No. 2 in the event of extremely low lake levels. The design and construction costs for this project are estimated to be approximately \$650 million and is scheduled to be in 2020. The fiscal year 2018-19 Budget Plan includes \$115.1 million to be spent on this project.

the ones described above, is tenuous at best. Capital projects are typically instituted for two major reasons – 1) to ensure end users have a reliable, consistent source of water and 2) to deliver that water in the most economical manner possible.

The construction of major capital items fits into an overall goal of system reliability and efficiency. Unlike other government agencies that can highlight a park, school, or street, for example, and immediately determine possible maintenance and operating costs, the capital items for a water utility affect the coordination of the entire water system. An increase in costs for one section of the project may cause a reduction in another connected portion. The SNWA’s capital projects utilize state of the art diagnostic equipment and testing procedures which significantly reduce the risk of catastrophic failures and help to minimize routine operating costs. Additionally, the SNWA utilizes internal cost controls to ensure funds are spent in the most conscientious manner. However, even with comprehensive controls such as these, estimating long range costs, especially in current financial conditions, can be a challenge.



Debt Service.

This reflects all outstanding debt of the SNWA. For more detail on the SNWA’s outstanding debt, see the Debt Management Policy, which is section seven of this budget document.

Periodically, the SNWA pays for capital costs on a pay-as-you-go basis, attempting to minimize financing costs for these capital expenditures, while maintaining financial stability. Projecting long term additional expenses of future capital projects, including

The Las Vegas area has experienced extraordinary population growth since the SNWA’s inception in 1991. The vast majority of the SNWA’s outstanding debt was necessary to fund the infrastructure growth to support such extraordinary population

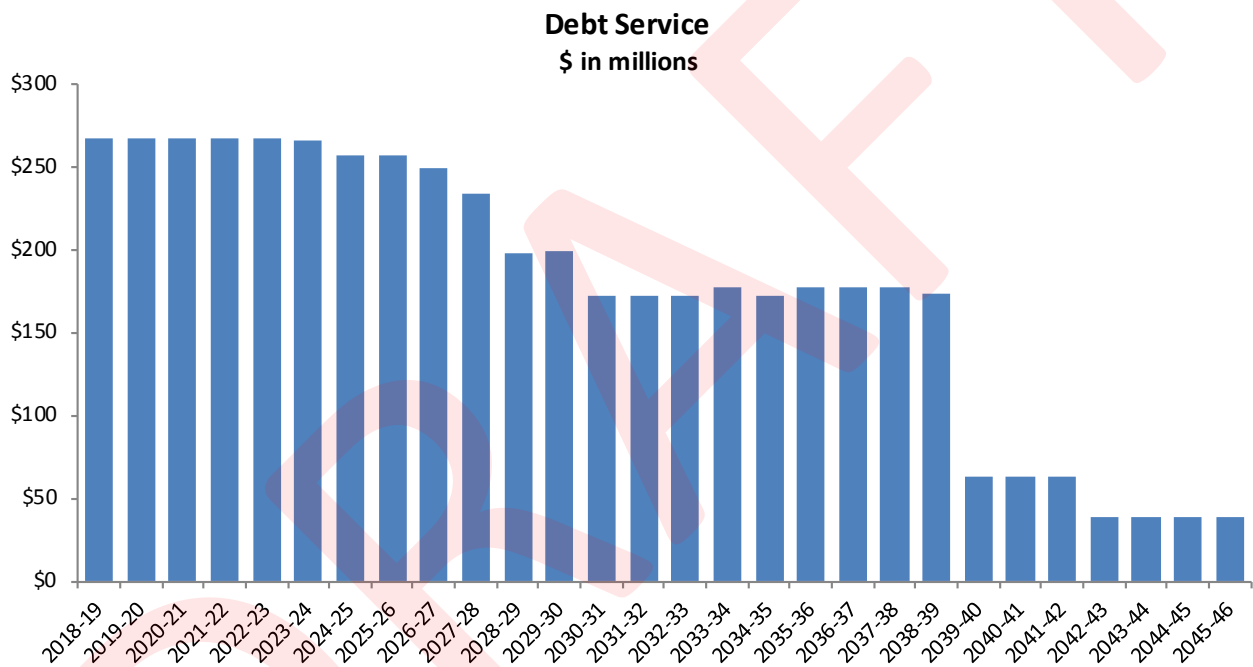
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growth. During the recession of the late 2000's, population growth slowed and the SNWA took actions to provide cash flow relief. For example, the SNWA postponed various capital projects and took advantage of historically low borrowing costs to refinance debt.

Debt service payments are anticipated to increase \$2.7 million (1 percent) compared to

the 2017-18 Adopted Budget Plan. This increase is primarily due to a projected rise in interest rates which affects the cost of the SNWA's commercial paper.

As the following chart illustrates, the existing debt service is projected to be relatively stable for approximately the next 6 years, then decline over subsequent years.



Southern Nevada Water Authority
Operating and Capital Budget
Operating and Capital Budget Plan
Fiscal Year Ending June 30, 2019

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 SNWA accounts for its Net Assets in accordance with GASB Statement 33. The following table summarizes the estimated sources and uses of funds and changes in net assets for the fiscal year 2018-19 Budget Plan.

Estimated Net Assets Detail Fiscal Year 2018-19 Budget

	Invested in Capital Assets Net of <u>Related Debt</u>	<u>Restricted</u>	<u>Unrestricted</u>	Total Net Assets
Estimated Net Position on June 30, 2018	\$ 940,943,812	\$ 488,103,266	\$ 554,122,595	\$ 1,983,169,673
<i>From Revenues, Expenses, and Net Income Schedule (RENI), Page 4-5</i>				
Operating Revenue	\$ -	\$ -	\$ 148,622,486	\$ 148,622,486
Capital Contributions		65,926,569	296,246,867	362,173,436
Interest Earned	(2,922,750)		5,880,785	2,958,035
Payroll and Related	20,176,291		(83,096,589)	(62,920,299)
Energy			(35,727,002)	(35,727,002)
Operating Expenses			(69,263,847)	(69,263,847)
Depreciation Expense	(130,000,000)			(130,000,000)
Interest Expense (Debt Service)	116,524,074		(266,611,625)	(150,087,551)
<i>Subtotal from RENI</i>	<u>\$ 3,777,615</u>	<u>\$ 65,926,569</u>	<u>\$ (3,948,925)</u>	<u>\$ 65,755,259</u>
<i>Items not on RENI</i>				
Capitalized Expenditures	\$ 188,228,615	\$ (188,228,615)	\$ -	\$ -
Debt Issuance Proceeds		-		-
<i>Subtotal Items not on RENI</i>	<u>\$ 188,228,615</u>	<u>\$ (188,228,615)</u>	<u>\$ -</u>	<u>\$ -</u>
Estimated Net Position on June 30, 2019	<u><u>\$ 1,132,950,041</u></u>	<u><u>\$ 365,801,221</u></u>	<u><u>\$ 550,173,670</u></u>	<u><u>\$ 2,048,924,932</u></u>

Southern Nevada Water Authority
Operating and Capital Budget
Operating and Capital Budget Plan
Fiscal Year Ending June 30, 2019

Sub Funds

According to Generally Accepted Accounting Principles (GAAP), governmental entities use fund based accounting. As a governmental entity, the SNWA accounts for its financial activities in a single enterprise fund. However, the SNWA utilizes sub funds for internal tracking purposes.

and Las Vegas Wash Operating sub fund are small in terms of activity and dollars, they are typically combined into one sub fund for budgeting purposes. Therefore, the SNWA budget presents only five sub funds. Three are classified as capital sub funds while two are operating sub funds. The following table presents the five sub funds, which are described after the table.

The SNWA maintains six sub funds. Since both the Las Vegas Wash Capital sub fund

Budget Summary by Sub Fund
Fiscal Year 2018-19

	Operating Sub Funds		Capital Sub Funds			
	Wholesale Delivery Operations	Groundwater Management Plan	New Expansion Debt Service	Major Capital & Construction Plan	Las Vegas Wash	Total
Sources						
Wholesale Delivery Charge	\$ 141,151,263					\$ 141,151,263
Infrastructure Charge			158,564,232			158,564,232
Commodity Charge			69,814,797			69,814,797
Connection Charge			62,298,684			62,298,684
Reliability Surcharge			5,569,153			5,569,153
Sales Tax			61,248,488		4,257,916	65,506,404
Investment Income	117,616	-	2,822,777	2,922,750	17,642	5,880,785
Groundwater Management Fees		896,494				896,494
LV Wash Program Fees	(620,652)	-	-	-	1,046,691	426,040
Grant Proceeds	136,495	-	9,012	-	274,658	420,165
Other Revenues	712,323	-	4,652,043	72,000	-	5,436,366
Subtotal	\$ 141,497,044	\$ 896,494	\$ 364,979,187	\$ 2,994,750	\$ 5,596,908	\$ 515,964,384
Debt Issuance Proceeds	-	-	-	-	-	-
Total Sources	\$ 141,497,044	\$ 896,494	\$ 364,979,187	\$ 2,994,750	\$ 5,596,908	\$ 515,964,384
Uses						
Water Resource Investments			\$ 19,016,798			19,016,798
Energy	35,727,002					35,727,002
Payroll & Related	57,189,888	518,327	13,249,231	11,071,775	1,067,367	83,096,589
Operating Expenses	47,919,883	793,500	19,888,764		661,700	69,263,847
Capital Expenditures			8,442,900	179,688,515	97,200	188,228,615
Debt Service			266,611,625			266,611,625
Total Uses	\$ 140,836,773	\$ 1,311,827	\$ 327,209,318	\$ 190,760,290	\$ 1,826,267	\$ 661,944,475
Total Net Surplus/(Deficit)	\$ 660,271	\$ (415,333)	\$ 37,769,869	\$ (187,765,540)	\$ 3,770,641	\$ (145,980,091)

Southern Nevada Water Authority
Operating and Capital Budget
Operating and Capital Budget Plan
Fiscal Year Ending June 30, 2019

Operating Sub Funds.

Wholesale Delivery Operations sub fund. This sub fund accounts for the sources and uses of funds related to the SNWA's primary operations, which is the treatment and delivery of potable water to its members. Other activities include the research and study of water quality issues in support of the overall water industry.

Groundwater Management Program sub fund. This sub fund accounts for the sources and uses of funds related to the SNWA's groundwater management program. In 1997, the Nevada Legislature directed the SNWA to develop a Groundwater Management Program to protect and manage the Las Vegas area's primary groundwater supply. The program protects the local groundwater basin from over-drafting and potential sources of contamination.

Capital Sub Funds.

New Expansion Debt Service sub fund. The primary purpose of this sub fund is to account for the majority of the SNWA's debt service and funds received to support those debt service payments. Other expenses include non-turf rebate conservation costs, northern resources costs, non-engineering capitalized labor in support of the MCCP, and some pay-as-you-go capital expenditures.

Major Construction and Capital Plan sub fund. This sub fund accounts for proceeds of debt issued to support the MCCP and capital expenditures related to the MCCP.

Las Vegas Wash sub fund. Although this is a hybrid sub fund paying both capital and operating expenses, the major function of this sub fund is to pay construction costs of the Las Vegas Wash. This sub fund tracks capital and operational revenues and expenses pertaining to the Las Vegas Wash. As stated previously, this sub fund is actually two small sub funds combined into one for budget presentation purposes. They are the Las Vegas Wash Capital sub fund and the Las Vegas Wash Operating sub fund.

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SOUTHERN NEVADA WATER AUTHORITY®

SECTION 4

STATE OF NEVADA

BUDGET DOCUMENTS

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SOUTHERN NEVADA WATER AUTHORITY®

FISCAL YEAR 2018-19

OPERATING AND CAPITAL BUDGET



SOUTHERN NEVADA WATER AUTHORITY®

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

Southern Nevada Water Authority _____ herewith submits the (TENTATIVE) -- (FINAL) budget for the
fiscal year ending June 30, 2019

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 \$ 446,307,271

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 Brian Thomas
(Print Name)
Chief Financial Officer
(Title)

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

Signed Brian Thomas

Dated: 4-12-18

APPROVED BY THE GOVERNING BOARD

Marilyn Kirkpatrick, Chair
Bob Coffin, Vice Chair
James Gibson
Peggy Leavitt
John Lee
John Marz
Steve Sisolak

SCHEDULED PUBLIC HEARING:

Date and Time Thursday, May 31, 2018 11:00AM

Publication Date 5/21/2018

Place: Molasky Corporate Center, 100 City Parkway, Suite 700, Las Vegas, NV

**SOUTHERN NEVADA WATER AUTHORITY
BUDGET DOCUMENT INDEX**

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FULL TIME EQUIVALENT EMPLOYEES BY FUNCTION

	ACTUAL PRIOR YEAR ENDING 06/30/17	ESTIMATED CURRENT YEAR ENDING 06/30/18	BUDGET YEAR ENDING 06/30/19
General Government			
Judicial			
Public Safety			
Public Works			
Sanitation			
Health			
Welfare			
Culture and Recreation			
Community Support			
TOTAL GENERAL GOVERNMENT			
Utilities	400.9	453.1	460.8
Hospitals			
Transit Systems			
Airports			
Other			
TOTAL			

POPULATION (AS OF JULY 1)	2,205,207	2,248,000	2,291,000
SOURCE OF POPULATION ESTIMATE*	Center for Business & Economic Res. UNLV	Center for Business & Economic Res. UNLV	Center for Business & Economic Res. UNLV
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.**

Southern Nevada Water Authority
(Local Government)

SCHEDULE S-2 - STATISTICAL DATA

PROPRIETARY FUND	(1)	(2)	(3) (4) BUDGET YEAR ENDING 06/30/19	
	ACTUAL PRIOR YEAR ENDING 6/30/2017	ESTIMATED CURRENT YEAR ENDING 6/30/2018	TENTATIVE APPROVED	FINAL APPROVED
OPERATING REVENUE				
Wholesale Delivery Charge	\$ 130,115,594	\$ 130,773,096	\$ 141,151,263	
Groundwater Management Fees	886,929	906,481	896,494	
Administration Costs Recoveries	625,349	612,600	712,323	
Las Vegas Wash Program Fees	356,365	429,845	426,040	
Other Revenues	5,389,896	4,076,681	4,724,043	
Total Operating Revenue	\$ 137,374,133	\$ 136,798,703	\$ 147,910,163	
OPERATING EXPENSE				
Energy	\$ 36,631,385	\$ 36,987,491	\$ 35,727,002	
Payroll and Related	55,987,034	52,657,549	62,920,299	
Operating Expenses	73,839,764	54,711,097	88,280,645	
Depreciation/Amortization	97,423,714	115,000,000	130,000,000	
Total Operating Expense	\$ 263,881,897	\$ 259,356,136	\$ 316,927,946	
Operating Income or (Loss)	\$ (126,507,764)	\$ (122,557,433)	\$ (169,017,783)	
NONOPERATING REVENUES				
Investment Income	\$ 955,013	\$ 1,936,085	\$ 2,958,035	
Capital Contributions	332,146,883	353,214,317	362,173,436	
Amortization of Bond Premiums & Discounts	18,002,315	-	-	
Other	18,935,983	-	-	
Total Nonoperating Revenues	\$ 370,040,194	\$ 355,150,402	\$ 365,131,471	
NONOPERATING EXPENSES				
Interest Expense	\$ 124,651,755	\$ 125,361,559	\$ 129,379,325	
Amortization of Refunding Costs	3,737,630	-	-	
Bond Issue & Commercial Paper Costs	5,569,998	-	-	
Total Nonoperating Expenses	\$ 133,959,383	\$ 125,361,559	\$ 129,379,325	
Net Income before Operating Transfers	\$ 109,573,047	\$ 107,231,410	\$ 66,734,364	
Transfers (Schedule T)				
In				
Out				
Net Operating Transfers				
CHANGE IN NET POSITION	\$ 109,573,047	\$ 107,231,410	\$ 66,734,364	

Southern Nevada Water Authority
(Local Government)

SCHEDULE F-1 REVENUES, EXPENSES AND NET POSITION

FUND _____ ENTERPRISE _____

PROPRIETARY FUND	(1)	(2)	(3) BUDGET YEAR ENDING 06/30/19	
	ACTUAL PRIOR YEAR ENDING 6/30/2017	ESTIMATED CURRENT YEAR ENDING 6/30/2018	TENTATIVE APPROVED	FINAL APPROVED
A. CASH FLOWS FROM OPERATING ACTIVITIES:				
Administrative Costs Recoveries	\$ 3,577,279	\$ 612,600	\$ 712,323	
Groundwater Management Fees	886,929	906,481	896,494	
Las Vegas Wash Program Fees	356,365	429,845	426,040	
Wholesale Delivery Charge	129,436,759	130,773,096	141,151,263	
Other Revenues	2,426,532	4,076,681	4,724,043	
Cash Payments to Suppliers of Goods and Services	(137,374,766)	(144,356,136)	(186,927,946)	
a. Net cash provided by (or used for) operating activities	\$ (690,902)	\$ (7,557,433)	\$ (39,017,783)	
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:				
Purchase or Construction of Capital Assets	\$ (169,046,968)	\$ (250,087,284)	(208,404,905)	
Proceeds from Disposal of Property and Equipment	76,939,276	-		
Proceeds of Debt Issuance	-	400,000,000	-	
Principal Paid on Debt	(106,181,517)	(512,089,439)	\$ (116,524,074)	
Interest Paid on Debt	(158,775,231)	(151,861,559)	\$ (150,087,551)	
Interest Rebate	2,082,181			
Capital Contributions	313,381,711	353,214,317	362,173,436	
c. Net cash provided by (or used for) capital and related financing activities	\$ (41,600,548)	\$ (160,823,966)	\$ (112,843,094)	
D. CASH FLOWS FROM INVESTING ACTIVITIES:				
Purchases of Investment Securities	\$ (950,359,687)	\$ (1,134,762,479)	\$ (1,286,905,059)	
Proceeds from Sales or Maturities of Investment Securities	982,141,170	1,327,923,040	1,399,376,082	
Investment Income	7,464,863	1,936,085	5,880,785	
d. Net cash provided by (or used in) investing activities	\$ 39,246,346	\$ 195,096,647	\$ 118,351,807	
NET INCREASE (DECREASE) in cash and cash equivalents (a+b+c+d)	\$ (3,045,104)	\$ 26,715,248	\$ (33,509,069)	
CASH AND CASH EQUIVALENTS AT JULY 1, 20xx	\$ 29,380,229	\$ 26,335,125	\$ 53,050,373	
CASH AND CASH EQUIVALENTS AT JUNE 30, 20xx	\$ 26,335,125	\$ 53,050,373	\$ 19,541,304	

Southern Nevada Water Authority
(Local Government)

SCHEDULE F-2 STATEMENT OF CASH FLOWS

FUND ENTERPRISE

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 7/1/2018	INTEREST PAYABLE	PRINCIPAL PAYABLE	(9)+(10) TOTAL
ENTERPRISE FUND										
Nevada Drinking Water State Revolving Fund Loan 1	2	20 Years	\$ 12,269,695	12/30/1999	2/1/2020	3.61%	\$ 1,657,846	\$ 52,567	\$ 814,096	\$ 866,663
Nevada Drinking Water State Revolving Fund Loan 2	2	20 Years	10,000,000	6/29/2001	8/1/2021	3.46%	2,278,891	73,503	623,438	696,941
LVVWD Commercial Paper	2	N/A	400,000,000	3/10/2004	N/A	Variable	400,000,000	8,580,000	-	8,580,000
Clark County 1106 Refunding Bonds	2	30 Years	604,140,000	11/2/2006	11/1/2036	2.5% - 5.00%	69,545,000	1,965,425	-	1,965,425
SNWA Renewable Energy 2008 Bonds	2	14 Years	6,900,000	7/30/2008	12/15/2022	1.17%	2,300,000	24,219	460,000	484,219
LVVWD 2009A Bonds	2	30 Years	90,000,000	8/5/2009	6/1/2039	7.10%	90,000,000	6,390,000	-	6,390,000
LVVWD 2009B Bonds	2	23 Years	10,000,000	8/5/2009	6/1/2019	4.0% - 5.25%	425,000	17,000	425,000	442,000
Clark County 2009 Refunding Bonds	2	20 Years	50,000,000	10/22/2009	6/1/2030	5.00%	37,905,000	1,895,250	2,380,000	4,275,250
State of Nevada 2009 Bonds	2	21 Years	2,214,457	10/22/2009	7/1/2029	0.00%	1,455,215	-	126,540	126,540
LVVWD 2009D Bonds	2	21 Years	71,965,000	12/23/2009	6/1/2030	4.25% - 5.25%	37,440,000	1,868,238	3,730,000	5,598,238
State of Nevada 2010B Refunding Bonds	2	10 Years	7,405,000	6/24/2010	6/1/2020	3.70%	2,310,000	85,355	1,135,000	1,220,355
LVVWD 2011A Refunding Bonds	2	15 Years	58,110,000	5/24/2011	6/1/2026	3.05% - 5.43%	44,795,000	2,212,867	4,745,000	6,957,867
LVVWD 2011B Refunding Bonds	2	16 Years	129,650,000	10/19/2011	6/1/2027	2.79% - 4.96%	101,180,000	4,384,115	10,000,000	14,384,115
LVVWD 2011C Refunding Bonds	2	26 Years	267,815,000	10/19/2011	6/1/2038	2.0% - 5.0%	210,205,000	10,525,963	11,260,000	21,785,963
Clark County 2012 Refunding Bonds	2	20 Years	85,015,000	6/20/2012	6/1/2032	4.0% - 5.0%	79,515,000	3,180,600	-	3,180,600
LVVWD 2012B Bonds	2	30 Years	360,000,000	7/31/2012	6/1/2042	3.0% - 5.0%	332,210,000	15,915,950	7,690,000	23,605,950
State of Nevada 2013 Refunding Bonds	2	15 Years	21,720,000	2/20/2013	8/1/2027	3.00%	21,720,000	651,600	-	651,600
LVVWD 2015 Refunding Bonds	2	24 Years	332,405,000	1/13/2015	6/1/2039	4.0% - 5.0%	332,405,000	16,370,250	-	16,370,250
LVVWD 2015B Refunding Bonds	2	12 Years	177,635,000	6/1/2015	6/1/2028	4.0% - 5.0%	155,795,000	7,439,350	11,680,000	19,119,350
LVVWD 2015C Refunding Bonds	2	14 Years	42,125,000	6/18/2015	9/15/2029	3.0% - 5.0%	36,755,000	1,725,575	2,835,000	4,560,575
Clark County 2016A Refunding Bonds	2	14 Years	263,955,000	3/3/2016	11/1/2029	4.5% - 5.0%	226,905,000	10,732,625	24,505,000	35,237,625
LVVWD 2016A Bonds	2	30 Years	497,785,000	4/6/2016	6/1/2046	3.0% - 5.0%	481,210,000	23,783,650	11,995,000	35,778,650
Clark County 2016B Refunding Bonds	2	18 Years	271,670,000	8/3/2016	11/1/2034	4.0% - 5.0%	267,885,000	12,789,475	3,965,000	16,754,475
LVVWD 2017B Refunding Bonds	2	15 Years	22,115,000	3/14/2017	6/1/2032	4.0% - 5.0%	22,115,000	1,027,125	-	1,027,125
Clark County 2017 Refunding Bonds	2	21 Years	321,640,000	3/22/2017	6/1/2038	4.0% - 5.0%	321,640,000	14,442,600	9,910,000	24,352,600
LVVWD 2018B Bonds	2	8 Years	79,085,000	3/6/2018	6/1/2026	4.25% - 5.0%	79,085,000	3,954,250	8,245,000	12,199,250
TOTAL ALL DEBT SERVICE							\$ 3,358,736,951	\$ 150,087,551	\$ 116,524,074	\$ 266,611,625

SCHEDULE C-1 - INDEBTEDNESS

Southern Nevada Water Authority Budget Fiscal Year 2018-2019
(Local Government)

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: 80th Session; February 4, 2019 to June 3, 2019

1. Activity:	<u>Legislature 2019 - Southern Nevada Water Authority</u>	
2. Funding Source:	<u>Operating Revenues</u>	
3. Transportation	\$	<u>22,205</u>
4. Lodging and meals	\$	<u>23,995</u>
5. Salaries and Wages	\$	<u>38,041</u>
6. Compensation to lobbyists	\$	<u>10,000</u>
7. Entertainment	\$	<u>-</u>
8. Supplies, equipment & facilities; other personnel and services spent in Carson City	\$	<u>1,302</u>
Total	\$	<u><u>95,543</u></u>

Entity: Southern Nevada Water Authority

Budget Year 2018-2019

Page: 8
Schedule 30

SCHEDULE OF EXISTING CONTRACTS

Budget Year 2018 - 2019

Local Government: Southern Nevada Water Authority
Contact: Brian Thomas
E-mail Address: brian.thomas@lvwd.com
Daytime Telephone: (702) 822-8810

Total Number of Existing Contracts: 153

Line	Vendor	Effective Date of Contract	Termination Date of Contract	Proposed Expenditure FY 2018-19	Proposed Expenditure FY 2019-20	Reason or need for contract:
1	A Trak Out Solution	08/15/15	07/31/21	\$ 14,000	\$ 14,000	Vegetation removal
2	A Trak Out Solution	10/02/15	06/30/20	14,000	14,000	WSNA Dumpster Service
3	Ab Sciex	03/11/14	03/10/19	183,627	183,627	Service agreement for lab equipment
4	Abyss Solutions Pty Ltd	01/23/18	01/22/19	42,000	42,000	Imaging services & analytical reporting
5	Aerotech Mapping	04/07/15	04/06/20	40,000	40,000	Ad hoc aerial imagery services
6	Agilent Technologies, Inc.	04/01/14	03/31/19	148,050	148,050	Laboratory equipment repair services
7	All Star Fence Co.	09/01/16	08/31/22	16,333	4,083	Fence Repairs at WSNA
8	Alliance For Water Efficiency	06/22/17	04/30/20	100,000	100,000	PSA to Study Water Demand for Use in Cooling
9	American Fence	09/01/16	08/31/22	16,334	4,084	Fence Repairs at WSNA
10	Anzalone Pumps, Inc.	05/01/13	04/30/18	250,000	-	Irrigation Well Maintenance Services
11	Argus Engineering	05/16/15	05/16/20	70,000	70,000	PSA for work related to the SCADA system
12	Argus Engineering	05/21/15	05/20/20	130,000	130,000	Engineering services
13	Arizona Water Banking Authority	08/17/17	-	3,400,000	-	Payment for Colorado River Water Banking in Arizona
14	Aspen Environmental Group	10/13/10	upon notice	100,000	100,000	Legal services for reporting and expert testimony
15	Association Of Metropolitan Water Agencies	01/01/18	12/31/21	59,912	59,912	PSA - AMWA Administrative Support
16	Avisight, LLC	08/22/16	08/21/20	40,000	40,000	Ad hoc aerial imagery services
17	B&W Trucking	01/01/16	12/31/23	24,000	24,000	Transportation Services for Livestock
18	Ballard Spahr LLP	11/26/13	11/27/21	20,000	20,000	Legal services regarding the Glen Canyon Dam
19	Beckman Coulter, Inc.	01/01/18	12/31/18	19,422	19,422	Lab equip. main. Agreement
20	Bio-West Inc	04/29/16	04/28/19	58,000	14,500	PSA for Biological consulting services on the Muddy River
21	Bio-West Inc	04/29/15	04/28/19	52,000	52,000	Biological Consulting Services on Virgin River
22	Black & Veatch	10/01/14	upon notice	45,740	45,740	Mixing zone modeling services
23	Black & Veatch Corporation	11/16/17	On Completion	1,429,415	-	Eng Svcs for AMSWTF Filter Improvements, Phase III
24	Booky Oren Global Water Technologies Ltd.	10/16/14	upon notice	100,000	100,000	Organizational development assistance
25	Bracken'S Valley Tire Repair LLC	03/30/15	04/01/21	20,000	20,000	Pivot Tire Purchases and Repairs
26	BSA Environmental Services	07/01/09	06/30/19	35,000	35,000	Zooplankton analysis for Water Quality Div.
27	C&E Fence LLC	07/01/17	06/30/22	49,000	49,000	Fencing Services for Northern Resources
28	C. Joseph Guild III	01/01/12	upon notice	64,000	64,000	Ranch and Agricultural Consulting
29	C. Joseph Guild III	01/09/12	upon notice	92,000	92,000	Natural Resource and Water Issues Consulting
30	Capital Project Law Group, PLLC	03/16/15	03/16/23	50,000	50,000	Legal advisory services
31	Cathy Leece	01/30/18	01/29/23	44,000	44,000	Graphic Designer Services
32	CDW Government	12/22/17	01/17/18	47,214	47,214	Annual Riverbend Gold Support Service Extension
33	CH2M Hill Engineers, Inc.	05/18/17	06/29/22	300,000	300,000	Eng. services for misc civil, electrical, mechanical & control sys projects
34	Coastline Equipment	12/19/17	01/16/18	22,100	-	Equipment repairs
35	Colorado Water Conservation Board	11/28/17	09/30/18	85,000	-	Weather Modification Program
36	Community Strategies Inc	01/23/18	01/24/18	24,000	-	Legal Services
37	Creel Printing Company	11/28/16	11/27/21	80,678	88,746	SNWA Water Smart Living Newsletter - Printing Services
38	Digital Mapping, Inc.	02/17/16	02/16/20	75,000	-	Aerial imagery to support off-site work for the Faraday Future electric vehicle mfg facility.
39	Dotson Law Group	10/12/16	10/11/23	100,000	100,000	Legal Services for SNWA
40	Ecosynthesis Scientific & Regulatory Services, Inc.	07/10/17	07/09/21	75,000	75,000	Geologic & Biologic Consulting Services
41	Engineering System Solutions	12/12/17	12/11/18	11,700	5,600	PSA Hacienda ROFCS
42	Environmental Resource Associates	02/16/17	01/31/19	46,500	52,000	Lab proficiency testing
43	Eurofins Eaton Analytical	11/01/16	10/31/21	110,185	110,185	Water sample analysis services
44	Faiss Foley Warren	08/01/13	07/31/19	900,000	900,000	Integrated communications and support services for SNWA
45	Fei Company	12/05/17	12/04/18	28,656	28,656	Lab equip. main. Agreement
46	Finlinson & Finlinson	01/21/06	upon notice	30,000	30,000	Natural resource consulting services
47	Frazier & Deeter LLC	01/04/18	01/03/19	70,000	-	Accounting & Budget Operations Advisory Services
48	Geohydros, LLC	01/19/17	01/18/19	108,633	-	Geologic Model Construction
49	Geophex Surveys, Ltd	09/17/15	12/31/18	88,774	-	Aerial imagery services
50	Geophex Surveys, Ltd	08/22/16	08/21/19	40,000	5,700	Ad hoc aerial imagery services
51	George T. Hall Company, Inc.	05/18/17	06/29/22	300,000	300,000	Technical services for ControlLogix controllers.
52	Glass Box Technology Inc.	11/30/15	11/29/20	60,000	60,000	Professional services for EMC data storage operating system software training

SCHEDULE OF EXISTING CONTRACTS

Budget Year 2018 - 2019

Local Government: Southern Nevada Water Authority
Contact: Brian Thomas
E-mail Address: brian.thomas@lvwd.com
Daytime Telephone: (702) 822-8810

Total Number of Existing Contracts: 153

Line	Vendor	Effective Date of Contract	Termination Date of Contract	Proposed Expenditure FY 2018-19	Proposed Expenditure FY 2019-20	Reason or need for contract:
53	Global Water Technologies Ltd	07/25/13	upon notice	70,000	70,000	Innovation development assistance
54	Great Basin Bird Observatory	08/28/14	08/27/20	71,498	75,073	Avian and Vegetation Monitoring in LV Wash
55	Great Basin Bird Observatory	10/01/15	06/30/20	43,160	43,160	WSNA Bird Surveys
56	Great Basin Institute	12/18/17	10/31/24	99,000	99,000	WSNA Vegetation Control and Docent Staffing
57	Great Basin Irrigation	01/01/16	12/31/23	40,000	40,000	Irrigation Systems Parts and Maintenance
58	Greenberg Traurig, LLP	06/19/12	upon notice	100,000	100,000	Bond counsel
59	Gunnison Bend Veterinary Services	08/09/17	06/30/22	50,000	50,000	PSA for Veterinary Services at the ranches.
60	Gust Electric, Inc.	01/01/18	12/31/22	100,000	115,000	Electrical Supplies, Materials & Related Services
61	Harris Acquisition	11/14/17	03/31/18	33,699	-	Chlorine Bldg. HVAC upgrades
62	Henderson Electric Motors, Inc.	05/21/14	05/20/19	175,050	175,050	Repair of electric motors
63	High Sierra Water Laboratory	12/01/14	11/30/19	40,000	40,000	Water sample analysis services
64	Hispana Comunicacion Integral	03/01/17	02/28/22	98,000	98,000	Spanish Language Support Services
65	Hitachi ID Systems Inc	01/16/18	02/12/18	16,250	16,250	Software Support Services
66	Hobbs, Ong & Associates Inc	07/21/16	07/20/21	150,000	150,000	Financial Advice and Debt Management Services
67	Hobbs, Ong & Associates Inc	03/20/14	upon notice	400,000	400,000	IRPAC Financial advisory services
68	Holland & Hart	05/22/12	05/22/19	100,000	100,000	Litigation related services
69	Holland & Hart	08/23/12	08/23/20	100,000	100,000	Nevada Power integrated resource plan litigation
70	Holland & Hart	07/01/13	06/30/20	1,500,000	1,500,000	Legal services for environmental compliance
71	Holland & Hart	08/26/13	08/22/19	100,000	100,000	Legal Services
72	HRA Inc	09/16/13	09/30/18	22,500	-	Archaeological Investigations in LV Wash
73	Imagine Exhibitions Inc.	09/03/15	03/20/19	125,000	125,000	Traveling Exhibit "Science Fiction: Science Future"
74	Institute For Executive Development	08/29/13	08/28/20	90,000	90,000	Development of organizational initiatives
75	James C Davis	01/20/16	07/19/18	96,000	96,000	SNWA Public Relations Assistance for PI
76	Jh Davenport	12/24/08	upon notice	10,150	10,150	Water resource and administrative consulting services
77	John Deere Repair Parts And Service	01/01/16	12/31/23	30,000	30,000	John Deere Repair Parts and Service for GB Ranches
78	Koffler Electrical Mechanical	01/13/14	01/12/19	1,150,000	1,150,000	Service Contract for Large Motor Refurbishment
79	Laguna Productions	02/21/13	02/20/19	145,000	145,000	Production assistance
80	Las Vegas Color Graphics	11/28/16	06/30/21	48,762	56,077	SNWA Water Smart Living Newsletter - Mailing Services
81	Law Office Of Joseph Guild	02/01/18	01/31/19	59,500	-	Professional Services Agreement - Ranch and Agricultural Consulting Services
82	Leavitt Enterprises LLC	07/01/16	06/30/20	27,000	27,000	SNWA Handyman Services
83	Lewis & Roca	03/22/10	upon notice	100,000	100,000	Legal Services
84	Lewis Michaelson	05/10/17	05/09/20	11,000	11,000	Professional Services for SNWA
85	Lionel, Sawyer & Collins	04/07/04	upon notice	24,999	24,999	Legal representation
86	Lj McCormick Enterprises Inc.	10/01/15	06/30/20	49,000	49,000	WSNA Ecological Restoration
87	Logistical Solutions	10/16/17	04/30/18	24,360		Removal of ferric tank liner at AMS
88	Louis Berger U.S., Inc.	11/16/17	On Completion	618,159		Eng Svcs for the Tropicana Weir Project
89	MalitzLaw	11/16/16	upon notice	15,000	15,000	H-2A Related Matters
90	March Counsel LLC	06/20/17	On Completion	100,000		Legal Services & Representation Regarding Energy Matters
91	Marcus R Jensen	10/1/2016	8/7/2020	90,000	90,000	Professional Engineering Services
92	Merrick & Company	09/17/15	9/16/2018	260,400	260,400	Purchase & delivery of LiDAR digital elevation data services
93	Michael J Brennan	08/23/12	07/01/18	100,000	100,000	Environmental compliance consulting
94	Mountain States Nursery	09/01/16	08/31/18	14,000	3,500	Plant Propagation
95	Moyle Irrigation	01/01/16	12/31/23	50,000	50,000	Pivot Irrigation Maintenance Services
96	Muddy River Regional Environmental Impact Alleviation Committee	01/06/14	01/07/19	50,000	50,000	Tamarisk removal services for fire control
97	National Park Service	02/01/17	01/31/22	57,500	66,125	Professional weed control services
98	Navigant Consulting Inc	08/10/17	08/10/24	60,000	60,000	Transmission evaluation Services
99	Nevada Division Of Forestry	01/31/17	01/31/22	250,000	250,000	Inmate Conservation Camp Services
100	New Vista Ranch Inc	01/24/18	01/24/18	74,574		SNWA Well Conversion - New Vista Ranch
101	Nv Energy	12/29/99	12/28/19	1,000,000	1,000,000	SNWA Lease of Fiber Optic Lines
102	O'Flarety Plumbing And Heating	01/01/16	12/31/23	35,000	35,000	Plumbing Repair Services for GB Ranches
103	Omniticket Network	08/01/15	07/31/21	20,000	20,000	Services related to internet ticket sales for the Springs Preserve
104	Par 3 Landscape & Maint. Inc.	10/01/15	06/01/21	47,000	47,000	WSNA Landscaping
105	Patricia Emery	05/18/15	05/17/19	24,900	24,900	Editorial services with finalizing documents & reports on an as-needed basis.
106	Patty A. Emery	05/18/17	05/17/19	24,900	24,900	Editorial Services

SCHEDULE OF EXISTING CONTRACTS

Budget Year 2018 - 2019

Local Government: Southern Nevada Water Authority
Contact: Brian Thomas
E-mail Address: brian.thomas@lvvwd.com
Daytime Telephone: (702) 822-8810

Total Number of Existing Contracts: 153

Line	Vendor	Effective Date of Contract	Termination Date of Contract	Proposed Expenditure FY 2018-19	Proposed Expenditure FY 2019-20	Reason or need for contract:
107	Performix Nutrition Systems	10/26/15	10/25/19	95,000	95,000	Custom Cattle Nutrition Supplements
108	Perkin Elmer	08/01/17	07/31/18	23,808	23,808	Lab equip. main. Agreement
109	Pfm Asset Management, LLC	08/24/17	08/23/22	75,000	75,000	Debt Arbitrage Compliance Services
110	Phycotech, Inc.	08/01/14	07/31/19	70,000	70,000	Phytoplankton analysis in Lake Mead
111	Piercy Bowler Taylor & Kern	3/30/2017	3/29/2022	47,500	47,500	Authority Auditor Services
112	Power Plus Engineering	02/15/17	02/14/18	24,000	24,950	Eaton/Powerware Plus main. Agree.
113	Process Applications Inc	11/06/14	until complete	20,000	10,000	Ozone dissolution methods
114	R&R Partners	07/16/15	06/30/21	3,350,000	3,350,000	Marketing & Media Support SNWA
115	R&R Partners, Inc	02/01/18	01/30/24	75,000	75,000	SNWA Government Affairs
116	R&R Public Affairs	01/22/12	01/21/18	75,000	37,500	Consulting services for state and federal natural resource issues
117	R2H Engineering Inc	01/24/18	01/23/19	23,760		Sloan Station Settlement Repairs
118	Rafael Construction, Inc.	02/12/18	12/31/18	96,255		AMS tank liner replacements
119	Ram Proline LLC	12/29/15	12/28/21	156,783	156,783	ARC Strip and Recoat Pump Parts
120	Ranch Advisory Partners	08/01/16	07/31/19	75,000	75,000	PSA Biological Consulting Services on Grazing Land
121	Raysco Inc	12/19/17	01/31/18	19,684		Floor Cleaning
122	Rogich Communications Group	06/15/17	06/14/21	96,000	96,000	Professional Services Agreement
123	Ronald E. Zegers	03/03/14	upon notice	100,000	100,000	Water quality issue consulting
124	Shimadzu Scientific	10/03/17	10/02/18	13,223	13,223	Lab equip. main. Agreement
125	Simplot Growing Solutions	10/01/13	09/30/19	50,000		Soil Testing for SNWA Ranches
126	Snell & Wilmer, LLP	04/11/12	04/11/20	100,000	100,000	Glen Canyon Dam environmental compliance
127	Soil Tech, Inc	08/02/16	08/01/21	496,800	496,800	Wash Revegetation
128	Southern Nevada Environmental	08/09/17	08/08/21	25,000	25,000	Environmental Consulting Services for Monitoring, Surveying and Compliance Inspections
129	Spring Valley Associates	01/01/15	12/31/20	1,200,000	1,200,000	Ranch Management
130	Stanka Consulting	08/21/08	upon notice	210,000	210,000	Water Rights Surveyor
131	Steve Reagan	01/01/16	12/31/23	35,000	35,000	Veterinary Services for GB Ranches
132	Steve Robinson	11/28/17	11/25/24	58,000	58,000	Consulting Services for Public Services
133	Stinson Leonard Street	01/02/14	06/30/21	100,000	100,000	Legal Services
134	Stotz Equipment	01/01/16	12/31/23	15,000	30,000	Ranches John Deere Repair Parts and Service
135	Stradling Yocca Carlson & Rauth, A Professional Corporation	12/05/17	12/05/24	50,000	50,000	Bond Disclosure Counsel Services
136	Sunbelt Controls	08/01/17	07/31/18	206,315		Energy Management System Services
137	Swendseid And Stern	04/03/12	upon notice	200,000	200,000	Bond Counsel
138	Taggart & Taggart	01/18/07	upon notice	286,000	286,000	Legal services for environmental compliance
139	The Tiberti Fence Company	09/01/16	08/31/22	49,000	49,000	Fence Repairs at WSNA
140	Tri-County Weed Control	09/01/16	08/31/20	30,000	30,000	Weed control in Warm Springs Nat Area
141	Tri-County Weed Control	06/25/17	06/24/21	35,000	35,000	Noxious and Invasive Weed Control
142	U S Captioning Company	08/01/16	07/31/21	12,000	3,000	Closed Captioning services for SNWA & LVVWD Board of Directors meetings
143	United Soil Science	02/22/17	02/21/22	215,124	236,636	Fertilizer Services for the Ranches
144	USGS Nevada Water Science Center	10/01/17	09/30/18	117,833	-	Joint Funding Agreement SNWA-USGA-USDOI
145	Utah Division Of Water Resources	11/27/17	09/30/18	66,084	-	Weather Modification Program
146	Utility Resources, Inc.	03/17/05	upon notice	530,000	530,000	Public utility commission regulatory hearings
147	Wag Services	06/01/15	06/30/20	49,500	49,500	Hay Tarping Services for GB Ranches
148	Warren Turkett	06/25/12	upon notice	81,680	81,680	Lower Colorado River water quality database
149	Water Research Foundation	10/01/17	09/30/18	277,764		Annual Subscription Services
150	Weck Analytical Enviro. Svcs Inc	06/10/15	06/10/20	300,000	300,000	Water sample analysis
151	Wilmer Cutler Pickering Hale & Dorr LLP	12/14/17	06/30/18	100,000		Colorado River Issues
152	Wunderlich-Malec	07/01/17	06/30/22	300,000	300,000	Programming technical services
153	Wyoming Water Development Office	11/28/17	12/31/18	100,000	-	Weather Modification Program
Total Proposed Expenditures				\$ 27,253,748	\$ 19,670,484	

SCHEDULE OF PRIVATIZATION CONTRACTS

Budget Year 2018 - 2019

Local Government: Southern Nevada Water Authority

Contact: Brian Thomas

E-mail Address: brian.thomas@lvvwd.com

Daytime Telephone: (702) 822-8810

Total Number of Privatization Contracts: NONE

Line	Vendor	Effective Date of Contract	Termination Date of Contract	Duration (Months/ Years)	Proposed Expenditure FY 2018-19	Proposed Expenditure FY 2019-20	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									

Place holder for
affidavit of
publication

Department of Taxation Letter Place Holder

SECTION 5

DEPARTMENT BUDGETS

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SOUTHERN NEVADA WATER AUTHORITY®

FISCAL YEAR 2018-19

OPERATING AND CAPITAL BUDGET

Southern Nevada Water Authority
Operating and Capital Budget
Department Budgets
Fiscal Year Ending June 30, 2019

Department Budgets

This section contains summaries of budgets for each of the Southern Nevada Water Authority's (SNWA) departments. Each department's budget narrative contains detailed budget information and other

highlights of the 2018-19 Budget Plan. The following table presents the 2016-17 actual, 2017-18 Adopted Budget and 2018-19 Budget Plan for each of the departments.

SNWA
Summary of Department Expenditures

Departments	2016-17 Actual	2017-18 Budget	2018-19 Budget	Budget-to-Budget Variance
Executive Management	\$ 1,868,200	\$ 1,602,828	\$ 1,719,356	\$ 116,528
Legal Services	2,920,137	3,959,668	4,716,733	757,065
Finance	15,923,270	12,705,963	13,397,280	691,317
Information Technology	9,208,827	17,865,264	16,861,649	(1,003,615)
Human Resources	772,442	625,138	798,881	173,743
Public Services	11,096,659	13,288,025	15,336,156	2,048,131
Environmental Health Safety & Corporate Security	2,442,922	2,951,566	3,492,274	540,708
Customer Care & Field Services	792,225	420,863	440,638	19,775
Engineering	158,500,911	141,669,054	132,013,674	(9,655,380)
Resources & Facilities	20,552,897	32,736,399	32,984,568	248,169
Infrastructure Management	5,344,064	13,546,215	16,976,779	3,430,564
Water Resources	14,311,867	49,888,482	57,590,653	7,702,171
Energy Management	37,935,699	46,064,068	43,096,095	(2,967,973)
Operations	12,940,713	17,520,581	15,283,433	(2,237,148)
Water Quality & Treatment	23,156,379	39,599,308	40,624,682	1,025,374
Total Department Expenditures	\$ 317,767,212	\$ 394,443,421	\$ 395,332,851	\$ 889,430
Debt Service	\$ 264,956,748	\$ 263,950,998	\$ 266,611,625	\$ 2,660,627
Total Uses of Funds	\$ 582,723,960	\$ 658,394,419	\$ 661,944,476	\$ 3,550,056

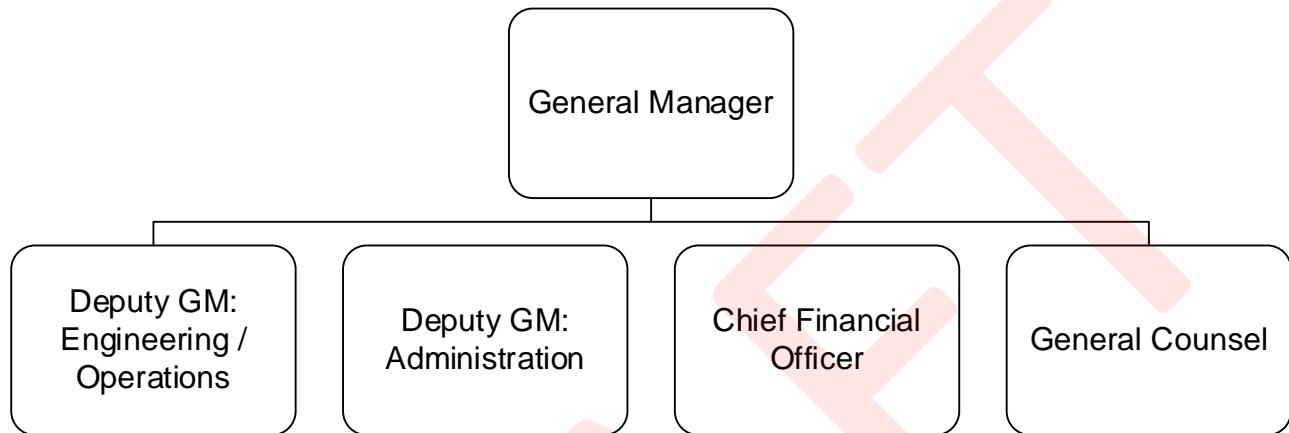
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SOUTHERN NEVADA WATER AUTHORITY®

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.

Managers, a Chief Financial Officer and a General Counsel also oversee administrative and operational activities.

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

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 LVVWD and SNWA missions, the Executive Management Team petitions the respective boards for direction and approval of funding and 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.

Southern Nevada Water Authority
Operating and Capital Budget
Department Budgets
Executive Management
Fiscal Year Ending June 30, 2019

Expenditures

SNWA Uses	Actual 2016-17	Budget 2017-18	Budget 2018-19
Materials & Supplies	\$ 12,661	\$ 28,600	\$ 30,100
Maintenance & Repairs	1	-	100
Other Employee Expenses	61,688	183,750	190,700
Other Expenses	206,444	255,980	253,740
Total Operating Expenses	\$ 280,794	\$ 468,330	\$ 474,640
Capital Costs	\$ 41,050	\$ -	\$ -
Payroll Costs	\$ 1,546,356	\$ 1,134,498	\$ 1,244,716
Total Department Expenditures	\$ 1,868,200	\$ 1,602,828	\$ 1,719,356
FTE Positions	7.0	5.0	5.5

Major Activities

The Executive Management Team continues to direct efforts to ensure that Southern Nevada has access to a 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:

- Continued progress in constructing a new Low Lake Level Pumping Station (L3PS), which is expected to be complete by 2020
- Continued implementation of LVVWD's 10-year Capital Improvement Plan
- Participation in the WaterStart partnership
- Completion of a Citizens Advisory Committee process for Big Bend Water District water rates, and implementation of the resulting recommendations
- Collaboration with Colorado River partners on conservation programs to help protect Lake Mead water elevations
- Leadership and involvement in Colorado River issues and initiatives
- Continuation of the Nevada State Engineer's public hearing process to review water rights associated with the Clark, Lincoln and White Pine Counties Groundwater Development Project

Southern Nevada Water Authority
Operating and Capital Budget
Department Budgets
Executive Management
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- The 10-year anniversary of the Springs Preserve, which experienced record-breaking attendance, membership and community involvement in 2017

Minute 323

On August 17, 2017, the SNWA Board of Directors approved six “Minute 323” related agreements between Colorado River water users and the country of Mexico.

Under Minute 323, Mexico will be able to defer delivery of a portion of its Colorado River water, which will remain in Lake Mead. This will help maintain elevation levels and avoid shortage declarations. Mexico has also agreed to absorb a share of the mandatory shortages should they be declared.

As part of the agreement, the SNWA Board authorized up to \$7.5 million in contributions for conservation projects in Mexico, which could potentially yield up to 35 billion gallons of water. A portion of this water would then be designated for Nevada’s use.

The Minute 323 agreement between the U.S and Mexico was officially executed and became effective September 21, 2017.

Low Lake Level Pumping Station

In 2015, SNWA began design and construction on L3PS at Lake Mead. To date, construction on all 34 of the project’s well shafts has been completed. These shafts will accommodate submersible pumps that are each capable of pumping 30 million gallons of water per day.

More than 500 feet beneath the well shafts, crews continue to excavate a 377-foot-long,

36-foot-high, 33-foot-wide underground forebay, which will be used to store water for pumping.

Crews have also completed the two 144-inch discharge pipelines that will connect the new pumping station to the transmission systems that deliver raw lake water to the River Mountains and Alfred Merritt Smith treatment plants.

L3PS construction remains on-schedule and is expected to be operational by 2020. Once complete, L3PS will allow SNWA to pump water from an elevation as low as 875 feet and work with Intake No. 3 to provide the community continued access to Colorado River supplies.

LVVWD Capital Improvement Plan

In January 2017, the LVVWD Board of Directors approved a 10-year Capital Improvement Plan to guide decisions related to asset management, necessary water system expansion and water quality compliance. Since then, significant progress has been made on various projects provided for within the Capital Plan; including the backflow retrofit program, beginning a 10 million-gallon storage reservoir in Summerlin and rehabilitation of major distribution lines. Once complete, these and other projects will increase water system reliability, enhance protection against water contamination and provide additional capacity for current and future water demands.

Southern Nevada Water Authority
Operating and Capital Budget
Department Budgets
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WaterStart

In 2013, the Nevada Governor's Office of Economic Development partnered with the Desert Research Institute, LVVWD, SNWA and other organizations to create a joint water technology venture called WaterStart. The goal of WaterStart is to leverage expertise and leadership in identifying practical, innovative solutions to water-related issues. Ultimately, the community's economy is strengthened and jobs are created as these issues are taken on by companies that are uniquely qualified to address them.

For example, companies such as Syrinix and RedEye are headquartered overseas, but have recently opened offices in Nevada as part of the WaterStart initiative. Each company offers its own specific, innovative product that is currently being used to increase efficiency and bolster the reliability of the community water system.

Big Bend Water District Rates Process

In 2017, more than \$9 million in capital improvements were identified as being necessary to maintain system reliability and avoid costly service interruptions to Big Bend Water District (BBWD) customers.

In response, the BBWD Board of Trustees appointed a Citizens Advisory Committee (CAC) in June 2017 to offer community perspective on how best to fund necessary capital expenditures for the water system. Nine individuals representing a broad spectrum of community interests served on the committee and met with LVVWD staff five times between July and September 2017. The group provided six recommendations to help

guide the Board of Trustees' decisions on how to meet revenue deficiencies and support a reliable water system.

System Conservation Pilot Program

The SNWA continues to partner with the U.S. Bureau of Reclamation and water users in the Upper and Lower Colorado River Basins to jointly fund voluntary water conservation projects that benefit the Colorado River. Under the funding agreement, participating partners have the authority to provide more than \$30 million to support projects in both basins.

By the end of 2017, the program had supported 10 projects in the Lower Basin and 45 projects in the Upper Basin, with more expected to be complete in 2018.

State Engineer Groundwater Hearings

In September of 2017, the Nevada State Engineer held a continuation of the public-hearing process to review water rights associated with the SNWA's Clark, Lincoln and White Pine Counties Groundwater Development Project. The hearings focused on monitoring, management and mitigation plans for protection of existing water rights and the environment, as well as verification that specified quantities of groundwater can be sustainably developed. A decision from the State Engineer is expected in 2018.

Springs Preserve 10-Year Anniversary

The Springs Preserve celebrated its 10-year anniversary in 2017. The Preserve also had its most successful year to date in terms of

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attendance, membership and community involvement.

A record 300,000 people visited the Springs Preserve in 2017. The increased attendance can largely be attributed the opening of several new and highly-anticipated exhibits and features, including the WaterWorks Exhibit, Boomtown 1905, a new children's playground and the Teaching Garden.

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.

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

2018-19 Performance Objectives

- Develop and maintain existing state, federal and international partnerships to advance and promote water-related technical development and innovative water-resource solutions.
- 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.

2017-18 Major Accomplishments

- The SNWA Board approved multiple Minute 323-related agreements among Colorado River water users and the country of Mexico to boost reservoir levels by adding billions of gallons of water to Lake Mead. The agreements will also support water conservation projects, expand wildlife habitat and provide for environmental restoration.
- The SNWA Board approved an updated Water Resource Plan in 2017 that extends water supply and demand planning scenarios through the year 2068.
- L3PS construction remains on-schedule with forebay construction in progress and the completion of pump well shafts and discharge pipelines.
- Continued progress on asset management, necessary system expansion and water quality compliance projects provided within LVVWD's 10-year Capital Improvement Plan.
- Supported a total of 55 Colorado River System Conservation Pilot Program projects throughout the Basin.
- Implementation of the Syrinix Pipeline Monitoring System, which monitors water pressure throughout the service area and provides staff data that can be used to minimize leaks, avert costly emergency repairs and enhance the

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- longevity of the community's water infrastructure.
- Implementation of the RedEye Digital Management System, a cloud-based engineering and drawing management platform, by which employees can more efficiently store, find, share, manage and update engineering drawings and data using computers or mobile devices.
- The LVVWD's average monthly water use for residential single services was approximately 10,800 gallons in 2017, representing a 39 percent decrease from calendar year 2000 consumption.

Strategic Plan Goal - Deliver an outstanding customer service experience.

2018-19 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.

2017-18 Major Accomplishments

- In 2017, LVVWD delivered approximately 108 billion gallons of water to customers throughout its service area.
- Fully installed and implemented Itron Analytics software, yielding significant benefits in workflow efficiency, water conservation and customer service and education.

- Installation of all-new electrical and data infrastructure in LVVWD Customer Service center, which will support software that will enhance customer service engagement efforts and provide additional avenues of customer-staff interaction.
- Launched a re-designed and mobile-friendly LVVWD website, with improved bill paying and customer self-service options.
- Launched a re-designed and mobile-friendly Springs Preserve website, which features an improved events calendar and easier access to ticketing, membership and visitor information.
- Opened the WaterWorks Exhibit at the Springs Preserve, which offers visitors an in-depth look at the treatment and delivery process that takes place before water comes out of the tap.
- Introduced the Springs Preserve's "Silver State Pass," a premier family membership that includes free family admission to signature events, unlimited seasonal access to the Butterfly Habitat, two annual guest admissions and general-admission train rides.

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

2018-19 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

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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.

2017-18 Major Accomplishments

- SNWA continues to serve as a member of the Water Utility Climate Alliance, and recently participated in the completion and approval of a Strategic Plan that will serve as the primary guidance document for the alliance's long-term efforts.
- Ranked 1st place in the 100 Best Fleets ratings for environmental practices, an award for which applicants were graded on a comprehensive set of criteria including use of renewable and alternative sources of fuel. More than 90 percent of the organization's fleet is now powered by alternative fuels.
- Attained 20 percent overall project completion on the Tropicana Weir – the last of the 21 weirs planned and constructed at the Las Vegas Wash. The Wash remains an important component to Southern Nevada's watershed by carrying the valley's excess water through wetlands, which serves as critical habitats to birds and plants, and a crucial cleansing point for the runoff.
- Continued monitoring of the Moapa dace population, which has been stable since 2014 at approximately 1,800 fish.

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

2018-19 Performance Objectives

- Continued implementation of IRPAC recommendations, including the construction of L3PS.
- Continue to lead the implementation of the Las Vegas Wash Comprehensive Adaptive Management Plan.

2017-18 Major Accomplishments

- Continued participation in the WaterStart partnership. Implementation of the aforementioned Redeye and Syrinx systems are a direct result of the WaterStart initiative and are yielding significant benefits.
- Continued to support environmental management efforts at 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.
- Participated with Israel-based company, WellToDo, to investigate technology that removes nitrate from LVVWD groundwater supplies. Future testing will continue to optimize performance and begin to evaluate other water contaminants.
- Participated with Japan-based company, Metawater, to investigate bromate-monitoring technology that

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monitors the formation of bromate in our treatment plants. Bromate is a byproduct of ozone disinfection process and currently regulated by USEPA. The analyzer would be first of its kind to monitor bromate to help ensure regulatory compliance.

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

2018-19 Performance Objectives

- Plan and develop opportunities to increase LVVWD and SNWA investments in alternative and renewable energy supplies.
- Continue to implement recommendations made by the LVVWD Rates and Service Rules Citizens Advisory Committee process and monitor results.

2017-18 Major Accomplishments

- Implementation of 6 recommendations made by a citizen's advisory committee, including annual 9.4 percent rate increases in years 2017-2020, to support long-term water system reliability in Laughlin, NV.
- Continued implementation of 11 recommendations, including a modest rate increase in 2017 and 2018, from a citizen's advisory committee to support long-term LVVWD water system reliability.

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

2018-19 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.

2017-18 Major Accomplishments

- 2017 was the Springs Preserve's most successful year to date in terms of attendance, membership and community involvement.
- Provided free admission to the Springs Preserve from November 20-24 for first responders, and other critical personnel for their service to the community on October 1.
- The Public Relations Society of America recognized LVVWD, SNWA and the Springs Preserve with 5 Pinnacle Awards.
- The Springs Preserve was named as one of "The Seven Best Places to Keep Kids Entertained" by vegasseven.com.
- The Springs Preserve earns the TripExpert Experts' Choice Award which reflects the views of journalists and professional travel writers and is bestowed on the best attractions around the world. The Preserve also received the TripExperts Best of Las Vegas award.

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- In 2017, SNWA assisted 17 well users to connect to the municipal water supply, in compliance with the SNWA's financial assistance guidelines for the Groundwater Management Program as established by the Nevada Legislature. Through the Sub-Meter Assistance Program, eight sub-meters have been distributed to well owners, seven rebates have been issued for the installation of those sub-meters, and seven wells have been plugged and abandoned.
- Hosted a federally-funded disaster management training for emergency response partners to prepare for, respond to and mitigate incidents affecting water and wastewater facilities.

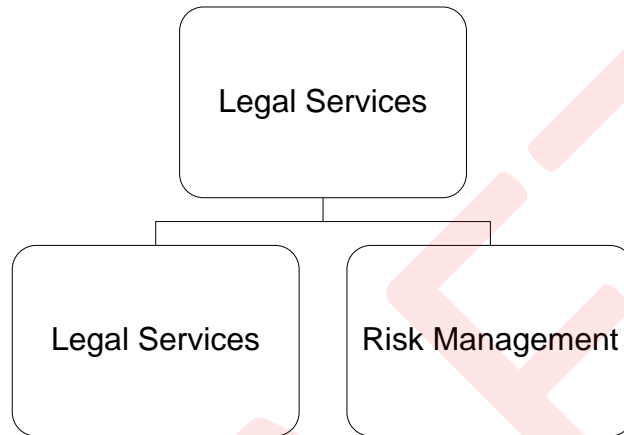
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SOUTHERN NEVADA WATER AUTHORITY®

LEGAL SERVICES

Level: 1200



Mission

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

and continues to advise on electrical power issues.

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

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 2018-19 budget contains continuing funding to support these efforts and for outside counsel who perform a variety of other legal services for the organization.

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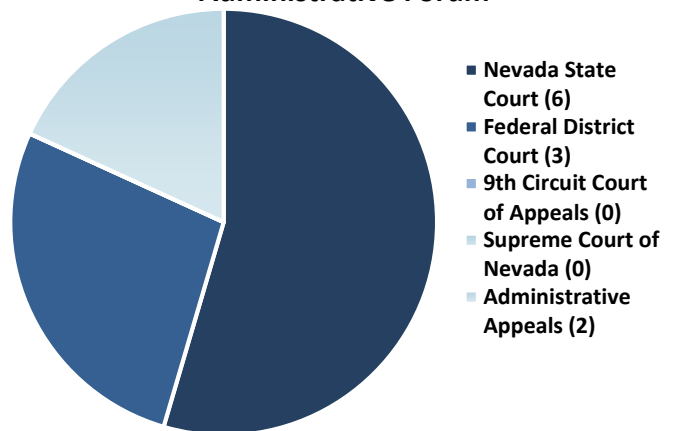
Expenditures

SNWA Uses	Actual 2016-17	Budget 2017-18	Budget 2018-19
Materials & Supplies	\$ 150	\$ 500	\$ 50,500
Maintenance & Repairs	-	-	-
Rental & Leases	-	-	-
Other Employee Expenses	49,703	61,500	83,500
Other Expenses	1,467,559	2,206,824	2,742,050
Total Operating Expenses	\$ 1,517,412	\$ 2,268,824	\$ 2,876,050
Capital Costs	\$ 19,734	\$ -	\$ -
Payroll Costs	\$ 1,382,991	\$ 1,690,844	\$ 1,840,683
Total Department Expenditures	\$ 2,920,137	\$ 3,959,668	\$ 4,716,733
FTE Positions	6.1	8.0	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.

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



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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.

2017-18 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.
- Began implementation of the District/SNWA Contract Management Software

2018-19 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.

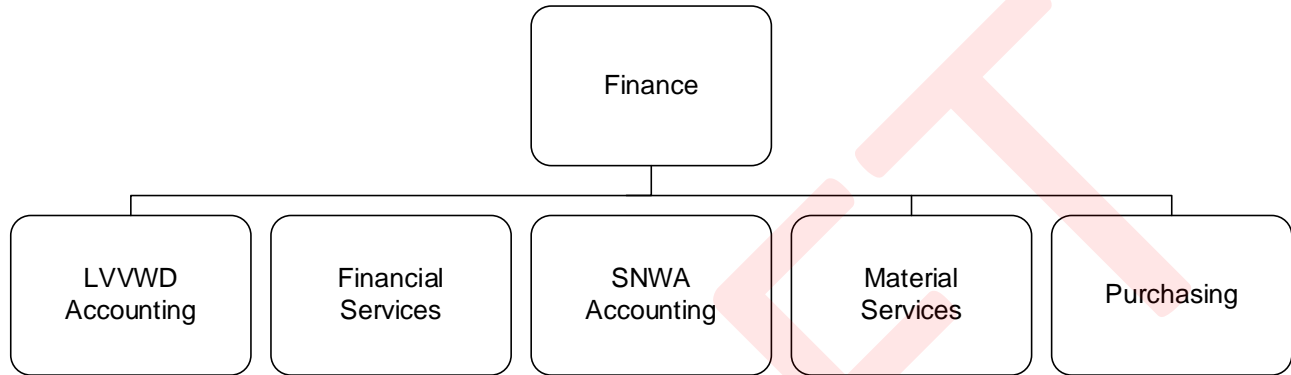
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SOUTHERN NEVADA WATER AUTHORITY®

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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, purchasing and material management procedures and processes.

Department Description

The Finance department is responsible for day-to-day accounting, financial reporting, financial planning, debt and treasury management, budgeting, 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 a Pension Trust Fund. In the Enterprise Funds, financial activities are recorded in a similar manner to that of a private business. The

Pension Trust Fund is used to account for the investments, earnings, contributions, expenses, and projected pension benefits of the Las Vegas Valley Water District Retirement Plan. 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 2018-19 Finance department budget contains funding to maintain the necessary functions the LVVWD and the SNWA require to provide quality services to both internal and external customers.

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Expenditures

SNWA Uses	Actual 2016-17	Budget 2017-18	Budget 2018-19
Materials & Supplies	\$ 2,874,234	\$ 105,400	\$ 438,400
Maintenance & Repairs	300	38,750	48,550
Rental & Leases	985	1,550	1,450
Other Employee Expenses	40,819	101,005	88,655
Other Expenses	8,977,414	8,931,905	8,881,305
Total Operating Expenses	\$ 12,635,495	\$ 9,178,610	\$ 9,458,360
Capital Costs	\$ -	\$ -	\$ -
Payroll Costs	\$ 3,287,775	\$ 3,527,353	\$ 3,938,920
Total Department Expenditures	\$ 15,923,270	\$ 12,705,963	\$ 13,397,280
FTE Positions	21.1	23.0	24.2

Department Performance

LVVWD Accounting. The LVVWD Accounting division is responsible for accounting, financial reporting, treasury and debt management, accounts payable and payroll activities, 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), which has received the Certificate of Achievement for Excellence in Financial Reporting from the Government Finance Officers Association (GFOA) for the last thirty-nine (39) consecutive years. The division provides accounting and payroll services for the LVVWD, the SNWA, 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 Retirement Plan.

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 with thousands of disbursements; processing payroll for approximately 1,250 employees; processing accounts payable for approximately 42,000 payments annually, earning more than

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\$256,000 discounts in fiscal year 2016-17 including an annual credit card rebate of \$99,000; accounting for the Springs Preserve; and accounts receivable, which includes federal and state agency grant accounting that require preparing and submitting reports to obtain reimbursements.

The LVVWD outsources its mail payment 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 preparing and monitoring the annual operating and capital budgets of the LVVWD and the SNWA; 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 rate, connection and other fee recommendations for the organization. On an annual basis, the 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 Annual Statistical Reports.

SNWA Accounting. The SNWA Accounting division is responsible for the SNWA's financial reporting, treasury and debt management, revenue billing, and various financial analyses.

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

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activities of the LVVWD, the SNWA and the Springs Preserve. These activities include: market analysis, developing new, expanded or alternative suppliers, systems contracting, formal and informal bidding processes, sustainable purchasing, disposal of company property, and the support of a 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.

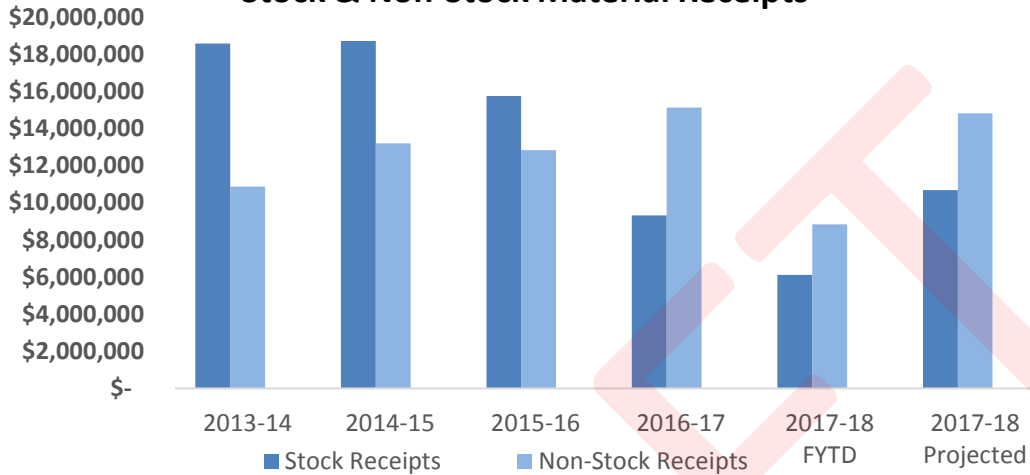
Material Services. Material Services' primary role is to deliver reliable customer service by providing quality operating and maintenance products, material requirements planning, inventory management, storage and retrieval services. To ensure customers' material needs are met, Material Services administers \$13.5 million in blanket agreements to replenish inventory. Material Services partners with their internal customers to identify, forecast, and schedule various Capital and operations and maintenance project material requirement deliveries.

These non-stock material items are received, inspected, and processed at both the LVVWD and SNWS Main distribution warehouses for delivery to internal customers at the LVVWD, SNWS, and eleven satellite facilities.

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**LVVWD & SNWS Material Services
Stock & Non-Stock Material Receipts**



In February 2018, average inventory assets were valued at \$16 million consisting of approximately 16,452 inventory items. Material Services also received, inspected, and processed stock replenishment deliveries. In fiscal year 2017-18, Material Services is projected to receive and process \$25.5 million or 23,890 lines combined for stock and non-stock receipts and projected to issue \$10.7 million or 76,078 lines of operating and maintenance inventory to internal users.

Material Services supports sustainability through inactive and obsolete inventory reduction, repurposed shipping materials, and administers, coordinates, and manages the investment recovery efforts for various recyclable and repurposed equipment and material through the auction program and bid sales. Additional services include emergency response planning, system emergency readiness, job site deliveries, safety garment administration, first-aid kit replenishments, Safety Data Sheet administration, and courier services for organizational business needs. Terrorism training certification is required annually by all Material Services personnel.

Mail Services. Mail Services processes incoming and outgoing intercompany and United States Postal Service (USPS) mail and processes office supply deliveries. Mail Services has two locations, one at the LVVWD Valley View office and the other at the Molasky Corporate Center. Mail Services delivers between the LVVWD, Molasky Corporate Center, SNWA, SNWS and Springs Preserve offices and to all remote facilities throughout the LVVWD service territory. Mail Services also performs the delivery and posting of agenda public notices, administers LVVWD's postage budget, desktop delivery of office supplies, and processes special communication campaign projects for Public Services. Terrorism training certification is required annually for all Mail Services personnel.

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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 all the various activities and services provided by the LVVWD and the SNWA.

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

2018-19 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.

2017-18 Major Accomplishments

- Standard & Poor's (S&P) raised its long-term credit rating for the LVVWD to AA+ from AA. The ratings upgrade reflects S&P's view of the LVVWD's strong financial management practices and policies, maintenance of robust cash reserves, and continued economic growth in the Las Vegas area.
- Board approved a long-term rate plan for the Big Bend Water District.

Strategic Plan Goal - Deliver an outstanding customer service experience.

2018-19 Performance Objectives

- Begin implementation of a new procure-to-pay and inventory management system that streamlines the procurement process, creating efficiencies that will allow staff the time to manage their assigned commodities and services more effectively.
- Streamline the warehousing processes to provide better functionality for inventory planning and forecasting.
- Continue to improve and streamline day-to-day accounting practices, specialized processes, improved financial analyses, reporting, and information sharing to departments.
- Provide the best possible equipment choices to departments to assist them in meeting their goals efficiently and effectively.
- Provide material services support to the internal customer's strategic goals and projects by planning, forecasting, scheduling, and coordinating their specific material requirements while maintaining optimal inventory availability.
- Complete financial month end close within 30 days of the end of the month.

2017-18 Major Accomplishments

- Provided Maintenance Engineering division forecasting and material

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- management services for the wellsite communications upgrade program.
- Explored cost savings and service improvements by changing supply source providers for Material Services' Vendor Managed Inventory (VMI). This change resulted in a 55 percent O&M cost savings, improved service, and supply reliability for their internal customers.
 - Provided internal customers with forecasting and material management services for their capital and/or maintenance projects. For example, Backflow Device Retrofit Program; PLC5 Remote Rack Replacement at well sites; Service Line and Pipeline Rehab/Replacement Program; Vault Rehabilitation Program.
 - Provided Customer Care and Field Services (CC&FS) with material management and forecasting services and utilized just-in-time delivery methods to support their commercial and residential meter maintenance program.
 - The combined metals recycling sales netted \$388,194 and \$46,615 for obsolete equipment and material auctions.
 - Expanded use of electronic systems for the submission and analysis of bids for goods, services, 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 larger supply base, including diverse suppliers.

- Began testing and implementation of a program to replace a manual user purchase order process for small dollar purchases. This program will increase transparency and accountability for small dollar purchases, and decrease the transactional costs for such items.
- Streamlined the internal approval process for contracts allowing a shorter turnaround time for contract implementation.

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

2018-19 Performance Objectives

- Increase purchases of recycled and environmentally friendly products.
- Provide weights and categories for all inventory items required for the computation of the LVVWD's carbon footprint.
- Administer the LVVWD's investment recovery program for the sale or repurposing of obsolete material and equipment.

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

2018-19 Performance Objectives

- Continue implementing improved report and automation technology for the upgraded general ledger and accounting system for more timely

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and useful reports, increased employee efficiency, better control of the approval/authorization process and to maximize vendor discounts.

- Actively participate in CC&B and Workday software.
- Encourage the purchase of sustainable products by facilitating meetings with suppliers and interested departments.
- Utilize mobile technologies for mail and warehousing processes and activities.

2017-18 Major Accomplishments

- Identified vendors for accounts payable automation software and began implementation.
- Implemented Workday payroll.
- Implemented a P-Card Program.
- Actively participated in vendor selection for new purchasing software.
- Actively participated in Avantis and Altru ticketing software upgrades and implementations.
- Implemented the Pitney Bowes Tracking Online System for mail and material deliveries. This system provides real time status, chain of custody tracking, and final delivery recording to the requestor and requires scanning the employee's ID badge and obtaining their signature.
- Upgraded two-way radios from analog to digital technology to improve communications and enhance interoperability.
- Automated several manual payment processes to improve accuracy and efficiency.

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

2018-19 Performance Objectives

- 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.
- Reduce the volume of manually processed payments through customer outreach efforts.
- Replace decades old purchasing and inventory management system.

2017-18 Major Accomplishments

- Upgraded bond ratings from AA and AA- Standard and Poor's (S&P) to AA+ and AA for the LVVWD and SNWA respectively.
- Issued the Las Vegas Valley Water District General Obligation Bonds (additionally secured by SNWA Revenues) Series 2018B Refunding Bonds generating net present value savings of \$10.2 million.
- Issued Las Vegas Valley Water District General Obligation Bonds Series 2018A to provide \$100 million of proceeds to fund the CIP.
- Renegotiated terms for the 2016D Bonds with a savings of \$270,000.
- Provided comprehensive financial planning and analytical support for the BBWD Citizens Advisory Committee, resulting in the BBWD rate plan.

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- Completed an Accounts Payable audit of overpayments/missed credits with minimal findings.
- Participated in implementation of new unclaimed property system.
- Participated in implementation of new job order ledger system.
- Implemented Pitney Bowes Tracking Online System for mail and material deliveries with real time status, chain of custody tracking, and final delivery recording to the requestor and requires scanning the employee's ID badge and obtaining their signature.
- Implemented remote mobile laptop and printer equipment and technology enabling paperless receipting by the warehouse staff, decreased processing time from 45 minutes per package to 3 minutes on average.
- Increased the AMS Material Services' Warehouse storage space by 37 percent to accommodate the L3PS's Andritz, Ebara and Indar pump's critical spare parts managed as an inventory asset.
- Reorganized the LVVWD Main Warehouse in-bound receiving and inventory storage sections to maximize space, improve safety and reduce physical movement of material handling staff and equipment by 26.2 miles over a year timeframe.
- Initiated RFP for a new Procure-to-Pay and Inventory Management System to replace a decade's old system.

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

2018-19 Performance Objectives

- Submit the LVVWD and SNWA CAFR for the year ending June 30, 2018, to the GFOA and receive the Certificate of Excellence in Financial Reporting.
- Receive unmodified opinions from external auditors for the LVVWD, SNWA and BBWD fiscal year 2018 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, 2019.
- Enforce regulatory and accounting requirements of inventory asset reporting and accountability.
- Update strategic goal tactics, which align with Strategic Goals 2, 5 and 6.

2017-18 Major Accomplishments

- Received the Certificate of Excellence in Financial Reporting from the GFOA of the United States and Canada for the thirty-ninth (39th) consecutive year for the LVVWD CAFR for the ended June 30, 2017.
- Received the Certificate of Excellence in Financial Reporting from the GFOA for the twenty-second (22nd) consecutive year for the SNWA CAFR for the year ended June 30, 2017.
- Received an unmodified opinion from external auditors for the LVVWD, SNWA and BBWD fiscal year 2017 audits.
- Received the Distinguished Budget Presentation Award from the GFOA for the LVVWD and SNWA Operating and

**Southern Nevada Water Authority
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Finance**

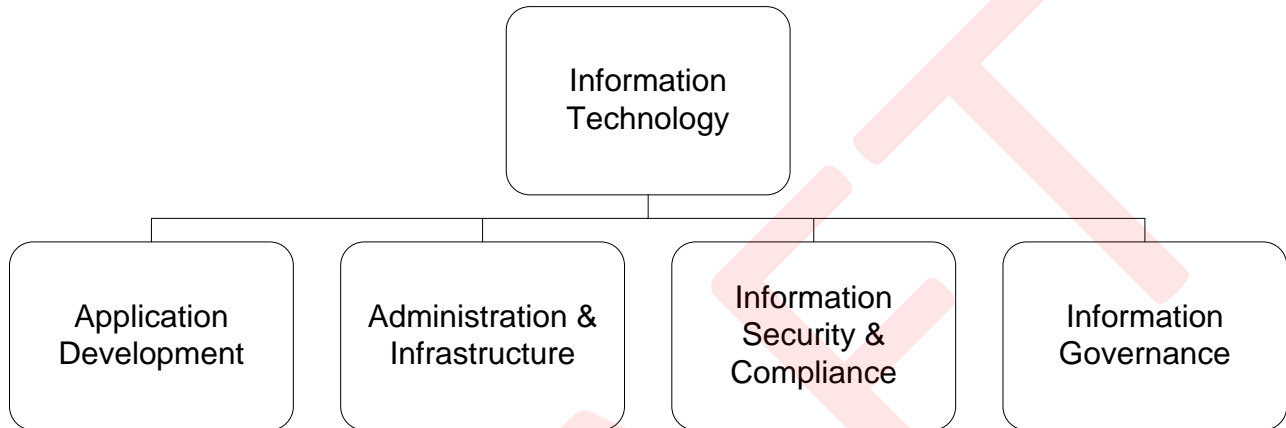
Fiscal Year Ending June 30, 2019

Capital Budgets for the year ending June 30, 2018.

- LVVWD Material Services achieved 23 years, SNWS Material Services 16 years, and Mail Services 5 years without a lost-time accident.
- Received an unmodified opinion for a near-perfect inventory accuracy audit from external auditors for the LVVWD and SNWS Material Services warehouses.

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 2018-19 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.

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Expenditures

SNWA Uses	Actual 2016-17	Budget 2017-18	Budget 2018-19
Materials & Supplies	\$ 578,278	\$ 767,120	\$ 646,868
Maintenance & Repairs	2,714,934	2,748,028	3,345,984
Rental & Leases	345,257	425,200	462,000
Other Employee Expenses	14,050	106,407	170,010
Other Expenses	888,779	2,558,755	3,314,276
Total Operating Expenses	\$ 4,541,298	\$ 6,605,510	\$ 7,939,138
Capital Costs	\$ 151,751	\$ 4,074,999	\$ 1,243,200
Payroll Costs	\$ 4,515,778	\$ 7,184,755	\$ 7,679,311
Total Department Expenditures	\$ 9,208,827	\$17,865,264	\$16,861,649
FTE Positions	24.8	39.6	40.1

Department Performance

Information Technology completed a number of projects to improve business processes, functionality, system operations, and security, while reducing expenses and risk to the organization. Major projects during the year included completion of the first phase of the Workday Human Capital Management System, upgrade of network storage, initiated the Call Center upgrade, continuation of PC/monitor refresh program, development of new Conservation system to manage Water Smart Landscapes program, deployment of business intelligence system, and completion of the Las Vegas Valley Light Detection and

Ranging (LiDAR) Project and the 2017 Clark County Imagery Project.

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.

Application Development is continuing to upgrade core enterprise systems including Avantix Asset Management Software, Itron Meter Field Collection System and Primavera Capital Project Management software. Efforts to stream-line the organization's purchasing

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systems will continue and include a new procure-to-pay system with inventory management capabilities to streamline the procure-to-pay functions, centralize purchasing and improve inventory management.

A system will be implemented to automate financial accounting month-end reconciliation processes. Significant efficiencies will be gained through elimination of manual reconciliation processes and use of a centralized on-line portal for reviewing and approving reconciled accounts.

DocStar ECM will be implemented to automate financial accounts payable functions. System features include automated invoice processing through workflow, automated data capture, auto-matching invoices with requisitions, facilitating vendors to electronically submit invoices, archiving documents and real-time reporting.

BBWD Customer Information System (CIS) will be integrated into LVVWD 's Customer Care & Billing System to eliminate redundant computer systems, provide consistency of CIS management, streamline accounting and meter reading processes and improve customer service for BBWD.

Flairdocs is a cloud-based software solution that will be implemented to replace four existing legacy applications. The Right-of-Way and Land Management teams will realize significant improved efficiencies in performing their work and interacting with property owners.

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.

Application Development will be supporting other key IT initiatives including major platform and operating system upgrades, bill payment and design services, systems supporting conservation, water resources, SCADA and engineering design, construction and capital projects.

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

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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-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 the implementation of the Genesys call center upgrade project with phase one go-live in second quarter of 2018-19, the upgrade of the corporate wide area network backbone to support 10GB between campuses and to the Internet, upgrades to the enterprise storage infrastructure, and the implementation of a new multimedia and imagery storage appliance.

The Spatial Technologies division is responsible for the acquisition and delivery of high-resolution imagery, Geographic Information System (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 existing GIS applications and mapping support for a wide range of projects important to the organization.

Security and Compliance. This team was formed in July of 2016 to ensure strong and continued focus on cybersecurity and Payment Card Industry (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

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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 organization in optimizing the management and use of its data.

A significant project that is currently being undertaken and will be implemented 2018-19, is the simplifying of our records retention schedule into Big Buckets. The new schedule will follow State and Federal regulations and IG will work with subject matter experts in all departments to successfully train and implement the new schedule. Another key project will involve identifying and curating historical records in conjunction with University of Nevada Las Vegas School of Library Sciences. This effort will lead to a sustainable approach to identifying and preserving historic records.

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 2018-19, focus will be placed on convening the IG Strategic Planning Committee, whose members will help guide and inform future IG initiatives. The implementation of an Enterprise Content Management System (ECMS) will be one of the key deliverables for the committee. 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.

2018-19 Performance Objectives

- LVVWD bill design will be outsourced to a professional services company providing customers with better messaging, advanced bill forwarding and more modern bill design capabilities.
- BBWD billing and customer service functions will be integrated within the LVVWD Customer Care & Billing

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System providing customers with access to 24x7 customer service.

- LVVWD will replace its current resource reservation system with a new modern digital application that will be used within Office 365 and use state-of-the-art digital signage for greater security, resource efficiency, and improved visibility to the various resources used throughout the organization.

2017-18 Major Accomplishments

- The organization's major customer facing web sites were reengineered to meet modern design and functionality standards and allow for seamless access to information and self-service features regardless of device, including a full range of mobile platforms.
- 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.

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

2018-19 Performance Objectives

- Work will continue to re-engineer the organization's purchasing system to consolidate purchasing activities and provide additional capabilities and controls within the organization's financial system.

- A system will be implemented to automate and help assist Accounts Payable's business processes with automated data capture, auto-match, workflow and analytics.
- Accounting will be provided a service to help automate and standardize their month-end reconciliation processes. The system will create workflows to standardize the reconciliation tasks, enable auditing and approvals to track the status of the closing process and provide analytics to identify issues and concerns.
- Project HUB, a system currently being developed to support engineering plan acceptance, construction and approval of service connections will be fully implemented in 2018-19. This effort will replace Hansen, a legacy system that has reached end-of-life and enhance corporate data security with emerging technology to identify threats and mitigate risk.
- 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.
- Complete the 2018 Las Vegas Valley LiDAR Digital Elevation Data Project which will upgrade the existing elevation models used within the organization and by our partner agencies.

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- Replace the existing facilities mapping application with a streamlined application which will improve the organization's ability to meet long-term management of water infrastructure assets and mapping needs.
- 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 storage arrays/platforms.

2017-18 Major Accomplishments

- The Workday Human Capital Management System was implemented on time and under budget. Workday eliminated several disparate systems, reducing operations costs, and provides improved customer self-service and analytics.
- RedEyeDMS, a cloud-based system for managing engineering drawings was implemented. This system will facilitate drawing access and collaboration needed by engineering and asset management.
- A new risk management information system was implemented that centralizes claims, Occupational Safety and Health Administration (OSHA) reporting, incident processing, inspections and audits, insurance

management, training and certifications. The system eliminated a variety of custom and legacy software and addresses key needs of Risk Management and Environmental, Health, Safety & Corporate Security.

- An upgrade of Customer Care and Field Service's mobile workforce management system was completed. The upgrade improved dispatch services, enhanced route optimization and standardized map services.
- Continued development of CiCADA, the new Conservation System, adding support for incentive programs for Water Smart Homes, Water Efficient Technologies, Pool Covers and Smart Irrigation Coupons. Consolidation of Conservation programs in this new system improves efficiency and reduces costs incurred with maintenance of aging technology of legacy systems.
- AssetWorks, Fleet's Management and Maintenance System, was upgraded to maintain version and vendor support. The latest version includes store-and-forward functionality through its mobile application which addressed data latency issues encountered by users at remote sites.
- 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.
- Completed the replacement of the corporate backup infrastructure to

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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.
- Combined the various GIS application development, data management, and mapping efforts into a single workgroup for maximum efficiency.

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

2018-19 Performance Objectives

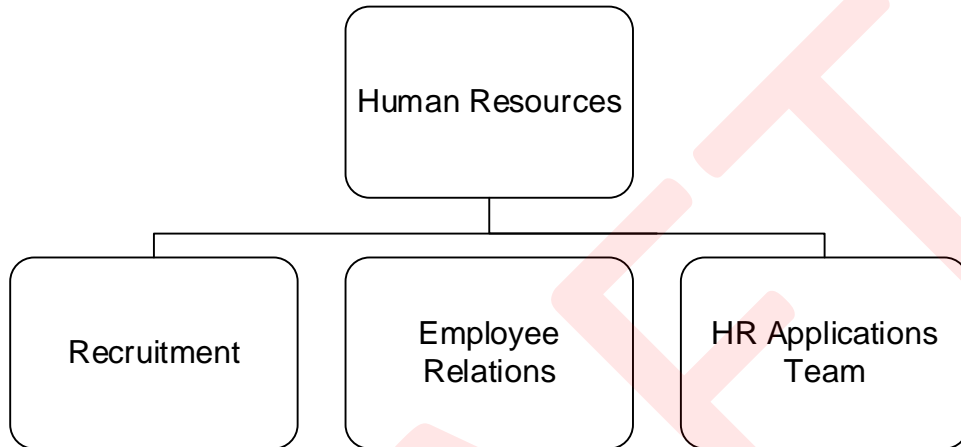
- Make numerous enhancements to cybersecurity which include the implementation of additional threat monitoring tools and further data separation to achieve PCI compliance 3.2.

2017-18 Major Accomplishments

- Continued implementation of Agile methodology throughout Information Technology utilizing both Scrum and Kanban principles to enhance interdepartmental collaboration and improve bidirectional customer communications.

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.

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, diversity, employee development, and productive employee relations.

Department Description

The Human Resources department is responsible for recruitment and selection; 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: Recruitment, Employee Relations and the HR Applications Team.

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Human Resources
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Expenditures

SNWA Uses	Actual 2016-17	Budget 2017-18	Budget 2018-19
Materials & Supplies	\$ -	\$ -	\$ -
Maintenance & Repairs	-	-	-
Rental & Leases	-	-	-
Other Employee Expenses	-	-	-
Other Expenses	7,450	100,000	100,000
Total Operating Expenses	\$ 7,450	\$ 100,000	\$ 100,000
Capital Costs	\$ -	\$ -	\$ -
Payroll Costs	\$ 764,991	\$ 525,138	\$ 698,881
Total Department Expenditures	\$ 772,442	\$ 625,138	\$ 798,881
FTE Positions	4.6	3.5	4.6

Department Performance

Recruitment. Provides recruitment and selection services; classification and salary assignment of jobs. This group develops and administers responsive recruitment and selection methods utilizing fair employment practices ensuring employees are properly classified. 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. Responsible for the administration of various employee benefit plans and all employee personal records and payment data. Provides support for HR management programs, activities and processes.

HR Applications Team. Responsible for the administration and support of the Human Resources Information System (HRIS) for the organization. This team prepares data in response to requests for employee information; implements organizational changes; provides employee application training.

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Performance Indicators
Human Resources Department
(Fiscal Year Ending June 30)

Activity	2013	2014	2015	2016	2017
Total Hires	83	82	239	249	226
Job Notices	59	84	243	453	620
Written Exams	457	149	237	0	0
Interviews	527	420	107	1,029	870
Job Applications					
Accepted/Processed	3,021	2,373	5,981	6,947	9,879
Job Interest Forms	8,871	10,467	17,179	13,531	14,278
Recruitment			not	not	not
Letters Sent	8,513	5,577	available	available	available
Training Hours	9,705	8,288	2,070	5,107	10,674

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 development; 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.

2018-19 Performance Objectives

- Continue to coordinate implementation of Workday modules, including recruitment, with a communication plan and training for employees in cooperation with Management Services.
- Centralize training and development within Human Resources. Work with the departments to track all training and education.

2017-18 Major Accomplishments

- Coordinated the successful implementation of Workday with a communication plan and training for employees in cooperation with Management Services.
- Implemented Workday for Benefits, Compensation, Time Tracking, Payroll, and Absence Management.

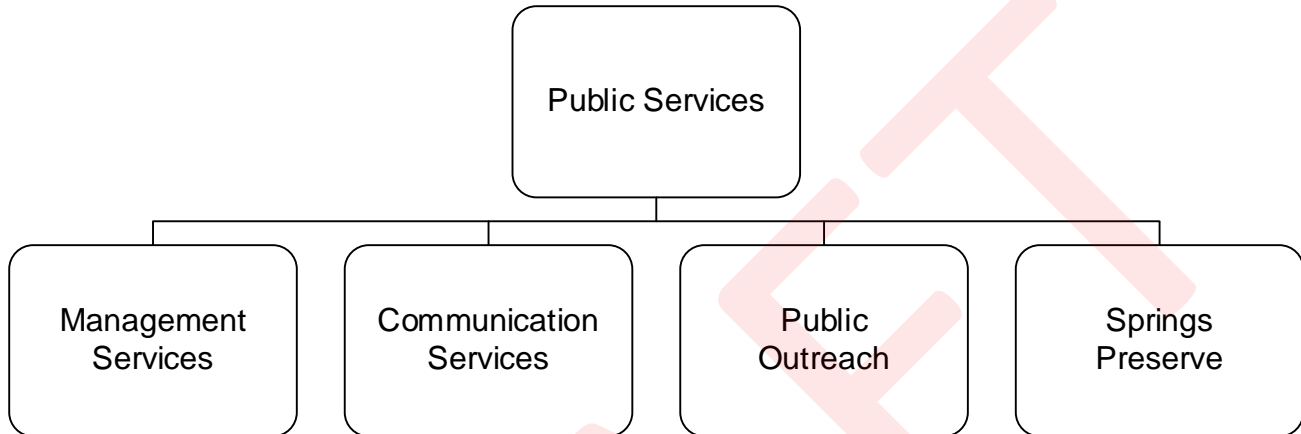
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SOUTHERN NEVADA WATER AUTHORITY®

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.

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Budget Objectives and Highlights

The 2018-19 budget remains consistent with the organization's efforts to enhance efficiency and service to internal and external customers.

Expenditures

SNWA Uses	Actual 2016-17	Budget 2017-18	Budget 2018-19
Materials & Supplies	\$ 165,638	\$ 307,400	\$ 365,400
Maintenance & Repairs	331,131	237,730	240,280
Rental & Leases	3,264	26,000	26,000
Other Employee Expenses	129,145	166,089	222,444
Other Expenses	5,831,889	6,603,265	7,224,115
Total Operating Expenses	\$ 6,461,066	\$ 7,340,484	\$ 8,078,239
Capital Costs	\$ -	\$ -	\$ 720,000
Payroll Costs	\$ 4,635,593	\$ 5,947,541	\$ 6,537,917
Total Department Expenditures	\$11,096,659	\$13,288,025	\$15,336,156
FTE Positions	31.3	40.3	39.8

Department Performance

In fiscal year 2017-18, 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.

Over the past fiscal year, the division concluded the Big Bend Water District's advisory committee process, which represented a major community inclusive process in the Laughlin service area. The division was also responsible for securing millions of dollars of funding for projects through grants, including \$4.4 million for Las

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Vegas Wash weir construction. The division supported the rehearing process for the SNWA's groundwater rights in eastern Nevada through material and exhibit development.

Communication Services. Communication Services is responsible for developing materials that reach customers through web, social media, television, email and print.

The division, in collaboration with Information Technologies, launched a mobile-friendly LVVWD.com website which features improved bill paying and customer self-service options. Communication Services and IT also launched a new SpringsPreserve.org website, featuring a mobile-first design and improved events calendar. The division also manages the social media accounts for LVVWD, SNWA and the Springs Preserve, which continue to add followers and earn accolades. The Communication Services team won first place for the LVVWD.com website redesign, Springs Preserve mobile app and Boomtown streetscape opening campaign from the Public Relations Society of America (PRSA) Las Vegas Valley Chapter's Pinnacle Awards.

Public Outreach. 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 an integrated communications campaign for the Springs Preserve, the launch of a public education campaign highlighting community investment

in water infrastructure, and updates to awareness and education campaigns supporting SNWA's water conservation initiatives. 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. Calendar Year 2017 marked the Springs Preserve's 10-year anniversary. It was also the Preserve's most successful year to date in terms of attendance, membership and community involvement. Also, there was an increase in volunteer interest, with 526 volunteers providing more than 30,000 hours of service. The Springs Preserve also opened two new permanent exhibits, which drew many new and repeat visitors to the site. New exhibits include Boomtown 1905, which features a recreated historical streetscape and preserved railroad cottages. WaterWorks provides visitors a one-of-kind inside view of water-resource treatment and delivery system. Other new features include the grant-funded Teaching Garden that opened in September 2017 and the Children's Playground that reopened with new equipment and concepts designed with the help from architecture UNLV students.

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.

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

2018-19 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.

2017-18 Major Accomplishments

- Secured over \$4 million in grant funding to support water-related initiatives.
- Assisted 9 well users who connected to the municipal water supply and responded to approximately 188 phone inquiries on the Groundwater Information Line.
- Supported the Groundwater Hearings, as the SNWA continues to maintain the Clark, Lincoln and White Pine Counties Groundwater Development Project as part of its water resource portfolio.

Strategic Plan Goal – Deliver an outstanding customer service experience.

2018-19 Performance Objectives

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

2017-18 Major Accomplishments

- The Water District launched its new mobile-friendly website in August with improved bill paying and customer self-service options. Surveys show an increase in customer satisfaction with the responsive website.
- In November, the Springs Preserve launched its new mobile-friendly website, which featured a modern design and improved events and activities calendar.
- The Springs Preserve social media program won a first place and “Best in Show” Award from the Public Relations Society of America (PRSA) Las Vegas Valley Chapter.
- Responded to more than 100 media requests.
- Completed an inclusive community rate setting process in Laughlin.

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- Conducted surveys that show increased customer satisfaction with LVVWD.com, which receives more than 2 million visits and 15 million-page views annually.
- The SpringsPreserve.org website receives nearly 900,000 visits and 2.4 million-page views annually. Almost 12,000 people have downloaded the Springs Preserve mobile app, which features an interactive map to help guests find their way around the Preserve. Between 175 and 250 visitors actively use this app each week.
- In 2017, the Springs Preserve had 300,055 visitors. This represents approximately a 15 percent increase in attendance from 2016.
- Distributed approximately 170 letters per day during mid-April through early-July to manage the notification process and possible inquiries to Customer Care on the new requirement regarding the installation of backflow retrofits. A special phone line was established for customers to directly contact Customer Care regarding these notices. Customers were made aware of the importance of the program, how it affected their water bills and how backflow protects water quality.

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

2018-19 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.

2017-18 Major Accomplishments

- Continued support of the Sustainability Cross-Departmental Team (CDT) to examine internal processes and develop sustainable practices within the organization.
- Worked with Resources to update the Water Resource Plan to include a scenario-based approach that looked at a wide range of conditions that may be experienced over the 50-year planning horizon.

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

2018-19 Performance Objectives

- Increase customer communication so there is a better understanding of the organization's products and services.

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- Ensure predictable rates that are aligned with community expectations.
- Establish and utilize benchmarks to explore new opportunities for improved efficiencies.
- Formulate risk assessments and develop alternatives for expenditure decisions.

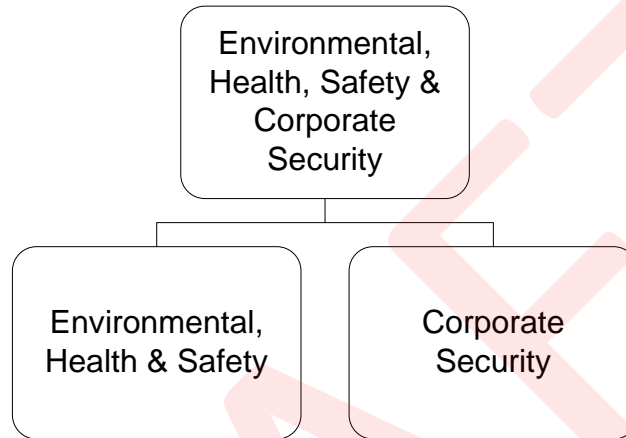
Hops, Haunted Harvest, Día de Muertos, and Holiday Express.

2017-18 Major Accomplishments

- Supported the LVVWD's Citizens Advisory Committees' recommendations including modest annual rate increases.
- Opened the Warm Springs Natural Area to the public on December 9, 2017. The facility includes public access walking trails and interpretive signage to educate and inform the public about its environmental resources.
- Successfully assisted the Big Bend Water District's Citizen's Advisory Committee. The committee reviewed 17 different scenarios, and ultimately recommended small rate increases beginning in January 2018.
- Community outreach efforts continue to raise awareness and provide education supporting the SNWA's water conservation initiatives. Also, communications campaign for the Springs Preserve and the launch of a public education campaign highlighting community investment in water infrastructure.
- Successfully coordinated several Springs Preserve special events to sell-out crowds, including Ice Cream Festival, Brews & Blues, Grapes &

ENVIRONMENTAL, HEALTH, SAFETY & CORPORATE SECURITY

Level: 2700



Mission Statement

To excel in providing a safe and secure environment for our 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.

Budget Objectives and Highlights

The 2018-19 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 to reduce costs.

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Expenditures

SNWA Uses	Actual 2016-17	Budget 2017-18	Budget 2018-19
Materials & Supplies	\$ 2,033	\$ -	\$ -
Maintenance & Repairs	-	-	150,000
Other Employee Expenses	183	-	-
Other Expenses	308,989	320,000	320,000
Total Operating Expenses	\$ 311,204	\$ 320,000	\$ 470,000
Capital Costs	\$ -	\$ -	\$ -
Payroll Costs	\$ 2,131,718	\$ 2,631,566	\$ 3,022,274
Total Department Expenditures	\$ 2,442,922	\$ 2,951,566	\$ 3,492,274
FTE Positions	15.4	18.6	19.7

Department Performance

Environmental, Health and Safety Division.

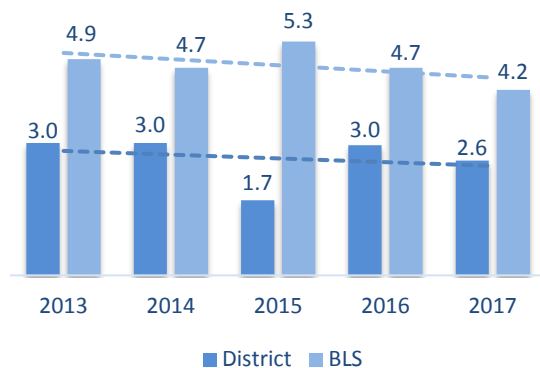
The EHS division is responsible for overall management of the District's Environmental, Health and Safety program to guarantee a safe workplace for all employees. EHS tracks negative trends in the program, making necessary adjustments to ensure a positive safety culture is maintained, and provides ongoing environmental, health and safety training for employees. The division is responsible for permitting and compliance with the federal, state and local agency 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. Additionally, the division is responsible for proper upkeep and care of the

District's Process Safety Management program for a highly hazardous chemical (chlorine) at Alfred Merritt Smith Water Treatment Facility (AMSWTF), and develops and publishes safety procedures ensuring compliance with Occupational Safety and Health Administration (OSHA) and state regulations. EHS employs an aggressive accident prevention program, investigates on-the-job accidents, and manages a comprehensive Fleet Safety program that encompasses vehicle and heavy equipment training and defensive driving education. The division conducts monthly meetings with the EHS Steering Committee, comprised of employees from various departments and labor management representatives. The health discipline manages the Radiation Safety, Asbestos, Lead Awareness, and Hearing Conservation programs for the organization.

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EHS tracks recordable injuries and illnesses annually and compares them to the Bureau of Labor Statistics (BLS) annual averages for similar industries.

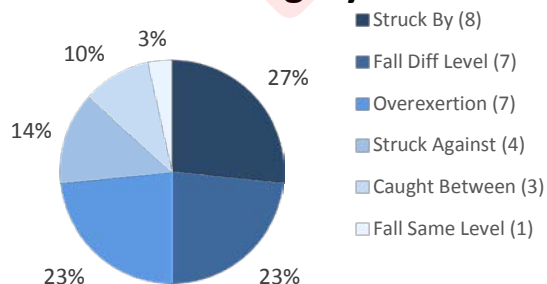
Recordable Injury Rates



The injuries sustained in 2017 were less severe than in 2016. There were 134 lost-work days in 2017 versus 423 in 2016. As a result, the severity rate in 2017 was reduced by 68 percent.

There were eight “struck by” injuries where employees were hit by equipment and other objects while on the job. Both the “overexertion” and “fall from different level” categories had seven injuries each.

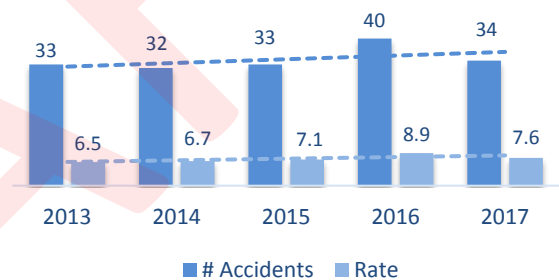
Recordable Injuries by Category



Overexertion injuries resulted from employees lifting objects, and fall related injuries were caused by employees slipping on walking surfaces.

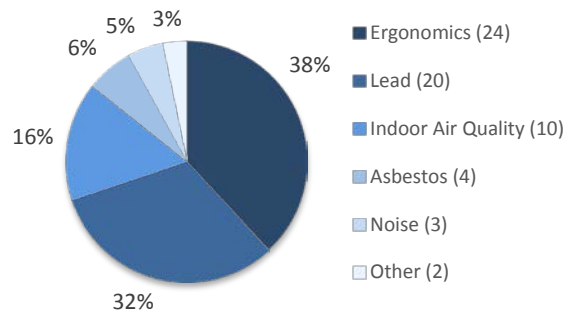
Overall, the District experienced 34 at-fault vehicle accidents in 2017, a decrease of six from 2016. The District’s vehicle accident frequency rate decreased from 8.9 in 2016 to 7.6 in 2017.

Vehicle Accidents & Rates



In 2017, all 178 employees enrolled in the Hearing Conservation program were audiometrically tested and the 260 employees enrolled in the Respiratory Protection program were respiratory fit tested. There were 63 health assessments conducted in 2017 (vs. 44 in 2016); the 43 percent increase is primarily due to construction and maintenance projects.

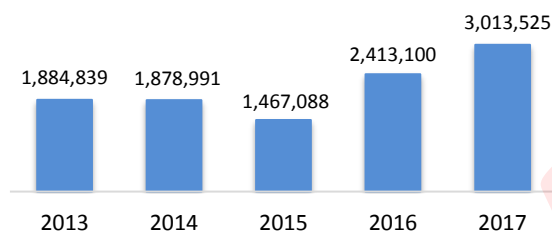
2017 Health Assessments



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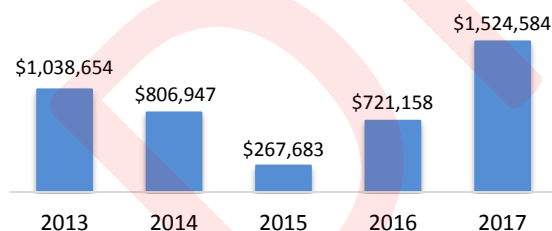
LVVWD and SNWA recycled a combined total of 3,013,525 pounds of materials in 2017. The increase in recycled material can be attributed to an increase in the amount of miscellaneous metals recycled and vehicles sent to auction.

Total Pounds Recycled



Total revenue increased for 2017 to \$1,524,584 (scrap \$440,928, auctions \$46,616, vehicles \$1,037,040) from the auction of scrap metal and fleet vehicles.

Total Revenue Generated



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 vendors' 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 24 hours daily by security officers.

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.

Strategic Plan Objectives and Accomplishments

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

2018-19 Performance Objectives

- Operate the Security Center, monitoring organizational security systems, and continue to implement automated security systems to

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improve the protection of facilities.

- Expand the use of card activated access control, and security system technologies to enhance efficiency.
- Review maintenance and services contracts to ensure EHS operational compliance.
- Train key employees and conduct drills on the LVVWD/SNWA combined 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 weekend/after-hours spot audits of industrialized work activities supporting water treatment, water quality, water distribution or other activities.
- Complete four 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.

2017-18 Major Accomplishments

- Continued supporting and promoting the Department of Homeland Security's national "If You See Something, Say Something™" campaign.
- Installed access control card readers at the Fulton gate entrance and in the LVVWD Warehouse.
- Installed anti-climb mesh on the executive parking garage.
- Tested Bosch thermal imaging camera at Fayle Reservoir to enhance surveillance methods.
- Converted Spring Mountain Durango site to Bosch Starlight closed-circuit television cameras and converted card readers to P2000 system for access improvement and control.
- Completed over 130 documented spot audits and two comprehensive audits that included a program management review.
- Reviewed and updated the EHS Manual and Administrative Policies 3 and 17 during the 2017 off-site meeting.
- Conducted 274 investigations related to recordable injuries, at-fault vehicle accidents, at-fault property damage incidents, near-misses, chemical spills and first-aid events. Recommended corrective actions were included as appropriate to reduce the chance of recurrence.
- Conducted 34 instructor-led EHS training courses, which included 2,457 participants and 4,836 training hours.
- Achieved a District incidence rate of 2.6, compared to the BLS rate of 4.2, extending the District's yearslong

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history of falling below BLS rates.

- Terminated four environmental permits (Big Bend Water District air permit; Springs Preserve dust control permit; and AMSWTF and River Mountains Water Treatment Facility drying bed permits) and negotiated an annual stormwater pollution prevention permit rather than individual permits that resulted in a cost savings of \$3,500.00.

Strategic Plan Goal – Deliver an outstanding customer service experience.

2018-19 Performance Objectives

- Explore and test new security technology and systems.
- Identify additional opportunities for security service and collaboration with internal departments.
- Attend briefings and meetings, and support groups such as the Utility Pipeline and Coordinating Group, InfraGard, Southern Nevada Counter-Terrorism Center, and Department of Homeland Security.
- Provide evaluation forms for instructor-led courses to assess customer satisfaction.
- Participate in local association 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.

2017-18 Major Accomplishments

- Collected student evaluation forms after each EHS instructor-led course to improve future course curriculums.
- Participated in local and national professional organizational meetings, seminars and conferences specific to water treatment and delivery, with EHS staff conducting presentations at several events.
- Represented EHS in all department safety action teams, the EHS Steering Committee and several CDTs - including the northern ranches and sustainability.
- Updated electronic materials on the Hydroweb to ensure that LVVWD 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.
- Installed indoor motion detectors tied to the card reader system in Boomtown at the Springs Preserve to increase security in the area.
- Improved situational awareness in the Customer Care lobby by converting standard cameras to 360-degree capable cameras.

Strategic Plan Goal – Anticipate and adapt to changing climatic conditions while

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demonstrating stewardship of our environment.

2018-19 Performance Objectives

- Identify non-compliance items through organization-wide collaboration.
- Prepare environmental reports and submit to regulatory agencies.
- Review current recycling and waste streams at manned facilities to identify new recycling opportunities.

2017-18 Major Accomplishments

- Enhanced security at remote locations by installing a solar powered motion activated security camera at the Searchlight site and Warm Springs Natural Area.
- Tracked and submitted operational environmental permits in a timely fashion with zero negative impact to the District.
- Recorded significant increase in recycling numbers for 2017 compared to 2016: 3,013,525 lbs. vs. 2,413,100 lbs., resulting in \$1,524,584 in revenue in 2017.
- Contained and cleaned six unintentional releases of regulated materials, with minimal environmental impact, at various District facilities.
- Registered a 5 percent decrease in hazardous waste generation and corresponding 47 percent decrease in costs.

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

2018-19 Performance Objectives

- Improve security and reliability of gate function by installing Wallace gates at AMSWTF.
- Enhance security blotter system to track theft, vandalism and suspicious activity accurately.
- Support IT and Risk Management divisions in the design and implementation of Phase II of the new risk management information system (Origami).
- Evaluate mobile technologies to improve EHS efficiency.

2017-18 Major Accomplishments

- Improved Security Center capability to monitor over 700 cameras by using video analytics in the current camera system.
- Acquired and implemented an EHS database system that automates management of the audiometric test program, resulting in a more efficient and effective Hearing Conservation program.
- Participated in the development and implementation of the new risk management information system (Origami) for the District, contributing to the increased technological and operational capabilities of the EHSCS department and reducing our overall carbon footprint.

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

2018-19 Performance Objectives

- Identify new regulations and policy changes and collaborate with other pertinent agencies.
- Assess all security processes, priorities and resource utilization to improve efficiency.
- Monitor progress of International Organization for Standardization (ISO) 45001 and evaluate the program for possible implementation at the District.

2017-18 Major Accomplishments

- Established a five-year professional services agreement for contract security to supplement in-house security staff.
- Adjusted instructor-led EHS training schedule to ensure critical safety training is offered more frequently.
- Actively monitored progress of ISO 45001 program via ISO committee membership and professional training seminars.

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

2018-19 Performance Objectives

- Engage in future construction and maintenance contracts to ensure security issues and concerns are addressed at the earliest stages.

- Conduct a monthly division staff meeting to update EHS employees on all major projects and communicate status changes and challenges.
- Conduct instructor-led EHS training for District employees.
- Provide EHS information updates to the District through electronic Management Advisory and Safety Alert messages, Pipeline articles, Hydroweb postings, etc.
- Provide diverse learning opportunities in all department disciplines.
- Conduct EHS annual off-site meeting to discuss future initiatives and to evaluate and update EHS programs, policies and procedures.
- Recognize employees/teams for their unique talents and accomplishments.
- Disseminate an annual EHS trend report.

2017-18 Major Accomplishments

- Participated in several professional development courses while continually searching for and participating in relevant low- or no-cost training opportunities.
- Achieved a 2017 Safety Stand Down Day participation rate of over 280 employees.
- Completed the annual EHS trend report which highlights major EHS accomplishments throughout 2017.
- Received zero OSHA citations in 2017.
- Received 21 Safety Action Requests, each of which were tracked and monitored to ensure corrective actions were implemented.
- Developed and implemented the 101 Critical Days of Summer safety

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campaign.

- Developed the Corporate Security Manual to define and explain the organization's security strategy, systems, procedures and practices.
- Applied Origami software risk accident/incident tracking and reporting process through the Security Center.
- Continued 100 percent ID badge checks at all entrance points to facilities, maintaining tighter control of access points.
- Assisted with the move of Customer Care from the Molasky Corporate Center to the Valley View campus.

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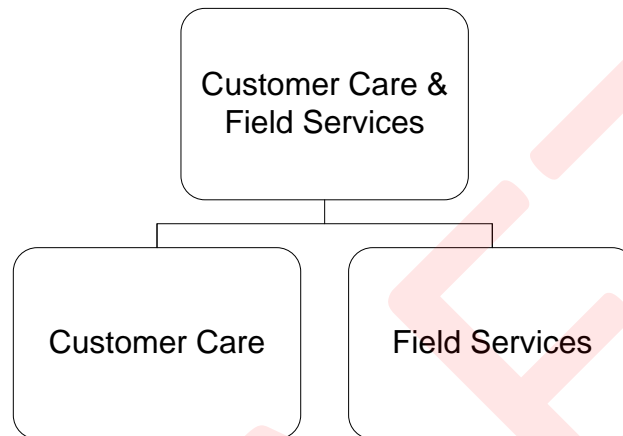


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CUSTOMER CARE AND FIELD SERVICES

Level: 2800



Mission

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

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.

Budget Objectives and Highlights

The 2018-19 budget for the Customer Care and Field Services department is consistent 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.

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

Field Services. The 2018-19 Budget Plan contains funding for large meter maintenance, advanced metering infrastructure, and operational costs.

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Expenditures

SNWA Uses	Actual 2016-17	Budget 2017-18	Budget 2018-19
Materials & Supplies	\$ 2,581	\$ 6,000	\$ 2,000
Maintenance & Repairs	3,264	3,500	3,500
Total Operating Expenses	\$ 5,845	\$ 9,500	\$ 5,500
Capital Costs	\$ 385	\$ -	\$ -
Payroll Costs	\$ 785,995	\$ 411,363	\$ 435,138
Total Department Expenditures	\$ 792,225	\$ 420,863	\$ 440,638
FTE Positions	4.7	2.9	2.9

Department Performance

In 2017-18, 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.

supporting approximately 391,000 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.

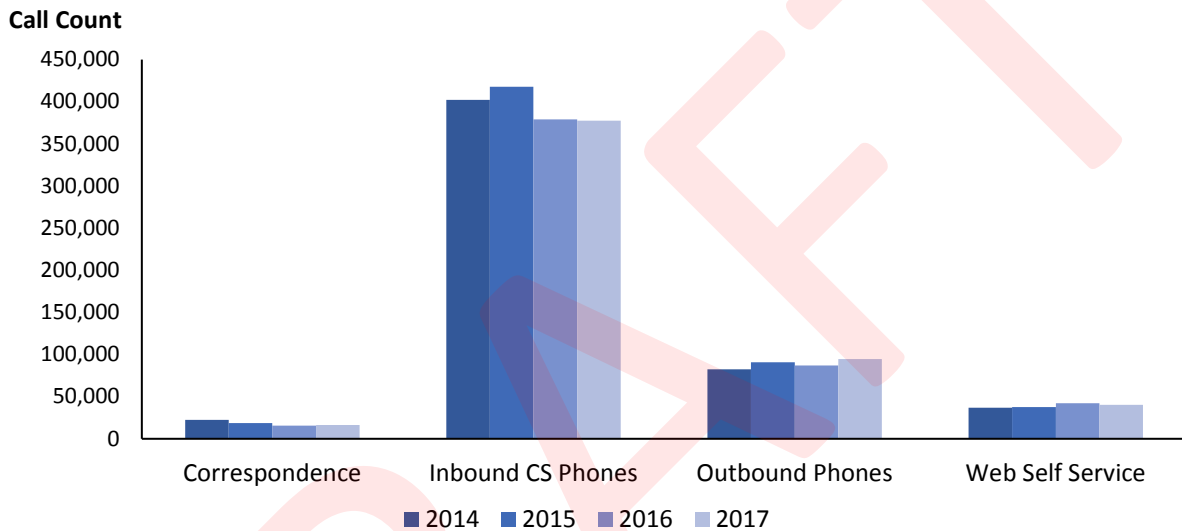
Customer care continues its proactive approach to customer education and service through outbound customer service calls and customer notifications.

Customer Care. The Customer Care division serves as the primary point of contact for internal and external service inquiries—

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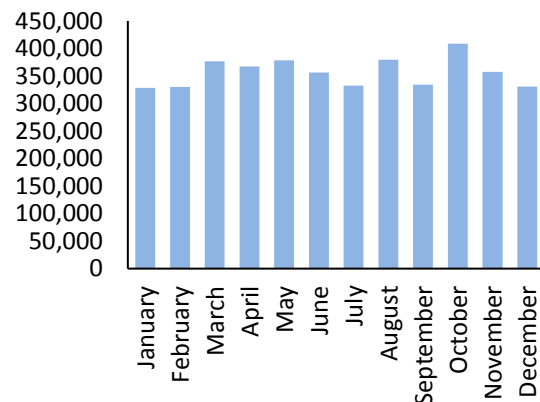
The following graph illustrates the shift in volume distribution over the past four years as process and technical innovations advance the meter to cash philosophy.

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 large services, developer accounts, adjustments, investigations, quality control, supplemental, fire protection services, consumption notifications and mobile meters.

Bills Generated 2017



The following chart depicts the total number of bills generated monthly in 2017.

Field Services: The Field Services division is responsible for reading and maintaining meters for approximately 391,000 services in Las Vegas, Searchlight, Blue Diamond, Kyle

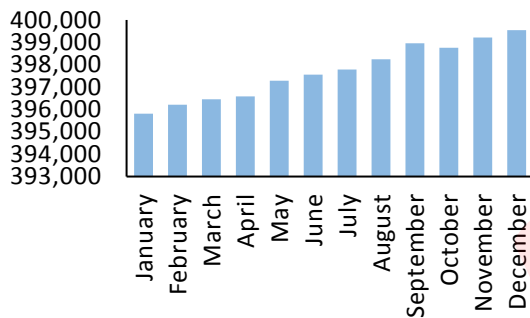
Canyon, Laughlin and Jean. The division also responds to leak investigations, low pressure, high consumption, water waste

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inquiries, billing requests, and turn ons/shut offs.

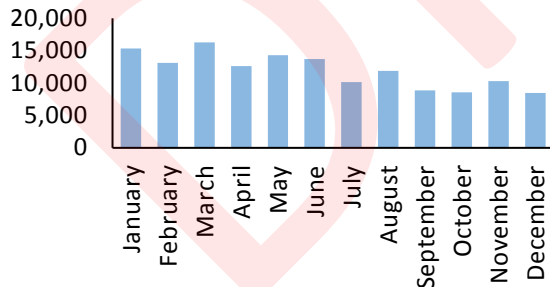
The 2017 Meter Reads chart illustrates the number of meter reads processed by Field Services in 2017 (Over 4.6 million total).

Meter Reads 2017



The following chart illustrates the number of work orders processed by Field Services in 2017 (Over 200,000 processed).

Field Activities Completed 2017



Strategic Plan Objectives and Accomplishments

Strategic Plan Goal – Deliver on Outstanding Customer Service Experience.

2018-19 Performance Objectives

- Continued assessment of customer satisfaction, establish benchmarks and identify all avenues for enhancement.
- Convert BBWD to Oracle CC&B and new bill print vendor and support call center operations.
- Redesign bill to updated format to improve communications to our customers.
- Outsource letter print to a local vendor to streamline process and eliminate internal support.
- 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.
- Identify and assess the viability of 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

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changes and procedural/process improvements.

- Monitor and collaborate with other organizations/industries to identify innovations, best practices and ways to improve the customer experience.
- Enhance our quality program for Field Services.
- Enhancement of the Quality Assurance initiatives to improve call assessment, incorporate more feedback and interactional based development.
- Assess customer satisfaction results against overall quality outcomes for actionable improvement.
- Continue to improve customer care technologies, tools, training and implementation.

2017-18 Major Accomplishments

- Dedicated 1900 hours of training throughout 2017 to consistently provide optimum customer experience.
- Deployed business processes and training critical to annual PCI compliance standards.
- Continue to refine safety measures for securing employees in the event of an evacuation emergency.
- Assisted over 680 customers in the field with consumption related questions.
- Performed 55 customer escalation field meets 2017
- Continued additional training to staff for water waste compliance to assist in educating our customers.

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

2018-19 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.

2017-18 Major Accomplishments

- Disposed of toxic waste material in compliance with OSHA regulations.
- Recycled tons of cardboard boxes through Opportunity Village, a not-for-profit organization.
- Mailed 4,015 water waste letters in 2017.
- Completed 3,875 Water Waste investigations resulting in \$36,080 in fees assessed.
- Large Services completed over 3,700 Field Activities.
- Dedicated staff handled over 9486 Springs Preserve related inquiries in 2017.

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

2018-19 Performance Objectives

- Develop and strengthen global partnerships to leverage resources and advance innovations in Customer Service.
- Continued identification, assessment and implementation of customer care technologies, tools and resources.
- Upgrade and enhance various call center technologies including but not limited to: IVR with increased self-service options and flexible design, a streamlined and integrated agent interface and more robust reporting tools.
- Adding infrastructure to support additional customer communication channels including chat, sms and email.
- 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.

2017-18 Major Accomplishments

- Lobby payments and transactions continue to decline with successful expanded payment and self-service options, reducing lobby traffic and carbon footprint.
- Collected event and more refined interval data from the meter reading system to reduce truck rolls and increase customer service.
- Successfully supported the District's backflow retrofit program with both inbound and outbound customer calls.
- Integrated hourly interval data into business processes.
- Implementation and training of the Itron Analytic software.
- Host and participate in education and technical venues for business advancement throughout 2017.

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

2018-19 Performance Objectives

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

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- Continuous communication forum between workgroups to address interdepartmental challenges and business impacts.
- Leverage the existing resources for expert training classes to employee skill development.

2017-18 Major Accomplishments

- 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.
- Upgraded Oracle CC&B to ensure future upgrade capabilities and implemented new payment vendor to ensure PCI compliance.
- Successful relocation of contact center from Molasky Corporate Center to Valley View campus without significant impacts on the operation.
- Reclassified and uptrained Field Services staff to better support organizational and customer service related efficiencies
- Transitioned from a Read Verification quality control program, to incorporating an enhanced verification and maintenance process to all Field Activity types.
- Moved our Curbing Water Waste test to an on-line version.
- Completed AMI deployment in Blue Diamond, Searchlight, and Kyle Canyon

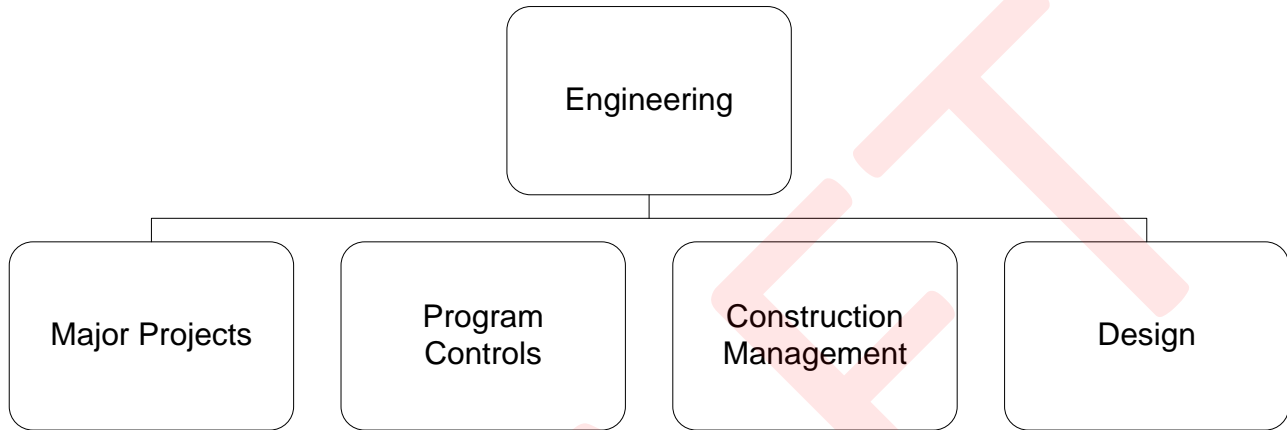
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SOUTHERN NEVADA WATER AUTHORITY®

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.

Improvements Plan (LVVWD CIP). In coordination with the Operations, Resources and Facilities, and Infrastructure Management departments, Engineering provides the design and construction services for many of the larger LVVWD CIP projects.

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 repair, rehabilitation, and replacement of aging pipelines, reservoirs, pumping stations, and related components within the large water distribution system spread across the Las Vegas Valley and in nearby rural areas. These projects are described in the LVVWD Capital

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 the SNWA's purveyor members in the Las Vegas Valley. Improvement projects for the SNWS are identified in the Major Construction and Capital Plan (MCCP). The MCCP is the vehicle for authorizing 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 the design and construction services for many of the larger MCCP projects.

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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.

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

Expenditures

SNWA Uses	Actual 2016-17	Budget 2017-18	Budget 2018-19
Materials & Supplies	\$ -	\$ 40,554	\$ 4,750
Maintenance & Repairs	74,885	713,000	703,000
Other Employee Expenses	1,614	55,950	23,250
Other Expenses	-	218,750	3,130,900
Total Operating Expenses	\$ 76,499	\$ 1,028,254	\$ 3,861,900
Capital Costs	\$ 153,550,062	\$ 135,783,762	\$ 123,452,909
Payroll Costs	\$ 4,874,350	\$ 4,857,037	\$ 4,698,865
Total Department Expenditures	\$ 158,500,911	\$ 141,669,054	\$ 132,013,674
FTE Positions	23.7	24.8	23.3

Budget Objectives and Highlights

The 2018-19 Engineering department budget demonstrates significant ongoing commitment for the major projects associated with Lake Mead Intake No. 3 and the Wash CIP. 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.

The Intake No. 3 tunnel and intake project was completed and became operational in 2015. This achieved the goal of access to better quality water deep in Lake Mead, but does not, on its own, protect against lost system capacity if lake levels drop below the operational levels of the two existing intake pumping stations. Accordingly, in 2015 the SNWA launched design and construction activities for a Low Lake Level Pumping Station

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(L3PS) that would function at levels as deep as possible for the new intake tunnel and preserve system capacity well below the operational levels of the existing intakes. Capital expenditures for the new pumping station will continue through project completion in 2020.

Work continued on the AMSWTF filter media replacement with two filters completed and three in progress. The remaining 15 filters to be upgraded will be under contract in the Fall of 2018 with completion scheduled for 2021.

Construction of the Historic Lateral Weir Expansion and Sunrise Mountain Weir began the Fall of 2017 and will be completed the Winter of 2019.

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 L3PS is the one active major project effort. Staff are dedicated to that project activity.

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

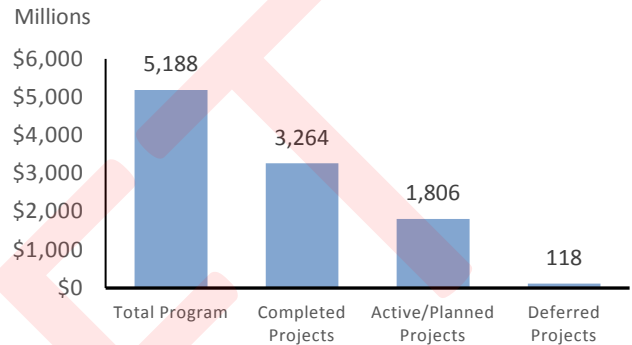
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schedule reports and analysis of capital projects. This team makes use of computer-based tools which compile relevant project data from various departments. This team also performs a vital function in collecting projected capital expenditures as a tool for forecasting future funding requirements and coordinates closely with the Finance department.

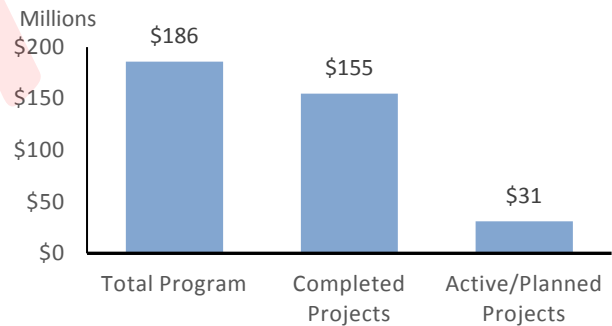
Survey, Property Management and Infrastructure Mapping Services. Professional staff within the department support design and construction of infrastructure by providing land surveying, water rights surveying, line location, right of way acquisition and property management and as-built record drawings 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.

The following charts compare completed projects to active and planned projects for each of the SNWA's capital plans and give perspective for the magnitude of the capital plan activities.

**Major Construction & Capital
Plan Status
As of March 2018**

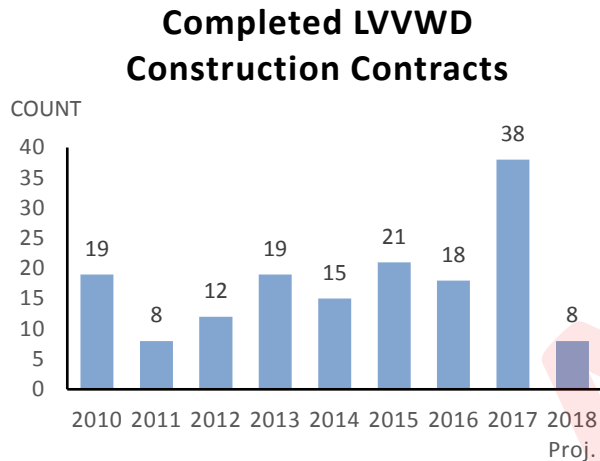


**Las Vegas Wash Capital
Improvements
As of March 2018**

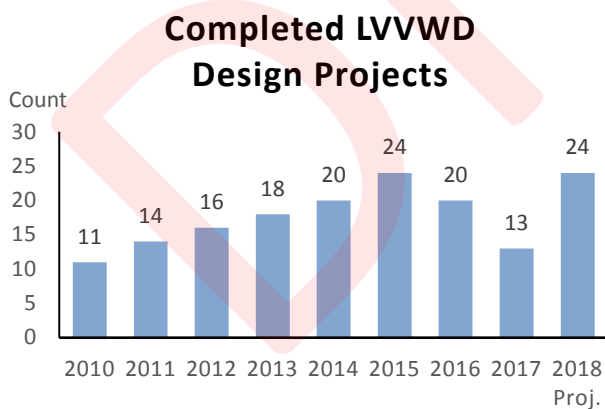


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The chart below (Completed LVVWD Construction Projects) represents the number of the LVVWD construction projects completed by Engineering since 2010 and the number expected to be completed in 2018.



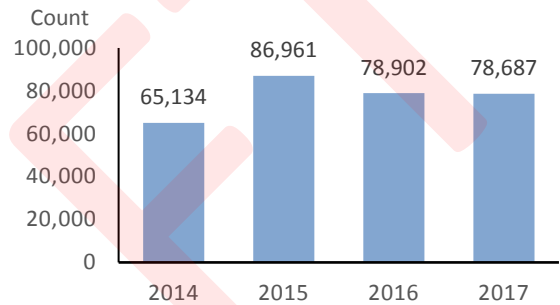
The following chart (Completed LVVWD Design Projects) illustrates the number of projects Engineering has designed since 2010 to support the infrastructure management requirements of the LVVWD.



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 three years. The chart mirrors the increase in development activities experienced in the service area over this time.

Number of GIS Project-Related Feature Edits



Strategic Plan Objectives and Accomplishments

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

2018-19 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 underground excavation work and discharge aqueducts construction contract for the L3PS.
- Complete the design and award the electrical substation contract for the L3PS.
- Provide the Infrastructure Management, Resources and Facilities, and Operations departments with a high level of technical services and capital project support.

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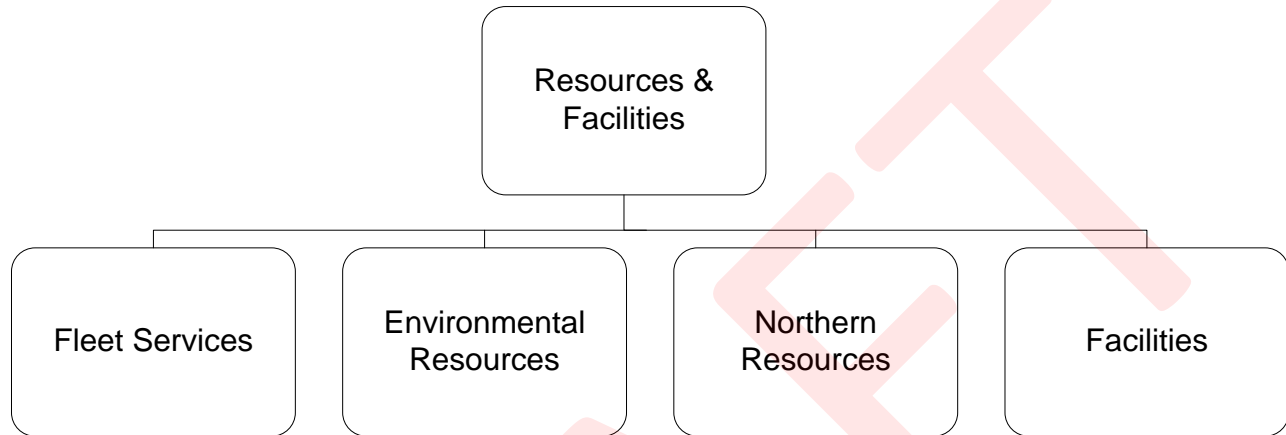
- Consolidate project tracking applications and align work processes to improve staff efficiency.
- Improve methods for direct electronic capture in the field of attributes of constructed water facilities.
- Complete combination of SNWA Facility Engineering Guides and LVVWD Guidance Documents into a single Engineering Design Guides document.
- construction cost of approximately \$16.3 million.
- Performed inspections on approximately 540 different projects, involving over 41,800 individual inspection actions.
- Created the System Reliability Team to oversee the \$100 million LVVWD Backflow Retrofit Program.

2017-18 Major Accomplishments

- Made significant progress on the underground portion and completed the design for the above-ground construction for the L3PS.
- Completed the discharge aqueducts connection work within the critical treatment plant outages.
- Completed construction of 8 LVVWD projects valued at \$9.5 million related to improvement of the LVVWD's facilities.
- Awarded 13 LVVWD construction contracts valued at \$19.2 million related to improvement of the LVVWD's facilities.
- Awarded one weir construction contract valued at \$14.3 million related to the Las Vegas Wash Capital Improvements Plan.
- Awarded five SNWA construction contract valued at \$6.9 million related to the Filter Demonstration Project at AMSWTF and tortoise fence improvements at numerous facilities.
- Completed construction on seven SNWA contracts for a total

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 and organizational business.

Department Description

The Resources & Facilities department consists of four divisions that include the Fleet Services division, Facilities division, Northern Resources 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 2018-19 Resources & Facilities department budget contains funding for a wide-range of initiatives discussed below.

Facilities. The Facilities division budget contains \$5.6 million in operational funding for the repair, maintenance, cleaning and servicing of all the LVVWD and the SNWA buildings and facilities, including landscape and roadways.

Fleet Services. The Fleet Services division budget contains approximately \$8.26 million for new & replacement vehicles and related equipment having reached their end of life cycle. An additional \$95,000 is for new telematics equipment for all fleet vehicles. This equipment will be used to better manage the fleet as well as reduce fuel usage and enhance safety. Fleet Services is also requesting \$240,000 for replacement of two-way radios that are becoming obsolete and will soon be inoperable on the Southern

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Nevada Area Communications Council (SNACC) radio system.

Environmental Resources. The Environmental Resources division budget contains \$3.4 million to continue environmental planning, compliance and resource management activities for the SNWA. The division will continue to provide environmental support and ensure regulatory compliance for the Las Vegas Wash, Northern Resources, Water Resources, Engineering, Energy Management, and other departments. The division will also continue to manage the Warm Springs Natural Area property to meet agreements and further the SNWA resource management objectives. In fiscal year 2018-19, the division anticipates receiving \$483,800 in revenue from Federal and State grants and local contributions.

Northern Resources. The Northern Resources division gross budget totals \$4.25 million, of which, \$2.93 million allocated to operations, \$455,000 is for livestock inventory purchase and \$1.3 million capital improvements to

develop, utilize and maintain primary groundwater rights. Total gross revenues are projected to exceed \$2.9 million for commodity sales. The Northern Resources division consists of seven individual properties that have been consolidated into one coordinated operating entity. The consolidation and management of these ranch properties has created operational efficiency and increased productivity. Program enhancements including water development, nutrient management, cropping structure, and propagation of systematically bred livestock have created sustainable revenue centers supporting operations. The primary goal for this division is to integrate the management of water, land and agricultural resources such that environmental and social conflicts are minimized and the Groundwater Development (GWD) Project is maintained as a viable and sustainable alternative future source of supply.

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Expenditures

SNWA Uses	Actual 2016-17	Budget 2017-18	Budget 2018-19
Water	\$ -	\$ -	\$ -
Energy	25	-	-
Materials & Supplies	1,542,160	1,797,950	2,014,650
Maintenance & Repairs	1,679,197	2,096,750	2,904,500
Rental & Leases	1,977,936	2,143,000	2,221,000
Other Employee Expenses	71,687	157,625	195,250
Other Expenses	1,450,342	2,458,800	4,177,350
Total Operating Expenses	\$ 6,721,346	\$ 8,654,125	\$ 11,512,750
Capital Costs	\$ 4,230,949	\$ 13,015,496	\$ 9,290,805
Payroll Costs	\$ 9,600,602	\$ 11,066,779	\$ 12,181,012
Total Department Expenditures	\$ 20,552,897	\$ 32,736,399	\$ 32,984,568
FTE Positions	63.5	75.8	78.9

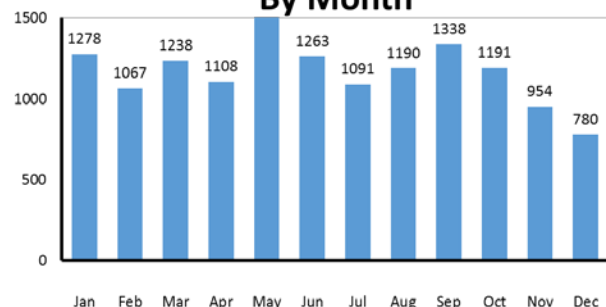
Department Performance

Facilities. The Facilities division is divided into three (3) subsets: Facilities Maintenance, Facilities Services, and Buildings and Grounds. The division is responsible for ensuring the four (4) major epicenters and the two hundred seven (207) offsite properties totaling 1,452 acres exceed the 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 retro-fit support for existing structures.

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

**2017 Completed Work Tasks
By Month**



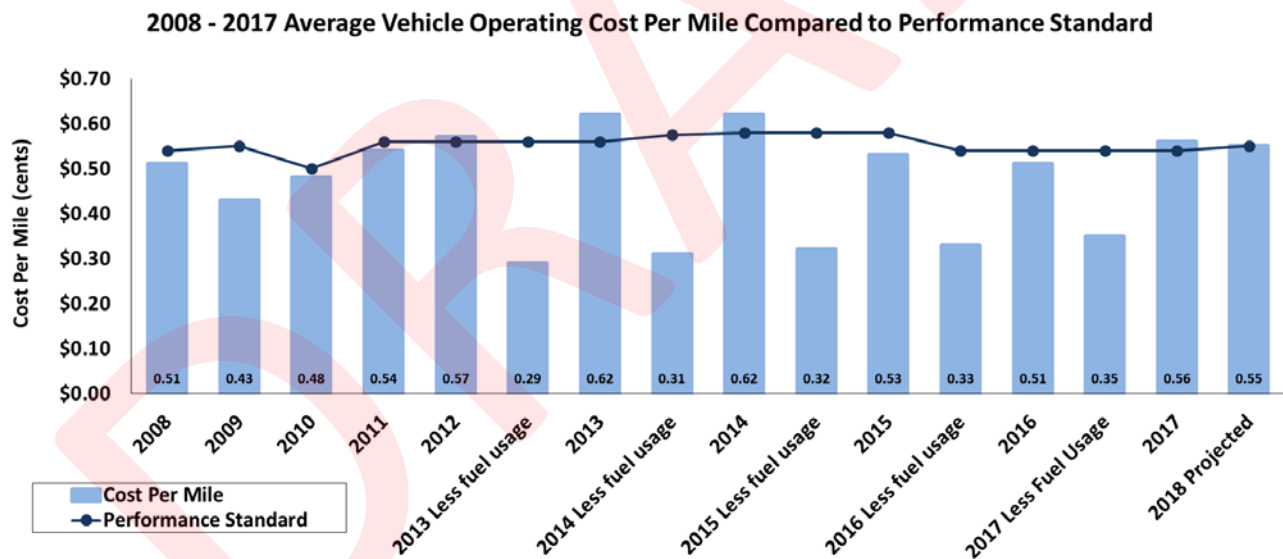
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Fleet Services. The mission of the Fleet Services division is to provide safe, reliable and functional vehicles, equipment, tools, fuel, and communications equipment to the LVVWD, SNWA, LVSP, and BBWD operations. Currently the division maintains more than 1,500 vehicles and support equipment pieces and 1,200 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.



Environmental Resources. The Environmental Resources division is responsible for conducting environmental planning, monitoring, and management to ensure compliance with environmental laws, permits, and agency agreements. This includes preparing environmental compliance documents for resources and infrastructure, conducting natural resources studies, and

completing environmental compliance monitoring and reporting, in accordance with Federal environmental regulations, state water right rulings, and interagency environmental agreements. The division is also responsible for fulfilling organizational responsibilities related to management and restoration of the Las Vegas Wash, and the Warm Springs Natural Area.

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Northern Resources. The Northern Resources division has developed and sustained global markets for sales of internally produced agricultural products, including beef calves, lambs, wool and alfalfa. These commodities represent approximately \$2.9 million in projected ranch revenue for fiscal year 2018-19. Improvements in agricultural practices, livestock genetics, program diversity and husbandry have resulted in increased efficiency and effectiveness in utilizing Federal rangeland and private forage, and added alfalfa acreage to increase overall production. The strategic plan for Ranch Operations is to produce and deliver quality products and service, exhibit scientific based stewardship and, demonstrate financial and organizational efficiency. Ranch operations also support cross-departmental initiatives concerning the collection of environmental and hydrologic monitoring data and various other aspects of the GWD Project.

Strategic Plan Objectives and Accomplishments

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

2018-19 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 construction and operation of weirs 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.

2017-18 Major Accomplishments

- Conducted threatened and endangered bird, fish, vegetation, and invertebrate surveys along the Las Vegas Wash; an endangered Yuma Ridgway's rail and a threatened yellow-billed cuckoo were identified in 2017.
- Conducted compliance monitoring and reporting in support of weir construction on the Las Vegas Wash without a single incident of non-compliance.
- Re-vegetated approximately 30 acres along the Las Vegas Wash, removed nearly 12 acres of tamarisk, and conducted vegetation monitoring on approximately 530 acres.
- Conducted two Wash Green-Up events, where more than 800 volunteers planted approximately 17 acres.
- Coordinated and hosted a two-day science symposium for approximately 150 high school students as part of World Wetlands Day.
- Educated about 100 fifth grade students from Mabel Hoggard Elementary School about the Las Vegas Wash and Lake Mead.

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- Provided eight 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 eight local events.

Strategic Plan Goal – Deliver an Outstanding Customer Service Experience.

2018-19 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.
- Partner with all departments to better assess vehicle/equipment needs and improve end products provided.
- 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.

2017-18 Major Accomplishments

- Enhanced customer service in outlying areas through the use of technology,

improved parts availability, and scheduling of technicians.

- Added a fueling facility at our Tropical Satellite facility to better support customers and reduce travel time.
- Maintained Automotive Service Excellence (ASE) “Blue Seal of Service Award”.
- Maintained Automotive Service Excellence (ASE) “World Class Technician Status”.
- Managed and facilitated the move of 110 Customer Care employees to the Molasky or Field Services Building in a prompt and efficient manner, significantly reducing anticipated downtime.
- Project 7S9016 – completed the installation of insulation in the north soffit of the AMSWTF Administration Building to eliminate all cold complaints.
- Facilitated major internal events including: all Divisional holiday parties, Safety Stand-Down Day, Celebrating You week.
- Implemented successful 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.

2018-19 Performance Objectives

- Continue to lead and develop the alternative fuel vehicle program in

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support of clean air in the Las Vegas Valley.

- Recondition and reuse service bodies for light duty vehicles.
- Expand the Districts plug-in electric vehicles fleet.
- Expand the use of compressed natural gas as an automotive fuel.
- Sustain the SNWA's central-eastern Nevada groundwater rights and right-of-way grant for the future.
- 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 percent of the wells at full operational capacity.
- Complete environmental compliance and monitoring for existing infrastructure and future projects initiated by other departments.
- 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 (Moapa dace).
- Support continued public access at the Warm Springs Natural Area in

accordance with the Southern Nevada Public Land Management Act funding agreement.

- Mow fields, trim palms, 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.

2017-18 Major Accomplishments

- Maintained ranch assets through roof repair or replacement on Harbecke office, Home Ranch main house, Bransford house, Phillips shop and sheep barn, Shoshone cow barn roof completed both for asset maintenance and historical preservation.
- Removed failing building at Meadow Creek.
- Installed truck fill station at Bastain well for hauling water, which will reduce total travel with water trucks.
- Drilled new domestic well at Bransford, installed new electrical, replaced plumbing, pressure tank and controls, which provides safe drinking water for field staff.
- Replaced windows and painted interior at McCoy, extending life of structure.
- Installed power to Huntsman feedlot, hospital, wash down pump, scale and commodity barn.
- Constructed a concrete commodity barn for feed storage at Huntsman.
- Constructed hospital pens and installed troughs for sick cattle.

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- Purchased and installed a livestock scale at Huntsman feedlot to be used for marketing and test weighing performance.
- Built clean water diversion and make-up waste water containment at Huntsman feedlot with compliance to CAFO permitting.
- Installed pivot 6 along with electrical service and plumbing at Huntsman which improves water efficiency and reduces manpower input for irrigation.
- Constructed new intake and screen system on the Williams Creek pipe line. Additionally, installed 1600 feet on steel pipeline on the Williams Creek to tie the screen to the 894-road crossing.
- Abandoned and concrete plugged four old wells, 2 at Huntsman, 1 at Bransford, and 1 at Harbecke, following state regulation for well abandonment.
- Replaced water troughs for cattle at Tippet Pass Mike springs and Majors North Twin tanks.
- Completed rehabilitation of old Harbecke North livestock well, installed solar panels and pump for cow watering on Osceola use are.
- Rehabilitated two irrigation wells at Harbecke, replaced old pump systems, will improve output and pump efficiency.
- Remodeled small Harbecke House completely from roof to basement, completely new structure, including HVAC, electrical, plumbing, lightening, lawn, etc.
- Constructed storage building for Fleet Services.
- Installed law sprinkler system at Goff.
- Sourced used WACO field house for seasonal labor, located at Wahoo.
- Constructed new horse corrals at Wahoo.
- Constructed hay barn at Wahoo.
- Added 780 head of replacement cows to the herd. Converted old population to 100% black Angus animals.
- Added 1100 head of replacement ewes to the herd.
- Met or exceeded the projected Ranch Revenue budget.
- Replaced older diesel and gasoline powered vehicles with flex fuel vehicles, lowering capital cost and reducing the Districts carbon foot print.
- Recycled and reused several service bodies and mounted equipment on light and medium duty utility vehicles, reducing the Districts use of raw materials.
- Selected as one of the 100 Best Fleets “Top 100 Fleets in North America” and “Top Green Fleets in North America”.
- Supported preparation of legal briefs and oral arguments in defense of the federal right-of-way for the future development of SNWA’s central-eastern Nevada groundwater rights.
- Prepared expert reports and provided testimony for water rights hearing remand for SNWA’s central-eastern Nevada groundwater rights.
- Monitored more than 300 ground photography fixed monitoring locations across the SNWA’s grazing allotments to document SNWA’s use

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- of the rangeland, drought conditions, and general health.
- Coordinated extensively with local ranchers in central-eastern Nevada and the BLM regarding management of shared grazing allotments.
 - Conducted desert tortoise, migratory bird, dark kangaroo mouse, pygmy rabbit, sage grouse, and other sensitive species surveys, and responded to calls for dangerous animals at SNWA/LVVWD facilities.
 - Conducted bi-annual Moapa dace counts, and validated the results with a mark-recapture study; the winter 2018 dace count is statistically flat from the previous winter.
 - Completed construction of the second phase of public access trails and kiosks at the Warm Springs Natural Area, and held an official public opening.
 - Conducted threatened and endangered bird species and marsh bird surveys at the Warm Springs Natural Area; nesting southwestern willow flycatchers (with successful nestlings) and a migrant yellow-billed cuckoo were identified in 2017.
 - Hosted the Audubon Society Christmas Bird count that counted over 7,400 birds of about 92 different species in the Upper Moapa Valley.
 - Grew over 5,000 native plants at the Warm Springs greenhouse for restoration areas on both Warm Springs and the Las Vegas Wash.
 - Trimmed 150 palm trees and mowed and maintained 9,000 feet of fire breaks to protect infrastructure and Moapa dace streams at the Warm Springs Natural Area.
 - Monitored 20 ecological restoration sites at Warm Springs Natural Area for restoration success.
 - Provided public outreach to 80 students from Moapa Valley Future Farmers of America who assisted in planting and property cleanup, 112 local fifth-graders for repotting event and World Wetlands Day information, and Boy Scouts of America who installed over 2,000 native plants and a foot bridge.
 - 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.
 - Participated in the annual holiday drive, recycling over 2,500 Christmas trees.
 - Continued to employ energy efficient upgrades in the lighting and climate control applications.
 - Facilitated the Sustainability CDT, which met more than six times to coordinate the organization's sustainability goals.
- Strategic Plan Goal – Ensure Organizational Efficiency and Manage Financial Resources to Provide Maximum Customer Value.***
- 2018-19 Performance Objectives**
- Without compromising safety and/or service level, reduce operating costs through standardization opportunities, inactive inventory

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- 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, for SNWA, LVVWD, and Small Systems projects.
- Facilitate renovation projects utilizing in-house labor whenever possible.

2017-18 Major Accomplishments

- Produced 19,182 bales of forage or 11,974 tons of marketable products with a value of \$1,975,738, presently sold \$624,102, balance is in inventory.
- The ranch produced 1472 beef calves, sold 920 head at 504,931 pounds of beef with a value of \$803,159 and added 530 beef replacement females to the inventory with a value of \$795,000.
- The ranch produced 283,944 pounds of lambs with a value of \$537,719. Additionally, produced 44,061 pounds of wool with a value of \$100,228.
- Replace older diesel and gasoline powered vehicles with flex fuel vehicles, saving an estimated \$300,000 in capital replacement costs.
- Reconditioned and reused several service bodies and mounted equipment on light and medium duty utility vehicles saving over \$50,000.

- Replaced 104 vehicles and equipment pieces that were no longer cost effective to operate and maintain.
- Recovered over \$1,043,401 in vehicle resale at auction.
- Recovered over \$89,354 in vehicle warranty repairs through our in-house warranty programs.
- Recovered over \$20,000 from insurance companies for the in-house repair of not at fault vehicle accident damage.
- Obtained \$436,500 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.

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

2018-19 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.

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- Ensure 98 percent or greater, fire and life safety inspections or tests are completed by the due date.
- Partner with other departments to create 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.

2017-18 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 34,337 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.

2018-19 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.
- Implement GPS/telematics technology throughout the fleet in order to enhance fleet management capabilities, save fuel and improve fleet utilization.

2017-18 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.

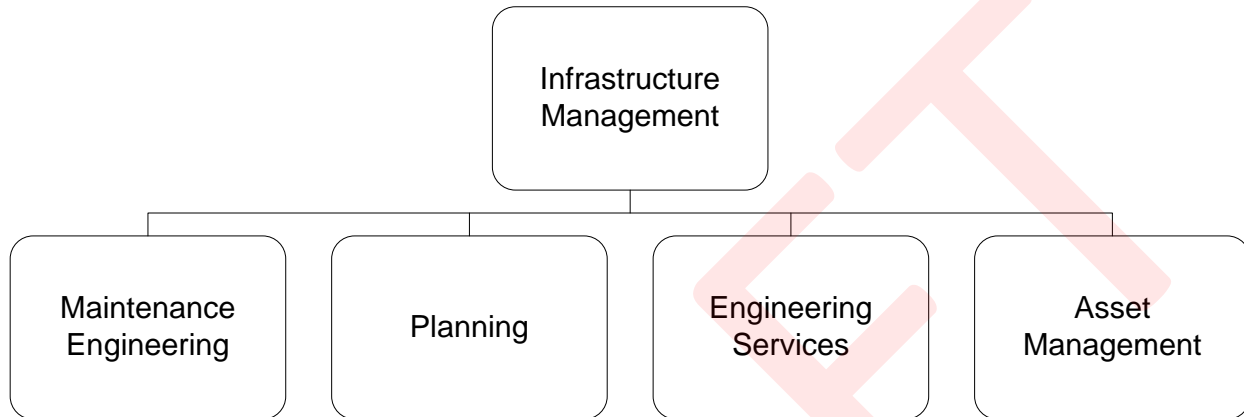
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SOUTHERN NEVADA WATER AUTHORITY®

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 Engineering Services division reviews water plan submittals for proposed development to ensure they meet the LVVWD's construction standards. The Planning division ensures new developments have adequate water pressure and fire flow, and evaluates future system requirements and develops future capital cost projections. The Maintenance Engineering division

conducts pumping unit efficiency tests, 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 tests for leaks on large diameter pipelines, provides inspection support, and maintains the LVVWD and the SNWA cathodic protection systems. These efforts are all directly in support of the department's mission.

Budget Objectives and Highlights

The 2018-19 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 daily operational support for the LVVWD's and SNWA's projects.

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Infrastructure Management's total operating expense budget between the LVVWD and the SNWA increased \$1,152,050 from budget year 2017-18 to 2018-19. Contributing factors to the increased operating expense budget include SNWA and LVVWD emergency and

maintenance work, joint replacements, and reservoir improvements. The department will continue to focus efforts on maintaining cathodic protection, SCADA, and the 4-1-1 developer review process.

Expenditures

SNWA Uses	Actual 2016-17	Budget 2017-18	Budget 2018-19
Materials & Supplies	\$ 181,313	\$ 177,000	\$ 180,500
Maintenance & Repairs	430,219	2,460,000	2,230,000
Rental & Leases	143,401	200,000	225,000
Other Employee Expenses	7,429	39,500	39,600
Other Expenses	303,723	100,825	111,550
Total Operating Expenses	\$ 1,066,085	\$ 2,977,325	\$ 2,786,650
 Capital Costs	 \$ 731,255	 \$ 5,877,000	 \$ 9,306,000
 Payroll Costs	 \$ 3,546,724	 \$ 4,691,890	 \$ 4,884,129
 Total Department Expenditures	 \$ 5,344,064	 \$ 13,546,215	 \$ 16,976,779
 FTE Positions	 17.0	 24.6	 23.6

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 infrastructure and 24x7 support, water quality projects, electrical coordination study analysis, motor control center and switchgear upgrades, administration of on-call vault repair and distribution service contracts, administration of pump and motor repair contracts, design and implementation of cathodic protection projects, tank re-coating projects, as-built documentation, and facilities improvements. The division also provides day-to-day engineering support for the LVVWD and SNWA, Big Bend Water

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District (BBWD), Alfred Merritt Smith Water Treatment Facility (AMSWTF), River Mountains Water Treatment Facility (RMWTF), and rural systems.

The division is currently managing over 250 projects between the LVVWD and the SNWA, with a capital budget of more than \$20 million. Major projects include the Emerson SCADA upgrade; Hacienda ROFC renovations; multi-site ROFC valve and venturi replacements; south valley lateral actuator replacements; RMWTF lab floor replacement; AMSWTF VPSA blower replacement; medium voltage transformer replacements; the AMSWTF electrical distribution upgrade; electrical distribution and engine controls upgrade at Campbell Pump Station; VFD replacements at the Rampart Pump Station; reservoir joint replacements at Campbell and Luce Pump Stations; emergency power system upgrade at Stewart Pump Station; and the build out of the fiber optic communications network.

Planning. The Planning 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 analysis. 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, and schedules new pumping stations, reservoirs, wells, and major pipelines. The division also maintains the District's 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 artificial recharge, small systems, recycled water distribution systems, and out-of-valley transmission systems.

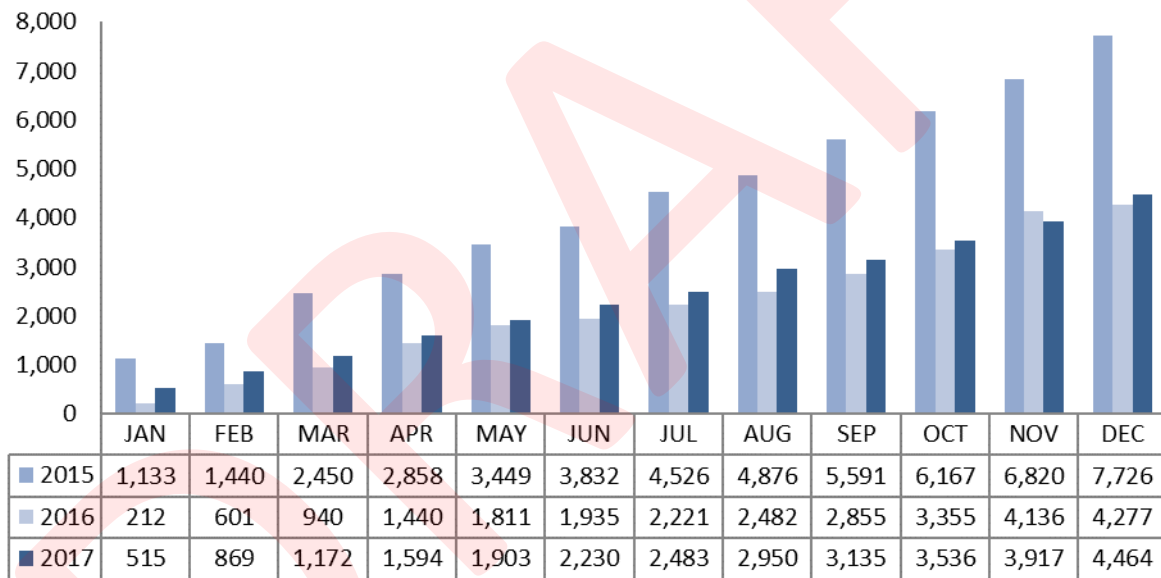
Engineering Services. The Engineering Services division is responsible for reviewing plans for additions and modifications to the systems of the LVVWD and the SNWA, initiated by developers, utilities, and public entities. The division approves the water plans for these system additions, and ensures

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system additions meet the LVVWD's and the SNWA's requirements for reliability and maintainability, calculates fees, processes agreements, commits water resources to new developments, and ensures water facility construction is per the LVVWD'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.

New Service Points
2015-2017 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 LVVWD 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

potable divers or the District owned 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

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other steel structures by applying and maintaining cathodic protection (CP). Corrosion Control Systems Technicians collect annual corrosion data on over 2,762 CP test stations and 17 impressed current rectifiers for the LVVWD, as well as 1,025 CP test stations and 73 impressed current rectifiers for the SNWA. The division also maintains CP system components, installs new anodes and test stations, and performs corrosion assessments.

Strategic Plan Objectives and Accomplishments

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

2018-19 Performance Objectives

- Replace obsolete site automation equipment with current technology utilizing industry standard protocol. This includes the Phase 3 SCADA system upgrade at LVVWD and the Emerson SCADA system upgrade at SNWA.
- Continue to build out fiber optic communications network over the next five years.
- Maintain a capital improvements program for the LVVWD, SNWA, and small systems, and review development submittals in a timely manner.
- Monitor and evaluate water quality in the distribution system, and recommend improvements in response to changing water quality and regulatory conditions.

2017-18 Major Accomplishments

- Completed SNWA and LVVWD PLC automation system upgrade projects at various sites.
- Completed site selection for a pilot test of the Blue Smart LEA, an advanced real-time water quality analyzer, in water distribution systems.
- Coordinated the trial installation of Primus liners to rehabilitate two pipelines to reduce construction costs.
- Installed new cathodic protection systems are protecting an additional 30 miles of steel pipelines.
- Worked with Clark County and SNWA in-house staff to coordinate the review and approval of the installation of 1,000 linear feet of 84-inch steel pipe.

Strategic Plan Goal – Deliver an outstanding customer service experience.

2018-19 Performance Objectives

- 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.
- 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.

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- Launch the SNWA digital plan submittal portal as part of the LVVWD DPS Website.
- Continue to work with other agencies to include water facility upgrades and replacements in road improvement projects.

2017-18 Major Accomplishments

- Approved 4,464 new water service connections, 441 hydraulic grade line requests, 753 water network analyses, 566 sets of development plans, and 267 fire flow information requests.
- Reviewed 4,142 sets of developer, utility, and public works plans for the LVVWD and the SNWA, including brand new submittals, re-submittals, and revisions.
- Hosted 408 project review meetings with developers and engineers.

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

2018-19 Performance Objectives

- Update master planning areas and associated facilities needed to serve developed and vacant acreages based on new development trends.
- Continue to utilize the latest condition assessment technologies to determine the true condition and expected remaining life of the infrastructure.
- 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.

- Coordinate with the City of Las Vegas to finalize a new master agreement between the City and the LVVWD.

2017-18 Major Accomplishments

- Acquired and implemented a sophisticated new software platform and generated a risk of failure score for all pipelines within the LVVWD water distribution system to facilitate prioritization of pipeline replacement.
- Updated the District's Table 1 demand factors used by developers to size pipelines and facilities to reflect current water demand usage patterns.
- Completed 140 projects, with another 131 projects scheduled to be completed by the end of the fiscal year.
- Created a dataset that linked all customer water demand and county employment to locations and land use codes. This table was utilized by UNR as the foundation of a Computable General Equilibrium (CGE) Model which is useful for regional economic impact analysis. This is the first CGE model ever to include a water sector.
- Utilized remote submarine to inspect critical infrastructure, such as the low-level intake structure and several reservoirs to reduce costs with diver services and used Magnaflux Leakage (MFL) technology to scan steel tank

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floors to measure wall thickness and identified holes.

- Completed maintenance engineering projects with an approximate capital value of \$5.7M.

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

2018-19 Performance Objectives

- Merge the individual division capital plans into one comprehensive cost loaded capital plan.
- Provide updated cost curves and risk assessments for the LVVWD and the SNWA pipelines.
- Continue to conduct Uniform Design and Construction Standards (UDACS) training sessions for engineering firms; addressing each firm's needs and assisting them in submitting more accurate plans.
- Support the Nevada Department of Environmental Protection (NDEP) and the water utilities in Nevada by providing engineering expertise in a state-wide working group and suggested edits to the Nevada Administrative Code.

2017-18 Major Accomplishments

- Processed 1,386 record drawing requests for developer and public works projects.
- Completed three UDACS' training seminars (two engineering firms and Southwest Gas).
- Participated in the Southern Nevada Code Council's Industry Review of the 2018 International Fire Code.

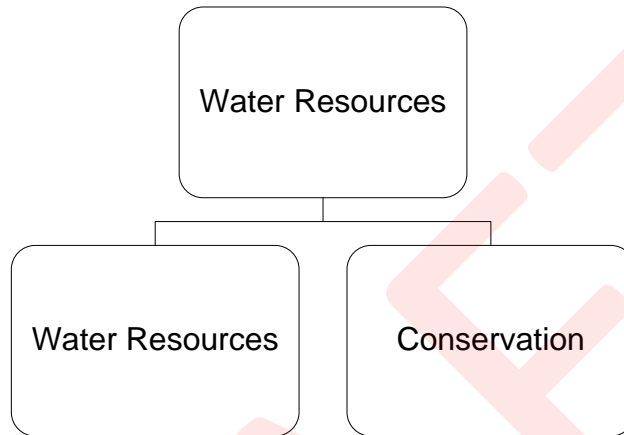
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SOUTHERN NEVADA WATER AUTHORITY®

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.

recharge, and irrigation wells, and administers regional water conservation programs.

Budget Objectives and Highlights

The department's budget is \$61,685,027 which represents an increase compared to the division and team budgets from the previous organizational structure for fiscal year 2017-18. Increases are primarily attributed to anticipated partnerships with Colorado River Basin States and Mexico to undertake system conservation projects designed to protect critical elevations in Lake Powell and Lake Mead and developing and expanding Tributary Conservation Intentionally Created Surplus (ICS) supplies through the lease and purchase of Muddy River and Virgin River 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.

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 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 needs, assesses future water supply risks, provides technical support for the operations of LVVWD and SNWA production, artificial-

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Expenditures

SNWA Uses	Actual 2016-17	Budget 2017-18	Budget 2018-19
Water	\$ 398,417	\$ -	\$18,766,798
Materials & Supplies	637,394	1,428,200	5,206,700
Maintenance & Repairs	628	31,300	535,300
Other Employee Expenses	96,492	186,775	250,645
Other Expenses	3,205,662	4,366,300	5,118,800
Total Operating Expenses	\$ 4,338,593	\$ 6,012,575	\$29,878,243
Capital Costs	\$ 2,469,719	\$36,156,339	\$19,724,400
Payroll Costs	\$ 7,503,554	\$ 7,719,568	\$ 7,988,010
Total Department Expenditures	\$14,311,867	\$49,888,482	\$57,590,653
FTE Positions	40.3	41.5	40.5

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.

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SNWA Permanent and Temporary Resources		
	Supply	Consumptive Use
Permanent	Colorado River (SNWA)	272,205 AFY
	Nevada Unused Colorado River (Non-SNWA)	0-21,151 AFY
	Tributary Conservation/ Imported Intentionally Created Surplus	39,000 AFY
	Las Vegas Valley Groundwater Rights	46,961 AFY
	Direct-Reuse	21,800 AFY
Temporary	Southern Nevada Groundwater Bank	335,410 AF
	Interstate Banks (California and Arizona)	931,266 AF
	Intentionally Created Surplus (storage in Lake Mead)	531,562 AF

Conservation. The Conservation division develops and implements demand reduction programs and strategies with emphasis on consumptive uses. The SNWA monitors water use in terms of Net Gallons Per Capita per Day (GPCD), since SNWA agencies recycle nearly all indoor water use, either through return-flow credits or direct reuse. Net GPCD more

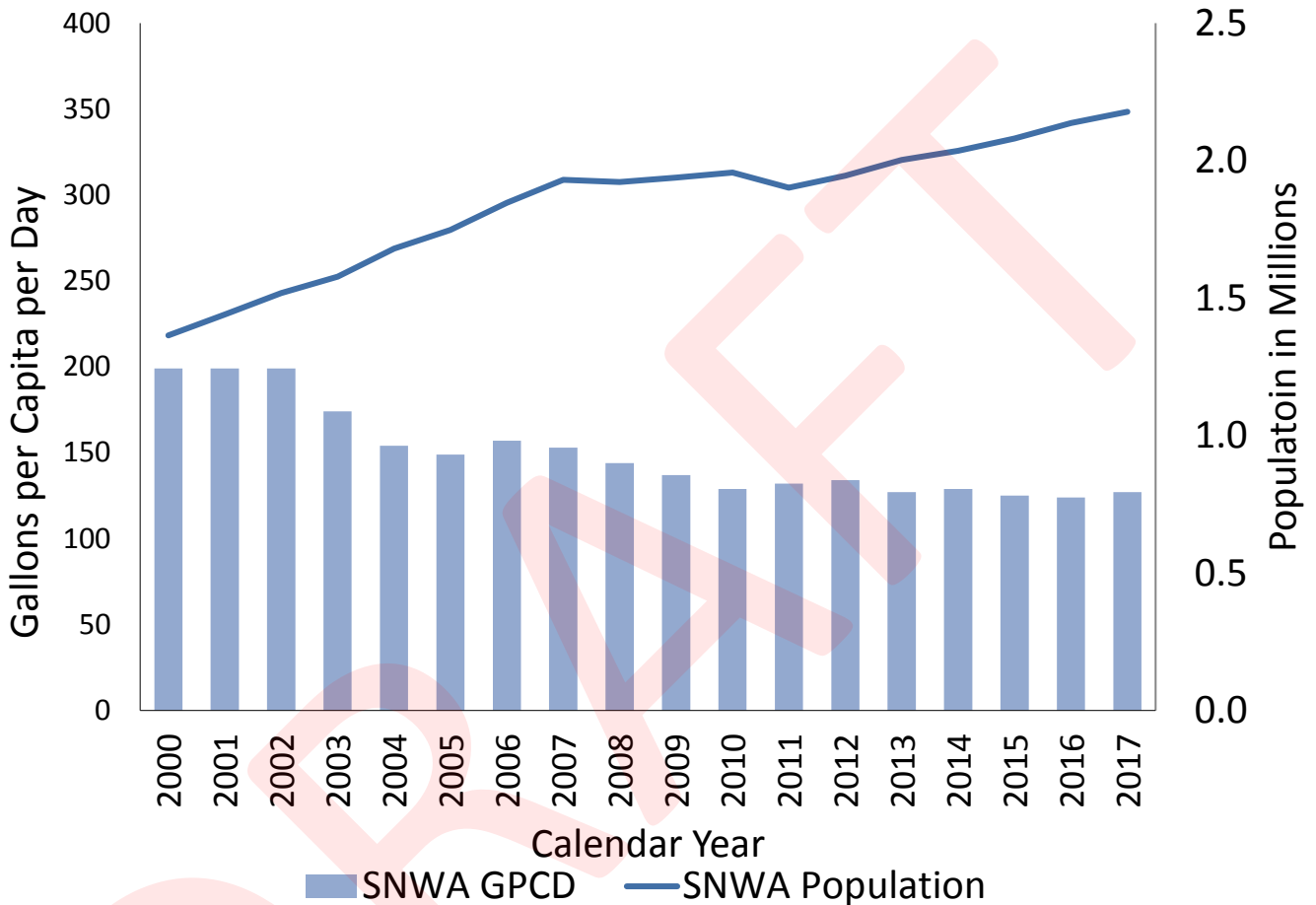
accurately reflects the community's use of water resources and improves comparability with other communities. The SNWA's net GPCD was 127 in 2017. This is a reduction of 36 percent, since onset of drought policies in 2002.

In 2017, the SNWA supported 2,016 projects comprising 3.5 million square feet of landscape conversion. These conversions will produce perpetual annual savings of more than 196 million gallons. The cumulative benefit of landscape conversions completed since 2000 reduced the SNWA's 2017 consumptive water use by more than 10.3 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.

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SNWA GPCD and Population



Strategic Plan Objectives and Accomplishments

Strategic Plan Goal 1 – Assure quality water through reliable and highly efficient system.

2018-19 Performance Objectives

- Cooperate with other Colorado River water users on programs that protect critical elevations in Lake Powell and Lake Mead.

- Ensure reliability of Colorado River supplies through active participation 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.

2017-18 Major Accomplishments

- Continued implementation of the Colorado River Pilot System

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Conservation Program. Lake Mead contains nearly 20 feet of additional water from the program and other storage initiatives.

- Prepared numerous scientific reports and provided expert testimony to the NSE in support of SNWA's water-right applications in Spring, Cave, Dry Lake, and Delamar valleys.
- Completed all compliance monitoring and reporting for the LVVWD's and SNWA's groundwater rights, and permits to recharge, store, and recover water from the Southern Nevada Water Bank.
- Maintain and perfect the LVVWD and SNWA groundwater and surface water rights while optimizing operation flexibility.
- Implemented a maintenance and repair plan to optimize efficiencies of irrigation wells and the development of water rights associated with the NR Ranch properties.
- Continued funding and/or participation in the Lower Colorado River Multi-Species Conservation Program and the Glen Canyon Dam Adaptive Management Program.

Strategic Plan Goal 2 – Deliver an Outstanding Customer Service Experience.

2018-19 Performance Objectives

- Maintain 90 percent or greater client satisfaction rating for delivery of the Water Smart Landscapes program.

2017-18 Major Accomplishments

- Conservation customer satisfaction rating increased 2.8 percent to 94.4 percent (4.72/5-point scale).
- Revised the Water Smart Home program to afford greater flexibility to homebuilders and recruited two additional builders.
- Improved the Water Smart Contractor program for consumers and subscribing contractors.

Strategic Plan Goal 3 – Anticipate and Adapt to Changing Climatic Conditions while Demonstrating Stewardship of our Environment.

2018-19 Performance Objectives

- Cooperate with other Colorado River water users on programs that protect critical elevations in Lake Powell and Lake Mead.
- Complete actions as required under the SNWA / Department of Interior Stipulated Agreements.
- Publish annual updates to SNWA's Water Resource Plan and Water Budget.
- Ensure compliance with terms of the SNWA Cooperative Agreement and Section 5 contracts with the Secretary of the Interior to fully utilize Nevada's 300,000 acre-feet of Colorado River apportionment.
- Communicate conservation goals and progress to the organization.
- Develop and submit the 2019-2023 5-Year Conservation Plan.

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- 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 current and future water supplies.
- Partnered with NV Energy, Southwest Gas, and the Desert Research Institute to supply 1,000 Water and Energy home retrofit kits to schools through a school sustainability curriculum.
- Implemented a uniform conservation policy for water features among all municipalities.
- Published the SNWA 2017 Water Budget and the SNWA 2017 Water Resource Plan.
- Completed an impact assessment of potential out-of-valley water use on water resources.
- Created approximately 32,000 acre-feet of Tributary Conservation ICS and over 740 acre-feet of System Conservation water from the Muddy and Virgin Rivers to Lake Mead.
- Negotiated and entered an additional agreement to develop recovery capacity for water banked in Arizona.
- Initiated interstate banking of 13,000 acre-feet in Arizona.
- Purchased 24.64 acre-feet of Virgin River water.

2017-18 Major Accomplishments

- Issued more than 5,000 conservation rebates saving the community nearly 260 million gallons per year.
- Contributed approximately 57,000 acre-feet of unused Nevada water for the protection of Lake Mead elevations.
- Participated in the ongoing implementation of the Pilot System Conservation Program.
- Conducted Colorado River modeling in support of ongoing negotiations and resource management activities.
- Partnered with Colorado River stakeholders to identify and prioritize research initiatives that would 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 CRB.
- Maintained a regional monitoring network in east central and southern Nevada to collect long-term hydrologic and climatological data.
- Designed and oversee construction of replacement wells within the Las Vegas Valley and for the ranches.
- Achieved 2017 Net GPCD of 127.

Strategic Plan Goal 4 – Develop Innovative and sustainable solutions through research and technology.

2018-2019 Performance Objectives

- Increase participation in SNWA conservation incentive programs such as Water Smart Landscapes Program and Water Efficient Technologies Program
- Host 11th Annual WaterSmart Innovations Conference.

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- Continue to collaborate with water efficiency technology incubators and accelerators, including WaterStart, ImagineH2O, the Metropolitan Water
- District of Southern California's Innovative Conservation Program, 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 resort and large facility management.
- Implement a pilot program to provide residential water use audits to clients with extraordinary use characteristics.
- Develop a 3-hour Conservation continuing education course for Homeowner Association Managers.
- Participate in the implementation of Minute No. 323, "Extension of Cooperative Measures and Adoption of a Binational Water Scarcity Contingency Plan in the Colorado River Basin".
- "smart" irrigation controllers to develop and improve features.
- Continued a research program to quantify potential water savings from residential audits conducted for clients with extraordinary water use characteristics.
- Partnered with the Alliance for Water Efficiency and major utilities to fund and develop a research venture to explore water conserving approaches to cooling.
- Increased participation in SNWA Smart Irrigation Controller Rebate by 13 percent from 2016.
- Hosted approximately 1,000 attendees at the 10th Annual WaterSmart Innovations Conference and Expo, the nation's largest event for exhibiting and presenting water efficiency technologies.
- Partnered with the Metropolitan Water District of Southern California and Central Arizona Project to implement the Innovative Conservation Program.
- Participated in the development of a scope of work for the study of water desalination opportunities in the Sea of Cortez.

2017-18 Major Accomplishments

- Ongoing collaboration with the State of Nevada's WaterStart program and ImagineH2O to review water efficiency technology and select award recipients.
- Ongoing collaboration with the RESNET network to develop a national water efficiency rating system for new homes.
- Ongoing collaboration with the nation's major manufacturers of

Strategic Plan Goal 5 – Ensure Organizational Efficiency and Manage Financial Resources to Provide Maximum Customer Value.

2018-19 Performance Objectives

- Implement hydrologic monitoring efficiencies with remote data collection.

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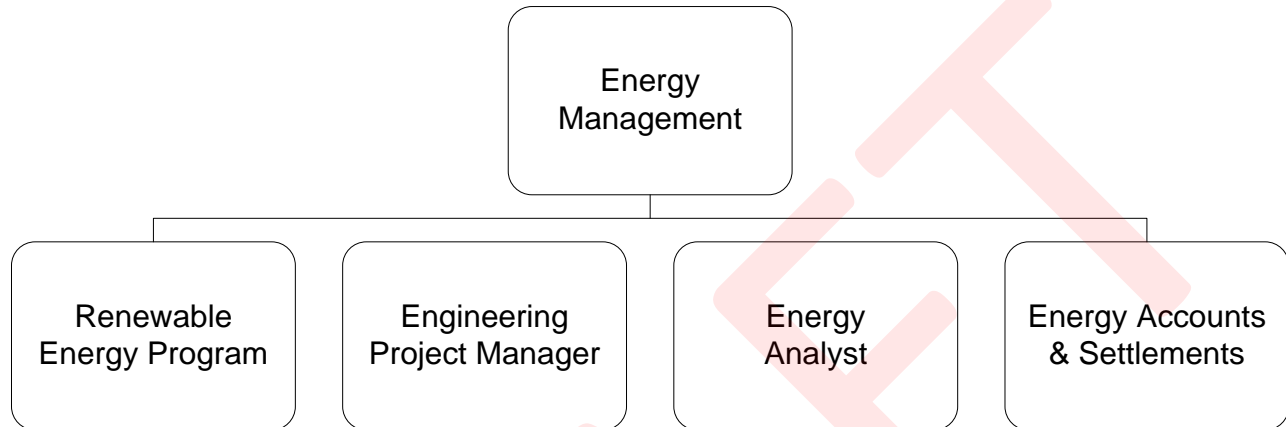
- Leverage conservation research dollars through regional/national projects that attract funding and participation from peer utilities.
- Implement a new business system to streamline workflows, maintain accountability, reduce labor intensity through automation and expand use of electronic documents.

2017-18 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 \$342,518 in grant funding to support conservation programs.

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

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also support the renewable energy initiatives of the SNWA and the LVVWD.

Budget Objectives and Highlights

The fiscal year 2018-19 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

SNWA Uses	Actual 2016-17	Budget 2017-18	Budget 2018-19
Energy	\$36,477,845	\$36,687,491	\$35,462,002
Materials & Supplies	570	2,500	2,500
Maintenance & Repairs	17,516	-	-
Rental & Leases	-	-	-
Other Employee Expenses	3,710	8,250	8,250
Other Expenses	35	1,250	1,250
Total Operating Expenses	\$36,499,676	\$36,699,491	\$35,474,002
Capital Costs	\$ -	\$ 7,920,000	\$ 6,120,000
Payroll Costs	\$ 1,436,023	\$ 1,444,577	\$ 1,502,093
Total Department Expenditures	\$37,935,699	\$46,064,068	\$43,096,095
FTE Positions	6.0	6.0	6.0

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

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Energy Services group have met this need for many years now.

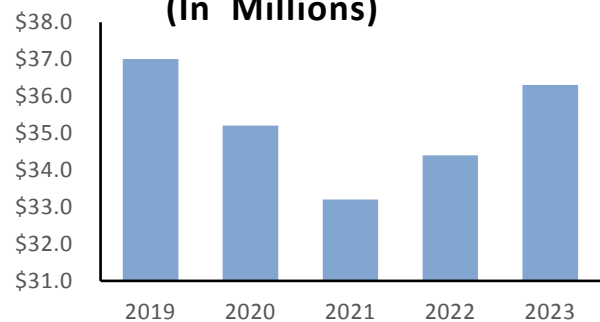
Expanding the energy portfolio managed by this group to include the SNWA member agencies and the members of the SSEA has brought significant economies of scale and portfolio synergies to each of the participants, including the SNWA. Furthermore, the energy portfolio has been able to be expanded in this 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 2022. 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 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 2022, 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 2023 as of the end of January 2018.

SNWA 2019-2023
Fiscal Year Ending
Projected Energy Costs
(In Millions)



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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 \$37 million, excluding the estimated cost of capital associated with the SNWA's energy assets for the fiscal year 2018-19. This amount is recovered through the SNWA wholesale water delivery charge

SSEA Eastern Nevada 230 kV Transmission Project. For the past several years, the SSEA members have been working cooperatively to develop the 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. Mead is the major regional wholesale market access point in Southern Nevada. The SSEA has completed an Environmental Assessment and received full project right-of-way grant and permits from the Bureau of Land Management. Management is presently evaluating various opportunities to move this project forward into the design phase.

SNWA and LVVWD Sustainability Initiatives. The SNWA continues to pursue economical energy contributing to the SNWA's and the LVVWD's goal of providing 25 percent of the

supply portfolio with renewable energy by 2025 and currently stands at 18%.

Strategic Plan Objectives and Accomplishments

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

2018-19 Performance Objectives

- Install 2 MW of solar covered carports at the LVVWD campus by the end of the first quarter of 2019. Installations will cover four employee parking areas at the main campus and the Springs Preserve.
- Evaluate Microgrid applications for the water delivery system. Identify possible pilot projects and assess performance if implemented.
- Develop a structure and business case for the Eastern Nevada Transmission and Solar Project that enables this strategic project to move into the design phase.

2017-18 Major Accomplishments

- Increased the value of existing renewable energy facilities through the application of strategic maintenance activities.
- Obtained management approval for moving forward on additional solar facilities.
- Completed evaluation of options for moving the ENTP forward into the design phase.

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- Completed integration of budget and accounting records into common system to produce timely and informative budget variance reports.

Strategic Plan Goal – Deliver an outstanding customer service experience.

2018-19 Performance Objectives

- Reach out to new customer representatives with a customized training program to meet their needs.
- Produce training videos to enhance customer understanding of our operations and resulting impacts on their costs.
- Offer our energy expertise in support of our customers' energy goals and objectives.

2017-18 Major Accomplishments

- Initiated the timely production and distribution of monthly energy budget to actual financial reports to all SSEA customers.
- Collaborated with the SNWA Finance department to provide an accurate and timely final accounting of all costs, deposits and refunds associated with the sale of the Silverhawk Power Plant and the administrative termination of the SNWA energy contract trading account.
- Implemented quarterly Energy Accounting Review meetings with SNWA Finance personnel.
- Implemented new customer agency federal hydropower allocations from Hoover Dam.

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

2018-19 Performance Objectives

- Reduce or eliminate unexpected changes to the cost of energy provided to customers.
- Develop internal tools and/or streamline internal processes, allowing for production of energy information that is more understandable and easily accessible to our internal and external customers.
- Enhance accounting system actual transaction detail to provide more robust cost versus actual comparison reports.
- Determine optimal balance of operating funds and short-term investments and identify available vehicles to achieve optimal fund balances.
- Investigate alternative methods for collateral posting.

2017-18 Major Accomplishments

- Developed a transmission wheeling rate for the Power Delivery Project.
- Implemented a new system for the accurate and timely tracking performance of renewable energy systems and portfolio energy credits.
- Created a timely and accurate PEC/REC report management tool.

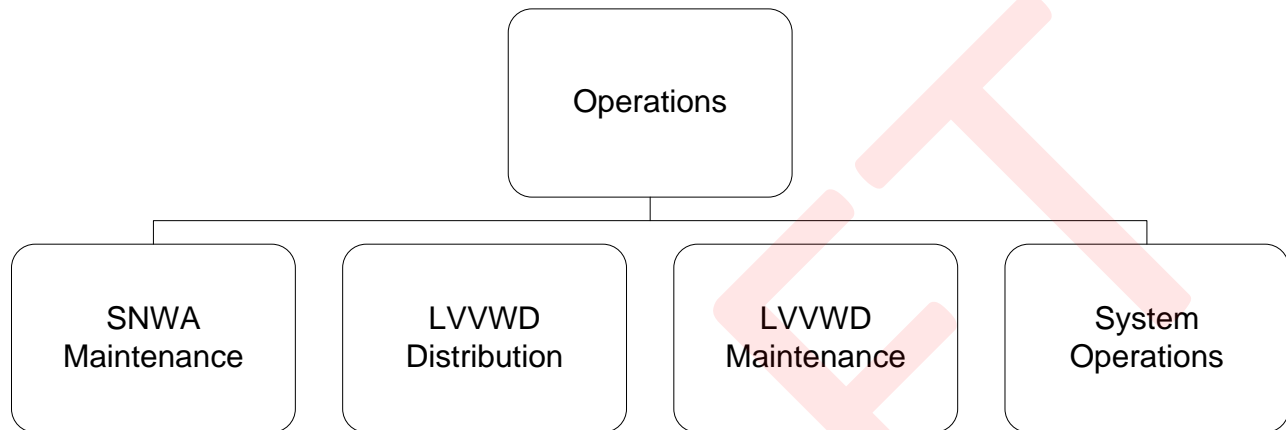
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- Created a schedule and procedures to facilitate the timely data upload, certification and invoicing of PECs.
- Prepared comprehensive documentation for all revenue and cost allocations.
- Maintained a fixed cost energy portfolio for our customers within compliance requirements.
- Executed and began administering new 50 year Hoover Dam federal hydropower contracts for the SNWA and LVVWD.
- Tested and evaluated a model for estimating the creditworthiness of energy suppliers that do not have an established credit rating.
- Completed a Pioneer Solutions trade capture system upgrade.
- Migrated member agency book budget records to Quickbooks and commenced producing monthly budget variance reports for all customers.
- Completed another clean external audit, without any significant audit findings, of the SSEA's financial records after converting to QuickBooks, allowing for the regular production of improved financial reports.
- Completed a clean SNWA Energy Management Department operational audit.
- Provided input and justification for rent expense allocation methodology.

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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, and two recycled water distribution systems that include two reservoirs, five pumping stations and four wells.

The SNWA system consists of 31 pumping plants, 36 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

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department was further reorganized in October 2015 to create a combined Systems Operation division with separate 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, rate of flow control stations (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 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 \$3,467,484 for the fiscal year 2018-19 Budget Plan between the LVVWD and the SNWA.

Operating Expense Budget. The department's Operating Expenses 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 2018-19 Budget Plan are shown on the following table.

Operations' fiscal year 2018-19 overall budget totals \$65,270,389 between the LVVWD and the SNWA.

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Expenditures

SNWA Uses	Actual 2016-17	Budget 2017-18	Budget 2018-19
Water	\$ 218,753	\$ 250,000	\$ 250,000
Energy	153,347	220,000	205,000
Materials & Supplies	1,117,062	2,232,500	2,542,500
Maintenance & Repairs	233,197	430,000	430,000
Rental & Leases	-	-	-
Other Employee Expenses	32,752	85,400	73,100
Other Expenses	2,225	221,100	221,100
Total Operating Expenses	\$ 1,757,336	\$ 3,439,000	\$ 3,721,950
Capital Costs	\$ 2,528,965	\$ 5,328,000	\$ 2,016,500
Payroll Costs	\$ 8,654,413	\$ 8,753,581	\$ 9,544,983
Total Department Expenditures	\$12,940,713	\$17,520,581	\$15,283,433
FTE Positions	52.6	54.0	57.3

Department Performance

SNWA Maintenance. The 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 31 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 pump 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).

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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 6,706 miles of pipeline and laterals, 125,124 valves, 399,836 service laterals, 39,027 fire hydrants, and appurtenances comprising the LVVWD's distribution system. In fiscal year 2016-17, Distribution crews completed 8,131 work orders consisting of repairs to pipelines, and repairing and replacing valves and fire hydrants; additionally, replaced 2,111 leaking service laterals. 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 60,628 of these services have been replaced, leaving 19,472 in unreliable service. Distribution also assists other departments, such as Asset Management, by installing cathodic test stations, and Inspections with valve corrections and water quality.

Distribution continues the preventative maintenance valve program which locates, operates, and maintains valves within the distribution system. Distribution located and exercised 10,092 valves in fiscal year 2016-17, 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 backsiphonage condition exists. The backflow technicians are certified by the California/Nevada section of the American Water Works Association (AWWA). They are currently managing approximately 29,000 backflow prevention devices.

LVVWD Maintenance. The LVVWD Maintenance division is comprised of five sections:

Field Booster Pump/Valve Repair
Pump System Repair
Electrical
Telemetry
Well Crew

The Field Booster Pump/Valve Repair section maintains, repairs, and installs mechanical equipment found at major pumping stations,

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select small system sites, and recycled water valve vaults.

The Pump System Repair section expedites repair of major pumps and motors. This is accomplished through the use of machinists, mechanical, and coating and painting skills of the section members. The section also implements the predictive maintenance tool of vibration analysis on the LVVWD 300+ motors. Another major responsibility is to maintain the natural gas industrial engines at the Campbell Pumping Station and field deployed emergency generators.

The Electrical section maintains, repairs, and installs electrical equipment typically used as a control voltage for starting electrical motors. This involves providing preventive maintenance as determined by the RCM process and implementing the infrared predictive maintenance technology, knowing and understanding 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 radios and repeater system, spread spectrum radios and repeater system, 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.

System Operations. The System Operations division is comprised of the management team, LVVWD System Operations, SNWS System 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 an energy analyst. The energy analyst is integral in compiling the monthly water usage for which the SNWA bills its customers.

The LVVWD SCADA Operations section provides around-the-clock monitoring and control of the all retail water distribution systems using the SCADA computer system. Daily tasks include coordinating water deliveries from the SNWS and operating pumps and wells to maintain reservoir levels and water system pressure. This section remains instrumental in the continuing development of an Energy Water Quality Management System (EWQMS) module designed to further improve pumping efficiencies and distribution system water quality.

The SNWS SCADA Operations section provides around-the-clock monitoring and

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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 valves at all pump 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 rate-of-flow control stations, 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 performs maintenance on equipment associated with the disinfection systems used to maintain a safe residual in the system. They are also responsible for reservoir structure maintenance and provide extensive support to the maintenance groups for valve and mixer maintenance.

The Small Systems section is staffed with two rural systems operators (RSO) and a superintendent. The RSOs are responsible for maintenance on the water system equipment at five locations throughout Clark County. The superintendent is aligning the Cross Departmental Teams (CDT) under his chairmanship to ensure operational, community growth, and system finances remain transparent to all work groups supporting the small systems.

Strategic Plan Objectives and Accomplishments

Strategic Plan Goal – Assure quality water through reliable and highly efficient systems. **2018-19 Performance Objectives**

- Replace/upgrade critical infrastructure components that have reached the end of their useful lives and retire assets that are no longer needed.
- Continue to collaborate with Infrastructure Management to complete SNWS PAC and LVVWD DNP3 programmable logic controller upgrades.
- Work with Infrastructure Management to upgrade SCADA communication system from radio to fiber optics.
- Continue to identify best operational and maintenance practices of various divisions and implement them as the standard practice.
- Continue to collaborate with Infrastructure Management to complete an upgrade to the LVVWD SCADA system.
- Partner with Information Technology to renew the Energy Water Quality Management System software so it is supportable and useable with advanced software and current server systems.
- Remain active and involved in major contracts involving new pump stations, reservoirs, wells, and other system additions or rehabilitations. After several years of no major projects, implementing advances in technology will need to be a team effort.

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- Continue to work in partnership with various departments to identify and correct causes of water losses. These could be SCADA related, maintenance related, or leak related. The goal is to return to 1 percent or less total losses.
- Continue to work in partnership with various departments to identify and correct causes of water losses. These could be SCADA related, maintenance related, or leak related. The goal is to return to 1 percent or less total losses.
- Install new actuators and control valves at Hacienda ROFC, Fayle ROFC and Oakey ROFC.
- Continue motor refurbishments on the A Lateral, C Lateral and PS06.
- Establish temporary generator power Emergency Preparedness program for all In Valley ROFCs.
- RF6A/RF6B/RF6C – Install new venturis, control valves and actuators in ROFC6A, 6B, 6C and Flamingo ROFC.
- Begin valve actuator replacement project in the South Valley Lateral.
- Replace the failing variable frequency drive at BPS1A for Unit No.1.
- Install fail safes (R6 relays) on all motor protection relays at Production facilities.
- Repair/replace all inoperable valves at River Mountains' reservoirs.
- Searchlight's water system suffered damage when a flash flood roared through a low area and washed out about 40 feet of transmission piping. Responding staff isolated the line within 15 minutes of arrival on site. Distribution staff made repairs the next business day and the Small Systems CDT collaborated to obtain Army Corp of Engineering funding support for a permanent repair.
- Identified the steps and equipment needed to convert the Boulder City Raw Water line to deliver treated water to Boulder City. The process had become lost due to retirements over the years and now the written plan is in place for all to refer to and use, if or when it is necessary.
- Teamed with Maintenance Engineering and Asset Management to install weko seals at Hacienda Rate of Flow and Forebay. Repairs fixed an estimated 500,000 gallons per day water leak from five piping joints.
- Use of groundwater wells to meet system demands is limited by the 40,760 af allocation. This year's pumping came in at 40,756 af.
- Joined forces with Human Resources to develop an Operator Trainee job description. This allowed for training of Limited Term Employees in preparation for future retirements.
- The LVVWD system grew by one pumping station, one storage tank, one recycled water system customer, and one intertie with the City of Henderson. Operational methods were converted to programming by Maintenance Engineering and all systems were successfully started up with no major issues.
- Executed 44 major SNWS outages in

2017-18 Major Accomplishments

- Averted a potential disaster in the Jean water system by assisting Letica Corporation in isolating their on-site piping. A piping failure was causing a leak approaching 1,000 gpm and this prompt isolation support prevent the small storage tank from draining.

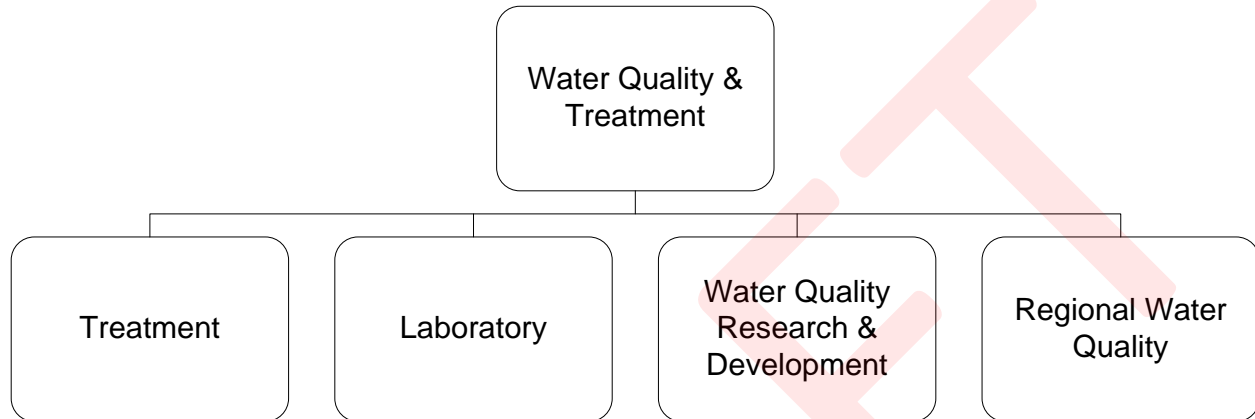
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- support of maintenance, engineering, or construction projects. One outage was a 10-day shutdown of the Pittman Lateral to allow relocation of the piping in support of a Clark County construction project for an overpass at Valley View and Harmon. Additionally, there was an unplanned shutdown of the South Valley Lateral to for a repair to a blown out plug. This required both LVVWD and City of Henderson to use alternative delivery plans to meet November demands. were to tie in the L3PS discharge lines.
- Conducted both a table-top and practical field exercise of Loss of SCADA scenario within the LVVWD system. Staff responded to start and/or stop pumping equipment as needed, field level measurements were taken, and after 48 hours of exercising the lessons learned list was prepared and shared.
 - Removed the old variable frequency drive and installed a new reduced voltage soft starter on Unit No. 10 at Sloan Pump Station.
 - Installed the RIVENTA Pump Monitoring System at Hacienda Pump Station.
 - System wide installation of the new FOXBORO flow transmitters at all rate-of-flow-control stations.
 - Installed new manual and electric guard/isolation valves and actuators at Oakey ROFC and Fayle ROFC.
 - Installed new station power distribution equipment and motor control centers at Twin Lakes Pump Station.
 - Isolated, drained and rewatered the South Valley Lateral at Gibson and Horizon for a leak repair.
 - Isolated, drained and rewatered the Pittman lateral in support of the 84" pipeline relocation.
 - PS06 Unit No. 1 – Remove for repair/refurbish by KOFFLER Electric.
 - Installation of level transmitters at Foothills Pumping Station surge tanks to replace Warrick level probes.
 - Installed infrared survey windows on switchgear at Production facilities.
 - Installed a new variable frequency drive to replace the failed Unit No. 3 at IPS2.
 - Completed North and Foothills ROF control valve installations.
 - Executed 29 major SNWS outages in support of maintenance, engineering, or construction projects. Three outages were to tie in the L3PS discharge lines. Additionally, there was an unplanned outage for the repair of a four-million- gallons per day water leak on an AVAR line at Butterfly Valve Vault 5.
 - Worked with Infrastructure Management to complete the multi-year LVVWD DNP3 programable logic controller upgrades.
 - Replaced the two-remaining variable frequency drive units at WRC main pump station.
 - Replaced 23-year-old Ronzone pump 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 based on age and oil condition.

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

Presently, the functions under the Water Quality and Treatment (WQ&T) department include: Treatment, Laboratory, Water Quality Research and Development (R&D), 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, all 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 coordinating water quality in the SNWA source waters. All of these efforts are in support of the primary responsibility for the department.

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), with a combined design treatment capacity of 1 billion gallons per day. The division, through a Supervisory Control and Data Acquisition System (SCADA),

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Expenditures

SNWA Uses	Actual 2016-17	Budget 2017-18	Budget 2018-19
Energy	\$ 49,656	\$ 80,000	\$ 60,000
Materials & Supplies	4,012,335	4,318,100	4,524,100
Maintenance & Repairs	797,719	1,115,000	1,025,000
Other Employee Expenses	563,015	679,950	678,125
Other Expenses	(76,903)	854,010	1,083,000
Total Operating Expenses	\$ 5,345,824	\$ 7,047,060	\$ 7,370,225
Capital Costs	\$ 2,718,272	\$ 16,965,000	\$ 16,354,800
Payroll Costs	\$ 15,092,283	\$ 15,587,248	\$ 16,899,657
Total Department Expenditures	\$ 23,156,379	\$ 39,599,308	\$ 40,624,682
FTE Positions	82.8	85.8	86.4

controls all water treatment, chemical dosages, filter backwashing, and water quality. Treatment plant operators have direct responsibility for the operation of the water treatment facilities. The operator must comply with the SDWA, the Surface Water Treatment Rule and optimize treatment while minimizing cost.

Each operator must be certified for water treatment by the Nevada Division of Environmental Protection (NDEP) to the appropriate level for their responsibilities. The American Water Works Association (AWWA) certifies operators at journeyman level and above as laboratory analysts. The water treatment process consists of ozonation for disinfection, followed by flocculation and

filtration, as well as corrosion control, fluoridation and chlorination.

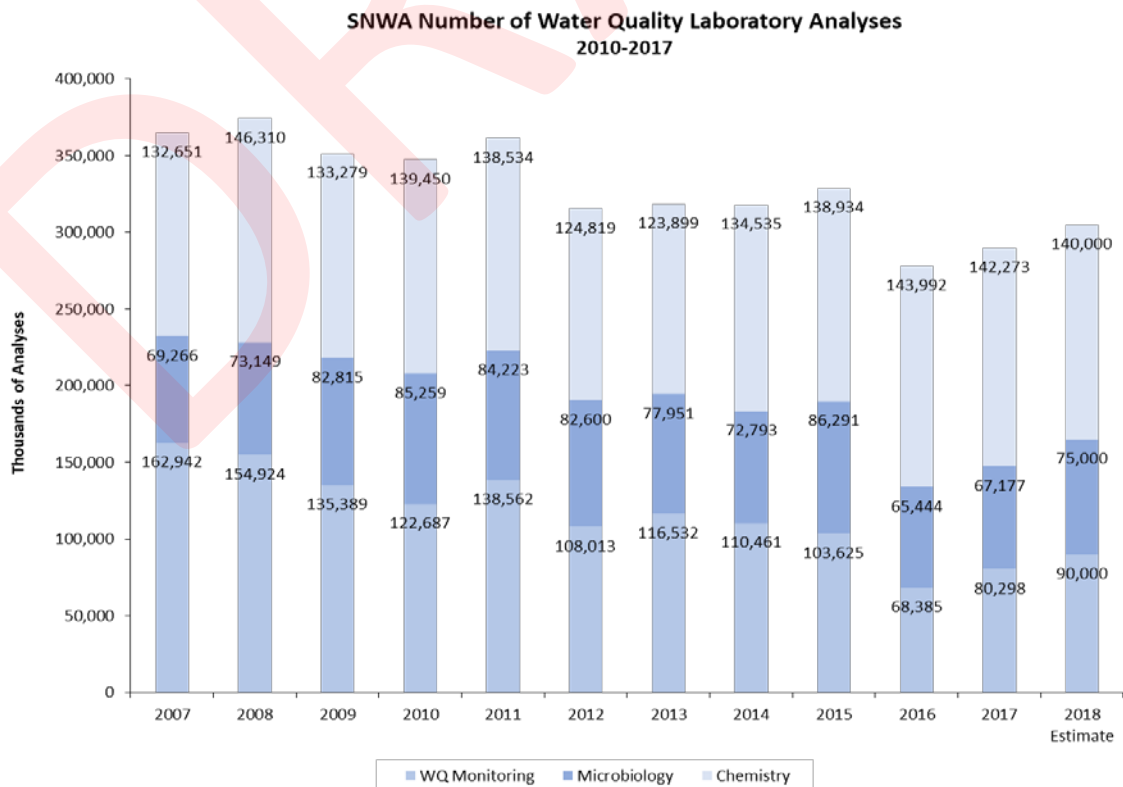
Laboratory. The Laboratory division is responsible for routine water quality monitoring, testing, and reporting. The sections within the Laboratory include Chemistry, Microbiology, Monitoring, and Laboratory Services. The analytical capabilities of the Laboratory cover a broad spectrum including: trace organic, trace inorganic, macro constituent, physical, wet-chemical, bacteriological, virological, protozoan, amoebas, and limnological analyses.

Analyses associated with the SDWA compliance testing are the highest priority in

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the Laboratory. The SDWA requires each public water system to perform or have performed a comprehensive set of analyses on its delivered water. The Laboratory Services section is responsible for scheduling all the routine and non-routine sampling events and receiving these samples into the laboratory. In addition, staff in this section serve as the primary point of contact for all Laboratory customers, including the private laboratories contracted for analytical services. The Monitoring section is responsible for collecting samples in the distribution systems of the SNWA purveyors. The Monitoring, Chemistry and Microbiology sections subsequently perform a variety of analyses on these samples. In addition, the Laboratory completed all the 2017 SDWA monitoring requirements for the 14 Clark County public water systems it serves.

The Laboratory conducts numerous analyses on samples from Lake Mead and its sources. Results of this work provide a general indication of the quality of water that will be received by the regional water treatment plants. The Laboratory also provides analytical support to the R&D division pilot plant and grant-funded research projects. With 38 employees, approximately 41,400 samples were collected and 289,748 analyses performed in 2017. The chart below presents the total number of laboratory analyses through calendar years 2007-2017 (2018 estimate). The number of analyses can fluctuate year-to-year depending on the year's monitoring requirements. A significant increase in sampling and analyses performed this year was because all LVVWD wells required full SDWA analyses including inorganics, synthetic organics, volatile organics, and radiological testing. (See chart below).



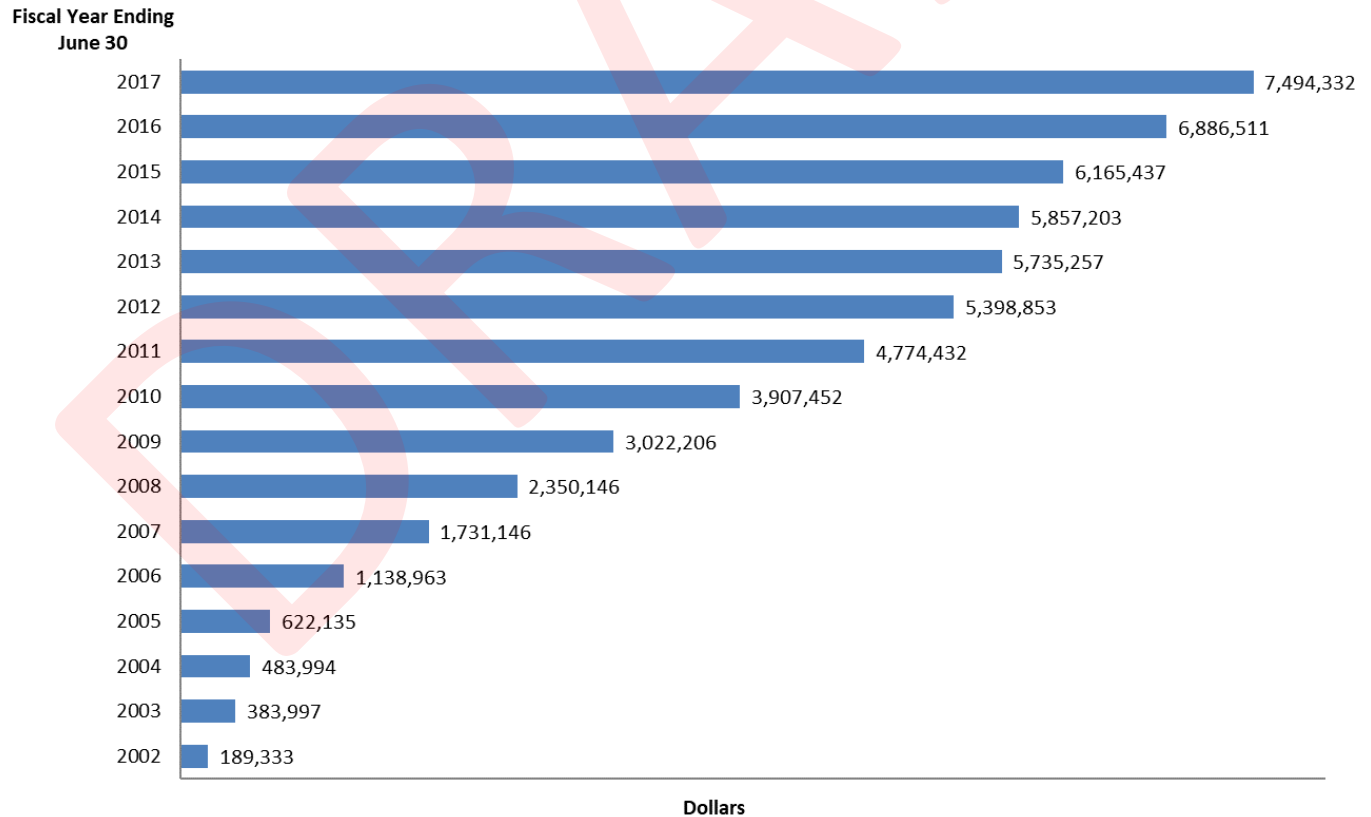
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Water Quality Research and Development.

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 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. The chart below represents the cumulative amount of water quality research funding received from outside sources through calendar years 2002 - 2017.

SNWA Water Quality Research & Development
2002-2017 Cumulative External Funding Received



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Regional Water Quality. The Regional Water Quality division is responsible for coordination of regional water quality issues within the SNWA and other local, state, and federal agencies. Another essential function is to collect data in the Muddy and Virgin Rivers and the Las Vegas Wash, and to compile, validate, and analyze 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.

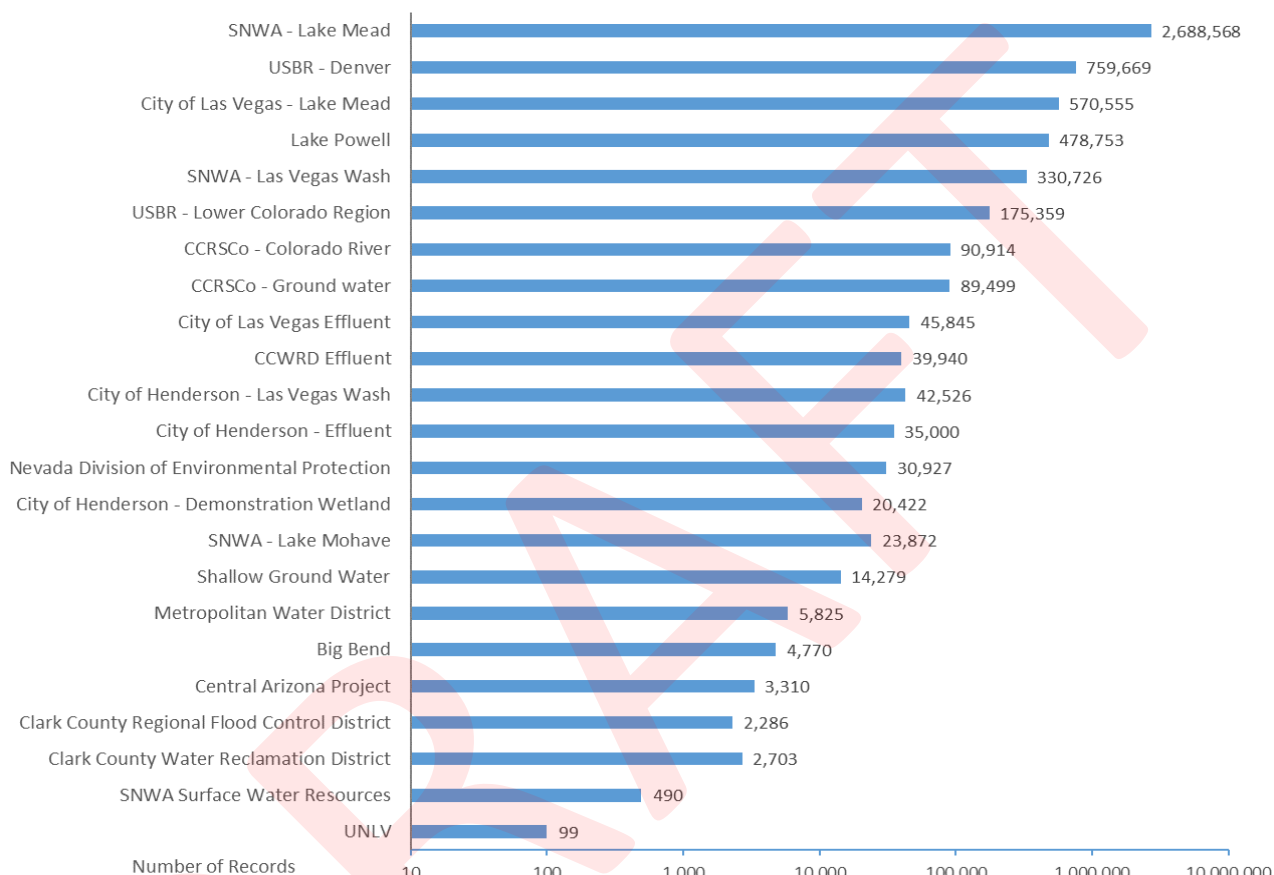
Data is also analyzed to assess impacts of nutrients, quagga mussels, perchlorate, total dissolved solids, selenium, Microcystis, and other contaminants on the water quality in Lake Mead and the drinking water supply. The division continued its efforts to integrate data and understanding of Colorado River dynamics upstream of Lake Mead including Lake Powell, the Colorado River through Grand Canyon, and releases during High Flow Experiments.

In 2017-18, the Regional Water Quality division updated the 3-dimensional Lake Mead Water Quality Model, including a transfer to a new modeling package. The model transfer included updating model code, verifying the performance of the new model software to ensure compatibility and use of the updated model. The division continued to coordinate the Lake Mead Monitoring and Ecosystem and the Interagency Monitoring Workgroups and hosted the Lower Colorado River Water Quality Symposium.

The division actively seeks out new sources of data for the Database. Water quality information can be found in the Colorado River from Lake Powell to the international border with Mexico, which makes the Database a truly regional database. There are currently over 4.5 million records in the Database. The following chart is a summary of the data that has been uploaded by each agency into the Database.

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**SNWA Number of Records in Lower Colorado River
Water Quality Database (Logrithmeic Scale - December 2017)**



Strategic Plan Objectives and Accomplishments

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

2018-19 Performance Objectives

- Pending completion of contacting and funds availability, proceed to develop 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. This work will allow for the exploration of potential future conditions and changes to the water treatment system that may be required.

- To work closely with Information Technology (IT) to complete the upgrade of ChemWare Laboratory

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Information Management System (LIMS) software and become proficient in use of the new upgrade.

- Continue to work with Fleet Services to ensure the SNWA sampling vessel is safe and reliable by compiling information regarding the necessary requirements needed for a new SNWA sampling boat by collaborating with stakeholders including the Water Quality Monitoring team, SNWA Fleet Services, and/or customers.
- Continue Operator-in-training.
- Complete update of 100 percent of Standard Operating Procedures (SOP).
- Refurbish AMSWTF filters 3, 4 and 5, and conduct performance study.
- Refurbish AMSWTF Fluorosilicic Acid (fluoride) storage system.
- Refurbish RMWTF Sodium Hypochlorite manufacturing system and reconfigure with several dilution options.
- Replacement of online instrumentation with the latest technology available.
- Evaluate full-scale filter performance following the renovation of Filters 1 and 2 at AMSWTF.

2017-18 Major Accomplishments

- Migrated the existing ELCOM/CAEDYM 3-dimensional water quality model to the AEM3D modeling platform. Including model revisions, performance verification and implementation of the new platform.
- Continued to analyze Lake Mead and Mohave water quality data and to advise Water Quality and Treatment

staff on possible impacts to the treatment system.

- Evaluated the laboratory's requirements for an Inductively Coupled Plasma Mass Spectrometer (ICP-MS) to replace a current instrument that had reached obsolescence. Worked with Purchasing to formulate a "Request for Proposal" based on those requirements. After staff identified an opportunity for a significant discount, the laboratory was able to purchase a second identical ICP-MS to replace an instrument nearing obsolescence with a minor increase in funding.
- Implemented the use of automated total coliform and *Escherichia coli* instrument for evening and weekend work.
- Completed re-write of approximately 80 percent of all SOPs.
- Refurbished AMSWTF filters 1 and 2 and conducted filter performance study.
- Completed update of 100 percent of chlorine SOPs and implemented annual training program.
- Programmable Area Controller (PAC) replacements at RMWTF.
- Completed removal of Granular Activated Carbon (GAC) in filters 19 and 20 at RMWTF.
- Evaluated performance of the old and new filter media design to remove high turbidity at pilot-scale.
- Completed research study leading to the replacement of Granulated Activated Carbon (GAC) media with anthracite in filters 19 and 20 at RMWTF.

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- Completed research study recommending the use of zinc orthophosphate to mitigate lead corrosion at Kyle Canyon.
- Developed strategy to use chloramines to eliminate biological activity in the filters at Big Bend Water District(BBWD).

Strategic Plan Goal – Deliver an outstanding customer service experience

2018-19 Performance Objectives

- Complete all Unregulated Contaminant Monitoring Rule 4 (UCMR4) monitoring required in 2018 for Henderson and LVVWD.
- 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.
- Refurbish AMSWTF Ozone Generator 3.
- Upgrade breaker/contactors on ozone generators at RMWTF.
- Continue with PAC replacements at BBWD.
- Refurbish BBWD filter 2.
- Obtain UV Disinfection Credit for BBWD.
- Continue serving the International Ozone Association – Pan American Group (IOA-PAG) as President and Administrative Communications Officer.
- Continue to interact with internal and

external customers of Lake Mead, Lake Mohave, Lower Colorado River and Las Vegas Wash water quality data to ensure a leadership role for SNWA in environmental issues.

- Implement updated water quality monitoring equipment and real-time data transfer capabilities for the Las Vegas Wash to support the activities of the Las Vegas Valley Watershed Advisory Committee.

2017-18 Major Accomplishments

- 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 R&D division, LVVWD Operations, and Rainbow Canyon residents with quick-turn analysis for various analytical parameters related to corrosion control and lead and copper issues.
- Chloramination system for bromate mitigation installed at BBWD.
- Provided support service and guidance to the IOA-PAG resulting in a surplus of \$57,000 from the 2017 IOA World Congress in Washington, DC.
- Reconstructed the IOA-PAG website on the platform Wild Apricot that is designed for member associations.
- Developed a predictive, model-based relationship between Lake Mead

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elevations and the dilution of Las Vegas Wash waters upon traveling through the lake for the benefit of Las Vegas Valley wastewater dischargers. This relationship will help the dischargers plan to meet water quality requirements of their NPDES permits.

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

2018-19 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.
- Continue rehabilitation of filters at AMSWTF.
- Water quality conversion to input data into Avantis for RMWTF.
- Rehab RMWTF Sodium Hypochlorite system and install new style generator.
- Operate, maintain and perform challenge testing for water quality instrumentation at the AMSWTF Star Lab and buoys in Lake Mead. 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.”

2017-18 Major Accomplishments

- Completed rehabilitation of filters 3, 4 and 5 at AMSWTF.
- Coordinated several plant shutdowns in support of SCADA hardware upgrades.
- Implemented paperless work order process at BBWD.
- 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”.
- Completed the USBOR grant through their WaterSMART Drought Response Program: “Lake Mead water quality monitoring to mitigate impacts caused by the drought”.
- Regional Water Quality has continued to analyze Lake Mead water quality data in the context of changing climactic conditions. In 2017 – 2018 this analysis has focused on the impact of the ongoing drought in the Colorado River Basin.

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

2018-19 Performance Objectives

- Pending completion of contacting and funds availability, proceed to develop 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

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with UNLV utilizing grant funding from the USBR WaterSMART program.

- Expand the collection of Lake Mead water quality data through the use of automated data collection and analysis.
- Coordinate high-turbidity filter study with R&D division.
- Investigate use of Next Generation Sequencing of Deoxyribonucleic acid (DNA) to differentiate between the types of microorganism present in our source waters.
- Continue support of R&D division projects involving algal toxin monitoring, Polymerase chain reaction (PCR) analysis, and other microbial methods.
- Continue work on externally-funded projects by WRF (Projects 4692, 4719, 4716, 4711, Reuse 16-02) and US Department of Agriculture (USDA).

2017-18 Major Accomplishments

- Install copper sulfate injection system for biological control of pilot plant and raw water sampling pipe.
- Fully implemented the electronic tablet-based Horizon Logbook Manager (HLM) for Water Quality Monitoring in 2017.
- Completed the R&D division studies involving Assimilable Organic Carbon (AOC) removal
- Evaluated the use of ATP and flow cytometry for early detection of harmful algal blooms.
- Completed WaterStart research project with Metawater.
- Completed WaterStart research

project with WellToDo.

- Completed externally-funded projects with WRF (Projects 4555, 4559, 4560, 4536, Reuse-14-16, TIRR2R15), City of Altamonte Springs, FL, and USBOR.

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

2018-19 Performance Objectives

- Revise and update preventive maintenance program.
- Enhance cross-training efforts of staff at RMWTF and AMSWTF.
- Pursue solicited and unsolicited externally-funded research grants from the WRF (e.g., Tailored Collaboration Project on disinfection framework for biofilters), US EPA, National Science Foundation, Water Environment & Reuse Foundation, and the USBOR.
- Pursued new position for microbiology, and started renovations on the microfiltration plant at the RMWTF.

2017-18 Major Accomplishments

- Began training Electrical/Electronic Systems Technician II at the RMWTF in anticipation of staff retirements.
- Operator-in-training completed training and advanced to Operator II position.
- The laboratory collaborated with procurement to negotiate a significant five-year discount for quality control

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- standard and samples from its proficiency testing vendor.
- Received over \$315,000 from external grants.
- Relocated the pilot plant into the ozone utilidor at the AMSWTF.
- Began publishing articles open access so research is readily available.

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

2018-19 Performance Objectives

- Investigate AWWA performance awards at the BBWD.
- Continue presenting scientific research at conferences and publishing on research projects.

2017-18 Major Accomplishments

- Applied to the AWWA Partnership for Safe Drinking Water for both the AMSWTF and the RMWTF for the “Excellence in Water Treatment” award.
- NDEP completed annual sanitary survey and found no deficiencies in the treatment process.
- A member of the Water Quality & Treatment Department’s Chemistry team won the General Manager’s (GM’s) Distinguished Award of Excellence.
- Published twelve articles in scientific journals.
- Presented twelve papers at the 2017 American Water Works Association (AWWA) Water Quality Technology

Conference.

- Presented seven papers at the 2017 IOA World Congress.
- Presented six papers at 11th International Water Association Reclamation and Reuse Conference.
- Presented five papers to the AWWA International Symposiums on Potable Reuse and Biological Treatment.
- Presented 3 posters at the Disinfection By-Products Gordon Research Conference.
- Presented a paper at the Tri-State Seminar.
- Presented a Water Research Foundation Webcast (Project WRF 4588).
- Submitted five papers at the 2018 AWWA Annual Conference and Exposition.
- Submitted a paper for the spring 2018 American Chemical Society Conference.
- Submitted a paper for the 2018 Water Research Foundation Conference.

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SOUTHERN NEVADA WATER AUTHORITY®

SECTION 6

CAPITAL PLANS

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SOUTHERN NEVADA WATER AUTHORITY®

FISCAL YEAR 2018-19
OPERATING AND CAPITAL BUDGET

Capital Budget

The Southern Nevada Water Authority (SNWA) maintains a long-range facility planning process to determine the type, size and location of water distribution and treatment facilities needed to meet the water service demands of the areas in Clark County served by the member agencies – Las Vegas Valley Water District, City of Henderson, City of North Las Vegas, City of Boulder City and the Big Bend Water District (Member Agencies). As water system facilities are defined they are incorporated into the SNWA's overall construction program. The program is dynamic, with projects added, changed, or deleted as necessary to meet the changing conditions of the Member Agencies.

The overall capital project-related expenditures for 2018-19, totaling \$181.6 million, consist of continuing construction of the Low Lake Level Pumping Station at Lake Mead, groundwater development, weir improvements and expansion, pumping stations, water resources acquisition and development, reservoirs and wells, new water pipelines, and other distribution facilities. The capital equipment budget of over \$6.6 million consists of vehicles, information technology equipment, water works and diverse industrial equipment.

Impact of Construction Program on Operation and Maintenance Expenses

For the SNWA water distribution facilities, in the near term, the SNWA does not anticipate any impact on maintenance expenses and only minimal expenses associated with the operation of the new facilities added to the

SNWA's water distribution system through its overall construction program. This is due to the following three factors:

- First, the facilities being added to the SNWA's system are new and require little or no maintenance.
- Second, the facilities are designed and constructed with the latest available technology, and are not accepted by the SNWA until they are fully inspected and tested and ready for operation.
- Third, over the past several years the SNWA 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 SNWA anticipates incurring maintenance expenses for the rehabilitation of facilities such as reservoirs, pump stations, and pipelines. However, these costs are minimized through the SNWA'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 member agencies who generate additional operating revenues. These revenues in the past have offset, and in the future are anticipated to continue to offset, the added long-term maintenance expense.

Projecting long-term additional operating expenses driven by the addition of capital

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assets to the SNWA's water system is not easily quantified.

The tables on the following pages contain a listing of all the capital equipment and capital projects included in the SNWA's capital expenditures for the next fiscal year.

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SNWA: CAPITAL BUDGET 2018-19

CAPITAL EQUIPMENT

2300 - Information Technology

Plotter Replacements	\$ 10,000
Bridgewave 10Gig	12,000
Large Format Scanners for IG	14,000
Struxware Appliance	30,000
Corporate Intrusion Prevention System (IPS)	50,000
Virtual Infrastructure Additions	60,000
Network Edge Switch Replace	80,000
PC Monitor Refresh	90,000
FireEye NX Replacement	98,000
General Infrastructure	100,000
Mobile Device Refresh	116,000
Multimedia Storage Appliance	157,200
Data Storage Growth	196,000
PC Refresh	230,000
Subtotal	\$ 1,243,200

3600 - Resources & Facilities

Honda Pioneer 1000 CC. 4X4 UTV.	\$ 16,500
3810 Brush Hog	19,000
Mid-Size SUV 4X2	33,000
1/2 Ton Crew Cab, Short bed pickup 4X4	35,000
1/2 Ton Extended cab Pick-up 4X4	35,000
1/2 Ton Pickup, Crew Cab 4X4	35,000
Mid size Pickup Crew Cab 4X4	35,000
GPS Equipment for SNWA Fleet	45,000
43' Side Dump semi Trailer	50,000
Regular Cab Stake Bed Dump Groundskeeper Truck	70,000
Regular Cab Stake Bed Dump Groundskeeper Truck	70,000
2 Each Replacement Vehicles	104,000
Used Gravel Screening System	120,000
500 CFM High Pressure Air Compressor	123,000
5 Ton Telehandler	145,000

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Used Motor Grader with 14' Moldboard	145,000
1 Lot of 3 Replacement Vehicles For the SNWA Ranch	148,000
Extended Cab Utility W/Crane 4X4	165,000
Regular Cab Utility W/Crane and Welder	165,000
SNWA HVAC Unit Replacement	200,000
Regular Cab Utility W/Crane & Welder 33,000 lb. Truck.	225,000
John Deere 644 Wheel Loader or Equal	260,000
2 Each 19,500 lb trucks with Cranes & Welders.	310,000
Water Sampling Vessel/Boat.	380,000
Livestock - replacement of rams, ewes, heifers and bulls	455,000
1 Lot of 6 Ranch Equipment Pieces	475,500
1 Lot of 12 Replacement Vehicles	988,000
Subtotal	\$ 4,852,000
 <u>4100 - Operations</u>	
Storage Cabinets For Eight Pump Stations	\$ 12,000
Cutler Hammer VCP Breaker Lift	20,000
Motor Analyzer	45,000
Subtotal	\$ 77,000
 <u>4500 - Water Quality & Treatment</u>	
Seal AA3 Segmented Flow Spectrophotometer Upgrade	\$ 22,800
Total Organic Carbon and Total Nitrogen Analyzer	55,000
Safe Drinking Water Act (SDWA) Compliance Monitoring and Tracking Software	100,000
QIAsymphony SP (DNA/RNA Purification System)	120,000
AB3500 Genetic Analyzer (Next Generation Sequencing)	172,000
Subtotal	\$ 469,800
TOTAL CAPITAL EQUIPMENT	\$ 6,642,000

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CAPITAL PROJECTS

2500 - Public Services

Colorado River Traveling Exhibit	\$ 720,000
Subtotal	\$ 720,000

3400 - Engineering

Archery Weir Revegetation	\$ 79,421
Three Kids Replacement Revegetation	83,274
Flood Repair Allocation	90,000
Lower Las Vegas Wash Program	97,200
Warm Springs Building Project (Restrooms and Shower Facilities)	123,570
Silver Bowl Revegetation	141,286
AMS Asphalt Repair and Resurface - Phase II	180,000
Wahoo Hay Barn (Barn #4)	216,000
Housing Replacement	234,000
880S - Tropicana Outfall Revegetation	239,070
Pump Station Roof Replacements	256,500
Warm Springs Office Replacement	270,000
Tropicana Outfall Weir	270,000
BOR Materials & Equipment	270,000
SNWA Roof Replacements	360,000
Sunrise Mountain Weir & Historic Lateral Weir Expansion	5,400,000
Low Lake Level Pumping Station (L3PS)	115,142,588
Subtotal	\$ 123,452,909

3600 - Resources & Facilities

AMS Exterior Renovation	\$ 22,500
Harbecke water cleaning Screens and Truck Fill Station	27,000
Ranch Fleet Storage Area Upgrades. Doors, Floor and Lighting.	27,000
Domestic Well Repair	49,500
Ridge/Pine, Shingle and Bastian Concrete intake and Screen Replacement	49,500
Huntsman Feedlot Processing Building, laboratory and bathroom	54,000
Phillips Sheep Corrals	67,500
RM Warehouse Storage Upgrade	72,000
Harbecke House Renovation	81,000
RM Replace Ruptured Coils for PS-14B	81,000

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AMS PS-1a Coolers - Drain Pipe	81,000
SNWA Door Replacement	90,000
AMS Entry Gate Upgrade	108,000
Entry Gate for Foothill Complex	108,000
Clark, Lincoln, and White Pine Counties Groundwater Development - Land/Resources Acquisition	131,038
AMS Warehouse Office Reconfiguration	135,000
AMSWTF Miscellaneous Facilities Improvements	153,000
SNWA Water Treatment Facility Roadway Lighting	270,000
Multi Sites - Install LED Lighting in all ROFC	450,000
Williams Creek Pipeline Replacement	540,000
Clark, Lincoln, and White Pine Counties Groundwater Development - Environmental	1,841,767
Subtotal	\$ 4,438,805

3700 - Infrastructure Management

Multi-site -PP1A/2A Crane Upgrade Project	\$ 27,000
AMSWTF Site - Back-up VPSA Blower Project	63,000
Multi-site - Redundant Power to Comms Battery Charger and PLC	81,000
AMSWTF Site - Complete change-out of valve actuators in filters 21-26	90,000
Sloan Pumping Station Foundation Repairs	90,000
Simmons ROFCS Pipeline Repairs	90,000
RMWTF Drain Installations	90,000
AMS SCADA Room Halon System	90,000
Multi-site - Bilco Hatch Upgrade Project for SNWS Fore bays and Reservoirs	90,000
R-8 Equestrian Pump Replacement	135,000
Stage I and II Facilities PLC Upgrades	180,000
Foothills Site Valve Vaults for BFV5, 6, 7, 10 ladder access project	180,000
SNWS - Multi-site - Emerson Evergreen - Server Hardware upgrade	180,000
SNWS - Ovation SCADA Server Virtualization	180,000
Sleeve Valve Installation at Galleria, Simmons, Carlton, and Gibson ROFC Stations	225,000
AMSWTF Site - Drying Bed Influent Valve Access Vaults	225,000
RMWTF Site - Lab Flooring Replacement	225,000
SNWS - Replace PLC 5 Processors and Remote Racks from Production Sites	225,000
AMSWTF Replace Switchboard PDS 7, 8 & 7/8	270,000
AMSWTF Site - Treatment Chemical Storage Tank Repairs	270,000
AMS Utility Building Replace Unit 1C MCC and Unit 2B MCC	360,000
RMWTF - SCADA UPS	360,000

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RMWTF Site - 15-T-1 Transformer Replacement Project	450,000
South Valley Lateral Actuator Replacement Project	450,000
Stage 2 ROFC Valve & Venturi Flow Control Unit Replacements	1,350,000
Pumping Station Electrical Transformer Repairs	1,530,000
PS 1C, 2C, BPS1A, and BPS2 Variable Frequency Drive Enhancements	1,800,000
Subtotal	\$ 9,306,000

3800 - Water Resources

Clark, Lincoln, and White Pine Counties Groundwater Development - Planning	\$ 90,000
Hydrologic and Water-Quality Monitoring and Assessment of Las Vegas Valley Groundwater	733,500
Interim Colorado River Supplies - Water Banking	900,000
NR Kerr Ranch Irrigation Well Replacement	1,080,000
Clark, Lincoln, and White Pine Counties Groundwater Development - Water Resources	1,170,900
Virgin and Muddy Rivers Water Resource Acquisition	1,800,000
Interim Colorado River Supplies - Project Management	1,800,000
Conservation - Water Smart Landscape Program	12,150,000
Subtotal	\$ 19,724,400

3900 - Energy Management

Eastern Nevada Transmission Project	\$ 6,120,000
Subtotal	\$ 6,120,000

4100 - Operations

Hacienda Pump Station Vibration System	\$ 45,000
Recoat Pump Casings at BPS1A and BPS2	72,000
PS 1A, 2A, 1B and 2B Pump Repairs and Flow Meter Installation	90,000
Motor Refurbishment (originally 6S027)	180,000
Sleeve and Miscellaneous Valve Repairs	270,000
"A" Lateral Motor Refurbishment	270,000
Machine Shop Equipment	337,500
Modifications to Hacienda Pump Station	675,000
Subtotal	\$ 1,939,500

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4500 - Water Quality & Treatment

Microfiltration Plant Renovation	\$ 180,000
R&D Necessary Unforeseen Projects	180,000
Ozone System Related Needs	225,000
SNWA Necessary Unforeseen Projects	450,000
Innovation Projects	450,000
Sodium Hypochlorite System Upgrades at RMWTF	4,500,000
AMSWTF Filter Improvements	9,900,000

Subtotal	\$ 15,885,000
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TOTAL CAPITAL PROJECTS	\$ 181,586,615
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TOTAL CAPITAL BUDGET	\$ 188,228,615
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SECTION 7

DEBT MANAGEMENT POLICY

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OPERATING AND CAPITAL BUDGET

Debt Management Policy

In Accordance With
NRS 350.013



SOUTHERN NEVADA
WATER AUTHORITY

June 30, 2018

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Debt Management Policy

NRS 350.013 Subsection 1(c)

Introduction

The Southern Nevada Water Authority (SNWA) is charged with: 1) operating the Southern Nevada Water System (SNWS) to deliver wholesale treated Colorado River water to its purveyor members, 2) expanding the SNWS as needed to meet the growing demand for water by its purveyor members, and 3) securing additional supplies of water for Southern Nevada, and effectively manage existing water supplies through the cooperative action of its member agencies.

The SNWS was originally a joint effort of the State of Nevada (State) acting through its Colorado River Commission (CRC) and the United States of America acting through the U.S. Bureau of Reclamation. Prior to 1995, the debt associated with the SNWS was either repayment contracts with the federal government, or general obligations of the State. Assembly Bill No. 542, approved by the Nevada Legislature in June 1995, transferred all assets and liabilities associated with the SNWS from the CRC to the SNWA effective January 1, 1996.

The SNWA's current debt structure is presented in the appendix. The SNWA has four options to sell debt –

- The SNWA can request the Las Vegas Valley Water District (LVVWD) to sell debt on its behalf. Standard & Poor's

rates the LVVWD bonds "AA+", and Moody's Investors Service rates them at "Aa1". This rating makes the LVVWD's bonds "high investment grade". This option has generally been used to sell most debt.

- The SNWA can sell its bonds to the State of Nevada's (State) Bond Bank, which then sells the State general obligation bonds. The 1997 Nevada Legislature made this option available. Standard & Poor's rates State bonds "AA", and Moody's Investors Service rates them at "Aa2". This rating classifies the State's bonds as "high investment grade". This option has generally been used to sell long term fixed rate debt.
- The SNWA can sell its bonds to the Clark County (County) Bond Bank, which can then sell County general obligation bonds. The 1999 Nevada Legislature made this option available. Standard & Poor's rates County bonds "AA+", and Moody's Investors Service rates them at "Aa1". This rating classifies the County bonds as "high investment grade". This option has generally been used to sell long term fixed rate debt.
- The SNWA can issue debt in its own name. However, the SNWA is unable to make a general obligation (property tax) pledge, therefore interest rates would tend to be higher. This debt has not been rated but is likely to be below the rating of the LVVWD, the State, and the County, which would result in higher interest rates. Therefore, it is expected that the SNWA will continue

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to use the options listed above to issue debt.

The SNWA Major Construction and Capital Plan (MCCP) outlines the phased construction plan developed to meet the growing demands for water in the Las Vegas Valley. Originally the MCCP was provided in two documents. The first was the Capital Improvements Plan (CIP), first produced in December 1995 and updated sixteen times hence. This plan detailed treatment facilities and intake systems needed to expand the SNWS capacity to 900 million gallons per day (MGD). The second was called the MCCP and covered other construction and capital projects not included in the CIP. The original MCCP was first published in June 2002. In February 2010, the SNWA's Board of Directors (the Board) approved the merger of the two capital plans into a new MCCP. The MCCP is reviewed semi-annually and is presented to the Board as determined appropriate by the SNWS work group. The most recent update was adopted by the Board in May 2015. The SNWA anticipates using debt to fund the projects in the MCCP.

The Las Vegas Wash Capital Improvements Plan (LVWCIP) covers projects the SNWA is building in the Las Vegas Wash. The LVWCIP is updated annually with the most recent update occurring in May 2016. The SNWA intends to use an inter account loan from the New Expansion Debt Service sub fund, as well as grant proceeds, to pay for these projects. Four percent of the SNWA's overall sales tax proceeds received are dedicated to the Las Vegas Wash and will be used to make debt service payments on this inter account loan.

This document is not intended to review the SNWA's total financial position. Analysis of the SNWA's debt position is important, as growth in the County has resulted in an increased need for capital financing. Resources, as well as needs, drive the SNWA's debt issuance program. The MCCP and LVWCIP were developed to identify clearly, and in detail, the specific facilities which are to be built, the year in which they are proposed to be completed, and an estimate of how much each will cost. As projects are completed, these plans will also document actual costs of those facilities.

Below are excerpts from Nevada Law, which require local governments to submit this debt management policy and a five-year capital improvement plan:

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:

(a) A complete statement of current general obligation debt and special elective taxes, and a report of current debt and special assessments and retirement schedules, in the

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detail and form established by the Committee on Local Government Finance.

(b) A complete statement, in the detail and form established by the Committee on Local Government Finance, of general obligation debt and special elective taxes contemplated to be submitted to the commission during the fiscal year.

(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 this 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 property 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.

(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.

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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 Issued by the Las Vegas Valley Water District ("LVVWD Bonds").

The SNWA's Bonds issued in the name of the LVVWD 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, subject to Nevada constitutional and statutory limitations on the aggregate amount of ad valorem taxes. The LVVWD Bonds are payable from general ad-valorem taxes on all taxable property in the LVVWD service area, and are additionally secured by certain pledged revenues as set forth in Section 4, Chapter 631, Statutes of Nevada 1993. The pledged revenues currently consist of connection, commodity, infrastructure and reliability charges, which were approved by the SNWA, the LVVWD, and the cities of Henderson and North Las Vegas. Beginning in 1999, proceeds received by the SNWA from the County ¼ cent sales tax for water and wastewater infrastructure are also pledged revenues.

In any year in which the total property taxes levied within the LVVWD's service area by all applicable taxing units (e.g. the State, 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 concerning the LVVWD Bonds or their security may be repealed, amended, or modified in such a manner as to adversely impair 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 Bonds is not secured by an encumbrance, mortgage or other pledge of property of the LVVWD or the SNWA, and no property shall be liable to be forfeited or taken in payment of the LVVWD Bonds; provided the payment of the Bonds is secured by the proceeds of general (ad valorem) taxes and the LVVWD's and the SNWA's 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 LVVWD 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 or the SNWA, past, present or future, either directly or indirectly by virtue of any statute or rule of

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law. The LVVWD Bonds will be repaid with revenues of the SNWA and/or revenues made available to the LVVWD by certain members of the SNWA.

LVVWD has never levied an ad valorem tax because theirs and the SNWA's revenues have been sufficient to pay debt service on all of LVVWD's bonds and obligations secured by such revenues.

Proposed Future SNWA Water Bonds. The SNWA does not intend to issue new money debt in fiscal year 2018-19. However, the bond market is constantly monitored for savings opportunities via refunding or restructuring existing debt issues.

Bonded Indebtedness. The first table on General Obligation Indebtedness shows the SNWA's outstanding LVVWD Bonds as of June 30, 2018.

Debt Service Requirements. See the appendix for the table illustrating the debt service to maturity on the LVVWD Bonds.

Property Tax Rate Impact. Principal and interest on the LVVWD Bonds are payable from the SNWA's pledged revenues. There will be no direct impact on the ad valorem tax rate as long as pledged revenues are sufficient to pay debt service on the outstanding bonds. Appendix 4 illustrates the SNWA's pledged revenues and debt service coverage.

Southern Nevada Water Authority
Debt Issued By The Las Vegas Valley Water District
As of June 30, 2018

	Issue Date	Original Amount Issued	Outstanding Principal
LVVWD Commercial Paper	Mar-04	\$ 400,000,000	\$ 400,000,000
LVVWD 2009A Bonds	Aug-09	90,000,000	90,000,000
LVVWD 2009B Bonds	Aug-09	10,000,000	425,000
LVVWD 2009D Bonds	Dec-09	71,965,000	37,440,000
LVVWD 2011A Refunding Bonds	May-11	58,110,000	44,795,000
LVVWD 2011B Refunding Bonds	Oct-11	129,650,000	101,180,000
LVVWD 2011C Refunding Bonds	Oct-11	267,815,000	210,205,000
LVVWD 2012B Bonds	Jul-12	360,000,000	332,210,000
LVVWD 2015 Refunding Bonds	Jan-15	332,405,000	332,405,000
LVVWD 2015B Refunding Bonds	Jun-15	177,635,000	155,795,000
LVVWD 2015C Refunding Bonds	Jun-15	42,125,000	36,755,000
LVVWD 2016A Bonds	Apr-16	497,785,000	481,210,000
LVVWD 2017B Refunding Bonds	Mar-17	22,115,000	22,115,000
LVVWD 2018B Bonds	Mar-18	79,085,000	79,085,000
Total		\$ 2,538,690,000	\$ 2,323,620,000

SOURCE: Southern Nevada Water Authority

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Existing, Authorized and Proposed General Obligation/Revenue Supported Bond Indebtedness Issued by the Clark County, Nevada Bond Bank (“County Bonds”).

The County Bonds will be repaid with revenues of the SNWA and/or revenues made available to the SNWA by certain members of the SNWA. AB 201, approved by the 1997 State Legislature, provides that members of the SNWA must contract with the SNWA to make payments from the revenues of the members’ water systems that, in the aggregate, are fully sufficient to pay those bonds as they become due. If the water revenues of any such member are insufficient to pay the member’s share of the amount due on the bonds, the member shall pay the deficiency out of money available for that purpose in the general fund of the member. If the money in the general fund of the member is insufficient to pay fully any such deficiency promptly, the member shall levy a general ad valorem tax on all taxable property within the member’s boundaries at a rate necessary to produce revenue in an amount sufficient to pay that member’s share of the payments due on the bonds. The obligations of the members of the SNWA to the SNWA and the State as a result of the acquisition of bonds of the SNWA pursuant to AB 201 do not constitute indebtedness of the members within the meaning of any constitutional, charter, or statutory limitation or other provision restricting the ability to incur debt. Nevada statutes provide that no act concerning the County 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.

Payment of the County Bonds is not secured by an encumbrance, mortgage or other pledge of property of the SNWA, and no property shall be liable to be forfeited or taken in payment of the County Bonds; provided payment of the Bonds is secured by the SNWA revenues, which are pledged for payment of the Bonds. Furthermore, Section 350.606 of the Bond Act provides that 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 County 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 SNWA, past, present or future, either directly or indirectly by virtue of any statute or rule of law.

Bonded Indebtedness. The following Revenue Supported Indebtedness table sets forth the SNWA’s proposed County Bonds as of June 30, 2018.

Debt Service Requirements. See the appendix for the table illustrating the debt service to maturity for the existing and proposed County Bonds.

Property Tax Rate Impact. There is no impact on tax rates as principal and interest on the County Bonds is payable from the SNWA’s pledged revenues only. See the appendix for the table illustrating the SNWA’s pledged revenues and debt service coverage.

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Southern Nevada Water Authority
Debt Issued By Clark County, Nevada Bond Bank
As of June 30, 2018

	Issue Date	Original Amount Issued	Outstanding Principal
Clark County 2006 Refunding Bonds	Nov-06	\$ 604,140,000	\$ 69,545,000
Clean Renewable Energy 2008 Bonds	Jul-08	6,900,000	2,300,000
Clark County 2009 Refunding Bonds	Nov-09	50,000,000	37,905,000
Clark County 2012 Refunding Bonds	Jun-12	85,015,000	79,515,000
Clark County 2016A Refunding Bonds	Mar-16	263,955,000	226,905,000
Clark County 2016B Refunding Bonds	Aug-17	271,670,000	267,885,000
Clark County 2017 Refunding Bonds	Mar-17	321,640,000	321,640,000
Total		\$ 1,603,320,000	\$ 1,005,695,000

SOURCE: Southern Nevada Water Authority

Existing, Authorized and Proposed General Obligation/Water Revenue Bonds Issued by the State of Nevada Bond Bank ("State Bonds").

The SNWS was originally financed by a combination of State of Nevada, CRC General Obligation Bonds and Federal Repayment Contracts entered into between the State and the United States Bureau of Reclamation (the Repayment Contracts). These debt obligations were transferred to SNWA effective January 1, 1996, according to the Transfer Act (Assembly bill No. 542, NRS Chapter 393).

The State Bonds are general obligations of the State, and the payment of principal and interest due thereon are secured by general taxes levied against all taxable property within the State, subject to limitations imposed by the constitution and statutes of

the State. The full faith and credit of the State is pledged for the payment of the principal, redemption premium, if any, and interest on the State Bonds. For the purpose of paying the principal and interest on the Bonds, there shall be levied, until all the Bonds shall have been fully paid, a general tax on all property, both real and personal, subject to taxation within the boundaries of the State, including the net proceeds of mines, fully sufficient to pay and retire the State Bonds, without regard to any statutory tax limitations now or hereafter existing (other than the limitation of \$3.64 on each \$100 of assessed valuation in the State statutes, and after there are made due allowances for probable delinquencies).

The payment of the State Bonds is further secured by a lien on the net pledged revenues derived from the operation of the SNWA facilities.

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In any year in which the total property taxes levied within the State by all overlapping units (e.g. the State, any county, the school district, any city, or any special district) exceed such property tax limitations, the reduction to be made by those units (including the State) must be in taxes levied for purposes other than the payment of their bonded indebtedness, including interest on such indebtedness, subject to any implied police power exception.

Nevada statutes provide that the faith of the State be pledged and any law supplemental or otherwise appertaining thereto, and any act concerning the Bonds, or other municipal securities, taxes or pledged revenues, shall not 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 State Bonds is not secured by an encumbrance, mortgage or other pledge of property of the State, except the proceeds of general taxes, net pledged revenues, and other money pledged for the payment of the Bonds shall be liable or forfeited for, or taken in payment of, the Bonds.

The Federal Repayment Contracts were general obligations of the State. To secure reimbursement by the State, the Repayment Contract grants the United States a prior claim to part of the CRC's net revenues derived through the Federal Facilities from

the Water User Contracts with the LVVWD, the City of Boulder City, the City of Henderson, the City of North Las Vegas and the USAF at Nellis Air Force Base.

In July 2000, the U.S. Congress passed, and President Clinton signed, into law the Griffith Project Prepayment and Conveyance Act (Public Law 106-249) which directed the Secretary of Interior to transfer title to the Robert E. Griffith Project to the SNWA, subject to prepayment of the project's federal repayment obligation. On July 3, 2001, the SNWA transferred \$116.2 million to the U.S. Bureau of Reclamation to prepay the federal repayment contracts. This amounted to a discount of approximately \$48 million. As a result, the SNWA now holds title to the Robert E. Griffith Project and the federal repayment contracts are no longer shown as outstanding debt.

Bonded Indebtedness. The following State Bonds table sets forth the SNWA's outstanding State Bonds as of June 30, 2018.

Debt Service Requirements. See the appendix for the table illustrating the debt service to maturity on the State Bonds.

Property Tax Rate Impact. Principal and interest on the State bonds are payable from the SNWA's net pledged revenues. There will be no direct impact on the State's ad valorem tax rate as long as pledged revenues are sufficient to pay debt service on the outstanding bonds. See the appendix for the table illustrating the SNWA's pledged revenues and debt service coverage.

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Southern Nevada Water Authority
Debt Issued By The State of Nevada Bond Bank
As of June 30, 2018

	Issue Date	Original Amount Issued	Outstanding Principal
Nevada Drinking Water State Revolving Fund Loan 1	Dec-99	\$ 12,269,695	\$ 1,657,846
Nevada Drinking Water State Revolving Fund Loan 2	Jun-01	10,000,000	2,278,891
State of Nevada 2009 Bonds	Oct-09	2,214,457	1,455,215
State of Nevada 2010B Refunding Bonds	Jun-10	7,405,000	2,310,000
State of Nevada 2013A Refunding Bonds	Feb-13	21,720,000	21,720,000
Total		\$ 53,609,152	\$ 29,421,951

SOURCE: Southern Nevada Water Authority

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 SNWA does not have a specific debt limit dollar amount threshold. The SNWA's ability to issue and pay its debt is a function of its capital needs and revenues generated from the SNWA facilities.

Debt Comparison (per capita and assessed valuation)

Response to NRS 350.013 1(c):

(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 this state; and
(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;

The SNWA currently has no outstanding bonds payable directly from property taxes. The existing and proposed 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

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government may sell its bonds at a competitive or negotiated sale. The SNWA will follow these 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 governed by 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 SNWA.
- 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.
- Other factors which lead the SNWA to conclude a competitive sale would not be effective, including market conditions.

It is the policy of the SNWA to provide minority owned business enterprises, women owned business enterprises and all other business enterprises an equal opportunity to participate in the performance of the SNWA contracts. At competitive sale, bidders are requested to assist the SNWA 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 SNWA 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 the SNWA's competitive bond issues over the prior five years. In addition, the list

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may contain firms that have participated in other financings in Nevada (in competitive bids or negotiated sales), demonstrated ability and interest in SNWA financings, or have submitted financing ideas and concepts for SNWA's consideration over the past five years.

- The CFO may distribute, or request that the SNWA's Financial Advisors distribute on behalf of the SNWA, a Request for Proposal (RFP) to underwriting firms on the list. The RFP may include, at a minimum, information regarding the firm's qualifications, staffing and personnel assigned to the SNWA, 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) may be based on the overall quality of the response, qualifications of the firm, demonstrated success in pricing bonds, understanding of the SNWA's objectives, qualifications of the banking and underwriting team to be assigned to the SNWA, 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 the SNWA. 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.

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 a single firm (typically 60 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 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.

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- 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).

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 SNWA'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 the Capital Improvement Plans

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 pursuant to paragraph (d), 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 SNWA's intent to finance future operational costs with water revenues and will therefore have no effect on ad valorem taxes. New capital improvement projects will allow the SNWA 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:

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- **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 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 the SNWA'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 the SNWA's reserves or debt service fund.
- (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, net present value savings of at least 3 percent or 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 SNWA 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 three years or less.

Debt Structure.

Prior to beginning a refunding bond issue, the SNWA will review an estimate of the savings achievable from the refunding. The SNWA may also review a pro forma schedule estimating the savings assuming the refunding is done at various points in the future.

The SNWA will generally consider refunding outstanding bonds if one or more of the following conditions exist:

- For advance refundings, present value savings are estimated to be at least 5 percent of the par amount of the refunded or refunding bonds

Maturity Structures. The term of the debt issues will not extend beyond the useful life of the project or equipment financed. As appropriate, debt 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 SNWA are sufficient to pay debt service, or where the deferral of principal allows the SNWA to achieve combined level debt service on all outstanding bonds.

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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 to purchase bond insurance from bond proceeds

Bond insurance can be purchased directly by the issuer 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 issuer, 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).

Fixed and Variable Rate Debt.

Fixed rate debt or variable rate debt may be issued, 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 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 is reset typically either daily, weekly or monthly. This rate may be based on remarketing or on an 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 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, it shall not constitute more than 25 percent of the SNWA's overall debt portfolio. The CFO, in consultation with the SNWA's Financial Advisors, will determine the appropriate form of variable rate debt, subject to the approval of the Board.

Financing Sources. The SNWA will evaluate available State and County bond financing programs before choosing the financing source. The SNWA will consider utilizing a State or County program if bonds can be sold by the State or County in a manner meeting the SNWA'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.

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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: Brian Thomas

TITLE: Chief Financial Officer

ADDRESS: 1001 South Valley View Boulevard
Las Vegas, Nevada 89153

TELEPHONE: (702) 822-8810

Appendix

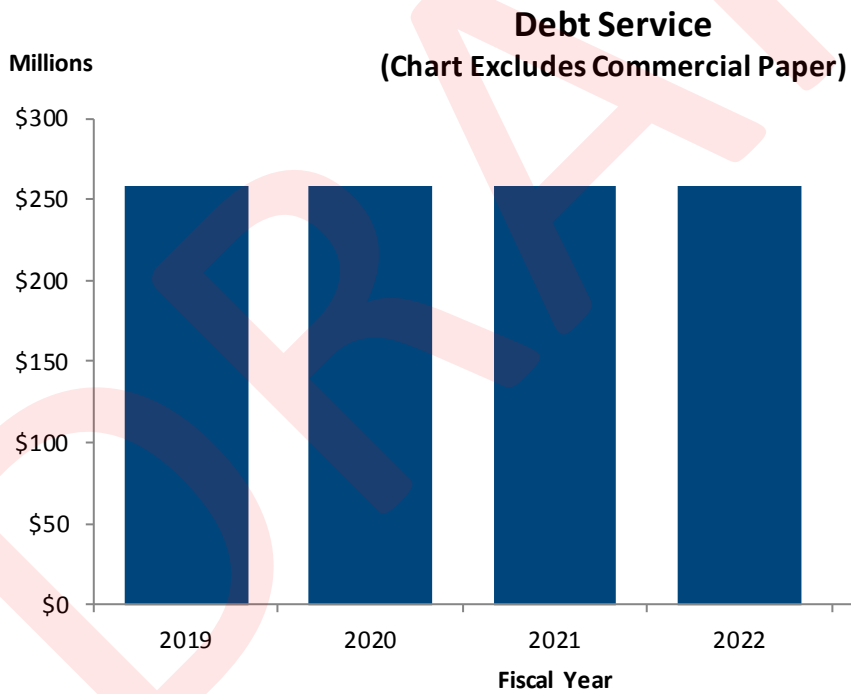
Debt Service and Pledged Revenue Tables

1. Five Year Schedule of Debt Service Requirements
2. Combined Schedule of Debt Service Requirements
3. Combined Schedule of Existing and Proposed Debt Service Requirements
4. Net Pledged Revenues
5. Schedule of Debt Service by Issuer

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Five Year Schedule of Debt Service Requirements
As of June 30, 2018

#	Fiscal Year	Commercial Paper		Bonds		Total Debt
1	2019	\$	408,580,000	\$	258,031,625	\$ 666,611,625
2	2020		-		257,931,006	257,931,006
3	2021		-		257,950,603	257,950,603
4	2022		-		258,016,247	258,016,247
5	2023		-		257,957,216	257,957,216

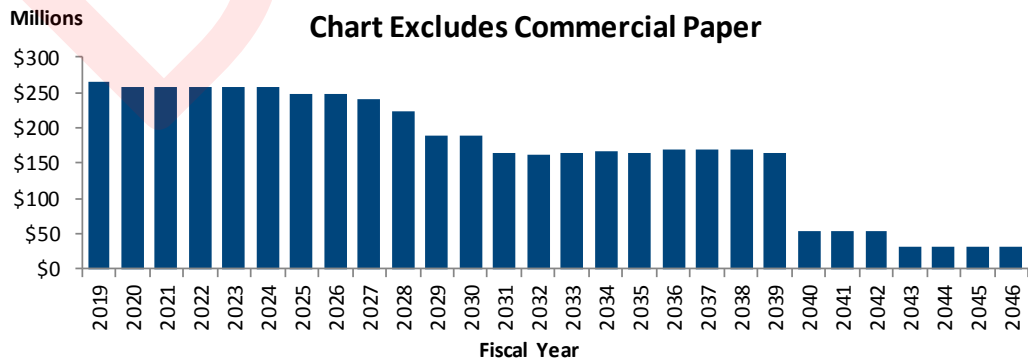


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Combined Schedule of Debt Service Requirements

As of June 30, 2018

Fiscal Year	Principal	Interest	Total
2019	\$ 516,524,074	\$ 150,087,551	\$ 666,611,625
2020	121,865,486	136,065,520	257,931,006
2021	127,684,253	130,266,350	257,950,603
2022	133,864,085	124,152,162	258,016,247
2023	140,416,540	117,540,676	257,957,216
2024	146,946,540	110,569,682	257,516,222
2025	144,796,540	103,234,935	248,031,475
2026	152,236,540	95,738,893	247,975,434
2027	152,756,540	88,002,809	240,759,349
2028	144,286,540	80,407,738	224,694,278
2029	115,036,540	74,505,038	189,541,578
2030	120,923,270	69,235,913	190,159,183
2031	99,595,000	63,761,525	163,356,525
2032	103,735,000	59,327,875	163,062,875
2033	109,035,000	54,610,775	163,645,775
2034	118,655,000	49,488,755	168,143,755
2035	119,390,000	44,164,005	163,554,005
2036	129,730,000	38,637,630	168,367,630
2037	135,375,000	32,940,213	168,315,213
2038	140,910,000	27,357,510	168,267,510
2039	144,500,000	20,095,840	164,595,840
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
Total	<u>\$ 3,358,736,951</u>	<u>\$ 1,713,253,642</u>	<u>\$ 5,071,990,593</u>



Southern Nevada Water Authority
Operating and Capital Budget
Debt Management Policy
Fiscal Year Ending June 30, 2019

Combined Schedule of Existing and Proposed Debt Service Requirements
as of June 30, 2018

Fiscal Year	Existing Debt			Proposed (New Money)		
	Principal	Interest	Total	Principal	Interest	Total
2019	\$ 516,524,074	\$ 150,087,551	\$ 666,611,625	-	-	-
2020	121,865,486	136,065,520	257,931,006	-	-	-
2021	127,684,253	130,266,350	257,950,603	-	-	-
2022	133,864,085	124,152,162	258,016,247	-	-	-
2023	140,416,540	117,540,676	257,957,216	-	-	-
2024	146,946,540	110,569,682	257,516,222	-	-	-
2025	144,796,540	103,234,935	248,031,475	-	-	-
2026	152,236,540	95,738,893	247,975,434	-	-	-
2027	152,756,540	88,002,809	240,759,349	-	-	-
2028	144,286,540	80,407,738	224,694,278	-	-	-
2029	115,036,540	74,505,038	189,541,578	-	-	-
2030	120,923,270	69,235,913	190,159,183	-	-	-
2031	99,595,000	63,761,525	163,356,525	-	-	-
2032	103,735,000	59,327,875	163,062,875	-	-	-
2033	109,035,000	54,610,775	163,645,775	-	-	-
2034	118,655,000	49,488,755	168,143,755	-	-	-
2035	119,390,000	44,164,005	163,554,005	-	-	-
2036	129,730,000	38,637,630	168,367,630	-	-	-
2037	135,375,000	32,940,213	168,315,213	-	-	-
2038	140,910,000	27,357,510	168,267,510	-	-	-
2039	144,500,000	20,095,840	164,595,840	-	-	-
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	-	-	-
Totals	\$ 3,358,736,951	\$ 1,713,253,642	\$ 5,071,990,593	\$ -	\$ -	\$ -

Fiscal Year	Total Existing & Proposed Debt		
	Principal	Interest	Total
2019	\$ 516,524,074	\$ 150,087,551	\$ 666,611,625
2020	121,865,486	136,065,520	257,931,006
2021	127,684,253	130,266,350	257,950,603
2022	133,864,085	124,152,162	258,016,247
2023	140,416,540	117,540,676	257,957,216
2024	146,946,540	110,569,682	257,516,222
2025	144,796,540	103,234,935	248,031,475
2026	152,236,540	95,738,893	247,975,434
2027	152,756,540	88,002,809	240,759,349
2028	144,286,540	80,407,738	224,694,278
2029	115,036,540	74,505,038	189,541,578
2030	120,923,270	69,235,913	190,159,183
2031	99,595,000	63,761,525	163,356,525
2032	103,735,000	59,327,875	163,062,875
2033	109,035,000	54,610,775	163,645,775
2034	118,655,000	49,488,755	168,143,755
2035	119,390,000	44,164,005	163,554,005
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2038	140,910,000	27,357,510	168,267,510
2039	144,500,000	20,095,840	164,595,840
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2041	44,205,000	9,788,000	53,993,000
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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
Totals	\$ 3,358,736,951	\$ 1,713,253,642	\$ 5,071,990,593

Southern Nevada Water Authority
Operating and Capital Budget
Debt Management Policy
Fiscal Year Ending June 30, 2019

Net Pledged Revenues
as of June 30, 2018

Fiscal Year End	2015 Actual	2016 Actual	2017 Actual	2018 Budget	2019 Budget
REVENUES					
Wholesale Delivery Charges	\$ 121,100,263	\$ 125,054,059	\$ 130,115,594	\$ 130,773,096	\$ 141,151,263
Regional Connection Charges	66,015,927	63,781,176	57,024,817	63,284,557	62,298,684
Regional Infrastructure Charges	53,761,657	61,704,236	132,471,445	149,098,164	158,564,232
Regional Water Charges	87,046,856	106,459,684	70,650,728	73,852,236	75,383,950
Sales Tax	55,933,316	58,152,408	60,856,934	62,294,313	65,506,404
Groundwater Management Fees	882,331	928,893	886,929	906,481	896,494
Las Vegas Wash Revenues	404,578	411,893	356,365	429,845	426,040
Investment Income (including Capitalized Portion)	2,058,437	4,803,855	4,917,264	3,849,077	5,880,785
Other Revenues ¹	15,236,337	59,447,266	95,847,684	9,375,141	5,856,531
Total Revenues	402,439,702	480,743,470	553,127,761	493,862,910	515,964,384
OPERATING EXPENSES					
Energy	35,071,725	39,333,766	36,631,385	36,987,491	36,481,790
Payroll	49,951,688	56,252,596	55,987,034	52,657,549	62,920,299
Operating Expenses	42,471,373	39,349,790	41,443,135	54,461,097	42,447,106
Pay-as-you-go Capital Expenditures				4,925,400	6,642,000
Total Operating Expenses	127,494,786	134,936,152	134,061,554	149,031,536	148,491,194
NET PLEDGED REVENUES	274,944,916	345,807,318	419,066,207	344,831,373	367,473,190
Add Beginning Unrestricted Funds ²	322,928,812	382,138,848	422,711,617	432,240,362	506,046,272
Net Available for Debt Service	597,873,728	727,946,166	841,777,824	777,071,735	873,519,462
ANNUAL DEBT SERVICE³	167,810,691	216,455,955	264,956,748	271,025,463	263,950,998
DEBT SERVICE COVERAGE RATIO	3.56	3.36	3.18	2.87	3.31
SNWA REVENUE AND FUNDS AVAILABLE AFTER DEBT SERVICE	\$ 430,063,037	\$ 511,490,211	\$ 576,821,076	\$ 506,046,272	\$ 609,568,464

1 Includes receipts from the Southern Nevada Public Lands Management Act (SNPLMA), raw water facilities charge and minor billings of purveyor members (Big Bend, City of Las Vegas, and Clark County Water Reclamation District).

2 Unrestricted funds include unrestricted cash and unrestricted investments as shown on the Comprehensive Annual Financial Report and sales tax proceeds on hand regardless of classification.

3 Includes the interest amounts paid on the 2004 Commercial Paper Notes. Gross of credits from the Build America Bonds (BABs).

Southern Nevada Water Authority
Operating and Capital Budget
Debt Management Policy
Fiscal Year Ending June 30, 2019

Schedule of Debt Service By Issuer

As of Fiscal Year Ending June 30, 2018

Page 1 of 2

Fiscal Year	Southern Nevada Water Authority Through the Las Vegas Valley Water District			Southern Nevada Water Authority Through the Clark County Bond Bank		
	Principal	Interest	Total	Principal	Interest	Total
2019	\$ 472,605,000	\$ 104,194,332	\$ 576,799,332	\$ 41,220,000	\$ 45,030,194	\$ 86,250,194
2020	75,795,000	92,345,159	168,140,159	43,280,000	42,950,687	86,230,687
2021	81,440,000	88,819,467	170,259,467	45,450,000	40,766,055	86,216,055
2022	85,660,000	85,023,588	170,683,588	47,735,000	38,471,048	86,206,048
2023	90,125,000	80,830,035	170,955,035	50,165,000	36,059,041	86,224,041
2024	94,565,000	76,392,107	170,957,107	52,255,000	33,525,975	85,780,975
2025	89,740,000	71,717,485	161,457,485	54,930,000	30,865,850	85,795,850
2026	94,350,000	67,018,068	161,368,068	57,760,000	28,069,225	85,829,225
2027	89,600,000	62,280,109	151,880,109	63,030,000	25,071,100	88,101,100
2028	56,170,000	58,220,588	114,390,588	66,270,000	21,861,350	88,131,350
2029	45,670,000	55,732,563	101,402,563	69,240,000	18,772,475	88,012,475
2030	46,965,000	53,497,563	100,462,563	73,895,000	15,738,350	89,633,350
2031	38,140,000	51,188,350	89,328,350	61,455,000	12,573,175	74,028,175
2032	56,510,000	49,303,250	105,813,250	47,225,000	10,024,625	57,249,625
2033	73,165,000	46,488,250	119,653,250	35,870,000	8,122,525	43,992,525
2034	76,815,000	42,795,980	119,610,980	41,840,000	6,692,775	48,532,775
2035	80,605,000	38,958,480	119,563,480	38,785,000	5,205,525	43,990,525
2036	84,550,000	34,977,055	119,527,055	45,180,000	3,660,575	48,840,575
2037	88,675,000	30,800,900	119,475,900	46,700,000	2,139,313	48,839,313
2038	117,500,000	26,421,110	143,921,110	23,410,000	936,400	24,346,400
2039	144,500,000	20,095,840	164,595,840			
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			
Totals	\$ 2,323,620,000	\$ 1,280,162,526	\$ 3,603,782,526	\$ 1,005,695,000	\$ 426,536,263	\$ 1,432,231,263

Southern Nevada Water Authority
Operating and Capital Budget
Debt Management Policy
Fiscal Year Ending June 30, 2019

Schedule of Debt Service By Issuer

As of Fiscal Year Ending June 30, 2018

Page 2 of 2

Fiscal Year	Southern Nevada Water Authority Through the State of Nevada Bond Bank			Total Debt Service		
	Principal	Interest	Total	Principal	Interest	Total
2019	\$ 2,699,074	\$ 863,024	\$ 3,562,099	\$ 516,524,074	\$ 150,087,551	\$ 666,611,625
2020	2,790,486	769,674	3,560,160	121,865,486	136,065,520	257,931,006
2021	794,253	680,829	1,475,082	127,684,253	130,266,350	257,950,603
2022	469,085	657,526	1,126,611	133,864,085	124,152,162	258,016,247
2023	126,540	651,600	778,140	140,416,540	117,540,676	257,957,216
2024	126,540	651,600	778,140	146,946,540	110,569,682	257,516,222
2025	126,540	651,600	778,140	144,796,540	103,234,935	248,031,475
2026	126,540	651,600	778,140	152,236,540	95,738,893	247,975,434
2027	126,540	651,600	778,140	152,756,540	88,002,809	240,759,349
2028	21,846,540	325,800	22,172,340	144,286,540	80,407,738	224,694,278
2029	126,540	-	126,540	115,036,540	74,505,038	189,541,578
2030	63,270	-	63,270	120,923,270	69,235,913	190,159,183
2031				99,595,000	63,761,525	163,356,525
2032				103,735,000	59,327,875	163,062,875
2033				109,035,000	54,610,775	163,645,775
2034				118,655,000	49,488,755	168,143,755
2035				119,390,000	44,164,005	163,554,005
2036				129,730,000	38,637,630	168,367,630
2037				135,375,000	32,940,213	168,315,213
2038				140,910,000	27,357,510	168,267,510
2039				144,500,000	20,095,840	164,595,840
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
	<u>\$ 29,421,951</u>	<u>\$ 6,554,854</u>	<u>\$ 35,976,805</u>	<u>\$ 3,358,736,951</u>	<u>\$ 1,713,253,642</u>	<u>\$ 5,071,990,593</u>

SECTION 8

STATISTICAL INFORMATION

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SOUTHERN NEVADA WATER AUTHORITY®

FISCAL YEAR 2018-19

OPERATING AND CAPITAL BUDGET

**Southern Nevada Water Authority
Statistical Summary**

<u>Page</u>	<u>Description</u>
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8-4	Clark County New Home Sales, Median Home Price
8-5	Secured Tax Roll
8-6	Temperature & Rainfall
8-7	Charts: Average Rainfall and Comparison of Lake Elevations

Southern Nevada Water Authority
Operating and Capital Budget
Statistical Information
Fiscal Year Ending June 30, 2019

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⁾
2017	2,248,390	N/A	N/A	N/A
2016	2,205,207	42,284	91,150.4	52,629
2015	2,147,641	41,915	88,411.5	51,575
2014	2,102,238	39,860	82,306.0	52,070
2013	2,062,253	38,028	77,011.2	52,873

Calendar Year	School Enrollment ⁽⁴⁾	Total Labor Force ⁽⁵⁾	Unemployment Rate ⁽⁶⁾
2017	322,436	N/A	N/A
2016	322,122	1,048,043	5.8%
2015	320,339	1,039,435	6.9%
2014	318,592	1,019,945	8.0%
2013	314,643	1,005,025	9.6%

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).

**Southern Nevada Water Authority
Operating and Capital Budget
Statistical Information**

Fiscal Year Ending June 30, 2019

**Top Ten Employers⁽¹⁾⁽²⁾
Clark County, Nevada
Calendar Year 2017**

Employer Trade name	Employees	Ranking	% of Total Labor Force ⁽⁴⁾
Clark County School District	30,000 to 39,999	1	3.5%
Clark County	8,000 to 8,499	2	0.8%
Wynn Las Vegas	8,000 to 8,500	3	0.8%
Bellagio LLC	8,000 to 8,500	4	0.8%
MGM Grand Hotel & Casino	8,000 to 8,500	5	0.8%
Aria Resort & Casino LLC	7,000 to 7,499	6	0.7%
Mandalay Bay Resort & Casino	7,000 to 7,499	7	0.6%
Caesars Palace	5,000 to 5,499	8	0.6%
University of Nevada Las Vegas	5,000 to 5,499	9	0.5%
Las Vegas Metropolitan Police	4,500 to 4,999	10	0.5%

Total Labor Force 1,043,127

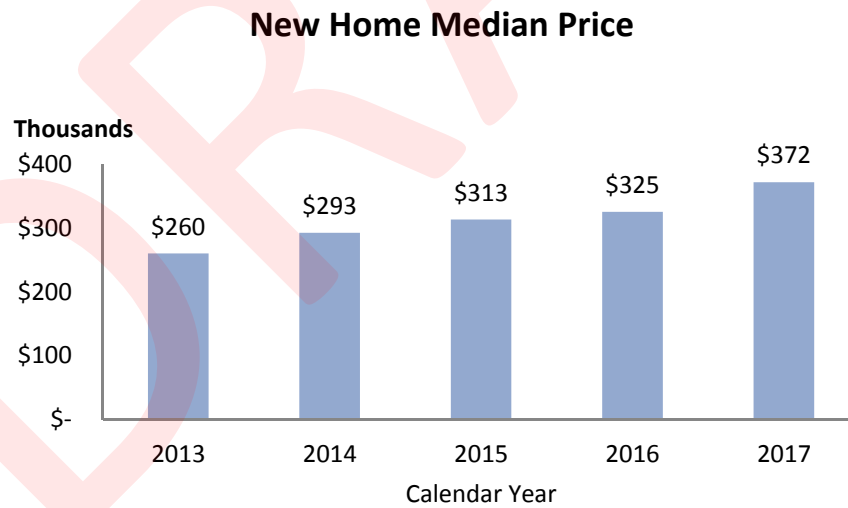
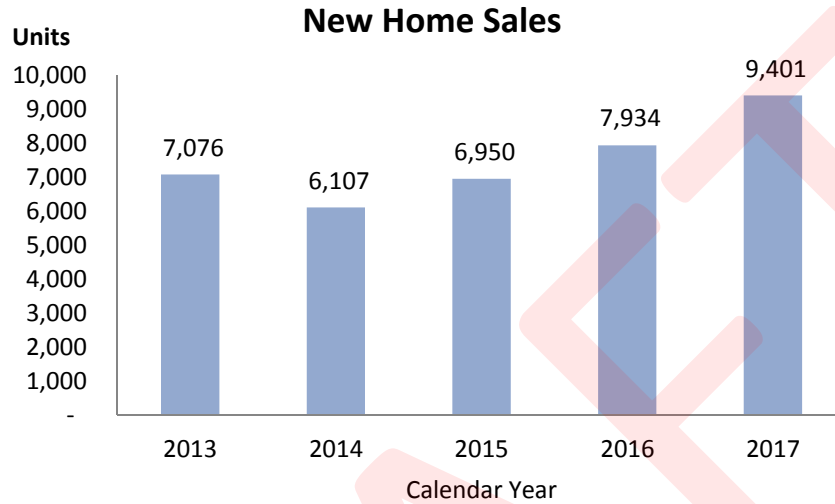
Sources:

(1) Nevada Workforce Informer, Nevada Employer Directory, GASB 44 report as of June, 2013. Most recent figures available. Trade names are as described in the source document. No attempt has been made to trace corporate name changes if any.

(2) Nevada law prohibits the disclosure of exact employee counts. All employee counts are shown in ranges. Calculations of total labor force per employer (column (4)) are estimates.

Southern Nevada Water Authority
Operating and Capital Budget
Statistical Information
Fiscal Year Ending June 30, 2019

Residential Real Estate
Clark County, Nevada



Southern Nevada Water Authority
Operating and Capital Budget
Statistical Information
Fiscal Year Ending June 30, 2019

Secured Tax Roll
Clark County, Nevada
2017 - 18

<u>Taxpayer</u>	<u>Taxable Assessed</u>	<u>Taxable Appraised</u>
1. MGM Resorts International	\$ 3,102,542,941	\$ 8,864,408,403
2. NV Energy	1,767,589,380	5,050,255,371
3. Caesar's Entertainment Corp.	1,462,469,206	4,178,483,446
4. Wynn Resorts Limited	779,066,017	2,225,902,906
5. Las Vegas Sands Corporation	739,466,396	2,112,761,131
6. Station Casinos Incorporated	553,650,967	1,581,859,906
7. Howard Hughes Corporation	438,926,452	1,254,075,577
8. Boyd Gaming Corporation	431,579,097	1,233,083,134
9. Nevada Property 1 LLC	253,324,527	723,784,363
10. Picerne Real Estate Group	244,734,848	699,242,423
	<u>\$ 9,773,349,831</u>	<u>\$ 27,923,856,660</u>

SOURCE: Clark County Assessor's Report Dated April 1, 2017

Southern Nevada Water Authority
Operating and Capital Budget
Statistical Information
Fiscal Year Ending June 30, 2019

2012 - 2017 Temperature and Rainfall

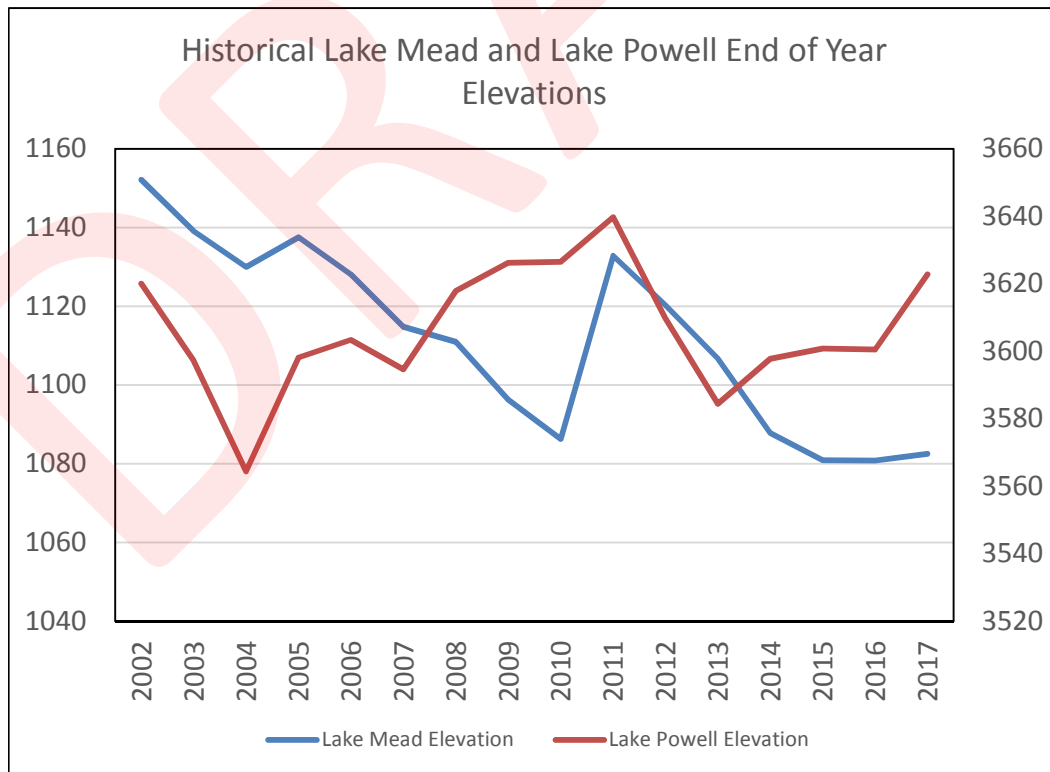
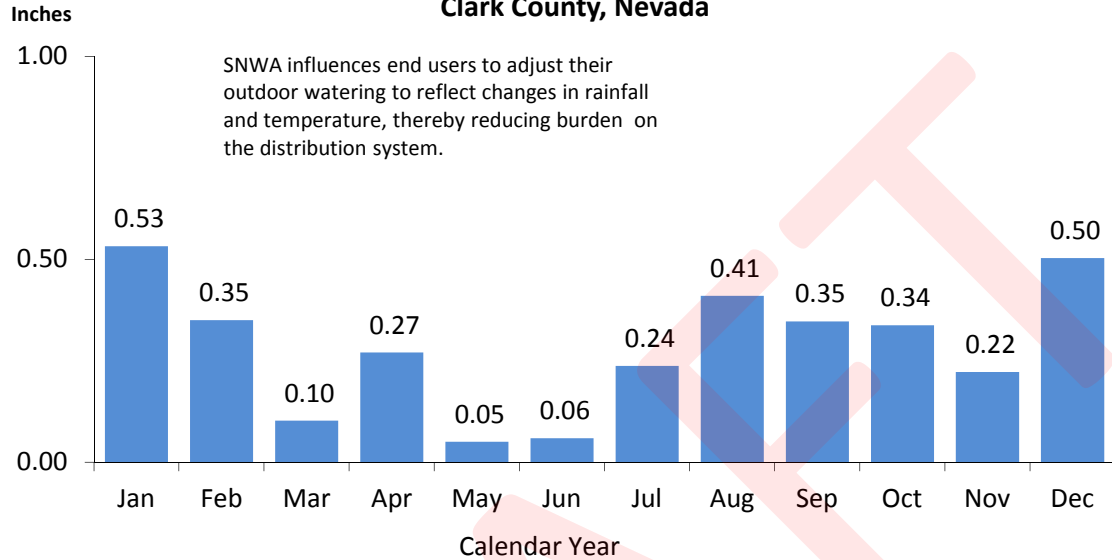
Average Maximum and Minimum Daily Temperature
in Degrees Fahrenheit and Monthly Rainfall in Inches

Month	2012			2013			2014		
	Temperature			Temperature			Temperature		
	Max.	Min.	Rainfall	Max.	Min.	Rainfall	Max.	Min.	Rainfall
January	61	40	0.0	56	36	0.4	64	42	0.0
February	63	44	0.1	62	41	0.0	68	46	0.3
March	72	49	0.2	75	54	0.2	74	52	0.0
April	81	58	0.0	82	58	0.0	81	59	0.0
May	92	69	0.0	89	67	0.0	90	67	0.0
June	101	77	0.0	104	79	0.0	101	77	0.0
July	103	80	0.2	105	84	0.3	105	83	0.2
August	103	82	2.3	100	79	0.3	99	78	0.4
September	97	74	1.2	91	71	0.4	96	74	0.6
October	83	61	0.9	78	56	0.0	86	63	0.0
November	71	50	0.0	67	48	1.4	70	49	0.0
December	57	41	0.5	57	38	0.1	58	44	0.3
Average Annual Temperature/ Total Rainfall	81.9	60.5	5.3	80.5	59.1	3.0	82.6	61.3	1.8

Month	2015			2016			2017		
	Temperature			Temperature			Temperature		
	Max.	Min.	Rainfall	Max.	Min.	Rainfall	Max.	Min.	Rainfall
January	62	44	0.9	57	40	0.5	57	42	0.9
February	71	49	0.5	70	46	0.1	65	49	0.6
March	78	56	0.3	75	53	0.0	77	54	0.0
April	80	58	0.3	79	58	2.3	81	59	0.0
May	85	64	0.2	86	65	0.0	89	66	0.1
June	104	80	0.0	105	81	0.5	105	79	0.0
July	101	80	0.2	107	84	0.2	107	85	0.1
August	104	82	0.7	102	80	0.2	103	81	0.2
September	98	76	0.0	93	71	0.0	92	72	0.5
October	84	65	1.2	84	64	0.2	84	60	0.0
November	64	45	0.2	71	51	0.0	73	53	0.0
December	56	38	0.0	57	40	0.8	63	42	0.0
Average Annual Temperature/ Total Rainfall	82.2	61.3	4.5	82.1	61.0	4.77	82.9	61.7	2.4

Southern Nevada Water Authority
Operating and Capital Budget
Statistical Information
Fiscal Year Ending June 30, 2019

Average Rainfall Per Month Ten Year Span (2008 to 2017) Clark County, Nevada



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SOUTHERN NEVADA WATER AUTHORITY®

SECTION 9

FINANCIAL POLICIES

Financial Policy.....	9-2
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SOUTHERN NEVADA WATER AUTHORITY®

FISCAL YEAR 2018-19
OPERATING AND CAPITAL BUDGET

Financial Policy

As operating agent for the Southern Nevada Water Authority, 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.

DRAFT

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.

SOUTHERN NEVADA WATER AUTHORITY	SUBJECT:	NUMBER:
	SOUTHERN NEVADA WATER AUTHORITY RESERVE POLICY	11
BOARD POLICY	APPROVED BY:	ISSUE:
ISSUING DEPARTMENT:	BOARD OF DIRECTORS	1
FINANCE	January 21, 2016	PAGE:
		1 OF 2

Purpose

The purpose is to establish 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 Southern Nevada Water Authority (SNWA).

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 SNWA's reserve policy:

1. Volatility in Sources of Funds – Some of the SNWA's sources of funds have experienced significant volatility; for example, connection charges and sales tax, in periods where the local economy suffers.
2. Customer Concentration – The SNWA receives the majority of its unrestricted funds from its member agencies. Although none have ever defaulted, such a default or a significant delay could have a substantial impact on the SNWA's operations.
3. Likelihood of Successful Rate Increases – Although the SNWA has enjoyed tremendous support from its member agencies and the community, it is possible that these conditions could change in the future, thus impacting the SNWA's ability to increase rates to meet increasing costs.
4. Asset Age and Condition – As the infrastructure ages, maintenance and replacements costs will increase. Also, there is always the possibility of unexpected failures that can be quite expensive. Such failures could result from age-related causes or natural disasters.

5. Control Over Expenses – Although most of the SNWA's expenses are predictable, there remains the possibility of large, unexpected expenditures; for example, litigation, natural disasters, increases in energy and chemical costs.

Reserve Components

The following are the four components identified for the SNWA'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 SNWA 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 SNWA 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 the SNWA operations, and provide assurances to investors that the SNWA 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, the capital improvement plan may be used. This reserve will fluctuate over time as projects change. This level of capital reserve will enable the SNWA 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 SNWA 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.

SECTION 10

GLOSSARY

Glossary.....	10-1
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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 SNWA's service area.

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).

Amortization. Amortization is paying off a debt with a fixed repayment schedule in incremental installments over a given period.

Arizona Groundwater Banking Program. A program between SNWA and the Arizona Water Banking Authority (AWBA). In exchange for financial consideration, the AWBA will bank recharged water in Arizona for future use by Clark County, Nevada.

Balanced Budget. A budget where revenues are equal to or exceed expenses. SNWA is not required to issue a balanced budget.

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 major capital projects.

Budget. Proposed financial plan over a given period, usually one year.

Budget Calendar. The schedule of key dates or milestones the SNWA 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 statement prepared by the SNWA and approved by the SNWA's Board of Directors.

U.S 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.

Capital Contributions. For net position purposes, defined as regional connection, commodity, reliability and infrastructure surcharge revenues as well as grant receipts.

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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 useful life of three or more years.

Capitalized Expenses. An accounting method used to delay the recognition of expenses by recording the expense as a long-term asset. This classification contains expenses such as professional services, rental expenses, research and studies, etc. that are projected to be spent in the acquisition and improvement of capital items. These costs are identical to Operating Expenses in form but are paid for with capital revenues and bond proceeds. On a GAAP prepared financial statement, these costs can appear on the Statement of Revenues, Expenses and Changes in Net Position if they are paid by the New Expansion Debt Service sub fund -- otherwise they would merely appear as a cash expenditure for a capital asset.

Capital Revenue. A revenue source that is used solely to either retire debt or pay for construction of capital assets. Examples include Regional Connection Charges, Regional Commodity Charges, Reliability Surcharges, Infrastructure Surcharges, sales tax revenues and contributions from the Southern Nevada Public Lands Fund.

Colorado River Commission (CRC). An agency of the of the State of Nevada created to acquire and hold in trust Nevada's right to water and power resources from Colorado River water apportioned among the seven Colorado River Basin states and Mexico.

Commercial Paper. Short-term, unsecured, discounted, and negotiable notes sold through the open market. In most cases commercial paper provides immediate cash needs at lower rates than standard debt issues.

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).

Connection. Generic term for a retail customer. Currently a connection is estimated to increase the annual load on the water delivery system by 0.45 acre-foot per year. A customer whose annual load is estimated at more than 0.45 acre-foot per year is said to have multiple connections.

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 SNWA achieves the benefits of conservation through education of the end user, promoting water efficient hardware, and pricing signals.

Construction Expenditures. Generally, expenses that are spent on third party vendors who build, supervise, or provide materials used in the construction of capital assets.

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Debt Issuance Proceeds. Principal amount or face value of debt issues. These proceeds are used to pay for major construction expenditures incurred by the SNWA.

Debt Service Payments. Funds used for the repayment of annual principal and interest charges on debt the SNWA has issued.

Department. A basic organizational unit of the SNWA that is functionally unique in its delivery of services.

Depreciation. A reduction in the value of a physical asset with the passage of time.

Disbursements. Funds actually expended.

Division. Organizational component of a department.

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 valley as well as power office buildings and other ancillary locations.

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 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 Southern Nevada Water Authority, the 12-month period begins with July 1, and ends with June 30 of the designated fiscal year; e.g. FY 2018-19 ends on June 30, 2019.

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 workweek for 52 weeks, or one full year. For example, two part-time positions, each working 20 hours per week, equals one FTE.

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

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the estimated cash balance in a specific sub-fund at the beginning or ending of an accounting period.

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.

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).

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 in the late-2000's and lasted roughly through the end of that decade.

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.

Intake No. 3. One of the largest municipal water projects in the United States designed 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.

Inter-fund Loan. An internal financing device used by the wholesale delivery operations, capital improvements plan, and Las Vegas wash sub funds wherein money is "loaned" to the sub funds by the new expansion debt service sub fund. The WDO sub fund will repay the loan as the actual market price of power falls below the model clearing price. The MCCP sub fund will repay the loan when additional bond proceeds become available. The LVW sub fund will repay the loan with future sales tax revenues. In each case the repayments will include amounts equal to the estimated amount of interest the NEDS could have earned from the loan proceeds in addition to the principal.

Intergovernmental Revenue. Revenue received from other governments in the

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form of grants, entitlements, shared revenues or payments in lieu of taxes.

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 Authority employee salaries including overtime, longevity pay, and benefits. Labor can either be paid by operating funds or capital funds according to the project in which it was expended.

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 Groundwater Management Program Sub Fund. Sub fund that tracks revenues and expenses incurred from the SNWA program designed to protect and manage the Las Vegas valley's primary groundwater supply.

Las Vegas Wash (LVW). The primary channel through which the valley's excess water returns to Lake Mead. The water flowing through the wash comprises less than 2 percent of the water in Lake Mead and consists of urban runoff, shallow groundwater, storm water and releases

from the valley's three water reclamation facilities.

Las Vegas Wash Program Fees. Fees imposed on signatories of the Las Vegas Wash Inter local Agreement that will be used for Las Vegas Wash operating expenses. The fees are net of any anticipated grant proceeds. Participants in the Inter local Agreement are the SNWA, the City of Henderson, the City of Las Vegas, Clark County, the Clark County Regional Flood Control District, and the Clark County Water Reclamation District.

Las Vegas Wash (LVW) Sub Fund. Sub fund that tracks capital and operational revenues and expenses pertaining to the Las Vegas Wash.

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.

Major Construction and Capital Program (MCCP). 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.

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Model Clearing Price. A power cost calculated per MWh and established to reflect the projected cost of electrical power over a ten year period.

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.

Net Position. Financial liabilities minus cash and cash equivalents. Net position was formerly known as fund equity until the application of GASB 65.

Nevada Revised Statutes (NRS). The current codified laws of the State of Nevada.

New Expansion Debt Service (NEDS) Sub Fund. Sub fund that tracks revenues and expenses relating to debt service incurred from the expansion of the SNWA transmission and distribution system.

Northern Resources. All-inclusive term for water rights, land, and ranching operations owned by the SNWA and found in Lincoln and White Pine County, Nevada.

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 of the SNWA's treatment and distribution system and through the Las Vegas Wash and groundwater management program. These expenses are identical to Capital Expenses in form but are paid with operating revenues. On a GAAP prepared financial statement, these costs will appear on the Statement of Revenues, Expenses and Changes in Net Position.

Operating Revenue. For net position purposes, defined as wholesale delivery charge, net income from ranch operations, program fees collected from the operation of the Las Vegas Wash and groundwater management fees.

Other Revenues. Various sundry revenues from minor sources. Other revenues include, but are not limited to, reimbursement of Authority operating expenses for purveyors who do not use the SNWA's treatment facilities and income from the SNWA's Northern Resource holdings.

Payroll and Related. For net position purposes, this classification includes all non-capitalized labor costs.

Period. The date (usually a 12 month span) that expenditures, encumbrances, etc. are recorded for reporting purposes.

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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.

Positions. Authorized (created by the LVVWD Board of Directors and approved by the SNWA 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 SNWA distribution system.

Proprietary Fund. Synonym in this document for Enterprise Fund.

Purveyor. A subset of the members of SNWA consisting of City of Boulder City, City of Henderson, City of Las Vegas, City of North Las Vegas, and the Las Vegas Valley Water District. These members purchase potable water from SNWA and remit a form of capital revenue.

Recharge. Lake water injected directly into the aquifer by wells to store for future use.

Regional. Pertaining to the area of Clark County, Nevada (the jurisdiction of SNWA).

Regional Commodity Charge. Charge placed each thousand gallons of potable water sold. This charge is collected by SNWA's purveyor members (City of Henderson, City of North Las Vegas and Las Vegas Valley Water District only) and remitted monthly to SNWA.

Regional Connection Charge. Charge placed on new connections to the system. Mainly based on service size, although adjustments to certain customer classes are made. This charge is collected by SNWA's purveyor members (City of Henderson, City of North Las Vegas and Las Vegas Valley Water District only) and remitted monthly to SNWA.

Regional Infrastructure Surcharge. Surcharge placed on all retail water bills. Revenue collected by the purveyors on this charge is forwarded to SNWA monthly. The charge is based on the size of meter or meters that service a customer. Different rates apply for residential, nonresidential and nonresidential fire services. Residential fire services are not assessed this charge.

Reliability Surcharge. Surcharge placed on retail water bills. Currently the charge is 0.25% of total retail bill for residential customers, and 2.5% of total retail bill for non-residential services. This charge is collected by SNWA's purveyor members (City of Henderson, City of North Las Vegas and Las Vegas Valley Water District only) and remitted monthly to SNWA.

Restricted Revenues. For net position purposes, defined as operating capital and expenses, payroll, recharge purchases and power costs. However it excludes these

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costs if they are present in the MCCP sub-fund or if they are associated with capital costs for the Las Vegas Wash.

Revenues. Funds received from various sources and treated as income to SNWA to finance expenditures.

Revenue Bonds. Bonds where pledges are made to dedicate specific revenue sources to repay the bonds.

Risk Management. An organized attempt to protect a government'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.

Salaries & Wages. A budget category that includes employee salaries including overtime, longevity pay and benefits.

Sales Tax. One quarter of one penny addition to the Clark County sales tax rate that is remitted to SNWA on a monthly basis. The rate was added on April 1999, and is shared with wastewater agencies, rural water and wastewater systems and the Las Vegas Wash.

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.

Southern Nevada Public Lands Funds. A federal law governing the disposition of certain public lands in the Las Vegas Valley by the Bureau of Reclamation. The SNPLMA calls for SNWA to receive 10% of the purchase price of all public lands sold pursuant to the Act. These funds are restricted in use to paying for the SNWA Capital Improvement Plan.

Southern Nevada Water Authority (SNWA). Was formed in 1991 to manage Southern Nevada's water needs on a regional basis. The SNWA 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.

Sub Fund. An internal control measure used to ensure that revenues and expenses from similar operations are matched. Although SNWA is an enterprise fund under Nevada law, the sub fund philosophy assists SNWA in analyzing and controlling its costs throughout the year.

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Wholesale Delivery Charge (WDC). The per acre-foot charge that SNWA charges purveyor members for the treatment and delivery of treated, potable water.

Wholesale Delivery Operations (WDO) Sub Fund. Sub fund that tracks revenues and expenses incurred from the production of potable water.

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SOUTHERN NEVADA WATER AUTHORITY®

**SOUTHERN NEVADA WATER AUTHORITY
BOARD OF DIRECTORS
AGENDA ITEM**

May 31, 2018

Subject: Agreement	Director's Backup
Petitioner: Julie A. Wilcox, Deputy General Manager, Administration	
Recommendations: That the Board of Directors approve an assistance agreement, in substantially the same form as that attached hereto, between the Bureau of Reclamation and the Authority to accept grant funding in the amount of \$88,599 for Lake Mead drought modeling to inform future drinking water treatment needs, with the Authority providing up to \$132,397 of in-kind contributions.	

Fiscal Impact:

If the above recommendation is approved, the Authority will receive funds from the Bureau of Reclamation in the amount of \$88,599. The Authority will provide a matching contribution of \$132,397, which is available in the Authority's Fiscal Year 2018/19 Operating Budget.

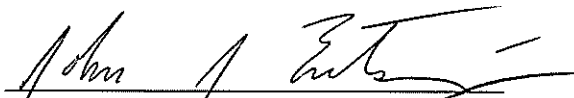
Background:

The Bureau of Reclamation (BOR) established the WaterSMART: Applied Science Grants program to support projects that develop science and tools to address conservation issues affecting water, fish and wildlife, and cultural resources.

On August 17, 2017, the Board of Directors approved a resolution authorizing the submission of a grant application seeking \$88,599 to support enhanced modeling of Lake Mead's water quality and the impact of drought on drinking water and threatened and endangered fish species. In September 2017, the Authority was notified that the BOR approved a grant in an amount not to exceed \$88,599. The Authority's matching contribution of \$132,397 will be comprised entirely of staff labor.

At this time, the Board is being asked to approve the assistance agreement, which includes the provisions necessary for the Authority to obtain federal funding. This agreement is being entered into pursuant to NRS 277.180 and Section 6(o) of the SNWA 1995 Amended Cooperative Agreement. The office of the General Counsel has reviewed and approved the agreement.

Respectfully submitted:



John J. Entsminger, General Manager
JJE:JAW:AMB:KH:kf
Attachment

AGENDA
ITEM #

4

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
ASSISTANCE AGREEMENT

1A. AGREEMENT NUMBER R18AC00021		1B. MOD NUMBER		2. TYPE OF AGREEMENT <input type="checkbox"/> GRANT <input checked="" type="checkbox"/> COOPERATIVE AGREEMENT		3. CLASS OF RECIPIENT Special District Government									
4. ISSUING OFFICE Bureau of Reclamation Financial Assistance Support Services 84-27814 P.O. Box 25007 Denver Colorado 80225				5. RECIPIENT Southern Nevada Water Authority 1001 S. Valley View Boulevard Las Vegas, NV 89107-4447											
								EIN #:		88-0278492		County:		Clark	
								DUNS #:		135965650		Congress. Dist:		NV- 003	
6. GRANTS MANAGEMENT SPECIALIST Matthew Reichert Bureau of Reclamation Financial Assistance Support Services 84-27814 P.O. Box 25007 Denver Colorado 80225 303-445-3865 mreichert@usbr.gov				7. RECIPIENT PROJECT MANAGER Kathy Flanagan, Management Analyst Southern Nevada Water Authority 1001 S. Valley View Boulevard Las Vegas, NV 89107-4447 702-258-3173 kathy.flanagan@snwa.com											
8. GRANTS OFFICER TECHNICAL REPRESENTATIVE Genevieve Johnson, Bureau of Reclamation, Lower Colorado Regional Office 500 Date St. 61470 Boulder City NV 89006-1470 702-293-8054 gjohnson@usbr.gov				9A. INITIAL AGREEMENT EFFECTIVE DATE: See block 17.a below		9B. MODIFICATION EFFECTIVE DATE:									
				10. COMPLETION DATE June 30, 2020											
11A. PROGRAM STATUTORY AUTHORITY Omnibus Public Land Management Act of 2009, Public Law 111-11, Section 9509						11B. CFDA Number 15.557									
12. FUNDING INFORMATION		<u>RECIPIENT/OTHER</u>		<u>RECLAMATION</u>		13. REQUISITION NUMBER 0020143322									
Total Estimated Amount of Agreement		\$132,397.00		\$88,599.00		14A. ACCOUNTING AND APPROPRIATION DATA Fund: 17XR0680A1 WBS: RX.30080001.0022043									
This Obligation		\$132,397.00		\$88,599.00											
Previous Obligation		\$0.00		\$0.00											
Total Obligation		\$132,397.00		\$88,599.00											
Cost-Share %		60%		40%		14B. TREASURY ACCOUNT FUNDING SYMBOL 14X0680									
15. PROJECT TITLE Application of Numerical Simulation Modeling of Drought Conditions in Lake Mead															
16a. Acceptance of this Assistance Agreement in accordance with the terms and conditions contained herein is hereby made on behalf of the above-named recipient BY: _____ DATE: _____				17a. Award of this Assistance Agreement in accordance with the terms and conditions contained herein is hereby made on behalf of the United States of America, Department of the Interior, Bureau of Reclamation BY: _____ DATE: _____											
16b. NAME, TITLE, AND TELEPHONE NUMBER OF SIGNER <input type="checkbox"/> Additional signatures are attached				17b. NAME OF GRANTS OFFICER Irene M. Hoiby 303-445-2025											

Southern Nevada Water Authority

Approved as to form:


By:  Date: 5/10/16

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**Cooperative Agreement
Between
Bureau of Reclamation
And
Southern Nevada Water Authority
For
Application of Numerical Simulation Modeling of Drought Conditions in Lake Mead**

I. OVERVIEW AND SCHEDULE

1. AUTHORITY

This Cooperative Agreement (Agreement) is entered into between the United States of America, acting through the Department of the Interior, Bureau of Reclamation, hereinafter referred to as “Reclamation,” and Southern Nevada Water Authority, hereinafter referred to as the “Recipient” or “Grantee,” pursuant to the **Omnibus Public Land Management Act of 2009, Public Law 111-11, Section 9509** (the “Act”). The following section, provided in full text, authorizes Reclamation to award this financial assistance agreement:

Public Law 111-11, Section 9509, Research Agreement Authority:

The Secretary may enter into contracts, grants, and cooperative agreements, for periods not to exceed 5 years, to carry out research within the Bureau of Reclamation.

2. PUBLIC PURPOSE OF SUPPORT OR STIMULATION

The model developed under this Agreement will provide resource, recreation, and water supply managers with water management strategies based on trophic status and water quality conditions. The model will be available for use by regional water managers and academic community.

3. BACKGROUND AND OBJECTIVES

As part of its WaterSMART Basin Study Program, the Bureau of Reclamation (Reclamation) supports the development of science and tools necessary to address management challenges faced by water resources managers that are too complex for any one entity to address alone. Some of these issues include: water scarcity, species conservation and recovery, invasive species, and a range of other complex issues. These issues are amplified by the frequent drought conditions that characterize the western United States.

Through the Applied Science Grants, Reclamation provides funding for applied science projects, including research to identify how drought impacts natural or cultural resources; projects to

develop information and tools that inform watershed management; and projects to improve access and use of water resources data by resource managers in the West.

The Southern Nevada Water Authority, located in Las Vegas, Nevada, will perform water quality modeling to assess how changes in lake elevations due to drought affect critical water quality parameters, and to determine if and when water treatment plant modifications may be required. SNWA will conduct three-dimensional water quality modeling, and model output will then be incorporated into a new simulation model of SNWA's drinking water treatment processes. The project will address gaps in knowledge regarding the effects of drought on lake and reservoir water quality, including impacts to water temperature, turbidity, and algal growth. The modeling will inform future planning efforts for treatment plant upgrades and expansions, as well as planning efforts related to aquatic species, including endangered Razorback Suckers and Humpback Chub.

4. PERIOD OF PERFORMANCE AND FUNDS AVAILABILITY

This Agreement becomes effective on the date shown in Block 17a of Form 7-2279, United States of America, Department of the Interior, Bureau of Reclamation, Assistance Agreement. The Agreement shall remain in effect until the date shown in Block 10 of Form 7-2279, United States of America, Department of the Interior, Bureau of Reclamation, Assistance Agreement. The period of performance for this Agreement may only be modified through written modification of the Agreement by a Reclamation Grants Officer.

No legal liability on the part of the Government for any payment may arise until funds are made available, in writing, to the Recipient by the Grants Officer. The total estimated amount of federal funding for this agreement is \$88,599.00 of which the initial amount of federal funds available is limited to \$88,599.00 as indicated by "this obligation" within Block 12 of Form 7-2279, United States of America, Department of the Interior, Bureau of Reclamation, Assistance Agreement.

5. SCOPE OF WORK AND MILESTONES

Under this Agreement, Recipient will develop a simulation model for drinking water treatment processes by using three-dimensional hydrodynamic and water quality modeling. The work shall be conducted substantially in accordance with Application of Numerical Simulation Modeling of Drought Conditions in Lake Mead, submitted in response to Funding Opportunity Announcement BOR-DO-17-F024, *WaterSMART: Applied Science Grants for the Desert and Southern Rockies Landscape Conservation Cooperatives (LCCs) Fiscal Year 2017*, (Exhibit A). The major tasks for this project are described in Section 5.1 through 5.7 below.

5.1 Literature Search on Suspended Sediment Modeling

Recipient shall conduct a literature search to expand its understanding of turbidity dynamics in Lake Mead. The search will include a brief review of different suspended sediment modeling approaches used in the literature, as well as specific quantitative measurements or estimates of turbidity.

5.2 Collection and Analysis of In-Reservoir and River Inflow Data

Recipient shall perform in-reservoir and inflowing Colorado River data collection, described in Section 1.3.3.3, will be performed by SNWA. Results of the data collection and analysis (i.e., plots of nutrient concentrations, temperature, dissolved oxygen concentrations, pH, and other relevant parameters) will be provided in the Project Report (Task 7) and presented at meetings and conferences (Task 9) in addition to being used to guide modeling efforts.

5.3 Implement Suspended Sediments Modeling

The Recipient shall develop estimates of suspended sediments/turbidity of the lake water will be incorporated into the Lake Mead model. Additionally, the testing and debugging process will involve preliminary test simulations that can be used subsequently to inform, corroborate, or refine the modeling of suspended sediments with information developed in Tasks 1 and 2 through comparisons of model results with measurements of the in-reservoir turbidity.

5.4 Lake Mead AEM3D Modeling with Changing Lake Water Levels

The Recipient shall use the Lake Mead Aquatic Ecosystem 3D (AEM3D) model to evaluate the role of water drawdown caused by drought. Comparative analysis between the simulation results will be performed to identify important trends and changes in water quality parameters arising from water level decreases driven by possible projected drought.

5.5 Coupling the Lake Mead AEM3D Model with Water Treatment Process Model

Quantities of interest to drinking water treatment will be transferred from the Lake Mead AEM3D model (Task 4) to the water treatment process model after interpolation of output to allow for seamless integration.

5.6 Interpretation of the potential impact of changing water quality on aquatic species

The Recipient shall analyze the output parameters from the Lake Mead AEM3D model (Task 4) to interpret the potential reaction of aquatic species to water quality changes resulting from water level drawdown and other external inputs.

5.7 Project Presentations/Meetings

The Recipient's project team shall make presentations on the results of the research at Lake Mead Water Quality Forum Ecosystem Monitoring Workgroup regularly, at the Colorado River Aquatic Biologists Annual Meeting, at regional stakeholder meetings, and a Society for Industrial and Applied Mathematics Uncertainty Quantification Conference.

The milestones for completing the scope of work are:

Milestone / Task / Activity	Planned Start Date	Planned Completion Date
Complete Literature Search on Suspended Sediment Modeling	June 2018	September 2018
Begin Collection and Analysis of In-Reservoir and River Inflow Data	June 2018	July 2018

Begin Implementation of Suspended Sediments Modeling	September 2018	July 2020
Begin Lake Mead AEM3D Modeling with Changing Lake Water Levels	November 2018	June 2020
Couple Lake Mead AEM3D Model with Water Treatment Process Model	May 2019	July 2019
Complete collection of data and modelling	April 2020	June 2020
Interpretation of the potential impact of changing water quality on aquatic species	January 2020	June 2020
Project Presentations/Meetings	November 2019	June 2020

6. RESPONSIBILITY OF THE PARTIES

6.1 Recipient Responsibilities

6.1.1 The Recipient shall carry out the Scope of Work (SOW) in accordance with the terms and conditions stated herein. The Recipient shall adhere to Federal, state, and local laws, regulations, and codes, as applicable, and shall obtain all required approvals and permits. If the SOW contains construction activities, the Recipient is responsible for construction inspection, oversight, and acceptance. If applicable, the Recipient shall also coordinate and obtain approvals from site owners and operators.

6.1.2 The Recipient will ensure that all data, tools, guidelines, or other information being developed are available in industry standard formats that are compatible with the Geographic Information System platforms and are disseminated, transferred, communicated, or made available to resource managers and interested stakeholders.

6.1.3 Recipient will prepare and submit to Reclamation interim Project financial and performance reports as required by *Section I.9 – Reporting Requirements and Distribution*. Each interim performance report will include (but is not limited to) the information identified in *Section I.9.3 - Monitoring and reporting program performance* and will discuss the following:

- A comparison of actual accomplishments to the milestones established by the financial assistance agreement for the period
- The reasons why established milestones were not met, if applicable
- The status of milestones from the previous reporting period that were not met, if applicable
- Whether the Project is on schedule and within the original cost estimate
- Any additional pertinent information or issues related to the status of the Project

6.1.4 Recipient will prepare and submit to Reclamation final financial and Project performance reports (Final Reports) as required by *Section I.9 – Reporting requirements and distribution*. The

final performance report will include (but is not limited to) the information identified in *Section I.9.3 – Monitoring and reporting program performance* and at a minimum, will discuss the following:

- A narrative summary of all work performed under the agreement
- Description and interpretation of the data, methods, results, and conclusions, as appropriate
- Major accomplishments and/or implementation of the Project
- Outcomes from meeting the Project objectives and goals (or reasons and lessons learned from not meeting objectives and goals)
- Discussion of the benefits achieved by the Project, including how the results are being used or will be used by resource managers
- Discussion and description of how the Project has been communicated with stakeholders and/or other partners
- Description of how the data, tools, guidelines, or other information developed is being disseminated, transferred, communicated, or made available to resource managers interested stakeholders.
- How the Project demonstrates collaboration, including a discussion of outcomes from engagement with the Project's beneficiaries
- Photographs documenting the Project results and/or process (including citation for photographer, photo content, and location)

Recipient is aware that the final Project Report is a public document and may be made available on Reclamation's website, www.usbr.gov/watersmart/lcc/index.html.

6.2 Reclamation Responsibilities

6.2.1 Reclamation will monitor and provide Federal oversight of activities performed under this Agreement. Monitoring and oversight includes review and approval of financial status and performance reports, payment requests, and any other deliverables identified as part of the SOW. Additional monitoring activities may include site visits, conference calls, and other on-site and off-site monitoring activities. At the Recipient's request, Reclamation may also provide technical assistance to the Recipient in support of the SOW and objectives of this Agreement.

6.2.2 Reclamation will direct or redirect work due to interrelationships with other projects. Reclamation will also participate and collaborate with the recipient in carrying out the scope of work.

7. BUDGET

7.1 Budget Estimate. The following is the estimated budget for this Agreement. As Federal financial assistance agreements are cost-reimbursable, the budget provided is for estimation

purposes only. Final costs incurred under the budget categories listed may be either higher or lower than the estimated costs. All costs incurred by the Recipient under this agreement must be in accordance with any pre-award clarifications conducted between the Recipient and Reclamation, as well as with the terms and conditions of this agreement. Final determination of the allowability, allocability, or reasonableness of costs incurred under this agreement is the responsibility of the Grants Officer. Recipients are encouraged to direct any questions regarding allowability, allocability or reasonableness of costs to the Grants Officer for review prior to incurrence of the costs in question.

BUDGET ITEM DESCRIPTION	COMPUTATION		Quantity Type	TOTAL COST
	\$/Unit	Quantity		
Salaries and Wages				
All Salaries and Wages				\$80,080.00
Fringe Benefits				
All Fringe Benefits				\$53,872.00
Travel				
All Travel				\$6,881.00
Supplies and Materials				
Simulink Software Licenses	\$3,250.00	2	Licenses	\$6,500.00
Contractual/Construction				
UNLV				\$71,485.00
TOTAL DIRECT COSTS				\$220,996.00
Indirect Costs				
N/A	0%		MTDC	\$0.00
TOTAL ESTIMATED PROJECT COSTS				\$220,996.00

FUNDING SOURCES	PERCENT TOTAL PROJECT COST	TOTAL COST BY SOURCE
RECIPIENT FUNDING	61%	\$132,397.00
OTHER NON-FEDERAL FUNDING	0%	\$0.00
RECLAMATION FUNDING	39%	\$88,599.00
OTHER FEDERAL FUNDING	0%	\$0.00
TOTALS	100%	\$224,584.76

7.2 Cost Sharing Requirement

At least 50 % non-Federal cost-share is required for costs incurred under this Agreement. If pre-award costs are authorized, reimbursement of these costs is limited to federal cost share percentage identified in this agreement.

The Federal share of allowable costs shall not be expended in advance of the Recipient's non-Federal share. It is expected that expenditure of Federal and non-Federal funds shall occur

concurrently based upon the cost share percentages reflected in Block 12 of Form 7-2279 United States of America, Department of the Interior, Bureau of Reclamation, Assistance Agreement

If a bona fide need arises which requires the expenditure of Federal funds in advance of the Recipient share, then the Recipient must request written approval from the Grants Officer prior to the expenditure. Recipient's may expend their agreed upon share of costs in advance of the expenditure of Federal funds without prior written approval.

7.3 Pre-Award Incurrence of Costs

The Recipient shall be entitled to reimbursement for costs incurred on or after October 1, 2016, which if had been incurred after this Agreement was entered into, would have been allowable, allocable, and reasonable under the terms and conditions of this Agreement.

7.4 Allowable Costs (2 CFR Subpart E §200.400 through §200.475)

Costs incurred for the performance of this Agreement must be allowable, allocable to the project, and reasonable. The following regulations, codified within the Code of Federal Regulations (CFR), governs the allowability of costs for Federal financial assistance:

2 CFR Subpart E, "Cost Principles"

Expenditures for the performance of this Agreement must conform to the requirements within this CFR. The Recipient must maintain sufficient documentation to support these expenditures. Questions on the allowability of costs should be directed to the Grants Officer responsible for this Agreement.

The Recipient shall not incur costs or obligate funds for any purpose pertaining to operation of the program or activities beyond the expiration date stated in the Agreement. The only costs which are authorized for a period of up to 90 days following the project performance period are those strictly associated with closeout activities for preparation of the final reports. However, in accordance with 2 CFR §200.461(3), Recipient may charge this award before closeout for the costs of publication of research results if the costs are not incurred during the period of performance of the Agreement.

7.5 Revision of Budget and Program Plans (2 CFR §200.308)

In accordance with 2 CFR §200.308(c)-(e) the recipient must request prior written approval for any of the following changes:

- a) A change in the approved scope of work or associated tasks, even if there is no associated budget revisions.
- b) Change in key personnel specified in section 8 "Key Personnel" of this agreement.
- c) Changes in the approved cost-sharing or matching outlined within this agreement in section 7.2 "Cost Share requirements"

- d) Inclusion of pre-award costs or reimbursement for pre-award costs which are not included in the initially approved budget and included in section 7.3 “Pre-Award Incurrence of Costs” of this agreement.
- e) Extensions to the Completion Date outlined in block 10 of the coversheet (form 7-2279) of this agreement.
- f) The transfer of funds between direct cost categories, functions, and activities for which the expected transfer amount is to exceed 10 percent of the total approved budget.

7.6 Modifications

Any changes to this Agreement shall be made by means of a written modification. Reclamation may make changes to the Agreement by means of a unilateral modification to address administrative matters, such as changes in address, no-cost time extensions, changes to Reclamation Key Personnel, or the addition of previously agreed upon funding. Additionally, a unilateral modification may be utilized by Reclamation if it should become necessary to suspend or terminate the Agreement in accordance with 2 CFR §200.338.

All other changes shall be made by means of a bilateral modification to the Agreement. No oral statement made by any person, or written statement by any person other than the Grants Officer, shall be allowed in any manner or degree to modify or otherwise effect the terms of the Agreement.

All requests for modification of the Agreement shall be made in writing, provide a full description of the reason for the request, and be sent to the attention of the Grants Officer. Any request for project extension shall be made at least 45 days prior to the expiration date of the Agreement or the expiration date of any extension period that may have been previously granted. Any determination to extend the period of performance or to provide follow-on funding for continuation of a project is solely at the discretion of Reclamation.

8. KEY PERSONNEL

8.1 Recipient's Key Personnel

The Recipient's Project Manager for this Agreement shall be:

Kathy Flanagan, Management Analyst
Southern Nevada Water Authority
1001 S. Valley View Boulevard
Las Vegas, NV 89107-4447
702-258-3173
kathy.flanagan@snwa.com

8.2 Reclamation's Key Personnel

8.2.1 Grants Officer:

Irene Hoiby
Bureau of Reclamation
Financial Assistance Support Section
P.O. Box 25007, MS 84-27814
Denver, CO 80225
303-445-2025
ihoiby@usbr.gov

- (a) The Grants Officer is the only official with legal delegated authority to represent Reclamation. The Grants Officer's responsibilities include, but are not limited to, the following:
- (1) Formally obligate Reclamation to expend funds or change the funding level of the Agreement;
 - (2) Approve through formal modification changes in the scope of work and/or budget;
 - (3) Approve through formal modification any increase or decrease in the period of performance of the Agreement;
 - (4) Approve through formal modification changes in any of the expressed terms, conditions, or specifications of the Agreement;
 - (5) Be responsible for the overall administration, management, and other non-programmatic aspects of the Agreement including, but not limited to, interpretation of financial assistance statutes, regulations, circulars, policies, and terms of the Agreement; Where applicable, ensures that Reclamation complies with the administrative requirements required by statutes, regulations, circulars, policies, and terms of the Agreement.

8.2.2 Grants Officer Technical Representative (GOTR):

Genevieve Johnson, Desert Landscape Conservation Cooperative Coordinator
Bureau of Reclamation, Lower Colorado Regional Office
500 Date St. 61470
Boulder City NV 89006-1470
702-293-8054
gjohnson@usbr.gov

- (a) The GOTR's authority is limited to technical and programmatic aspects of the Agreement. The GOTR's responsibilities include, but are not limited to, the following:
- (1) Assist the Recipient, as necessary, in interpreting and carrying out the scope of work in the Agreement;
 - (2) Review, and where required, approve Recipient reports and submittals as required by the Agreement;
 - (3) Where applicable, monitor the Recipient to ensure compliance with the technical requirements of the Agreement;

- (4) Where applicable, ensure that Reclamation complies with the technical requirements of the Agreement;
- (b) The GOTR does not have the authority to and may not issue any technical assistance which:
 - (1) Constitutes an assignment of additional work outside the scope of work of the Agreement;
 - (2) In any manner causes an increase or decrease in the total estimated cost or the time required for performance; or
 - (3) Changes any of the expressed terms, conditions, or specifications of the Agreement.

8.2.3 Grants Management Specialist. The Grants Management Specialist is the primary administrative point of contact for this agreement and should be contacted regarding issues related to the day-to-day management of the agreement. Requests for approval regarding the terms and conditions of the agreement, including but not limited to modifications and prior approval, may only be granted, in writing, by a Reclamation Grants Officer. Please note that for some agreements, the Grants Officer and the Grants Management Specialist may be the same individual.

Matthew Reichert
Bureau of Reclamation
Financial Assistance Support Section
P.O. Box 25007, MS 84-27814
Denver, CO 80225
303-445-3865
mreichert@usbr.gov

9. REPORTING REQUIREMENTS AND DISTRIBUTION

9.1 Noncompliance. Failure to comply with the reporting requirements contained in this Agreement may be considered a material noncompliance with the terms and conditions of the award. Noncompliance may result in withholding of payments pending receipt of required reports, denying both the use of funds and matching credit for all or part of the cost of the activity or action not in compliance, whole or partial suspension or termination of the Agreement, recovery of funds paid under the Agreement, withholding of future awards, or other legal remedies in accordance with 2 CFR §200.338.

9.2 Financial Reports. Financial Status Reports shall be submitted by means of the SF-425 and shall be submitted according to the Report Frequency and Distribution schedule below. All financial reports shall be signed by an Authorized Certifying Official for the Recipient's organization.

9.3 Monitoring and reporting program performance (2 CFR §200.328)

(a) Monitoring by the non-Federal entity. The non-Federal entity is responsible for oversight of the operations of the Federal award supported activities. The non-Federal entity must monitor its

activities under Federal awards to assure compliance with applicable Federal requirements and performance expectations are being achieved. Monitoring by the non-Federal entity must cover each program, function or activity. See also §200.331 Requirements for pass-through entities.

(b) Non-construction performance reports. The Federal awarding agency must use standard, OMB-approved data elements for collection of performance information (including performance progress reports, Research Performance Progress Report, or such future collections as may be approved by OMB and listed on the OMB Web site).

(1) The non-Federal entity must submit performance reports at the interval required by the Federal awarding agency or pass-through entity to best inform improvements in program outcomes and productivity. Intervals must be no less frequent than annually nor more frequent than quarterly except in unusual circumstances, for example where more frequent reporting is necessary for the effective monitoring of the Federal award or could significantly affect program outcomes. Annual reports must be due 90 calendar days after the reporting period; quarterly or semiannual reports must be due 30 calendar days after the reporting period. Alternatively, the Federal awarding agency or pass-through entity may require annual reports before the anniversary dates of multiple year Federal awards. The final performance report will be due 90 calendar days after the period of performance end date. If a justified request is submitted by a non-Federal entity, the Federal agency may extend the due date for any performance report.

(2) The non-Federal entity must submit performance reports using OMB-approved governmentwide standard information collections when providing performance information. As appropriate in accordance with above mentioned information collections, these reports will contain, for each Federal award, brief information on the following unless other collections are approved by OMB:

(i) A comparison of actual accomplishments to the objectives of the Federal award established for the period. Where the accomplishments of the Federal award can be quantified, a computation of the cost (for example, related to units of accomplishment) may be required if that information will be useful. Where performance trend data and analysis would be informative to the Federal awarding agency program, the Federal awarding agency should include this as a performance reporting requirement.

(ii) The reasons why established goals were not met, if appropriate.

(iii) Additional pertinent information including, when appropriate, analysis and explanation of cost overruns or high unit costs.

(c) Construction performance reports. For the most part, onsite technical inspections and certified percentage of completion data are relied on heavily by Federal awarding agencies and pass-through entities to monitor progress under Federal awards and subawards for construction. The Federal awarding agency may require additional performance reports only when considered necessary.

(d) Significant developments. Events may occur between the scheduled performance reporting dates that have significant impact upon the supported activity. In such cases, the non-Federal

entity must inform the Federal awarding agency or pass-through entity as soon as the following types of conditions become known:

- (1) Problems, delays, or adverse conditions which will materially impair the ability to meet the objective of the Federal award. This disclosure must include a statement of the action taken, or contemplated, and any assistance needed to resolve the situation.
- (2) Favorable developments which enable meeting time schedules and objectives sooner or at less cost than anticipated or producing more or different beneficial results than originally planned.

Reclamation requires Performance reporting for all financial assistance awards, both Construction and non-Construction. Performance reports for Construction agreements shall meet the same minimum requirements outlined in 2 CFR §200.328(b)(2) above.

9.4 Report Frequency and Distribution. The following table sets forth the reporting requirements for this Agreement. Please note the first report due date listed for each type of report.

Required Reports	Interim Reports	Final Report
Performance Report		
Format	No specific format required. See content requirements within Section 9.3 (2 CFR §200.328) above.	Summary of activities completed during the entire period of performance is required. See content requirements within Section 9.3 (2 CFR §200.328) above.
Reporting Frequency	Semi-Annual	Final Report due after completion of Agreement's period of performance
Reporting Period	October 1 through March 31 and April 1 through September 30.	Entire period of performance
Due Date*	Within 30 days after the end of the Reporting Period.	Within 90 days after the completion of project or completion date of the Agreement, whichever occurs earlier
First Report Due Date	The first performance report is due for reporting period ending September 30, 2018	N/A
Submit to:	sha-dro-faoperations@usbr.gov	sha-dro-faoperations@usbr.gov
Federal Financial Report		
Format	SF-425 (all sections must be completed)	SF-425(all sections must be completed)
Reporting Frequency	Semi-Annual	Final Report due after completion of Agreement's period of performance
Reporting Period	October 1 through March 31 and April 1 through September 30.	Entire period of performance

Required Reports	Interim Reports	Final Report
Due Date*	Within 30 days after the end of the Reporting Period.	Within 90 days after the completion of project or completion date of the Agreement, whichever occurs earlier
First Report Due Date	The first Federal financial report is due for reporting period ending September 30, 2018	N/A
Submit to:	sha-dro-faoperations@usbr.gov	sha-dro-faoperations@usbr.gov

* If the completion date is prior to the end of the next reporting period, then no interim report is due for that period. Instead, the Recipient is required only to submit the final financial and performance reports, which will cover the entire period of performance including the last abbreviated reporting period.

10. REGULATORY COMPLIANCE

The Recipient agrees to comply or assist Reclamation with all regulatory compliance requirements and all applicable state, Federal, and local environmental and cultural and paleontological resource protection laws and regulations as applicable to this project. These may include, but are not limited to, the National Environmental Policy Act (NEPA), including the Council on Environmental Quality and Department of the Interior regulations implementing NEPA, the Clean Water Act, the Endangered Species Act, consultation with potentially affected Tribes, and consultation with the State Historic Preservation Office.

Certain environmental and other associated compliance are Federal responsibilities, and will occur as appropriate. Reclamation will identify the need for and will complete any appropriate environmental compliance requirements, as identified above, pertinent to Reclamation pursuant to activities specific to this assisted activity. Environmental and other associated compliance shall be completed prior to the start of this project. As such, notwithstanding any other provision of this Agreement, Reclamation shall not provide any funds to the Recipient for Agreement purposes, and the Recipient shall not begin implementation of the assisted activity described in this Agreement, until Reclamation provides written notice to the Recipient that all applicable environmental and regulatory compliance analyses and clearances have been completed and that the Recipient may begin implementation of the assisted activity. If the Recipient begins project activities that require environmental and other regulatory compliance approval, such as construction activities, prior to receipt of written notice from Reclamation that all such clearances have been obtained, then Reclamation reserves the right to unilaterally terminate this agreement for cause.

Note: It was determined that consideration under National Environmental Policy Act (NEPA), Endangered Species Act (ESA), or National Historic Preservation Act (NHPA), is not required for this action. However, other state, regional, tribal, or local requirements may require the evaluation of environmental and cultural resources.

11. INTANGIBLE PROPERTY (2 CFR 200.315)

(a) Title to intangible property (see §200.59 Intangible property) acquired under a Federal award vests upon acquisition in the non-Federal entity. The non-Federal entity must use that property for the originally-authorized purpose, and must not encumber the property without approval of the Federal awarding agency. When no longer needed for the originally authorized purpose, disposition of the intangible property must occur in accordance with the provisions in §200.313 Equipment paragraph (e).

(b) The non-Federal entity may copyright any work that is subject to copyright and was developed, or for which ownership was acquired, under a Federal award. The Federal awarding agency reserves a royalty-free, nonexclusive and irrevocable right to reproduce, publish, or otherwise use the work for Federal purposes, and to authorize others to do so.

(c) The non-Federal entity is subject to applicable regulations governing patents and inventions, including governmentwide regulations issued by the Department of Commerce at 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Awards, Contracts and Cooperative Agreements."

(d) The Federal Government has the right to:

- (1) Obtain, reproduce, publish, or otherwise use the data produced under a Federal award; and
- (2) Authorize others to receive, reproduce, publish, or otherwise use such data for Federal purposes.

(e) Freedom of Information Act (FOIA).

(1) In response to a Freedom of Information Act (FOIA) request for research data relating to published research findings produced under a Federal award that were used by the Federal Government in developing an agency action that has the force and effect of law, the Federal awarding agency must request, and the non-Federal entity must provide, within a reasonable time, the research data so that they can be made available to the public through the procedures established under the FOIA. If the Federal awarding agency obtains the research data solely in response to a FOIA request, the Federal awarding agency may charge the requester a reasonable fee equaling the full incremental cost of obtaining the research data. This fee should reflect costs incurred by the Federal agency and the non-Federal entity. This fee is in addition to any fees the Federal awarding agency may assess under the FOIA (5 U.S.C. 552(a)(4)(A)).

(2) Published research findings means when:

- (i) Research findings are published in a peer-reviewed scientific or technical journal; or
- (ii) A Federal agency publicly and officially cites the research findings in support of an agency action that has the force and effect of law. "Used by the Federal Government in developing an agency action that has the force and effect of law" is defined as when an agency publicly and officially cites the research findings in support of an agency action that has the force and effect of law.

(3) Research data means the recorded factual material commonly accepted in the scientific community as necessary to validate research findings, but not any of the following: preliminary analyses, drafts of scientific papers, plans for future research, peer reviews, or communications with colleagues. This “recorded” material excludes physical objects (e.g., laboratory samples). Research data also do not include:

(i) Trade secrets, commercial information, materials necessary to be held confidential by a researcher until they are published, or similar information which is protected under law; and

(ii) Personnel and medical information and similar information the disclosure of which would constitute a clearly unwarranted invasion of personal privacy, such as information that could be used to identify a particular person in a research study.

II. RECLAMATION STANDARD TERMS AND CONDITIONS

1. REGULATIONS

The regulations at 2 CFR Subtitle A, Chapter II, Part 200 “Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards”, are hereby incorporated by reference as though set forth in full text. Failure of a Recipient to comply with any applicable regulation or circular may be the basis for withholding payments for proper charges made by the Recipient and/or for termination of support.

2. PAYMENT

2.1 Payment. (2 CFR §200.305)

(a) For states, payments are governed by Treasury-State CMIA agreements and default procedures codified at 31 CFR Part 205 “Rules and Procedures for Efficient Federal-State Funds Transfers” and TFM 4A-2000 Overall Disbursing Rules for All Federal Agencies.

(b) For non-Federal entities other than states, payments methods must minimize the time elapsing between the transfer of funds from the United States Treasury or the pass-through entity and the disbursement by the non-Federal entity whether the payment is made by electronic funds transfer, or issuance or redemption of checks, warrants, or payment by other means. See also §200.302 Financial management paragraph (b)(6). Except as noted elsewhere in this part, Federal agencies must require recipients to use only OMB-approved standard government-wide information collection requests to request payment.

(1) The non-Federal entity must be paid in advance, provided it maintains or demonstrates the willingness to maintain both written procedures that minimize the time elapsing between the transfer of funds and disbursement by the non-Federal entity, and financial management systems that meet the standards for fund control and accountability as established in this part. Advance payments to a non-Federal entity must be limited to the minimum amounts needed and be timed to be in accordance with the actual, immediate cash requirements of the non-Federal entity in carrying out the purpose of the approved program or project. The timing and amount of advance payments must be as close as is administratively feasible to the actual disbursements by the non-Federal entity for direct program or project costs and the proportionate share of any allowable indirect costs. The non-Federal entity must make timely payment to contractors in accordance with the contract provisions.

(2) Whenever possible, advance payments must be consolidated to cover anticipated cash needs for all Federal awards made by the Federal awarding agency to the recipient.

(i) Advance payment mechanisms include, but are not limited to, Treasury check and electronic funds transfer and must comply with applicable guidance in 31 CFR part 208.

(ii) Non-Federal entities must be authorized to submit requests for advance payments and reimbursements at least monthly when electronic fund transfers are

not used, and as often as they like when electronic transfers are used, in accordance with the provisions of the Electronic Fund Transfer Act (15 U.S.C. 1693-1693r).

(3) Reimbursement is the preferred method when the requirements in paragraph (b) cannot be met, when the Federal awarding agency sets a specific condition per §200.207 Specific conditions, or when the non-Federal entity requests payment by reimbursement. This method may be used on any Federal award for construction, or if the major portion of the construction project is accomplished through private market financing or Federal loans, and the Federal award constitutes a minor portion of the project. When the reimbursement method is used, the Federal awarding agency or pass-through entity must make payment within 30 calendar days after receipt of the billing, unless the Federal awarding agency or pass-through entity reasonably believes the request to be improper.

(4) If the non-Federal entity cannot meet the criteria for advance payments and the Federal awarding agency or pass-through entity has determined that reimbursement is not feasible because the non-Federal entity lacks sufficient working capital, the Federal awarding agency or pass-through entity may provide cash on a working capital advance basis. Under this procedure, the Federal awarding agency or pass-through entity must advance cash payments to the non-Federal entity to cover its estimated disbursement needs for an initial period generally geared to the non-Federal entity's disbursing cycle. Thereafter, the Federal awarding agency or pass-through entity must reimburse the non-Federal entity for its actual cash disbursements. Use of the working capital advance method of payment requires that the pass-through entity provide timely advance payments to any subrecipients in order to meet the subrecipient's actual cash disbursements. The working capital advance method of payment must not be used by the pass-through entity if the reason for using this method is the unwillingness or inability of the pass-through entity to provide timely advance payments to the subrecipient to meet the subrecipient's actual cash disbursements.

(5) Use of resources before requesting cash advance payments. To the extent available, the non-Federal entity must disburse funds available from program income (including repayments to a revolving fund), rebates, refunds, contract settlements, audit recoveries, and interest earned on such funds before requesting additional cash payments.

(6) Unless otherwise required by Federal statutes, payments for allowable costs by non-Federal entities must not be withheld at any time during the period of performance unless the conditions of §§200.207 Specific conditions, Subpart D—Post Federal Award Requirements of this part, 200.338 Remedies for Noncompliance, or one or more of the following applies:

(i) The non-Federal entity has failed to comply with the project objectives, Federal statutes, regulations, or the terms and conditions of the Federal award.

(ii) The non-Federal entity is delinquent in a debt to the United States as defined in OMB Guidance A-129, "Policies for Federal Credit Programs and Non-Tax Receivables." Under such conditions, the Federal awarding agency or pass-through entity may, upon reasonable notice, inform the non-Federal entity that payments must not be made for obligations incurred after a specified date until the

conditions are corrected or the indebtedness to the Federal Government is liquidated.

(iii) A payment withheld for failure to comply with Federal award conditions, but without suspension of the Federal award, must be released to the non-Federal entity upon subsequent compliance. When a Federal award is suspended, payment adjustments will be made in accordance with §200.342 Effects of suspension and termination.

(iv) A payment must not be made to a non-Federal entity for amounts that are withheld by the non-Federal entity from payment to contractors to assure satisfactory completion of work. A payment must be made when the non-Federal entity actually disburses the withheld funds to the contractors or to escrow accounts established to assure satisfactory completion of work.

(7) Standards governing the use of banks and other institutions as depositories of advance payments under Federal awards are as follows.

(i) The Federal awarding agency and pass-through entity must not require separate depository accounts for funds provided to a non-Federal entity or establish any eligibility requirements for depositories for funds provided to the non-Federal entity. However, the non-Federal entity must be able to account for the receipt, obligation and expenditure of funds.

(ii) Advance payments of Federal funds must be deposited and maintained in insured accounts whenever possible.

(8) The non-Federal entity must maintain advance payments of Federal awards in interest-bearing accounts, unless the following apply.

(i) The non-Federal entity receives less than \$120,000 in Federal awards per year.

(ii) The best reasonably available interest-bearing account would not be expected to earn interest in excess of \$500 per year on Federal cash balances.

(iii) The depository would require an average or minimum balance so high that it would not be feasible within the expected Federal and non-Federal cash resources.

(iv) A foreign government or banking system prohibits or precludes interest bearing accounts.

(9) Interest earned amounts up to \$500 per year may be retained by the non-Federal entity for administrative expense. Any additional interest earned on Federal advance payments deposited in interest-bearing accounts must be remitted annually to the Department of Health and Human Services Payment Management System (PMS) through an electronic medium using either Automated Clearing House (ACH) network or a Fedwire Funds Service payment. Remittances must include pertinent information of the payee and nature of payment in the memo area (often referred to as “addenda records” by Financial Institutions) as that will assist in the timely posting of interest earned on federal funds. Pertinent details include the Payee Account Number (PAN) if the payment originated from PMS, or Agency information if the payment originated from ASAP, NSF or another federal agency payment system. The remittance must be submitted as follows:

(i) For ACH Returns:

Routing Number: 051036706

Account number: 303000

Bank Name and Location: Credit Gateway—ACH Receiver St. Paul, MN

(ii) For Fedwire Returns*:

Routing Number: 021030004

Account number: 75010501

Bank Name and Location: Federal Reserve Bank Treas NYC/Funds Transfer
Division New York, NY

(* Please note organization initiating payment is likely to incur a charge from
your Financial Institution for this type of payment)

(iii) For International ACH Returns:

Beneficiary Account: Federal Reserve Bank of New York/ITS (FRBNY/ITS)

Bank: Citibank N.A. (New York)

Swift Code: CITIUS33

Account Number: 36838868

Bank Address: 388 Greenwich Street, New York, NY 10013 USA

Payment Details (Line 70): Agency

Name (abbreviated when possible) and ALC Agency POC: Michelle Haney,
(301) 492-5065

(iv) For recipients that do not have electronic remittance capability, please make
check** payable to: "The Department of Health and Human Services."

Mail Check to Treasury approved lockbox:

HHS Program Support Center, P.O. Box 530231, Atlanta, GA 30353-0231

(** Please allow 4-6 weeks for processing of a payment by check to be applied to
the appropriate PMS account)

(v) Any additional information/instructions may be found on the PMS Web site at
<http://www.dpm.psc.gov/>.

2.2 Payment Method

Recipients must utilize the Department of Treasury Automated Standard Application for Payments (ASAP) payment system to request advance or reimbursement payments. ASAP is a Recipient-initiated payment and information system designed to provide a single point of contact for the request and delivery of Federal funds. ASAP is the only allowable method for request and receipt of payment. Recipient procedures must minimize the time elapsing between the drawdown of Federal funds and the disbursement for agreement purposes.

Recipients must complete enrollment in ASAP for all active financial assistance agreements with Reclamation. ASAP enrollment is specific to each Agency and Bureau; meaning, if a Recipient organization has an existing ASAP account with another Federal agency or Department of the Interior bureau, but not with Reclamation, then the Recipient must initiate and complete enrollment in ASAP under Reclamation's Agency Location Code (1425) through submission of an enrollment form found at www.usbr.gov/mso/aamd/asap.html. For information regarding ASAP enrollment, please visit www.usbr.gov/mso/aamd/asap.html, or contact the Reclamation

ASAP Help Desk BOR_ASAP_Enroll@usbr.gov. Further information regarding ASAP may be obtained from the ASAP website at <http://www.fms.treas.gov/asap>.

In accordance with 2 CFR 25.200(b)(2) the Recipient shall “Maintain an active SAM registration with current information at all times during which it has an active Federal award or an application or plan under consideration by an agency”. If the Recipient allows their SAM registration to lapse, the Recipient’s accounts within ASAP will be automatically suspended by Reclamation until such time as the Recipient renews their SAM registration.

3. PROCUREMENT STANDARDS (2 CFR§200.317 through §200.326)

§200.317 Procurements by states.

When procuring property and services under a Federal award, a state must follow the same policies and procedures it uses for procurements from its non-Federal funds. The state will comply with §200.322 Procurement of recovered materials and ensure that every purchase order or other contract includes any clauses required by section §200.326 Contract provisions. All other non-Federal entities, including subrecipients of a state, will follow §200.318 General procurement standards through 200.326 Contract provisions.

§200.318 General procurement standards.

(a) The non-Federal entity must use its own documented procurement procedures which reflect applicable State, local, and tribal laws and regulations, provided that the procurements conform to applicable Federal law and the standards identified in this part.

(b) Non-Federal entities must maintain oversight to ensure that contractors perform in accordance with the terms, conditions, and specifications of their contracts or purchase orders.

(c)

(1) The non-Federal entity must maintain written standards of conduct covering conflicts of interest and governing the actions of its employees engaged in the selection, award and administration of contracts. No employee, officer, or agent may participate in the selection, award, or administration of a contract supported by a Federal award if he or she has a real or apparent conflict of interest. Such a conflict of interest would arise when the employee, officer, or agent, any member of his or her immediate family, his or her partner, or an organization which employs or is about to employ any of the parties indicated herein, has a financial or other interest in or a tangible personal benefit from a firm considered for a contract. The officers, employees, and agents of the non-Federal entity may neither solicit nor accept gratuities, favors, or anything of monetary value from contractors or parties to subcontracts. However, non-Federal entities may set standards for situations in which the financial interest is not substantial or the gift is an unsolicited item of nominal value. The standards of conduct must provide for disciplinary actions to be applied for violations of such standards by officers, employees, or agents of the non-Federal entity.

(2) If the non-Federal entity has a parent, affiliate, or subsidiary organization that is not a state, local government, or Indian tribe, the non-Federal entity must also maintain written standards of conduct covering organizational conflicts of interest. Organizational conflicts of interest means that because of relationships with a parent company, affiliate, or subsidiary organization, the non-Federal entity is unable or appears to be unable to be impartial in conducting a procurement action involving a related organization.

(d) The non-Federal entity's procedures must avoid acquisition of unnecessary or duplicative items. Consideration should be given to consolidating or breaking out procurements to obtain a more economical purchase. Where appropriate, an analysis will be made of lease versus purchase alternatives, and any other appropriate analysis to determine the most economical approach.

(e) To foster greater economy and efficiency, and in accordance with efforts to promote cost-effective use of shared services across the Federal Government, the non-Federal entity is encouraged to enter into state and local intergovernmental agreements or inter-entity agreements where appropriate for procurement or use of common or shared goods and services.

(f) The non-Federal entity is encouraged to use Federal excess and surplus property in lieu of purchasing new equipment and property whenever such use is feasible and reduces project costs.

(g) The non-Federal entity is encouraged to use value engineering clauses in contracts for construction projects of sufficient size to offer reasonable opportunities for cost reductions. Value engineering is a systematic and creative analysis of each contract item or task to ensure that its essential function is provided at the overall lower cost.

(h) The non-Federal entity must award contracts only to responsible contractors possessing the ability to perform successfully under the terms and conditions of a proposed procurement. Consideration will be given to such matters as contractor integrity, compliance with public policy, record of past performance, and financial and technical resources. See also §200.212 Suspension and debarment.

(i) The non-Federal entity must maintain records sufficient to detail the history of procurement. These records will include, but are not necessarily limited to the following: rationale for the method of procurement, selection of contract type, contractor selection or rejection, and the basis for the contract price.

(j)

(1) The non-Federal entity may use a time and materials type contract only after a determination that no other contract is suitable and if the contract includes a ceiling price that the contractor exceeds at its own risk. Time and materials type contract means a contract whose cost to a non-Federal entity is the sum of:

(i) The actual cost of materials; and

(ii) Direct labor hours charged at fixed hourly rates that reflect wages, general and administrative expenses, and profit.

(2) Since this formula generates an open-ended contract price, a time-and-materials contract provides no positive profit incentive to the contractor for cost control or labor efficiency. Therefore, each contract must set a ceiling price that the contractor exceeds at its own risk. Further, the non-Federal entity awarding such a contract must assert a high degree of oversight in order to obtain reasonable assurance that the contractor is using efficient methods and effective cost controls.

(k) The non-Federal entity alone must be responsible, in accordance with good administrative practice and sound business judgment, for the settlement of all contractual and administrative issues arising out of procurements. These issues include, but are not limited to, source evaluation, protests, disputes, and claims. These standards do not relieve the non-Federal entity of any contractual responsibilities under its contracts. The Federal awarding agency will not substitute its judgment for that of the non-Federal entity unless the matter is primarily a Federal concern. Violations of law will be referred to the local, state, or Federal authority having proper jurisdiction.

§200.319 Competition.

(a) All procurement transactions must be conducted in a manner providing full and open competition consistent with the standards of this section. In order to ensure objective contractor performance and eliminate unfair competitive advantage, contractors that develop or draft specifications, requirements, statements of work, or invitations for bids or requests for proposals must be excluded from competing for such procurements. Some of the situations considered to be restrictive of competition include but are not limited to:

- (1) Placing unreasonable requirements on firms in order for them to qualify to do business;
- (2) Requiring unnecessary experience and excessive bonding;
- (3) Noncompetitive pricing practices between firms or between affiliated companies;
- (4) Noncompetitive contracts to consultants that are on retainer contracts;
- (5) Organizational conflicts of interest;
- (6) Specifying only a “brand name” product instead of allowing “an equal” product to be offered and describing the performance or other relevant requirements of the procurement; and
- (7) Any arbitrary action in the procurement process.

(b) The non-Federal entity must conduct procurements in a manner that prohibits the use of statutorily or administratively imposed state, local, or tribal geographical preferences in the evaluation of bids or proposals, except in those cases where applicable Federal statutes expressly mandate or encourage geographic preference. Nothing in this section preempts state licensing laws. When contracting for architectural and engineering (A/E) services, geographic location may be a selection criterion provided its application leaves an appropriate number of qualified firms, given the nature and size of the project, to compete for the contract.

(c) The non-Federal entity must have written procedures for procurement transactions. These procedures must ensure that all solicitations:

(1) Incorporate a clear and accurate description of the technical requirements for the material, product, or service to be procured. Such description must not, in competitive procurements, contain features which unduly restrict competition. The description may include a statement of the qualitative nature of the material, product or service to be procured and, when necessary, must set forth those minimum essential characteristics and standards to which it must conform if it is to satisfy its intended use. Detailed product specifications should be avoided if at all possible. When it is impractical or uneconomical to make a clear and accurate description of the technical requirements, a “brand name or equivalent” description may be used as a means to define the performance or other salient requirements of procurement. The specific features of the named brand which must be met by offers must be clearly stated; and

(2) Identify all requirements which the offerors must fulfill and all other factors to be used in evaluating bids or proposals.

(d) The non-Federal entity must ensure that all prequalified lists of persons, firms, or products which are used in acquiring goods and services are current and include enough qualified sources to ensure maximum open and free competition. Also, the non-Federal entity must not preclude potential bidders from qualifying during the solicitation period.

[78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75885, Dec. 19, 2014]

§200.320 Methods of procurement to be followed.

The non-Federal entity must use one of the following methods of procurement.

(a) Procurement by micro-purchases. Procurement by micro-purchase is the acquisition of supplies or services, the aggregate dollar amount of which does not exceed the micro-purchase threshold (§200.67 Micro-purchase). To the extent practicable, the non-Federal entity must distribute micro-purchases equitably among qualified suppliers. Micro-purchases may be awarded without soliciting competitive quotations if the non-Federal entity considers the price to be reasonable.

(b) Procurement by small purchase procedures. Small purchase procedures are those relatively simple and informal procurement methods for securing services, supplies, or other property that do not cost more than the Simplified Acquisition Threshold. If small purchase procedures are used, price or rate quotations must be obtained from an adequate number of qualified sources.

(c) Procurement by sealed bids (formal advertising). Bids are publicly solicited and a firm fixed price contract (lump sum or unit price) is awarded to the responsible bidder whose bid, conforming with all the material terms and conditions of the invitation for bids, is the lowest in price. The sealed bid method is the preferred method for procuring construction, if the conditions in paragraph (c)(1) of this section apply.

- (1) In order for sealed bidding to be feasible, the following conditions should be present:
 - (i) A complete, adequate, and realistic specification or purchase description is available;
 - (ii) Two or more responsible bidders are willing and able to compete effectively for the business; and
 - (iii) The procurement lends itself to a firm fixed price contract and the selection of the successful bidder can be made principally on the basis of price.
- (2) If sealed bids are used, the following requirements apply:
 - (i) Bids must be solicited from an adequate number of known suppliers, providing them sufficient response time prior to the date set for opening the bids, for state, local, and tribal governments, the invitation for bids must be publically advertised;
 - (ii) The invitation for bids, which will include any specifications and pertinent attachments, must define the items or services in order for the bidder to properly respond;
 - (iii) All bids will be opened at the time and place prescribed in the invitation for bids, and for local and tribal governments, the bids must be opened publicly;
 - (iv) A firm fixed price contract award will be made in writing to the lowest responsive and responsible bidder. Where specified in bidding documents, factors such as discounts, transportation cost, and life cycle costs must be considered in determining which bid is lowest. Payment discounts will only be used to determine the low bid when prior experience indicates that such discounts are usually taken advantage of; and
 - (v) Any or all bids may be rejected if there is a sound documented reason.

(d) Procurement by competitive proposals. The technique of competitive proposals is normally conducted with more than one source submitting an offer, and either a fixed price or cost-reimbursement type contract is awarded. It is generally used when conditions are not appropriate for the use of sealed bids. If this method is used, the following requirements apply:

- (1) Requests for proposals must be publicized and identify all evaluation factors and their relative importance. Any response to publicized requests for proposals must be considered to the maximum extent practical;
- (2) Proposals must be solicited from an adequate number of qualified sources;
- (3) The non-Federal entity must have a written method for conducting technical evaluations of the proposals received and for selecting recipients;
- (4) Contracts must be awarded to the responsible firm whose proposal is most advantageous to the program, with price and other factors considered; and
- (5) The non-Federal entity may use competitive proposal procedures for qualifications-based procurement of architectural/engineering (A/E) professional services whereby competitors' qualifications are evaluated and the most qualified competitor is selected,

subject to negotiation of fair and reasonable compensation. The method, where price is not used as a selection factor, can only be used in procurement of A/E professional services. It cannot be used to purchase other types of services though A/E firms are a potential source to perform the proposed effort.

(e) [Reserved]

(f) Procurement by noncompetitive proposals. Procurement by noncompetitive proposals is procurement through solicitation of a proposal from only one source and may be used only when one or more of the following circumstances apply:

- (1) The item is available only from a single source;
- (2) The public exigency or emergency for the requirement will not permit a delay resulting from competitive solicitation;
- (3) The Federal awarding agency or pass-through entity expressly authorizes noncompetitive proposals in response to a written request from the non-Federal entity; or
- (4) After solicitation of a number of sources, competition is determined inadequate.

[78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75885, Dec. 19, 2014]

§200.321 Contracting with small and minority businesses, women's business enterprises, and labor surplus area firms.

(a) The non-Federal entity must take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible.

(b) Affirmative steps must include:

- (1) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
- (2) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
- (3) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
- (4) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;
- (5) Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce; and
- (6) Requiring the prime contractor, if subcontracts are to be let, to take the affirmative steps listed in paragraphs (1) through (5) of this section.

§200.322 Procurement of recovered materials.

A non-Federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

[78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75885, Dec. 19, 2014]

§200.323 Contract cost and price.

- (a) The non-Federal entity must perform a cost or price analysis in connection with every procurement action in excess of the Simplified Acquisition Threshold including contract modifications. The method and degree of analysis is dependent on the facts surrounding the particular procurement situation, but as a starting point, the non-Federal entity must make independent estimates before receiving bids or proposals.
- (b) The non-Federal entity must negotiate profit as a separate element of the price for each contract in which there is no price competition and in all cases where cost analysis is performed. To establish a fair and reasonable profit, consideration must be given to the complexity of the work to be performed, the risk borne by the contractor, the contractor's investment, the amount of subcontracting, the quality of its record of past performance, and industry profit rates in the surrounding geographical area for similar work.
- (c) Costs or prices based on estimated costs for contracts under the Federal award are allowable only to the extent that costs incurred or cost estimates included in negotiated prices would be allowable for the non-Federal entity under Subpart E—Cost Principles of this part. The non-Federal entity may reference its own cost principles that comply with the Federal cost principles.
- (d) The cost plus a percentage of cost and percentage of construction cost methods of contracting must not be used.

§200.324 Federal awarding agency or pass-through entity review.

- (a) The non-Federal entity must make available, upon request of the Federal awarding agency or pass-through entity, technical specifications on proposed procurements where the Federal awarding agency or pass-through entity believes such review is needed to ensure that the item or service specified is the one being proposed for acquisition. This review generally will take place prior to the time the specification is incorporated into a solicitation document. However, if the non-Federal entity desires to have the review accomplished after a solicitation has been

developed, the Federal awarding agency or pass-through entity may still review the specifications, with such review usually limited to the technical aspects of the proposed purchase.

(b) The non-Federal entity must make available upon request, for the Federal awarding agency or pass-through entity pre-procurement review, procurement documents, such as requests for proposals or invitations for bids, or independent cost estimates, when:

- (1) The non-Federal entity's procurement procedures or operation fails to comply with the procurement standards in this part;
- (2) The procurement is expected to exceed the Simplified Acquisition Threshold and is to be awarded without competition or only one bid or offer is received in response to a solicitation;
- (3) The procurement, which is expected to exceed the Simplified Acquisition Threshold, specifies a "brand name" product;
- (4) The proposed contract is more than the Simplified Acquisition Threshold and is to be awarded to other than the apparent low bidder under a sealed bid procurement; or
- (5) A proposed contract modification changes the scope of a contract or increases the contract amount by more than the Simplified Acquisition Threshold.

(c) The non-Federal entity is exempt from the pre-procurement review in paragraph (b) of this section if the Federal awarding agency or pass-through entity determines that its procurement systems comply with the standards of this part.

- (1) The non-Federal entity may request that its procurement system be reviewed by the Federal awarding agency or pass-through entity to determine whether its system meets these standards in order for its system to be certified. Generally, these reviews must occur where there is continuous high-dollar funding, and third party contracts are awarded on a regular basis;
- (2) The non-Federal entity may self-certify its procurement system. Such self-certification must not limit the Federal awarding agency's right to survey the system. Under a self-certification procedure, the Federal awarding agency may rely on written assurances from the non-Federal entity that it is complying with these standards. The non-Federal entity must cite specific policies, procedures, regulations, or standards as being in compliance with these requirements and have its system available for review.

§200.325 Bonding requirements.

For construction or facility improvement contracts or subcontracts exceeding the Simplified Acquisition Threshold, the Federal awarding agency or pass-through entity may accept the bonding policy and requirements of the non-Federal entity provided that the Federal awarding agency or pass-through entity has made a determination that the Federal interest is adequately protected. If such a determination has not been made, the minimum requirements must be as follows:

(a) A bid guarantee from each bidder equivalent to five percent of the bid price. The “bid guarantee” must consist of a firm commitment such as a bid bond, certified check, or other negotiable instrument accompanying a bid as assurance that the bidder will, upon acceptance of the bid, execute such contractual documents as may be required within the time specified.

(b) A performance bond on the part of the contractor for 100 percent of the contract price. A “performance bond” is one executed in connection with a contract to secure fulfillment of all the contractor's obligations under such contract.

(c) A payment bond on the part of the contractor for 100 percent of the contract price. A “payment bond” is one executed in connection with a contract to assure payment as required by law of all persons supplying labor and material in the execution of the work provided for in the contract.

§200.326 Contract provisions.

The non-Federal entity's contracts must contain the applicable provisions described in Appendix II to Part 200—Contract Provisions for non-Federal Entity Contracts Under Federal Awards.

4. EQUIPMENT (2 CFR §200.313)

See also §200.439 Equipment and other capital expenditures.

(a) Title. Subject to the obligations and conditions set forth in this section, title to equipment acquired under a Federal award will vest upon acquisition in the non-Federal entity. Unless a statute specifically authorizes the Federal agency to vest title in the non-Federal entity without further obligation to the Federal Government, and the Federal agency elects to do so, the title must be a conditional title. Title must vest in the non-Federal entity subject to the following conditions:

- (1) Use the equipment for the authorized purposes of the project during the period of performance, or until the property is no longer needed for the purposes of the project.
- (2) Not encumber the property without approval of the Federal awarding agency or pass-through entity.
- (3) Use and dispose of the property in accordance with paragraphs (b), (c) and (e) of this section.

(b) A state must use, manage and dispose of equipment acquired under a Federal award by the state in accordance with state laws and procedures. Other non-Federal entities must follow paragraphs (c) through (e) of this section.

(c) Use.

- (1) Equipment must be used by the non-Federal entity in the program or project for which it was acquired as long as needed, whether or not the project or program continues to be supported by the Federal award, and the non-Federal entity must not encumber the property without prior approval of the Federal awarding agency. When no longer needed

for the original program or project, the equipment may be used in other activities supported by the Federal awarding agency, in the following order of priority:

- (i) Activities under a Federal award from the Federal awarding agency which funded the original program or project, then
- (ii) Activities under Federal awards from other Federal awarding agencies. This includes consolidated equipment for information technology systems.

(2) During the time that equipment is used on the project or program for which it was acquired, the non-Federal entity must also make equipment available for use on other projects or programs currently or previously supported by the Federal Government, provided that such use will not interfere with the work on the projects or program for which it was originally acquired. First preference for other use must be given to other programs or projects supported by Federal awarding agency that financed the equipment and second preference must be given to programs or projects under Federal awards from other Federal awarding agencies. Use for non-federally-funded programs or projects is also permissible. User fees should be considered if appropriate.

(3) Notwithstanding the encouragement in §200.307 Program income to earn program income, the non-Federal entity must not use equipment acquired with the Federal award to provide services for a fee that is less than private companies charge for equivalent services unless specifically authorized by Federal statute for as long as the Federal Government retains an interest in the equipment.

(4) When acquiring replacement equipment, the non-Federal entity may use the equipment to be replaced as a trade-in or sell the property and use the proceeds to offset the cost of the replacement property.

(d) Management requirements. Procedures for managing equipment (including replacement equipment), whether acquired in whole or in part under a Federal award, until disposition takes place will, as a minimum, meet the following requirements:

- (1) Property records must be maintained that include a description of the property, a serial number or other identification number, the source of funding for the property (including the FAIN), who holds title, the acquisition date, and cost of the property, percentage of Federal participation in the project costs for the Federal award under which the property was acquired, the location, use and condition of the property, and any ultimate disposition data including the date of disposal and sale price of the property.
- (2) A physical inventory of the property must be taken and the results reconciled with the property records at least once every two years.
- (3) A control system must be developed to ensure adequate safeguards to prevent loss, damage, or theft of the property. Any loss, damage, or theft must be investigated.
- (4) Adequate maintenance procedures must be developed to keep the property in good condition.
- (5) If the non-Federal entity is authorized or required to sell the property, proper sales procedures must be established to ensure the highest possible return.

(e) Disposition. When original or replacement equipment acquired under a Federal award is no longer needed for the original project or program or for other activities currently or previously supported by a Federal awarding agency, except as otherwise provided in Federal statutes, regulations, or Federal awarding agency disposition instructions, the non-Federal entity must request disposition instructions from the Federal awarding agency if required by the terms and conditions of the Federal award. Disposition of the equipment will be made as follows, in accordance with Federal awarding agency disposition instructions:

(1) Items of equipment with a current per unit fair market value of \$5,000 or less may be retained, sold or otherwise disposed of with no further obligation to the Federal awarding agency.

(2) Except as provided in §200.312 Federally-owned and exempt property, paragraph (b), or if the Federal awarding agency fails to provide requested disposition instructions within 120 days, items of equipment with a current per-unit fair-market value in excess of \$5,000 may be retained by the non-Federal entity or sold. The Federal awarding agency is entitled to an amount calculated by multiplying the current market value or proceeds from sale by the Federal awarding agency's percentage of participation in the cost of the original purchase. If the equipment is sold, the Federal awarding agency may permit the non-Federal entity to deduct and retain from the Federal share \$500 or ten percent of the proceeds, whichever is less, for its selling and handling expenses.

(3) The non-Federal entity may transfer title to the property to the Federal Government or to an eligible third party provided that, in such cases, the non-Federal entity must be entitled to compensation for its attributable percentage of the current fair market value of the property.

(4) In cases where a non-Federal entity fails to take appropriate disposition actions, the Federal awarding agency may direct the non-Federal entity to take disposition actions.

[78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75884, Dec. 19, 2014]

5. SUPPLIES (2 CFR §200.314)

See also §200.453 Materials and supplies costs, including costs of computing devices.

(a) Title to supplies will vest in the non-Federal entity upon acquisition. If there is a residual inventory of unused supplies exceeding \$5,000 in total aggregate value upon termination or completion of the project or program and the supplies are not needed for any other Federal award, the non-Federal entity must retain the supplies for use on other activities or sell them, but must, in either case, compensate the Federal Government for its share. The amount of compensation must be computed in the same manner as for equipment. See §200.313 Equipment, paragraph (e)(2) for the calculation methodology.

(b) As long as the Federal Government retains an interest in the supplies, the non-Federal entity must not use supplies acquired under a Federal award to provide services to other organizations for a fee that is less than private companies charge for equivalent services, unless specifically authorized by Federal statute.

6. INSPECTION

Reclamation has the right to inspect and evaluate the work performed or being performed under this Agreement, and the premises where the work is being performed, at all reasonable times and in a manner that will not unduly delay the work. If Reclamation performs inspection or evaluation on the premises of the Recipient or a sub-Recipient, the Recipient shall furnish and shall require sub-recipients to furnish all reasonable facilities and assistance for the safe and convenient performance of these duties.

7. AUDIT REQUIREMENTS (2 CFR Subpart F §200.501)

(a) Audit required. A non-Federal entity that expends \$750,000 or more during the non-Federal entity's fiscal year in Federal awards must have a single or program-specific audit conducted for that year in accordance with the provisions of this part.

(b) Single audit. A non-Federal entity that expends \$750,000 or more during the non-Federal entity's fiscal year in Federal awards must have a single audit conducted in accordance with §200.514 Scope of audit except when it elects to have a program-specific audit conducted in accordance with paragraph (c) of this section.

(c) Program-specific audit election. When an auditee expends Federal awards under only one Federal program (excluding R&D) and the Federal program's statutes, regulations, or the terms and conditions of the Federal award do not require a financial statement audit of the auditee, the auditee may elect to have a program-specific audit conducted in accordance with §200.507 Program-specific audits. A program-specific audit may not be elected for R&D unless all of the Federal awards expended were received from the same Federal agency, or the same Federal agency and the same pass-through entity, and that Federal agency, or pass-through entity in the case of a subrecipient, approves in advance a program-specific audit.

(d) Exemption when Federal awards expended are less than \$750,000. A non-Federal entity that expends less than \$750,000 during the non-Federal entity's fiscal year in Federal awards is exempt from Federal audit requirements for that year, except as noted in §200.503 Relation to other audit requirements, but records must be available for review or audit by appropriate officials of the Federal agency, pass-through entity, and Government Accountability Office (GAO).

(e) Federally Funded Research and Development Centers (FFRDC). Management of an auditee that owns or operates a FFRDC may elect to treat the FFRDC as a separate entity for purposes of this part.

(f) Subrecipients and Contractors. An auditee may simultaneously be a recipient, a subrecipient, and a contractor. Federal awards expended as a recipient or a subrecipient are subject to audit under this part. The payments received for goods or services provided as a contractor are not Federal awards. Section §200.330 Subrecipient and contractor determinations sets forth the considerations in determining whether payments constitute a Federal award or a payment for goods or services provided as a contractor.

(g) Compliance responsibility for contractors. In most cases, the auditee's compliance responsibility for contractors is only to ensure that the procurement, receipt, and payment for goods and services comply with Federal statutes, regulations, and the terms and conditions of Federal awards. Federal award compliance requirements normally do not pass through to contractors. However, the auditee is responsible for ensuring compliance for procurement transactions which are structured such that the contractor is responsible for program compliance or the contractor's records must be reviewed to determine program compliance. Also, when these procurement transactions relate to a major program, the scope of the audit must include determining whether these transactions are in compliance with Federal statutes, regulations, and the terms and conditions of Federal awards.

(h) For-profit subrecipient. Since this part does not apply to for-profit subrecipients, the pass-through entity is responsible for establishing requirements, as necessary, to ensure compliance by for-profit subrecipients. The agreement with the for-profit subrecipient must describe applicable compliance requirements and the for-profit subrecipient's compliance responsibility. Methods to ensure compliance for Federal awards made to for-profit subrecipients may include pre-award audits, monitoring during the agreement, and post-award audits. See also §200.331 Requirements for pass-through entities.

[78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75887, Dec. 19, 2014]

8. REMEDIES FOR NONCOMPLIANCE (2 CFR §200.338)

§200.338 Remedies for noncompliance.

If a non-Federal entity fails to comply with Federal statutes, regulations or the terms and conditions of a Federal award, the Federal awarding agency or pass-through entity may impose additional conditions, as described in §200.207 Specific conditions. If the Federal awarding agency or pass-through entity determines that noncompliance cannot be remedied by imposing additional conditions, the Federal awarding agency or pass-through entity may take one or more of the following actions, as appropriate in the circumstances:

- (a) Temporarily withhold cash payments pending correction of the deficiency by the non-Federal entity or more severe enforcement action by the Federal awarding agency or pass-through entity.
- (b) Disallow (that is, deny both use of funds and any applicable matching credit for) all or part of the cost of the activity or action not in compliance.
- (c) Wholly or partly suspend or terminate the Federal award.
- (d) Initiate suspension or debarment proceedings as authorized under 2 CFR part 180 and Federal awarding agency regulations (or in the case of a pass-through entity, recommend such a proceeding be initiated by a Federal awarding agency).
- (e) Withhold further Federal awards for the project or program.

(f) Take other remedies that may be legally available.

9. TERMINATION (2 CFR §200.339)

(a) The Federal award may be terminated in whole or in part as follows:

(1) By the Federal awarding agency or pass-through entity, if a non-Federal entity fails to comply with the terms and conditions of a Federal award;

(2) By the Federal awarding agency or pass-through entity for cause;

(3) By the Federal awarding agency or pass-through entity with the consent of the non-Federal entity, in which case the two parties must agree upon the termination conditions, including the effective date and, in the case of partial termination, the portion to be terminated; or

(4) By the non-Federal entity upon sending to the Federal awarding agency or pass-through entity written notification setting forth the reasons for such termination, the effective date, and, in the case of partial termination, the portion to be terminated. However, if the Federal awarding agency or pass-through entity determines in the case of partial termination that the reduced or modified portion of the Federal award or subaward will not accomplish the purposes for which the Federal award was made, the Federal awarding agency or pass-through entity may terminate the Federal award in its entirety.

(b) When a Federal award is terminated or partially terminated, both the Federal awarding agency or pass-through entity and the non-Federal entity remain responsible for compliance with the requirements in §§200.343 Closeout and 200.344 Post-closeout adjustments and continuing responsibilities.

10. DEBARMENT AND SUSPENSION (2 CFR §1400)

The Department of the Interior regulations at 2 CFR 1400—Governmentwide Debarment and Suspension (Nonprocurement), which adopt the common rule for the governmentwide system of debarment and suspension for nonprocurement activities, are hereby incorporated by reference and made a part of this Agreement. By entering into this grant or cooperative Agreement with the Bureau of Reclamation, the Recipient agrees to comply with 2 CFR 1400, Subpart C, and agrees to include a similar term or condition in all lower-tier covered transactions. These regulations are available at <http://www.gpoaccess.gov/ecfr/>.

11. DRUG-FREE WORKPLACE (2 CFR §182 and §1401)

The Department of the Interior regulations at 2 CFR 1401—Governmentwide Requirements for Drug-Free Workplace (Financial Assistance), which adopt the portion of the Drug-Free Workplace Act of 1988 (41 U.S.C. 701 et seq., as amended) applicable to grants and cooperative agreements, are hereby incorporated by reference and made a part of this agreement. By entering into this grant or cooperative agreement with the Bureau of Reclamation, the Recipient agrees to comply with 2 CFR 182.

12. ASSURANCES AND CERTIFICATIONS INCORPORATED BY REFERENCE

The provisions of the Assurances, SF 424B or SF 424D as applicable, executed by the Recipient in connection with this Agreement shall apply with full force and effect to this Agreement. All anti-discrimination and equal opportunity statutes, regulations, and Executive Orders that apply to the expenditure of funds under Federal contracts, grants, and cooperative Agreements, loans, and other forms of Federal assistance. The Recipient shall comply with Title VI or the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, and any program-specific statutes with anti-discrimination requirements. The Recipient shall comply with civil rights laws including, but not limited to, the Fair Housing Act, the Fair Credit Reporting Act, the Americans with Disabilities Act, Title VII of the Civil Rights Act of 1964, the Equal Educational Opportunities Act, the Age Discrimination in Employment Act, and the Uniform Relocation Act.

Such Assurances also include, but are not limited to, the promise to comply with all applicable Federal statutes and orders relating to nondiscrimination in employment, assistance, and housing; the Hatch Act; Federal wage and hour laws and regulations and work place safety standards; Federal environmental laws and regulations and the Endangered Species Act; and Federal protection of rivers and waterways and historic and archeological preservation.

13. COVENANT AGAINST CONTINGENT FEES

The Recipient warrants that no person or agency has been employed or retained to solicit or secure this Agreement upon an Agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide offices established and maintained by the Recipient for the purpose of securing Agreements or business. For breach or violation of this warranty, the Government shall have the right to annul this Agreement without liability or, in its discretion, to deduct from the Agreement amount, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

14. TRAFFICKING VICTIMS PROTECTION ACT OF 2000 (2 CFR §175.15)

Trafficking in persons.

(a) *Provisions applicable to a recipient that is a private entity.*

(1) You as the recipient, your employees, subrecipients under this award, and subrecipients' employees may not

(i) Engage in severe forms of trafficking in persons during the period of time that the award is in effect;

(ii) Procure a commercial sex act during the period of time that the award is in effect; or

(iii) Use forced labor in the performance of the award or subawards under the award.

(2) We as the Federal awarding agency may unilaterally terminate this award, without penalty, if you or a subrecipient that is a private entity —

(i) Is determined to have violated a prohibition in paragraph a.1 of this award term; or

(ii) Has an employee who is determined by the agency official authorized to terminate the award to have violated a prohibition in paragraph a.1 of this award term through conduct that is either:

(A) Associated with performance under this award; or

(B) Imputed to you or the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, "OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)," as implemented by our agency at 2 *CFR part 1400*.

(b) *Provision applicable to a recipient other than a private entity.* We as the Federal awarding agency may unilaterally terminate this award, without penalty, if a subrecipient that is a private entity—

(1) Is determined to have violated an applicable prohibition in paragraph a.1 of this award term; or

(2) Has an employee who is determined by the agency official authorized to terminate the award to have violated an applicable prohibition in paragraph a.1 of this award term through conduct that is either:

(i) Associated with performance under this award; or

(ii) Imputed to the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, "OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)," as implemented by our agency at 2 *CFR part 1400*.

(c) *Provisions applicable to any recipient.*

(1) You must inform us immediately of any information you receive from any source alleging a violation of a prohibition in paragraph a.1 of this award term.

(2) Our right to terminate unilaterally that is described in paragraph a.2 or b of this section:

(i) Implements section 106(g) of the Trafficking Victims Protection Act of 2000 (TVPA), as amended (22 U.S.C. 7104(g)), and

(ii) Is in addition to all other remedies for noncompliance that are available to us under this award.

(3) You must include the requirements of paragraph a.1 of this award term in any subaward you make to a private entity.

(d) *Definitions.* For purposes of this award term:

(1) "Employee" means either:

(i) An individual employed by you or a subrecipient who is engaged in the performance of the project or program under this award; or

(ii) Another person engaged in the performance of the project or program under this award and not compensated by you including, but not limited to, a volunteer or individual

whose services are contributed by a third party as an in-kind contribution toward cost sharing or matching requirements.

(2) “Forced labor” means labor obtained by any of the following methods: the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.

(3) “Private entity”:

(i) Means any entity other than a state, local government, Indian tribe, or foreign public entity, as those terms are defined in 2 CFR 175.25.

(ii) Includes:

(A) A nonprofit organization, including any nonprofit institution of higher education, hospital, or tribal organization other than one included in the definition of Indian tribe at 2 CFR 175.25(b).

(B) A for-profit organization.

(4) “Severe forms of trafficking in persons,” “commercial sex act,” and “coercion” have the meanings given at section 103 of the TVPA, as amended (22 U.S.C. 7102).

15. NEW RESTRICTIONS ON LOBBYING (43 CFR §18)

The Recipient agrees to comply with 43 CFR 18, New Restrictions on Lobbying, including the following certification:

(a) No Federal appropriated funds have been paid or will be paid, by or on behalf of the Recipient, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(b) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, “Disclosure Form to Report Lobbying” in accordance with its instructions.

(c) The Recipient shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who

fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

16. UNIFORM RELOCATION ASSISTANCE AND REAL PROPERTY ACQUISITION POLICIES ACT OF 1970 (URA) (42 USC § 4601 *et seq.*)

- (a) The Uniform Relocation Assistance Act (URA), 42 U.S.C. § 4601 *et seq.*, as amended, requires certain assurances for Reclamation funded land acquisition projects conducted by a Recipient that cause the displacement of persons, businesses, or farm operations. Because Reclamation funds only support acquisition of property or interests in property from willing sellers, it is not anticipated that Reclamation funds will result in any “displaced persons,” as defined under the URA.
- (b) However, if Reclamation funds are used for the acquisition of real property that results in displacement, the URA requires Recipients to ensure that reasonable relocation payments and other remedies will be provided to any displaced person. Further, when acquiring real property, Recipients must be guided, to the greatest extent practicable, by the land acquisition policies in 42 U.S.C. § 4651.
- (c) Exemptions to the URA and 49 CFR Part 24
 - (1) The URA provides for an exemption to the appraisal, review and certification rules for those land acquisitions classified as “voluntary transactions.” Such “voluntary transactions” are classified as those that do not involve an exercise of eminent domain authority on behalf of a Recipient, and must meet the conditions specified at 49 CFR § 24.101(b)(1)(i)-(iv).
 - (2) For any land acquisition undertaken by a Recipient that receives Reclamation funds, but does not have authority to acquire the real property by eminent domain, to be exempt from the requirements of 49 CFR Part 24 the Recipient must:
 - (i) provide written notification to the owner that it will not acquire the property in the event negotiations fail to result in an amicable agreement, and;
 - (ii) inform the owner in writing of what it believes to be the market value of the property
- (d) Review of Land Acquisition Appraisals. Reclamation reserves the right to review any land appraisal whether or not such review is required under the URA or 49 CFR § 24.104. Such reviews may be conducted by the Department of the Interior’s Appraisal Services Directorate or a Reclamation authorized designee. When Reclamation determines that a review of the original appraisal is necessary, Reclamation will notify the Recipient and provide an estimated completion date of the initial appraisal review.

17. CENTRAL CONTRACTOR REGISTRATION AND UNIVERSAL IDENTIFIER REQUIREMENTS (2 CFR 25, APPENDIX A)

The Central Contractor Registration (CCR) has been migrated to the System for Award Management (SAM). Recipients must continue to comply with the CCR requirements below by maintaining current registration within www.SAM.gov.

A. Requirement for Central Contractor Registration (CCR)

Unless you are exempted from this requirement under 2 CFR 25.110, you as the recipient must maintain the currency of your information in the CCR until you submit the final financial report required under this award or receive the final payment, whichever is later. This requires that you review and update the information at least annually after the initial registration, and more frequently if required by changes in your information or another award term.

B. Requirement for Data Universal Numbering System (DUNS) Numbers

If you are authorized to make subawards under this award, you:

1. Must notify potential subrecipients that no entity (*see* definition in paragraph C of this award term) may receive a subaward from you unless the entity has provided its DUNS number to you.
2. May not make a subaward to an entity unless the entity has provided its DUNS number to you.

C. Definitions

For purposes of this award term:

1. *Central Contractor Registration (CCR)* means the Federal repository into which an entity must provide information required for the conduct of business as a recipient. Additional information about registration procedures may be found at the CCR Internet site (currently at <http://www.ccr.gov>).
2. *Data Universal Numbering System (DUNS) number* means the nine-digit number established and assigned by Dun and Bradstreet, Inc. (D&B) to uniquely identify business entities. A DUNS number may be obtained from D&B by telephone (currently 866-705-5711) or the Internet (currently at <http://fedgov.dnb.com/webform>).
3. *Entity*, as it is used in this award term, means all of the following, as defined at 2 CFR part 25, subpart C:
 - a. A Governmental organization, which is a state, local government, or Indian Tribe;
 - b. A foreign public entity;
 - c. A domestic or foreign nonprofit organization;
 - d. A domestic or foreign for-profit organization; and
 - e. A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.

4. *Subaward*:

- a. This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which you received this award and that you as the recipient award to an eligible subrecipient.
- b. The term does not include your procurement of property and services needed to carry out the project or program (for further explanation, *see* Sec. II.210 of the attachment to OMB Circular A-133, “Audits of States, Local Governments, and Non-Profit Organizations”).
- c. A subaward may be provided through any legal agreement, including an agreement that you consider a contract.

5. *Subrecipient* means an entity that:

- a. Receives a subaward from you under this award; and
- b. Is accountable to you for the use of the Federal funds provided by the subaward.

18. PROHIBITION ON TEXT MESSAGING AND USING ELECTRONIC EQUIPMENT SUPPLIED BY THE GOVERNMENT WHILE DRIVING

Executive Order 13513, *Federal Leadership On Reducing Text Messaging While Driving*, was signed by President Barack Obama on October 1, 2009 (ref: <http://edocket.access.gpo.gov/2009/pdf/E9-24203.pdf>). This Executive Order introduces a Federal Government-wide prohibition on the use of text messaging while driving on official business or while using Government-supplied equipment. Additional guidance enforcing the ban will be issued at a later date. In the meantime, please adopt and enforce policies that immediately ban text messaging while driving company-owned or rented vehicles, government-owned or leased vehicles, or while driving privately owned vehicles when on official government business or when performing any work for or on behalf of the government.

19. REPORTING SUBAWARDS AND EXECUTIVE COMPENSATION (2 CFR 170 APPENDIX A)

I. Reporting Subawards and Executive Compensation.

a. *Reporting of first-tier subawards.*

1. *Applicability.* Unless you are exempt as provided in paragraph d. of this award term, you must report each action that obligates \$25,000 or more in Federal funds that does not include Recovery funds (as defined in section 1512(a)(2) of the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5) for a subaward to an entity (see definitions in paragraph e. of this award term).

2. *Where and when to report.*

- i. You must report each obligating action described in paragraph a.1. of this award term to <http://www.fsrs.gov>.

ii. For subaward information, report no later than the end of the month following the month in which the obligation was made. (For example, if the obligation was made on November 7, 2010, the obligation must be reported by no later than December 31, 2010.)

3. *What to report.* You must report the information about each obligating action that the submission instructions posted at <http://www.fsrs.gov> specify.

b. *Reporting Total Compensation of Recipient Executives.*

1. *Applicability and what to report.* You must report total compensation for each of your five most highly compensated executives for the preceding completed fiscal year, if—

i. the total Federal funding authorized to date under this award is \$25,000 or more;

ii. in the preceding fiscal year, you received—

(A) 80 percent or more of your annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and

(B) \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and

iii. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/excomp.htm>.)

2. *Where and when to report.* You must report executive total compensation described in paragraph b.1. of this award term:

i. As part of your registration profile at <http://www.ccr.gov>.

ii. By the end of the month following the month in which this award is made, and annually thereafter.

c. *Reporting of Total Compensation of Subrecipient Executives.*

1. *Applicability and what to report.* Unless you are exempt as provided in paragraph d. of this award term, for each first-tier subrecipient under this award, you shall report the names and total compensation of each of the subrecipient's five most highly compensated executives for the subrecipient's preceding completed fiscal year, if—

i. in the subrecipient's preceding fiscal year, the subrecipient received—

(A) 80 percent or more of its annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and

(B) \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts), and Federal financial assistance subject to the Transparency Act (and subawards); and

ii. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/execomp.htm>.)

2. *Where and when to report.* You must report subrecipient executive total compensation described in paragraph c.1. of this award term:

i. To the recipient.

ii. By the end of the month following the month during which you make the subaward. For example, if a subaward is obligated on any date during the month of October of a given year (*i.e.*, between October 1 and 31), you must report any required compensation information of the subrecipient by November 30 of that year.

d. *Exemptions*

If, in the previous tax year, you had gross income, from all sources, under \$300,000, you are exempt from the requirements to report:

i. Subawards,

and

ii. The total compensation of the five most highly compensated executives of any subrecipient.

e. *Definitions.* For purposes of this award term:

1. *Entity* means all of the following, as defined in 2 CFR part 25:

i. A Governmental organization, which is a State, local government, or Indian tribe;

ii. A foreign public entity;

iii. A domestic or foreign nonprofit organization;

iv. A domestic or foreign for-profit organization;

v. A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.

2. *Executive* means officers, managing partners, or any other employees in management positions.

3. *Subaward*:

- i. This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which you received this award and that you as the recipient award to an eligible subrecipient.
- ii. The term does not include your procurement of property and services needed to carry out the project or program (for further explanation, see Sec. ____ .210 of the attachment to OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations").
- iii. A subaward may be provided through any legal agreement, including an agreement that you or a subrecipient considers a contract.

4. *Subrecipient* means an entity that:

- i. Receives a subaward from you (the recipient) under this award; and
- ii. Is accountable to you for the use of the Federal funds provided by the subaward.

5. *Total compensation* means the cash and noncash dollar value earned by the executive during the recipient's or subrecipient's preceding fiscal year and includes the following (for more information see 17 CFR 229.402(c)(2)):

- i. *Salary and bonus*.
- ii. *Awards of stock, stock options, and stock appreciation rights*. Use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Statement of Financial Accounting Standards No. 123 (Revised 2004) (FAS 123R), Shared Based Payments.
- iii. *Earnings for services under non-equity incentive plans*. This does not include group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of executives, and are available generally to all salaried employees.
- iv. *Change in pension value*. This is the change in present value of defined benefit and actuarial pension plans.
- v. *Above-market earnings on deferred compensation which is not tax-qualified*.
- vi. Other compensation, if the aggregate value of all such other compensation (e.g. severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the executive exceeds \$10,000.

20. RECIPIENT EMPLOYEE WHISTLEBLOWER RIGHTS AND REQUIREMENT TO INFORM EMPLOYEES OF WHISTLEBLOWER RIGHTS (SEP 2013)

- (a) This award and employees working on this financial assistance agreement will be subject to the whistleblower rights and remedies in the pilot program on Award Recipient employee whistleblower protections established at 41 U.S.C. 4712 by section 828 of the National Defense Authorization Act for Fiscal Year 2013 (Pub.L. 112-239).
- (b) The Award Recipient shall inform its employees in writing, in the predominant language of the workforce, of employee whistleblower rights and protections under 41 U.S.C 4712.
- (c) The Award Recipient shall insert the substance of this clause, including this paragraph (c), in all subawards or subcontracts over the simplified acquisition threshold. 48 CFR § 52.203-17 (as referenced in 48 CFR § 3.908-9).

21. RECIPIENT INTEGRITY AND PERFORMANCE MATTERS (APPENDIX XII to 2 CFR Part 200)

A. Reporting of Matters Related to Recipient Integrity and Performance

1. General Reporting Requirement

If the total value of your currently active grants, cooperative agreements, and procurement contracts from all Federal awarding agencies exceeds \$10,000,000 for any period of time during the period of performance of this Federal award, then you as the recipient during that period of time must maintain the currency of information reported to the System for Award Management (SAM) that is made available in the designated integrity and performance system (currently the Federal Awardee Performance and Integrity Information System (FAPIIS)) about civil, criminal, or administrative proceedings described in paragraph 2 of this award term and condition. This is a statutory requirement under section 872 of Public Law 110-417, as amended (41 U.S.C. 2313). As required by section 3010 of Public Law 111-212, all information posted in the designated integrity and performance system on or after April 15, 2011, except past performance reviews required for Federal procurement contracts, will be publicly available.

2. Proceedings About Which You Must Report

Submit the information required about each proceeding that:

- a. Is in connection with the award or performance of a grant, cooperative agreement, or procurement contract from the Federal Government;
- b. Reached its final disposition during the most recent five year period; and
- c. Is one of the following:

- (1) A criminal proceeding that resulted in a conviction, as defined in paragraph 5 of this award term and condition;
- (2) A civil proceeding that resulted in a finding of fault and liability and payment of a monetary fine, penalty, reimbursement, restitution, or damages of \$5,000 or more;
- (3) An administrative proceeding, as defined in paragraph 5. of this award term and condition, that resulted in a finding of fault and liability and your payment of either a monetary fine or penalty of \$5,000 or more or reimbursement, restitution, or damages in excess of \$100,000; or
- (4) Any other criminal, civil, or administrative proceeding if:
 - (i) It could have led to an outcome described in paragraph 2.c (1), (2), or (3) of this award term and condition;
 - (ii) It had a different disposition arrived at by consent or compromise with an acknowledgment of fault on your part; and
 - (iii) The requirement in this award term and condition to disclose information about the proceeding does not conflict with applicable laws and regulations.

3. Reporting Procedures

Enter in the SAM Entity Management area the information that SAM requires about each proceeding described in paragraph 2 of this award term and condition. You do not need to submit the information a second time under assistance awards that you received if you already provided the information through SAM because you were required to do so under Federal procurement contracts that you were awarded.

4. Reporting Frequency

During any period of time when you are subject to the requirement in paragraph 1 of this award term and condition, you must report proceedings information through SAM for the most recent five year period, either to report new information about any proceeding(s) that you have not reported previously or affirm that there is no new information to report. Recipients that have Federal contract, grant, and cooperative agreement awards with a cumulative total value greater than \$10,000,000 must disclose semiannually any information about the criminal, civil, and administrative proceedings.

5. Definitions

For purposes of this award term and condition:

- a. Administrative proceeding means a non-judicial process that is adjudicatory in nature in order to make a determination of fault or liability (e.g., Securities and Exchange Commission Administrative proceedings, Civilian Board of Contract Appeals proceedings, and Armed Services Board of Contract Appeals proceedings). This includes proceedings at the Federal and State level but only in connection with performance of a

Federal contract or grant. It does not include audits, site visits, corrective plans, or inspection of deliverables.

b. Conviction, for purposes of this award term and condition, means a judgment or conviction of a criminal offense by any court of competent jurisdiction, whether entered upon a verdict or a plea, and includes a conviction entered upon a plea of nolo contendere.

c. Total value of currently active grants, cooperative agreements, and procurement contracts includes—

- (1) Only the Federal share of the funding under any Federal award with a recipient cost share or match; and
- (2) The value of all expected funding increments under a Federal award and options, even if not yet exercised.

SOUTHERN NEVADA WATER AUTHORITY
BOARD OF DIRECTORS
AGENDA ITEM

May 31, 2018

Subject: Amendment	Director's Backup
Petitioner: Julie A. Wilcox, Deputy General Manager, Administration	
Recommendations: That the Board of Directors approve and authorize the General Manager to execute the first amendment to the existing lease agreement between Molasky Center Sign Company, LLC, and the Authority to extend the lease term for two sign locations on the Molasky Corporate Center building through 2022, in the amount of \$7,000 per month, and authorize an increase not to exceed 2 percent for each lease year.	

Fiscal Impact:

Funds requested for current year expenditures are available in the Authority's Operating Budget. Funds for future year expenditures will be budgeted accordingly.

Background:

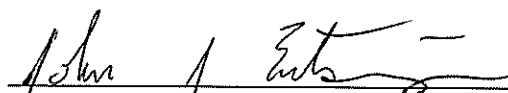
On July 15, 2010, the Board of Directors approved a lease agreement between Molasky Center Sign Company, LLC and the Authority for the use of two billboard signs on the Molasky Corporate Center building. The lease agreement included an initial term of 10 years (with an effective commencement date of December 1, 2007). The Authority has continued to utilize the signage on a month-to-month basis since the expiration of the original term on November 30, 2017, and is recommending an amendment to the lease for continued usage.

The Authority uses the two billboards to promote its conservation programs. The Nevada Department of Transportation reports the 2016 average traffic adjacent to these signs was 170,000 vehicles per day (1.19 million vehicles per week). This premium location in the center of the Las Vegas Valley augments the reach and frequency of the Authority's multi-faceted community outreach initiatives, furthering the agency's ability to reach target audiences and achieve established conservation goals.

At this time, the Board is being asked to approve the amendment of the original lease between the Authority and Molasky Center Sign Company, LLC, and authorize the execution of the amendment.

This amendment is being entered into pursuant Section 6(f) of the SNWA 1995 Amended Cooperative Agreement. The office of the General Counsel has reviewed and approved the amendment.

Respectfully submitted:


John J. Entsminger, General Manager
JJE:JAW:AMB:LS
Attachments

AGENDA
ITEM #

5

DISCLOSURE OF OWNERSHIP/PRINCIPALS

Business Entity Type (Please select one)						
<input type="checkbox"/> Sole Proprietorship	<input type="checkbox"/> Partnership	<input checked="" type="checkbox"/> Limited Liability Company	<input type="checkbox"/> Privately Held Corporation	<input type="checkbox"/> Publicly Held Corporation	<input type="checkbox"/> Trust	<input type="checkbox"/> Non-Profit Organization
<input type="checkbox"/> Other						
Business Designation Group (Please select all that apply)						
<input type="checkbox"/> MBE	<input type="checkbox"/> WBE	<input type="checkbox"/> SBE	<input type="checkbox"/> PBE	<input type="checkbox"/> VET	<input type="checkbox"/> DVET	<input type="checkbox"/> ESB
Minority Business Enterprise	Women-Owned Business Enterprise	Small Business Enterprise	Physically Challenged Business Enterprise	Veteran Owned Business	Disabled Veteran Owned Business	Emerging Small Business
Number of Clark County Nevada Residents Employed: 0						
Corporate/Business Entity Name: Molasky Center Sign Company LLC						
(Include d.b.a., if applicable)						
Street Address:		100 N City Parkway Suite 1700		Website:		
City, State and Zip Code:		Las Vegas, NV 89106		POC Name: Richard Worthington		
Telephone No:		702-735-0155		Email: richw@molaskyco.com		
Nevada Local Street Address:				Fax No: 702-737-7025		
(If different from above)				Website:		
City, State and Zip Code:				Local Fax No:		
Local Telephone No:				Local POC Name:		
				Email:		

All entities, with the exception of publicly-traded corporations and non-profit organizations, must list the names of individuals, either directly or indirectly, holding more than five percent (5%) ownership or financial interest in the business entity appearing before the Board of Directors.

Publicly-traded corporations and non-profit organizations shall list all Corporate Officers and Directors in lieu of disclosing the names of individuals with ownership or financial interest.

Entities include all business associations organized under or governed by Title 7 of the Nevada Revised Statutes, including but not limited to private corporations, close corporations, foreign corporations, limited liability companies, partnerships, limited partnerships, and professional corporations.

Full Name	Title	% Owned (Not required for Publicly Traded Corporations/Non-profit organizations)
Parkway Center, LLC	Nevada Limited Liability Co.	100%

This section is not required for publicly-traded corporations.

1. Are any individual members, partners, owners or principals, involved in the business entity, an Entity full-time employee(s), or appointed/elected official(s)?
☐ Yes ☒ No (If yes, please note that the employee(s), or appointed/elected official(s) may not perform any work on professional service contracts, or other contracts, which are not subject to competitive bid.)
2. Do any individual members, partners, owners or principals have a spouse, registered domestic partner, child, parent, in-law or brother/sister, half-brother/half-sister, grandchild, grandparent, related to an Entity full-time employee(s), or appointed/elected official(s)?
☐ Yes ☒ No (If yes, please complete the Disclosure of Relationship form on Page 2. If no, please print N/A on Page 2.)

I certify under penalty of perjury, that all of the information provided herein is current, complete, and accurate. I also understand that the Board will not take action on any item without the completed disclosure form.

Signature Richard S. Worthington	Richard S. Worthington Print Name
Manager Title	04/23/2018 Date

DISCLOSURE OF RELATIONSHIP

List any disclosures below:
(Mark N/A, if not applicable.)

NAME OF BUSINESS OWNER/PRINCIPAL	NAME OF ENTITY* EMPLOYEE/OFFICIAL AND JOB TITLE	RELATIONSHIP TO ENTITY* EMPLOYEE/OFFICIAL	ENTITY* EMPLOYEE'S/OFFICIAL'S DEPARTMENT
N/A			

* Entity employee means an employee of Las Vegas Valley Water District, Southern Nevada Water Authority, or Silver State Energy Association .

"Consanguinity" is a relationship by blood. "Affinity" is a relationship by marriage.

"To the second degree of consanguinity" applies to the candidate's first and second degree of blood relatives as follows:

- Spouse – Registered Domestic Partners – Children – Parents – In-laws (first degree)
- Brothers/Sisters – Half-Brothers/Half-Sisters – Grandchildren – Grandparents – In-laws (second degree)

For Entity Use Only:

If no Disclosure or Relationship is noted above or the section is marked N/A, please check this box.

☒ No Disclosure

If any Disclosure of Relationship is noted above, please complete the following:

☐ Yes ☐ No Is the Entity employee(s) noted above involved in the contracting/selection process for this particular agenda item?

☐ Yes ☐ No Is the Entity employee(s) noted above involved in any way with the business in performance of the contract?

Notes/Comments:


 Signature
 Andrew M. Belanger
 Print Name
 Authorized Department Representative

FIRST AMENDMENT TO LEASE

THIS FIRST AMENDMENT TO LEASE (this "Amendment") is made and effective as of December 1, 2017, regardless of its date of execution (the "Effective Date"), by and between the Southern Nevada Water Authority, a political subdivision of the State of Nevada ("AUTHORITY") and Molasky Center Sign Company, LLC, a Nevada limited liability company ("MOLASKY", and with AUTHORITY, at times, a "Party", or collectively the "Parties").

RECITALS

A. MOLASKY and AUTHORITY are parties to that certain Lease dated as of June 15, 2010 generally relating to certain signage rights at the Molasky Corporate Center (the "Lease").

B. Pursuant to Section 2 of the Lease, the term of the Lease expired on November 30, 2017 (the "Original Term").

C. Notwithstanding the expiration of the Original Term, the Parties continued to perform under the Lease as a month-to-month tenancy by AUTHORITY, including, without limitation, AUTHORITY'S timely payment of rent to MOLASKY pursuant to Section 3 of the Lease.

D. MOLASKY and AUTHORITY desire to enter into this Amendment to ratify the continuing effectiveness of the Lease, to amend the Lease as necessary to extend the Original Term, and to make certain other amendments to the Lease as set forth in this Amendment.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, the Parties hereto hereby agree as follows:

AGREEMENT

1. Recitals and Definitions. The Recitals to this Amendment are accurate and are incorporated herein by this reference. All capitalized terms not specifically defined in this Amendment shall have the meanings ascribed to them in the Lease.

2. Amendments to the Lease. The Lease is hereby amended as follows:

(a) Amendment to Section 2. Section 2 of the Lease is hereby amended and restated in its entirety to provide as follows:

SECTION TWO TERM

The term of this Lease commenced on December 1, 2007 (the "Commencement Date") and the term of this Lease shall expire, unless sooner terminated pursuant to the terms and conditions of this Lease, on November 30, 2022.

(b) Amendment to Section 3. Section 3 of the Lease is hereby amended and restated in its entirety to provide as follows:

SECTION THREE RENT

AUTHORITY shall pay MOLASKY monthly rent in the amount of Seven Thousand Dollars per month (\$7,000.00/month) on the first day of each month during the term of this Lease. Effective as of December 1, 2018 and each subsequent anniversary of December 1st during the term of this Lease, the monthly rental payable under this Lease shall be increased by Two Percent (2%) over the monthly rental payment payable during the prior lease year. AUTHORITY shall have the option, exercisable in AUTHORITY'S sole discretion, to pre-pay rental for a lease year on or prior to December 1st of each lease year. In addition to the rent required under this Lease, AUTHORITY shall also reimburse MOLASKY for all documented electricity charges attributable to AUTHORITY'S operation of the signs on the Leased Property, as documented by submeter readings. If AUTHORITY shall fail to pay, when the same are due and payable, any rent or other amount or charges to be paid by AUTHORITY hereunder, AUTHORITY shall pay, as additional rent, and in addition to the amounts due: (i) Ten Percent (10%) of the amount due and (ii) interest at a per annum rate of Fifteen Percent (15%) on each such obligation from the day it is due until paid.

(c) General Conforming Amendment to the Lease. The Parties agree that the primary intent of this Amendment is to extend the term of the Lease for a period of Five (5) years from the Effective Date. Accordingly, the Lease is hereby amended as and where necessary to clarify and confirm that the term of the Lease shall continue in full force and effect until 11:59 p.m. on November 30, 2022.

3. Ratification of Lease. The Parties each hereby acknowledge and agree that the Lease remained effective as a month-to-month tenancy following the expiration of the Original Term, and that this Amendment serves to retroactively extend the term of the Lease for a period of five (5) years from the Effective Date regardless of this Amendment's date of execution.

4. Acknowledgement of Payments. MOLASKY hereby acknowledges that AUTHORITY has timely made all required rent payments from the Effective Date until May 31,

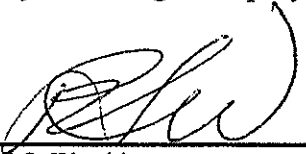
2018, and that the date of the first monthly rental payment owing under the Lease, as amended by this Amendment, is June 1, 2018.

5. Miscellaneous. This Amendment shall be construed, interpreted and enforced under the laws of the State of Nevada. Except as expressly set forth in this Amendment, this Amendment does not alter, amend, or otherwise modify the terms and conditions of the Lease. In the event of any conflict between this Amendment and the Lease, the terms of this Amendment shall control. The Parties agree that neither Party shall be deemed the drafter of this Amendment, and that this Amendment shall not be construed against either Party as the drafter. This Amendment shall be binding upon, and shall inure to the benefit of, the Parties and their respective successors and assigns. This Amendment may be signed in one or more counterparts with the same force and effect as if all required signatures were contained in a single, original instrument.

IN WITNESS WHEREOF, AUTHORITY and MOLASKY have executed this Amendment with the intention that it be effective as of the Effective Date regardless of its date of execution.

Molasky Center Sign Company, LLC

SOUTHERN NEVADA WATER AUTHORITY



Richard S. Worthington
Manager

5/7/18

Date

John J. Entsminger
General Manager

Date

Approved as to form:



Tabitha Fiddymont, Director
Legal Services

SOUTHERN NEVADA WATER AUTHORITY
BOARD OF DIRECTORS
AGENDA ITEM
May 31, 2018

Subject: Agreement	Director's Backup
Petitioner: Julie A. Wilcox, Deputy General Manager, Administration	
Recommendations: That the Board of Directors approve and authorize the General Manager to sign a fiscal partnership and sponsorship agreement between the Water Education Foundation and the Authority to support funding development for the Colorado River Traveling Exhibition and associated education programs.	

Fiscal Impact:

None by approval of the above recommendation.

Background:

The Authority joined federal, state and environmental stakeholders in 2016 to fund development of the Colorado River Conceptual Exhibition Plan. Completed in 2017, the plan summarizes research findings on the size, cost, public interest and feasibility of creating a nationally touring exhibition about the Colorado River. The Conceptual Exhibition Plan provides an overview of preliminary messages and exhibition experiences to expand public knowledge about the river, as well as the complex, interrelated challenges facing nearly 40 million Colorado River water users. A key goal of the project is to connect the Colorado River with the communities it serves and inspire meaningful change that embraces water stewardship for the world's diminishing resources.

As planned, the 7,500 square-foot exhibit will include 5,000 square feet of developed content about the Colorado River and 2,500 square feet of programmable casework that will allow host venues to curate their community's local water story. The \$5.5 million exhibition is expected to reach one million visitors at major museums in 15 cities during its (minimum) five-year tour. Five museums in the states of Nevada, Utah, California, Colorado and Illinois have provided letters of strong interest to host the exhibition, and many more have expressed significant interest. To date, project partners have made funding commitments totaling \$1.5 million.

Approximately \$4.0 million in additional funding is needed to move the project through design and development phases. As project manager, the Authority is pursuing state and federal funds to support the project, but most funding is expected to come from private foundations, corporate sponsors and other donors. To support fundraising success, the Authority is partnering with the Water Education Foundation (Foundation), a 501(c)(3) organization. Under the terms of this agreement, certain donations for the project will be collected, recognized and managed by the Foundation. As fiscal partner and sponsor, the Foundation will receive an amount not to exceed 5 percent or \$140,000 to be paid directly from project donations. The Foundation's portion of

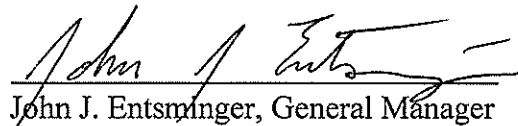
Agreement
May 31, 2018
Page Two

funds will support the Foundation's Colorado River education programs and the balance of funds will be transferred to the Authority to support development of the exhibition project.

If approved, the attached agreement for fiscal partnership and sponsorship would provide terms and conditions for the acquisition and management and disbursement of project funds necessary to move the Colorado River Traveling Exhibition project towards production.

This agreement is being entered into pursuant to NRS 332.115(1)(b) and Section 6(i) of the SNWA 1995 Amended Cooperative Agreement. The office of the General Counsel has reviewed and approved the agreement.

Respectfully submitted:

A handwritten signature in black ink, appearing to read "John J. Entsminger", is written over a horizontal line.

John J. Entsminger, General Manager

JJE:JAW:AJB SH: ajb

Attachments

DISCLOSURE OF OWNERSHIP/PRINCIPALS

Business Entity Type (Please select one)						
<input type="checkbox"/> Sole Proprietorship	<input type="checkbox"/> Partnership	<input type="checkbox"/> Limited Liability Company	<input type="checkbox"/> Privately Held Corporation	<input type="checkbox"/> Publicly Held Corporation	<input type="checkbox"/> Trust	<input checked="" type="checkbox"/> Non-Profit Organization
Business Designation Group (Please select all that apply)						
<input type="checkbox"/> MBE	<input type="checkbox"/> WBE	<input type="checkbox"/> SBE	<input type="checkbox"/> PBE	<input type="checkbox"/> VET	<input type="checkbox"/> DVET	<input type="checkbox"/> ESB
Minority Business Enterprise	Women-Owned Business Enterprise	Small Business Enterprise	Physically Challenged Business Enterprise	Veteran Owned Business	Disabled Veteran Owned Business	Emerging Small Business
Number of Clark County Nevada Residents Employed: 0						
Corporate/Business Entity Name: Water Education Foundation						
(Include d.b.a., if applicable) N/A						
Street Address: 1401 21st St, Suite 210			Website: www.watereducation.org			
City, State and Zip Code: Sacramento, CA 95811			POC Name: Jennifer Bowles			
Telephone No: 916-444-6240			Email: jbowles@watereducation.org			
Nevada Local Street Address: N/A			Fax No: 916-448-7699			
(If different from above)			Website:			
City, State and Zip Code: N/A			Local Fax No:			
Local Telephone No: N/A			Local POC Name:			
			Email:			

All entities, with the exception of publicly-traded corporations and non-profit organizations, must list the names of individuals, either directly or indirectly, holding more than five percent (5%) ownership or financial interest in the business entity appearing before the Board of Directors.

Publicly-traded corporations and non-profit organizations shall list all Corporate Officers and Directors in lieu of disclosing the names of individuals with ownership or financial interest.

Entities include all business associations organized under or governed by Title 7 of the Nevada Revised Statutes, including but not limited to private corporations, close corporations, foreign corporations, limited liability companies, partnerships, limited partnerships, and professional corporations.

Full Name	Title	% Owned (Not required for Publicly Traded Corporations/Non-profit organizations)
N/A		

This section is not required for publicly-traded corporations.

1. Are any individual members, partners, owners or principals, involved in the business entity, an Entity full-time employee(s), or appointed/elected official(s)?

☐ Yes

☐ No

(If yes, please note that the employee(s), or appointed/elected official(s) may not perform any work on professional service contracts, or other contracts, which are not subject to competitive bid.)

2. Do any individual members, partners, owners or principals have a spouse, registered domestic partner, child, parent, in-law or brother/sister, half-brother/half-sister, grandchild, grandparent, related to an Entity full-time employee(s), or appointed/elected official(s)?

☐ Yes

☐ No

(If yes, please complete the Disclosure of Relationship form on Page 2. If no, please print N/A on Page 2.)

I certify under penalty of perjury, that all of the information provided herein is current, complete, and accurate. I also understand that the Board will not take action on any item without the completed disclosure form.

Jennifer Bowles
 Signature
Executive Director
 Title

Jennifer Bowles
 Print Name
5-1-2018
 Date

DISCLOSURE OF RELATIONSHIP

List any disclosures below:
(Mark N/A, if not applicable.)

NAME OF BUSINESS OWNER/PRINCIPAL	NAME OF ENTITY* EMPLOYEE/OFFICIAL AND JOB TITLE	RELATIONSHIP TO ENTITY* EMPLOYEE/ OFFICIAL	ENTITY* EMPLOYEE'S/ OFFICIAL'S DEPARTMENT
N/A			

* Entity employee means an employee of Las Vegas Valley Water District, Southern Nevada Water Authority, or Silver State Energy Association .

"Consanguinity" is a relationship by blood. "Affinity" is a relationship by marriage.

"To the second degree of consanguinity" applies to the candidate's first and second degree of blood relatives as follows:

- Spouse – Registered Domestic Partners – Children – Parents – In-laws (first degree)
- Brothers/Sisters – Half-Brothers/Half-Sisters – Grandchildren – Grandparents – In-laws (second degree)

For Entity Use Only:

If no Disclosure or Relationship is noted above or the section is marked N/A, please check this box.

☒ No Disclosure

If any Disclosure of Relationship is noted above, please complete the following:

☐ Yes ☐ No Is the Entity employee(s) noted above involved in the contracting/selection process for this particular agenda item?

☐ Yes ☐ No Is the Entity employee(s) noted above involved in any way with the business in performance of the contract?

Notes/Comments:


 Signature
 Andrew M. Belanger
 Print Name
 Authorized Department Representative

**=FISCAL PARTNERSHIP AND SPONSORSHIP AGREEMENT BETWEEN THE WATER
EDUCATION FOUNDATION AND THE SOUTHERN NEVADA WATER AUTHORITY**

This Fiscal Partnership and Sponsorship Agreement ("Agreement") is made between the **Water Education Foundation** (the "FOUNDATION"), a California nonprofit public benefit corporation located in Sacramento, California, qualified as exempt from federal income tax under Section 501(c)(3) of the Internal Revenue Code ("IRC") and as exempt from state income tax under California Revenue and Tax Code Section 23701d and classified as a public charity under IRC Sections 509(a)(1) and 170(b)(1)(A)(vi) and the **Southern Nevada Water Authority** (the "AUTHORITY"), a not-for-profit municipal water provider located in Las Vegas, Nevada (referred to collectively herein as (the "Parties").

RECITALS:

WHEREAS, the Colorado River is an essential water resource for the United States, providing municipal, industrial and agricultural water supplies to nearly 40 million users, and

WHEREAS the Colorado River serves as critical habitat for a variety of plants and animals, including threatened and endangered species, and

WHEREAS severe drought has significantly reduced available water supplies in the Colorado River Basin, impacting storage and putting critical water, power infrastructure, and environmental resources at risk, and

WHEREAS all water users will play a critical role in conserving resources, as well as in developing new adaptive behaviors to help ease the effects of drought and extend the availability of limited supplies, and

WHEREAS, the AUTHORITY and other Colorado River Basin stakeholders ("Stakeholders") have contributed time and funding towards raising awareness of these complex, interrelated issues with the goal of improving resiliency to water supply and demand challenges, as well as other related water and environmental resource challenges facing local and regional communities, and

WHEREAS, the FOUNDATION is a non-profit organization whose mission is to create a better understanding of water resources and foster public understanding and resolution of water resource issues through facilitation, education and outreach, and

WHEREAS, the AUTHORITY and the FOUNDATION agree to collaborate with other Stakeholders, to create and tour a traveling exhibition (the "Project") that offers an educational foundation for engaging the public in complex issues surrounding the Colorado River Basin, and inspire meaningful change that embraces water stewardship and respect for the West's limited water resources, and

WHEREAS, the Parties agree that the FOUNDATION will serve as a fiscal partner and sponsor of the Project ("Fiscal Sponsor") effective upon the execution of this Agreement by both Parties.

NOW, THEREFORE, for valuable consideration, receipt and adequacy of which are hereby acknowledged, the FOUNDATION and the AUTHORITY hereby agree as follows:

1. THE PROJECT.

The Project shall consist of a 7,500-square foot traveling exhibition that includes 5,000 square-feet of developed Colorado River content and 2,500 square feet of optional museum components to be curated by host venues for customized regional content, a project website, K-12 educational materials and the

framework for a speaker series (the "Exhibition"). The Exhibition is expected to begin touring in 2022 for an initial five-year period at approximately 15 venues, averaging three locations per year. The cost to develop the Exhibition and associated programs is estimated at \$5.6 million.

For the term of this Agreement and in accordance with Section 3f, the Project description shall further include activities managed by the FOUNDATION, including Lower Colorado River Tours, Colorado River Publications and a biennial Colorado River Symposium.

2. PROJECT PARTNERS; DUTIES OF PROJECT PARTNERS.

The AUTHORITY has entered into various agreements or made other arrangements with federal, state, local, municipal, environmental and non-profit entities working in the Colorado River Basin, including the FOUNDATION, for time and funding contributions to support the Project. These entities ("Project Partners") include representatives from the seven Colorado River Basin states, Springs Preserve Foundation, Central Arizona Water Conservation District, Metropolitan Water District of Southern California, Denver Water, The Audubon Society, and the U.S. Bureau of Reclamation.

- a. Advisory Committee. The FOUNDATION will be invited to designate one (1) representative to participate as a member of the Project's Advisory Committee ("Advisory Committee").
- b. Project Reviews. The FOUNDATION will work with other Project Partners through the Advisory Committee to review reports and draft interpretive plans, with the goal of achieving consensus in all final reports and in the final Exhibition narrative plan prepared by the AUTHORITY (and/or its consultant(s)).
- c. Project Partner Recognition. The FOUNDATION'S participation as a Project Partner shall bear the same weight and recognition as other Project Partners, which share mutual and vested interest in the success of the Project. When practical, Project Partners will be recognized by name, logo representation and/or links to Project Partner websites.

3. SCOPE OF WORK; DUTIES OF THE FISCAL SPONSOR.

The FOUNDATION shall serve as the Fiscal Sponsor and be responsible for the fiscal management of all donations and grants received by the FOUNDATION in support of the Project.

- a. Accounting. The FOUNDATION shall be responsible for the processing, acknowledgment, and depositing of all monies received on behalf of the Project for the AUTHORITY's use in developing the Project (the "Project Funds"), which shall be reported as the income of the FOUNDATION for both tax purposes and for purposes of the FOUNDATION'S financial statements. The FOUNDATION will supply, on an annual basis, standard information required for IRC 501(c)(3) grant applications that the AUTHORITY may duplicate and use to apply for such grant applications. Additional information necessary to complete grant applications or satisfy the request of potential donors will be provided by the FOUNDATION to the AUTHORITY upon written request. The FOUNDATION shall, within ten (10) working days of written request, provide to the AUTHORITY a balance sheet reflecting credits, names of donors and a running balance of the Project Funds.
- b. Reporting. The FOUNDATION shall be responsible for the following reporting:
 - i. Furnish quarterly financial reports to the AUTHORITY within 30 days of the end of each quarter based on the July 1 to June 30 fiscal year, and a year-end report no later than July 30th of each year this Agreement is in effect, including a report of the financial status detailing all Project income and reimbursement for the designated time-period.

- ii. Review, approve and distribute quarterly, annual or other financial and work progress reports prepared by the AUTHORITY to Project donors whose contributions are accounted for by the FOUNDATION. The AUTHORITY will prepare and provide all project information to the FOUNDATION for reporting compliance to Project donors as further described in SECTION 4.
- c. Project Website Integration and Security. The Parties shall share links to their respective websites (www.watereducation.org and www.reachofariver.org), and the FOUNDATION shall develop and maintain an online donor portal for Project contributions and account for and report such contributions in accordance with SECTION 3. Each Party shall be responsible to maintain their respective websites in accordance with all applicable state and federal data security laws.
- d. Social Media. The FOUNDATION may, without compensation, post information about the Project and/or information about the FOUNDATION'S involvement in the Project on their website and social media platforms. Representations about the Project must be consistent with approved design plans/documents and/or other AUTHORITY approved narrative content. New content about the Project developed by the FOUNDATION must be reviewed and approved by the AUTHORITY, in writing, prior to distribution/publication.
- e. Funding Agreements. The FOUNDATION shall enter into funding agreements with private donors ("Funding Agreements"). The FOUNDATION shall draft a form agreement to be approved in writing by the AUTHORITY. Except as otherwise consented to by the Parties, the Funding Agreements shall include a clause stating that, in the event FOUNDATION terminates this Agreement prior to Tour Completion (as Tour Completion is defined in Section 14), remaining Project Funds shall be paid to the AUTHORITY pursuant to Section 14 of this Agreement.
- f. Additional Duties. As the Fiscal Sponsor, The FOUNDATION shall be responsible to perform all tax and regulatory requirements relating to its role as Fiscal Sponsor for the Project, including:
 - i. Manage Project Funds, assets and other resources of the Project within its direct control with the highest degree of responsibility, integrity, transparency and accountability.
 - ii. Manage all administrative duties and responsibilities professionally and with the highest degree of integrity and accountability.
 - iii. Govern ethically, avoiding conflicts of interest in conducting the affairs of the organization and in carrying out its legal, fiduciary and policy making responsibilities.

4. SCOPE OF WORK: DUTIES OF THE PROJECT MANAGER.

The AUTHORITY'S duties shall include, but are not limited to, the following:

- a. Project Management. The AUTHORITY shall serve as the Project Manager for the Project, including developing and managing the project budget, schedule, and coordinating overall work efforts, including hiring and management of any consultants and/or contractors retained to perform work on the Project. The AUTHORITY, or its consultants and/or contractors, will develop, design and fabricate the Exhibition and its accompanying programs, including the development of Exhibition design documents for the production and fabrication of the Exhibition; fabrication of the Exhibition in accordance with the documents; acquisition of space for the Exhibition with museums and other venues located inside and outside the Colorado River Basin; promotion of the Exhibition;

and touring and the disposition of the Exhibition following its planned tour. In addition, the AUTHORITY will manage fund development and advisory committee processes.

- b. Fund Development. The AUTHORITY will lead Project fund development efforts. As part of these duties, the AUTHORITY will create a fund development plan for approval by the FOUNDATION and, upon approval by the FOUNDATION, the AUTHORITY:
 - i. Will develop fund development stationery and informational products for distribution to potential Project donors that include the Parties' respective information, including trademark, agency description and web address, as practical.
 - ii. May solicit gifts, contributions, grants, or other charitable donations for the Project using approved stationary and collateral. The content of solicitations shall be based on the Colorado River Exhibition Conceptual Plan narrative, but may be tailored to meet the application requirements and appeal to the funding interests of potential donors.
 - iii. Will provide notice to the FOUNDATION about any funding solicitation(s) to potential donors within 30 days of such request. All grant agreements, pledges, or other written funding commitments to support the Project shall be jointly approved by the AUTHORITY and the FOUNDATION. Funding agreements through the FOUNDATION shall be entered into and/or executed by the FOUNDATION. All checks for charitable donations to the Project through the FOUNDATION shall be made payable to the FOUNDATION and be designated for Project use only. The AUTHORITY also may solicit and collect Project contributions through the AUTHORITY exclusively. Such funds will be used, managed and accounted for by the AUTHORITY.
- c. Advisory Committee Administration. The AUTHORITY will maintain and administer an Advisory Committee comprised of Project Partners and, in consultation with the Project Partners, may invite additional representatives to participate. The Advisory Committee will be responsible for participating in meetings, reviewing reports and draft interpretive plans. The Advisory Committee will seek to reach consensus in all final reports and in the final Exhibition narrative plan prepared by the AUTHORITY (and/or its consultant(s)).
- d. Reporting. The AUTHORITY shall prepare an annual progress report to the FOUNDATION that summarizes work efforts completed and/or in progress and present the report to the FOUNDATION each year no later than 30 days after June 30th. The AUTHORITY shall also prepare and deliver to the FOUNDATION quarterly, annual or other financial (expense) information and work progress reports for review, approval and distribution to Project donors as required and whose contributions are accounted for by the FOUNDATION.

5. AUTHORIZED REPRESENTATIVES AND NOTICES.

The AUTHORITY has designated an authorized representative to serve as the primary point of contact for the FOUNDATION in serving as the Fiscal Sponsor. The FOUNDATION has designated a similar representative to serve as the primary point of contact for the AUTHORITY.

Any and all notices, demands or requests required or appropriate under this Agreement (including invoices) shall be given in writing and signed by a person with authorization to bind the Parties, either by personal

delivery, via a scanned document sent via email, or by registered or certified mail, return receipt requested, addressed to the following addresses:

To FOUNDATION: Water Education Foundation
 1401 21st Street, Suite 200
 Sacramento, CA 95811
 Attention: Jennifer Bowles, Executive Director
 jbowles@watereducation.org
 916-444-6240

To AUTHORITY: Southern Nevada Water Authority
 1001 S Valley View Blvd.
 Las Vegas, NV 89153
 Attention: Amy Best, Project Manager
 amy.best@snwa.com
 702-258-7117

When notice is given by mail, it shall be deemed served three (3) business days following deposit, postage prepaid in the United States mail. When notice is given by email transmission, it shall be deemed served upon receipt of confirmation of transmission if transmitted during normal business hours or, if not transmitted during normal business hours, on the next business day following the facsimile or email transmission.

The Parties may designate a new contact person under this provision for notices or invoices or change the address, email address or fax number identified above by notifying the other Party in writing.

6. EMPLOYEES AND VOLUNTEERS.

The FOUNDATION shall be responsible for overseeing the activities of FOUNDATION employees and volunteers who perform work on or in relation to the Project. The FOUNDATION'S payroll tax withholding, worker's compensation insurance, unemployment benefits, and personnel policies apply to the Project's staff members who are FOUNDATION employees. Each FOUNDATION employee shall have an employee file on file at the FOUNDATION and will be expected to comply with the processes and requirements outlined in the FOUNDATION's Employee Handbook.

7. INDEPENDENT CONTRACTORS.

Contracts with independent contractors performing work on the Project on behalf of the FOUNDATION must be authorized and executed by the FOUNDATION. All independent contractors must have worker's compensation insurance coverage.

8. ADMINISTRATIVE CHARGE.

a. Charge Amount. FOUNDATION will receive an administrative charge ("Administrative Charge") to cover costs associated with its responsibilities as Fiscal Sponsor and other administrative responsibilities associated with this Agreement. This administrative charge shall be: five percent (5%) of the gross amount of the first One Million Dollars (\$1,000,000.00) in Project Funds received by Sponsor and three percent (3%) of the gross amount of up to Three Million Dollars (\$3,000,000.00) in Project Funds received by

Sponsor thereafter. Unless otherwise agreed by the Parties in writing, the total Administrative Charge shall not exceed One Hundred and Forty Thousand Dollars (\$140,000.00).

b. Administrative Charge Use. The Administrative Charge received by the FOUNDATION pursuant to Section 8(a) will be used to cover costs associated with its responsibilities as Fiscal Sponsor and other administrative responsibilities associated with this Agreement, including helping fund the FOUNDATION's Colorado River Project, which is dedicated to educating people about the challenges facing the Upper and Lower Colorado River Basins and assisting the many stakeholders in the two basins in reaching mutual understandings regarding the health and use of the Colorado River. The project includes the FOUNDATION'S annual Lower Colorado River tour, Colorado River publications, and a biennial Colorado River symposium.

9. INVOICING, REIMBURSEMENT AND PAYMENT OF EXPENSES.

a. Payment of Expenses and Reimbursement. The AUTHORITY shall pay all Project expenses and will invoice the FOUNDATION for reimbursement of such expenses from designated Project Funds held by the FOUNDATION. Reimbursement checks shall be mailed by the FOUNDATION to the AUTHORITY within fifteen (15) business days of written request by the AUTHORITY'S authorized representative. Checks shall be made payable to SOUTHERN NEVADA WATER AUTHORITY.

b. Invoicing. The FOUNDATION shall invoice the AUTHORITY every three months for the Administrative Charge at the amount set forth in Section 8. Reimbursement checks shall be mailed by the AUTHORITY to the FOUNDATION within ten (10) business days of written request by the FOUNDATION's authorized representative. Checks shall be made payable to WATER EDUCATION FOUNDATION.

10. INSPECTION AND AUDIT.

a. Books and Records. Each Party agrees to keep and maintain under general accepted accounting principles full, true and complete records, agreements, books, and documents as are necessary to fully disclose to the State or United States Government, or their authorized representatives, upon audits or reviews, sufficient information to determine compliance with all state and federal regulations and statutes.

b. Inspection & Audit. Each Party agrees that the relevant books, records (written, electronic, computer related or otherwise), including but not limited to relevant accounting procedures and practices of the Party, financial statements and supporting documentation, and documentation related to the work product shall be subject, at any reasonable time, to inspection, examination, review, audit, and copying at any office or location where such records may be found.

c. Period of Retention. All books, records, reports, and statements relevant to this Agreement must be retained a minimum six years. The retention period runs from the date of termination of this Agreement. Retention time shall be extended when an audit is scheduled or in progress for a period reasonably necessary to complete an audit and/or to complete any administrative and judicial litigation which may ensue.

11. REQUESTS FOR INFORMATION.

The AUTHORITY, through its authorized representative, may request information about Project donors, donor reporting requirements, fund balances, check requests and other fiscal matters. All such requests must

be in writing and may be made by mail, facsimile, or e-mail. All requests for clarification, meetings regarding the work of the AUTHORITY or any other matter requiring special attention should be addressed to the Executive Director of the FOUNDATION. The FOUNDATION will respond promptly to the AUTHORITY'S timely written request for information and assistance.

12. NO ATTEMPT TO INFLUENCE LEGISLATION.

The Project is not to be used in any attempt to influence legislation within the meaning of Internal Revenue Code Section 501(c)(3). No agreement, oral or written, to that effect has been made between the FOUNDATION and the AUTHORITY.

13. INDEMNIFICATION.

The FOUNDATION shall, to the fullest extent permitted by law, defend, indemnify and hold harmless the AUTHORITY, its officers, directors, trustees, employees and agents, from and against any and all claims, liabilities, damages, judgments, actions, losses and expenses (including reasonable attorneys' fees) directly, indirectly, wholly or partially arising from or in connection with any act or omission of the FOUNDATION, its employees or agents, in serving as Fiscal Sponsor for the AUTHORITY, except to the extent such claims, liabilities, losses or expenses arise from or in connection with any act or omission of the AUTHORITY, its officers, directors, trustees, employees or agents.

14. DURATION/TERMINATION.

a. Agreement Duration. This Agreement shall be effective upon execution and remain in effect until the Exhibition has completed its tour (estimated completion in 2027) ("Tour Completion"). The date of Tour Completion shall be determined by the AUTHORITY at its sole discretion. The AUTHORITY shall provide notice of the date of Tour Completion to FOUNDATION within 15 calendar days of Tour Completion.

b. Termination. This Agreement shall terminate if either the AUTHORITY or the FOUNDATION can no longer reasonably accomplish their respective duties as described in Section 3 and Section 4 of this Agreement. If the Agreement is terminated after Tour Completion, then all remaining Project Funds held by the FOUNDATION shall be returned to the respective donors

c. Termination for convenience. Prior to Tour Completion, either of the Parties may terminate this Agreement with or without cause upon sixty (60) days' written notice to the other Party. In the event of termination pursuant to this Section 14(c), all Project Funds held by the FOUNDATION and payable to the AUTHORITY shall be remitted to the AUTHORITY for Project use.

15. NON-DISCRIMINATION.

In implementing this Agreement, there shall be no discrimination against anyone engaged in the work because of race, color, ancestry, national origin, religious creed, physical disability, medical condition, marital status, sexual orientation, gender, or age. The FOUNDATION agrees to comply with applicable Federal and Nevada and AUTHORITY policy. The FOUNDATION shall not engage in unlawful discrimination in employment on the basis of actual or perceived race, color, national origin, ancestry, religion, age, marital status, pregnancy, physical or mental disability, medical condition, veteran status, gender, sex or sexual orientation.

16. GOVERNING LAW.

This Agreement shall be governed by and construed in accordance with the laws of the State of Nevada applicable to agreements made and to be enforced entirely within such State.

17. FINAL AGREEMENT.

This Agreement shall supersede any prior oral or written understandings or communications between the Parties and constitutes the entire agreement of the Parties with respect to the subject matter hereof. This Agreement may not be amended or modified, except in a writing signed by both Parties hereto.

18. NO THIRD PARTY RIGHTS.

This Agreement is not intended to and shall not be construed to give any third party any interest or rights (including, without limitation, any third party beneficiary rights) with respect to or in connection with any agreement or provision contained herein or contemplated hereby, except as otherwise expressly provided for in this Agreement.


IN WITNESS WHEREOF, the Parties have executed this Fiscal Sponsorship Agreement effective on the date first written above.

SOUTHERN NEVADA WATER AUTHORITY

John J. Entsminger, General Manager

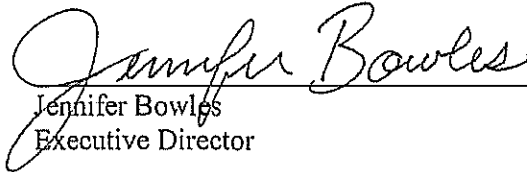
(Date)

Approved as to form by:



5/7/18
(Date)

WATER EDUCATION FOUNDATION


Jennifer Bowles
Executive Director

April 30, 2018
(Date)

SOUTHERN NEVADA WATER AUTHORITY
BOARD OF DIRECTORS
AGENDA ITEM

May 31, 2018

Subject: Resolutions to Submit Grant Proposals	Director's Backup
Petitioner: Julie A. Wilcox, Deputy General Manager, Administration	
Recommendations: That the Board of Directors approve two resolutions authorizing the submission of two grant proposals to the Bureau of Reclamation’s WaterSMART: Water and Energy Efficiency Grant Program, requesting \$300,000 and \$1,000,000, respectively; if either proposal is accepted, the Authority’s matching contribution would be \$3,000,000 or \$10,000,000, respectively.	

Fiscal Impact:

None by approval of the above recommendation. If the Bureau of Reclamation accepts either proposal, a funding agreement will be brought back before the Board of Directors for approval.

Background:

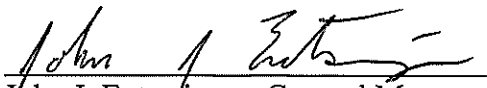
The Bureau of Reclamation (BOR) recently announced funding availability for its WaterSMART: Water and Energy Efficiency Grants Program. This funding is designed to support projects that bank water, conserve water and energy, or generally make more efficient use of existing water supplies.

In accordance with eligibility requirements, the Board of Directors is being asked to approve two resolutions authorizing the submission of two grant proposals to the BOR. The grant proposals will seek \$300,000 and \$1,000,000, respectively, to support funding for the Authority's Water Smart Landscape Rebate Program.

If either of these proposals is accepted by the BOR, a funding agreement will be brought back before the Board for approval at a future meeting.

These resolutions are authorized pursuant to NRS Chapter 277 and Section 6(o) of the SNWA 1995 Amended Cooperative Agreement. The office of the General Counsel has reviewed and approved these resolutions.

Respectfully submitted:



John J. Entsminger, General Manager

JJE:JAW:AMB:CNP:KH:kf

Attachments

AGENDA
ITEM #

7

RESOLUTION IN SUPPORT OF FUNDING REQUEST FOR
WATERSMART: WATER AND ENERGY EFFICIENCY GRANT PROPOSAL TO
THE UNITED STATES BUREAU OF RECLAMATION

WHEREAS, the U.S. Bureau of Reclamation WaterSMART: Water and Energy Efficiency Grants Program is soliciting proposals for and may provide financial assistance to irrigation districts, water districts and other organizations to implement projects that save water, improve energy efficiency, address endangered species and other environmental issues, and facilitate transfers to new uses; and

WHEREAS, the WaterSMART: Water and Energy Efficiency Grant Program specifically allows for project proposals involving an individual sale, lease or exchange of conserved water to another water use for agricultural, municipal or instream uses; and

WHEREAS, the Southern Nevada Water Authority has adopted a Water Resource Plan and a Conservation Plan, which outline specific water conservation strategies; and

WHEREAS, the Southern Nevada Water Authority will benefit significantly from financial assistance under the WaterSMART: Water and Energy Efficiency Grant Program to support water conservation efforts in Southern Nevada.

NOW, THEREFORE, BE IT RESOLVED that the Southern Nevada Water Authority Board of Directors agrees and authorizes:

1. The submission of an application to the U.S. Bureau of Reclamation WaterSMART: Water and Energy Efficiency Grant Program requesting \$300,000 to support the Authority's Water Smart Landscape Rebate Program.
2. The submission of a proposal, including a funding plan that outlines the applicant's ability to provide up to \$3,000,000 in matching funds, as specified by the WaterSMART: Water and Energy Efficiency Grant Program.
3. The Southern Nevada Water Authority's General Manager, or his designee, to execute and file an application and proposal with the U.S. Bureau of Reclamation for funding under the WaterSMART: Water and Energy Efficiency Grant Program, as outlined above.

Introduced and passed this 31st day of May, 2018.


Attest:

Southern Nevada Water Authority

John J. Entsminger, Secretary

Marilyn Kirkpatrick, Chair

Approved as to form:

 4/24/18

Gregory J. Walch, General Counsel

RESOLUTION IN SUPPORT OF FUNDING REQUEST FOR
WATERSMART: WATER AND ENERGY EFFICIENCY GRANT PROPOSAL TO
THE UNITED STATES BUREAU OF RECLAMATION

WHEREAS, the U.S. Bureau of Reclamation WaterSMART: Water and Energy Efficiency Grants Program is soliciting proposals for and may provide financial assistance to irrigation districts, water districts and other organizations to implement projects that save water, improve energy efficiency, address endangered species and other environmental issues, and facilitate transfers to new uses; and

WHEREAS, the WaterSMART: Water and Energy Efficiency Grant Program specifically allows for project proposals involving an individual sale, lease or exchange of conserved water to another water use for agricultural, municipal or instream uses; and

WHEREAS, the Southern Nevada Water Authority has adopted a Water Resource Plan and a Conservation Plan, which outline specific water conservation strategies; and

WHEREAS, the Southern Nevada Water Authority will benefit significantly from financial assistance under the WaterSMART: Water and Energy Efficiency Grant Program to support water conservation efforts in Southern Nevada.

NOW, THEREFORE, BE IT RESOLVED that the Southern Nevada Water Authority Board of Directors agrees and authorizes:

1. The submission of an application to the U.S. Bureau of Reclamation WaterSMART: Water and Energy Efficiency Grant Program requesting \$1,000,000 to support the Authority's Water Smart Landscape Rebate Program.
2. The submission of a proposal, including a funding plan that outlines the applicant's ability to provide up to \$10,000,000 in matching funds, as specified by the WaterSMART: Water and Energy Efficiency Grant Program.
3. The Southern Nevada Water Authority's General Manager, or his designee, to execute and file an application and proposal with the U.S. Bureau of Reclamation for funding under the WaterSMART: Water and Energy Efficiency Grant Program, as outlined above.

Introduced and passed this 31st day of May, 2018.


Attest:

Southern Nevada Water Authority

John J. Entsminger, Secretary

Marilyn Kirkpatrick, Chair

Approved as to form:

 4/24/18

Gregory J. Walch, General Counsel

SOUTHERN NEVADA WATER AUTHORITY
BOARD OF DIRECTORS
AGENDA ITEM

May 31, 2018

Subject: Interlocal Agreement	Director's Backup
Petitioner: David L. Johnson, Deputy General Manager Engineering/Operations	
Recommendations: That the Board of Directors approve and authorize the Chair to sign an interlocal agreement among the City of Henderson, the City of Las Vegas, the City of North Las Vegas, Clark County, the Clark County Regional Flood Control District, the Clark County Water Reclamation District and the Authority to establish funding allocations and the budget for Las Vegas Wash activities in Fiscal Year 2018/19 and to approve the Authority's allocation of \$293,818.	

Fiscal Impact:

The required \$293,818 is included in the Authority's Fiscal Year 2018/19 tentative Operating Budget.

Background:

Since 2001, the Board of Directors has approved an interlocal agreement among the Cities of Henderson, Las Vegas, and North Las Vegas, Clark County, the Clark County Regional Flood Control District, the Clark County Water Reclamation District and the Authority to establish funding allocations and the budget covering each fiscal year for Las Vegas Wash (Wash) activities. The most recent Board approval was on May 18, 2017, for Fiscal Year 2017/18.

To continue the stabilization and enhancement of the Wash, the Authority has completed a budget for capital construction and operations for Fiscal Year 2018/19. An interlocal agreement is attached allocating the monetary resources necessary for Wash operating expenses among the signatories. Funding for Wash capital projects will come from monies generated through the portion of the quarter-cent sales tax allocated to the Wash (4 percent), federal partners and other available sources.

The total Fiscal Year 2018/19 Wash operating budget is \$1,071,545. Grant funding is anticipated in the amount of \$337,000, leaving \$734,545 to be funded locally. The attached agreement provides that 40 percent of the local share (\$293,818) will be paid out of the Authority's Operating Budget using water revenues derived from wholesale delivery charges. The remaining \$440,727 of the local share will be paid as follows: City of Henderson, \$37,021; Clark County Water Reclamation District, \$161,306; City of Las Vegas, \$68,753; City of North Las Vegas, \$26,737; Clark County, \$73,455; and Clark County Regional Flood Control District, \$73,455.

On April 10, 2018, the Las Vegas Valley Watershed Advisory Committee reviewed and approved the Fiscal Year 2018/19 Wash operating budget.

This agreement is being entered into pursuant to NRS 277.180 and Section 6(j) of the SNWA 1995 Amended Cooperative Agreement. The office of the General Counsel has reviewed and approved this agreement.

Respectfully submitted:



John J. Entsminger, General Manager

JJE:DLJ:ZLM:LML:KKC:JR:nh

Attachments

AGENDA
ITEM #

8

INTERLOCAL AGREEMENT AMONG THE CITY OF HENDERSON, CITY OF LAS VEGAS, CITY OF NORTH LAS VEGAS, CLARK COUNTY, CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT, CLARK COUNTY WATER RECLAMATION DISTRICT, AND THE SOUTHERN NEVADA WATER AUTHORITY TO ESTABLISH FUNDING ALLOCATIONS AND THE BUDGET FOR LAS VEGAS WASH ACTIVITIES IN FISCAL YEAR 2018/2019

This Interlocal Agreement is entered into by the City of Henderson; the City of Las Vegas; the City of North Las Vegas; Clark County; the Clark County Regional Flood Control District; the Clark County Water Reclamation District; and, the Southern Nevada Water Authority ("Authority") comprised of Authority "Purveyor Members" (City of Henderson, City of North Las Vegas and the Las Vegas Valley Water District), and the Authority "Wastewater Discharge Members" (City of Henderson, City of Las Vegas, City of North Las Vegas and the Clark County Water Reclamation District) this _____ day of _____, 2018.

WHEREAS, Lake Mead and the Colorado River are the primary source of water for over two million residents of the metropolitan Las Vegas Valley and Laughlin, Nevada; and

WHEREAS, Lake Mead and the Colorado River are a significant source of water for millions of other residents in the Lower Colorado River Basin, including citizens of Arizona, California, and Mexico as well as members of several Native American Tribes; and

WHEREAS, the Las Vegas Wash is comprised of highly treated wastewater flows, urban runoff, shallow ground water, storm water flows, and other flows, all of which run through the single tributary from the urban Las Vegas Valley into Lake Mead; and

WHEREAS, concerns over erosion, water quality, the loss of wetlands, and other issues have made managing the Las Vegas Wash one of the highest environmental priorities for Southern Nevada; and

WHEREAS, the undersigned parties – along with other local, state, and federal entities – embarked on a water quality process in 1997 that included participation in the Lake Mead Water Quality Forum and the formation of a citizens advisory committee which studied various issues related to water quality in the Las Vegas Wash, Las Vegas Bay, and Lake Mead; and

WHEREAS, the citizens advisory committee developed a series of recommendations for protecting and improving water quality, one of which was to develop a comprehensive adaptive management plan for the Las Vegas Wash; and

WHEREAS, following the presentation of the citizen recommendations to the Lake Mead Water Quality Forum and their acceptance by the Authority Board of Directors in 1998, the undersigned parties participated in the Las Vegas Wash Coordination Committee ("LVWCC"), a committee comprised of 29 local, state, federal, environmental, and public representatives; and

WHEREAS, the LVWCC, over a 10-month period and with the support of over 100 staff from participating agencies, developed 44 recommended actions in nine study areas related to the Las Vegas Wash; and

WHEREAS, the LVWCC compiled these recommended actions into the Las Vegas Wash Comprehensive Adaptive Management Plan ("LVWCAMP"), a document that was subsequently approved by the LVWCC in December 1999 and by the Authority Board of Directors in January 2000; and

WHEREAS, in July of 2000, a Sales Tax Allocation Cooperative Agreement was entered into by the Authority and the Wastewater Discharge Agencies represented by the City of Henderson, the City of Las Vegas and the Clark County Water Reclamation District; and

WHEREAS, that Sales Tax Allocation Cooperative Agreement provided that four percent (4%) of the gross revenue from the ¼ cent sales tax provided for by NRS Chapter 377B would be allocated to capital improvements and infrastructure needs in the Las Vegas Wash, and

WHEREAS, in June of 2002, the parties to this agreement entered into a Cooperative Agreement which recognized the Las Vegas Wash Comprehensive Adaptive Management Plan and established a basic understanding of the parties concerning implementation of the plan and their respective roles in that implementation through the Management Advisory Committee (MAC); and

WHEREAS, in November 2007, the parties to this agreement, along with the Clean Water Coalition, entered into an agreement that established the Las Vegas Valley Watershed Advisory Committee (LVVWAC). The LVVWAC assumed the responsibilities of the MAC and provided that the LVVWAC would continue implementation of the Las Vegas Wash Comprehensive Adaptive Management Plan, along with establishing a cohesive direction and integrated approach to addressing water quality issues in the Las Vegas Valley and Lake Mead; and

WHEREAS, the Authority has been designated as the lead agency to implement the LVWCAMP and has established a staff team to coordinate this effort; and

WHEREAS, a Workplan and estimated budget for the Las Vegas Wash construction and operation has been established by the Authority for fiscal year 2018/2019; and

WHEREAS, Authority Purveyor members will pay 40% of the total operating budget (or \$293,818) to be paid from the revenues derived from the water wholesale delivery charge; and

WHEREAS, it is the desire of all parties to this agreement to allocate the monetary responsibility for contribution to said capital and infrastructure budget as well as the parties' respective monetary contributions to the estimated Las Vegas Wash operating budget.

WHEREAS, pursuant to NRS 277.180, a political subdivision may enter into a interlocal agreement with any one or more other public agencies to perform any governmental service,

activity or undertaking which any of the individual governmental entities are authorized by law to perform.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the Southern Nevada Water Authority, City of Henderson, Clark County Water Reclamation District, City of Las Vegas, City of North Las Vegas, Clark County, and the Clark County Regional Flood Control District agree as follows:

Section 1: Capital Improvements Budget

It is agreed that the budget for capital improvements and associated activities for 2018/2019 are included in the Project Work Plan of the Amended Las Vegas Wash Capital Improvements Plan. The Project Work Plan includes funding for design and construction activities related to channel stabilization structures, revegetation of disturbed construction sites, flood repair, construction equipment rental, and construction materials transportation.

Funding for capital projects will come from monies generated from 4% of gross revenue from the $\frac{1}{4}$ cent sales tax, federal partners, and other available sources.

The Authority will require its contractors to indemnify, defend and hold harmless the Parties to this Agreement against any and all claims, causes of action, judgments, and/or fees arising out of the contractor's acts and/or omissions related to its performance of any contract for the Authority.

The Authority will also require its contractors to name each party to this Agreement as an additional insured on the contractor's insurance policy.

Section 2: Operating Budget

It is agreed by the parties hereto that the total operating budget for the Authority's Las Vegas Wash activities for fiscal year 2018/2019 is estimated to be \$1,071,545. It is anticipated that there will be federal funding from the Bureau of Reclamation available to augment the parties' contributions. Said federal funding is estimated to be approximately \$300,000. Other grants are anticipated to augment the operating budget in the amount of \$37,000. This will leave \$734,545 of the total operating budget to be provided locally (referred to herein as the "local share"). Additionally, it is anticipated that the Authority's purveyor members will contribute \$293,818 or 40% of the local share; however, the purveyor members' contribution is not governed by this agreement. The parties hereto agree, therefore, that \$440,727 or 60% of the local share of the total operating budget must be paid by the parties hereto. Contained in Attachment A is an Operating Budget Narrative outlining the anticipated administration costs as well as programs and study costs included in the 2018/2019 operating budget.

a) Funding of Local Share:

It is hereby agreed by the parties that the following allocation ratios and funding sources are established as binding for the purpose of funding the local share or \$734,545 of the total operating budget for the Las Vegas Wash for fiscal year 2018/2019:

i) Authority Purveyor Members acknowledge that the Authority shall pay 40% (\$293,818) of the local share using revenues derived from the water wholesale delivery charges paid to the Authority by the Authority Purveyor Members.

ii) Authority "Wastewater Discharge Members" shall pay 40% (\$293,818) of the local share as follows:

The City of Henderson, as a discharger, will be responsible for payment of 12.6% of the \$293,818 or \$37,021;

The Clark County Water Reclamation District will be responsible for 54.9% of the \$293,818, or \$161,306;

The City of Las Vegas will be responsible for 23.4% of the \$293,818, or \$68,753;

The City of North Las Vegas will be responsible for 9.1% of the \$293,818, or \$26,737.

iii) Clark County will pay 10% of the local share (\$73,455).

iv) Clark County Regional Flood Control District will pay 10% of the local share (\$73,455).

Section 3: Payments

Payments will be made by the respective parties hereto as specified in Section 2 into a fund established specifically for the operations of the Las Vegas Wash projects for fiscal year 2018/2019 within 30 days of approval by all governmental bodies.

Section 4: Effective Date

This agreement becomes effective when the duplicate originals are executed and dated by all parties, realizing that each entity, by necessity, must approve and execute the subject document at different places and on different dates.

Section 5: Severability

Should any part of this agreement be rendered void, invalid, or unenforceable by any court of law for any reason, such determination shall not render void, invalid or unenforceable under any other part of this agreement.

Section 6: Governing Law

The laws of the State of Nevada will govern as to the interpretation, validity and effect of this agreement.

Section 7: Third Party Beneficiaries

This agreement is intended only to benefit the parties hereto and does not create any rights, benefits or causes of action for any other person, entity or member of the general public.

Section 8: One Time Agreement

It is specifically recognized and agreed by all parties hereto, that this agreement is not to be interpreted or constructed as establishing a precedent for any further agreement, covenant or commitment on the part of any party hereto and should be considered a stand alone document without establishing any future obligations, other than as described herein, on the part of any party hereto.

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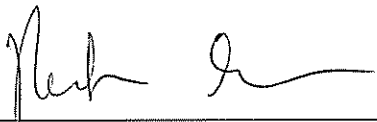
INTERLOCAL AGREEMENT AMONG THE CITY OF HENDERSON, CITY OF LAS VEGAS, CITY OF
NORTH LAS VEGAS, CLARK COUNTY, CLARK COUNTY REGIONAL FLOOD CONTROL
DISTRICT, CLARK COUNTY WATER RECLAMATION DISTRICT, AND THE SOUTHERN NEVADA
WATER AUTHORITY TO ESTABLISH FUNDING ALLOCATIONS AND THE BUDGET FOR LAS
VEGAS WASH ACTIVITIES IN FISCAL YEAR 2018/2019

SOUTHERN NEVADA WATER AUTHORITY

Marilyn Kirkpatrick, Chair

Approved as to form:

Approved on _____, by the Board of Directors
Southern Nevada Water Authority.



Brent Gunson, Senior Attorney

Attest:

CITY OF LAS VEGAS

LuAnn D. Holmes, MMC, City Clerk

Carolyn G. Goodman, Mayor

Approved As to Form:

Approved on _____, by the City Council
for the City of Las Vegas.

John S. Ridilla, Deputy City Attorney

INTERLOCAL AGREEMENT AMONG THE CITY OF HENDERSON, CITY OF LAS VEGAS, CITY OF
NORTH LAS VEGAS, CLARK COUNTY, CLARK COUNTY REGIONAL FLOOD CONTROL
DISTRICT, CLARK COUNTY WATER RECLAMATION DISTRICT, AND THE SOUTHERN NEVADA
WATER AUTHORITY TO ESTABLISH FUNDING ALLOCATIONS AND THE BUDGET FOR LAS
VEGAS WASH ACTIVITIES IN FISCAL YEAR 2018/2019

Attest:

CITY OF HENDERSON

Sabrina Mercadante, MMC
City Clerk

Debra March, Mayor

Approved As To Form:

Approved on _____, by the City Council for
the City of Henderson.

Josh M. Reid, City Attorney

Attest:

CITY OF NORTH LAS VEGAS

Catherine Raynor, MMC City Clerk

John J. Lee, Mayor

Approved As to Form:

Approved on _____, by the City Council for the
City of North Las Vegas.

Micaela Rustia Moore, City Attorney

INTERLOCAL AGREEMENT AMONG THE CITY OF HENDERSON, CITY OF LAS VEGAS, CITY OF
NORTH LAS VEGAS, CLARK COUNTY, CLARK COUNTY REGIONAL FLOOD CONTROL
DISTRICT, CLARK COUNTY WATER RECLAMATION DISTRICT, AND THE SOUTHERN NEVADA
WATER AUTHORITY TO ESTABLISH FUNDING ALLOCATIONS AND THE BUDGET FOR LAS
VEGAS WASH ACTIVITIES IN FISCAL YEAR 2018/2019

**CLARK COUNTY WATER RECLAMATION
DISTRICT**

Lawrence L. Brown, III, Chairman

Approved As To Form:

Approved on _____, by the Board of Trustees for the
Clark County Water Reclamation District.

David Stoft, Deputy District Attorney

Attest:

CLARK COUNTY

Lynn Goya, County Clerk

Steve Sisolak, Chair

Approved As To Form:

Approved on _____, by the Board of County Commissioners for Clark
County (Parks & Recreation)

Carolyn Campbell, Deputy District Attorney

INTERLOCAL AGREEMENT AMONG THE CITY OF HENDERSON, CITY OF LAS VEGAS, CITY OF
NORTH LAS VEGAS, CLARK COUNTY, CLARK COUNTY REGIONAL FLOOD CONTROL
DISTRICT, CLARK COUNTY WATER RECLAMATION DISTRICT, AND THE SOUTHERN NEVADA
WATER AUTHORITY TO ESTABLISH FUNDING ALLOCATIONS AND THE BUDGET FOR LAS
VEGAS WASH ACTIVITIES IN FISCAL YEAR 2018/2019

Attest:

**CLARK COUNTY REGIONAL FLOOD
CONTROL DISTRICT**

Deanna Hughes, Board Secretary

Lawrence L. Brown, III, Chairman

Approved As To Form:

Approved on _____, by the Board of Directors for the
Clark County Regional Flood Control District.

Christopher Figgins, Clark County
Chief Deputy District Attorney

Attachment A
Operating Budget Narrative
FY 2018/2019

MATERIALS, SUPPLIES, EQUIPMENT – TOTAL \$57,821

Funding in the amount of \$57,821 is requested for general office support items including office supplies, printing, safety supplies, dues for professional organizations, and subscriptions/publications.

OFFICE LEASE – TOTAL \$54,740

Funding in the amount of \$54,740 is requested for the office space located at 100 City Parkway.

SALARIES AND BENEFITS – TOTAL \$601,984

Funding in the amount of \$601,984 is requested for salaries and benefits to support Las Vegas Wash Project Coordination Team staff.

RESEARCH AND STUDIES PROJECTS – TOTAL \$357,000 (LOCAL CONTRIBUTION \$20,000)

The total research and studies budget is \$357,000. Of this, the local contribution is \$20,000, with the remaining budget anticipated to come from federal and local grants. These projects include a variety of activities and studies to meet the tasks identified in the LVWCAMP and to meet state and federal environmental compliance requirements.

Budgeted Items	Amount
Materials, Supplies, Equipment	\$57,821
Office Lease	\$54,740
Salaries and Benefits	\$601,984
Research and Studies Projects	\$357,000
TOTAL FY 18/19 BUDGET	\$1,071,545
BUREAU OF RECLAMATION CONTRIBUTION	\$300,000
OTHER CONTRIBUTION/GRANTS	\$37,000
LOCAL CONTRIBUTION	\$734,545

SOUTHERN NEVADA WATER AUTHORITY
BOARD OF DIRECTORS
AGENDA ITEM

May 31, 2018

Subject: Amendment	Director's Backup
Petitioner: David L. Johnson, Deputy General Manager, Engineering/Operations	
Recommendations: That the Board of Directors approve and authorize the General Manager to sign an amendment to the existing agreement between CH2M HILL Engineers, Inc., and the Authority for miscellaneous civil, electrical, mechanical and control systems projects for an increase not to exceed \$300,000 annually.	

Fiscal Impact:

Funds requested for initial term expenditures are included in the Authority's Fiscal Year 2018/19 tentative Operating Budget. Funds for future year expenditures will be budgeted accordingly.

Background:

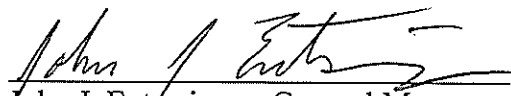
On May 18, 2017, the Board of Directors approved an agreement with CH2M HILL Engineers, Inc. (CH2M), to provide professional engineering services for miscellaneous civil, electrical, mechanical and control systems projects; and authorized four additional one-year renewals. CH2M was selected based upon competence, qualifications and other criteria after a Statement of Qualifications (SOQ) was advertised and responded to by six firms.

To support the Authority's goal of providing a safe and reliable water system, continued improvements are necessary. Based on original SOQ requirements, staff recommends funding for CH2M to provide additional work, which will include building modifications at Authority pumping stations and reservoirs.

If approved, the attached Amendment No. 1 would provide the terms and conditions for an increase not to exceed \$300,000 annually, increasing the not-to-exceed amount of the agreement to \$600,000 per year.

This amendment is being entered into pursuant to NRS 332.115.1(b) and Section 6(j) of the SNWA 1995 Amended Cooperative Agreement. The office of the General Counsel has reviewed and approved the amendment.

Respectfully submitted:


John J. Entsminger, General Manager
JJE:DLJ:GPK:MB:am
Attachments

AGENDA ITEM #

9

DISCLOSURE OF OWNERSHIP/PRINCIPALS

Business Entity Type (Please select one)						
<input type="checkbox"/> Sole Proprietorship	<input type="checkbox"/> Partnership	<input type="checkbox"/> Limited Liability Company	<input type="checkbox"/> Privately Held Corporation	<input checked="" type="checkbox"/> Publicly Held Corporation	<input type="checkbox"/> Trust	<input type="checkbox"/> Non-Profit Organization
Business Designation Group (Please select all that apply)						
<input type="checkbox"/> MBE	<input type="checkbox"/> WBE	<input type="checkbox"/> SBE	<input type="checkbox"/> PBE	<input type="checkbox"/> VET	<input type="checkbox"/> DVET	<input type="checkbox"/> ESB
Minority Business Enterprise	Women-Owned Business Enterprise	Small Business Enterprise	Physically Challenged Business Enterprise	Veteran Owned Business	Disabled Veteran Owned Business	Emerging Small Business
Number of Clark County Nevada Residents Employed: 92						
Corporate/Business Entity Name: CH2M HILL Engineers, Inc.						
(Include d.b.a., if applicable)						
Street Address:		9191 South Jamaica Street		Website: WWW.Ch2mhill.com		
City, State and Zip Code:		Englewood, CO 80112		POC Name:		
Telephone No:		(303) 771-0900		Email:		
Nevada Local Street Address:		2485 Village View Drive Suite 350		Website:		
(If different from above)						
City, State and Zip Code:		Henderson, NV 89074		Local Fax No: (702) 369-1107		
Local Telephone No:		(702) 369-6175		Local POC Name: Aaron Hall		
				Email: aaron.hall@ch2m.com		

All entities, with the exception of publicly-traded corporations and non-profit organizations, must list the names of individuals, either directly or indirectly, holding more than five percent (5%) ownership or financial interest in the business entity appearing before the Board of Directors.

Publicly-traded corporations and non-profit organizations shall list all Corporate Officers and Directors in lieu of disclosing the names of individuals with ownership or financial interest.

Entities include all business associations organized under or governed by Title 7 of the Nevada Revised Statutes, including but not limited to private corporations, close corporations, foreign corporations, limited liability companies, partnerships, limited partnerships, and professional corporations.

Full Name	Title	% Owned (Not required for Publicly Traded Corporations/Non-profit organizations)
Jan Walstrom	President	
James Doyna	Vice President	
Michael Carlin	Treasurer	
Julie T. Arnold	Assistant Secretary	

This section is not required for publicly-traded corporations.

1. Are any individual members, partners, owners or principals, involved in the business entity, an Entity full-time employee(s), or appointed/elected official(s)?

☐ Yes

☒ No

(If yes, please note that the employee(s), or appointed/elected official(s) may not perform any work on professional service contracts, or other contracts, which are not subject to competitive bid.)

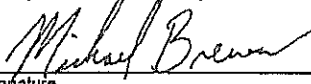
2. Do any individual members, partners, owners or principals have a spouse, registered domestic partner, child, parent, in-law or brother/sister, half-brother/half-sister, grandchild, grandparent, related to an Entity full-time employee(s), or appointed/elected official(s)?

☐ Yes

☒ No

(If yes, please complete the Disclosure of Relationship form on Page 2. If no, please print N/A on Page 2.)

I certify under penalty of perjury, that all of the information provided herein is current, complete, and accurate. I also understand that the Board will not take action on any item without the completed disclosure form.


Signature

Michael Brewer
Print Name

Vice President
Title

1/31/2018
Date

DISCLOSURE OF RELATIONSHIP

List any disclosures below:
(Mark N/A, if not applicable.)

NAME OF BUSINESS OWNER/PRINCIPAL	NAME OF ENTITY* EMPLOYEE/OFFICIAL AND JOB TITLE	RELATIONSHIP TO ENTITY* EMPLOYEE/OFFICIAL	ENTITY* EMPLOYEE'S/OFFICIAL'S DEPARTMENT
N/A			

* Entity employee means an employee of Las Vegas Valley Water District, Southern Nevada Water Authority, or Silver State Energy Association .

"Consanguinity" is a relationship by blood. "Affinity" is a relationship by marriage.

"To the second degree of consanguinity" applies to the candidate's first and second degree of blood relatives as follows:

- Spouse – Registered Domestic Partners – Children – Parents – In-laws (first degree)
- Brothers/Sisters – Half-Brothers/Half-Sisters – Grandchildren – Grandparents – In-laws (second degree)

For Entity Use Only:

If no Disclosure or Relationship is noted above or the section is marked N/A, please check this box.


☒ No Disclosure

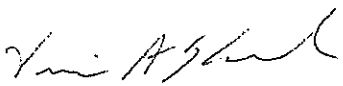
If any Disclosure of Relationship is noted above, please complete the following:

☐ Yes ☐ No Is the Entity employee(s) noted above involved in the contracting/selection process for this particular agenda item?

☐ Yes ☐ No Is the Entity employee(s) noted above involved in any way with the business in performance of the contract?

Notes/Comments:


 Signature
 Michael Brewer
 Print Name
 Authorized Department Representative

 1/31/18
 Veronica A. Kammler

AGREEMENT TO PROVIDE PROFESSIONAL SERVICES
AMENDMENT NO. 1

This Amendment No. 1 amends the Agreement to Provide Professional Services (Agreement) dated July 1, 2017, based on SOQ #100-17, Professional Engineering Services, made and entered into, by and between the Southern Nevada Water Authority (Authority) and CH2M HILL Engineers, Inc. (Consultant).

WITNESSETH

WHEREAS, the Authority utilizes the Consultant for professional engineering services related to various budgeted projects, under the above referenced agreement; and

WHEREAS, the Authority desires to increase the number of projects the Consultant can perform for the Authority under the Agreement, on an as requested basis.

NOW THEREFOR, the above referenced Agreement is hereby amended as set forth below:

A. Replace Paragraph 6 on page 3 of 22 of the Agreement with the following paragraph.


6. LIMITATION ON COSTS:

The total cost of Services provided under this Agreement shall not exceed six hundred thousand dollars (\$600,000.00) per year.

B. All other terms and condition of the Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, the Parties have executed this Amendment No. 1 on the _____ day of _____, 2018.

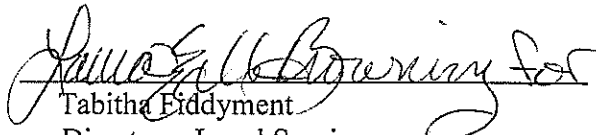
CH2M HILL Engineers, Inc..

By: 
Michael Brewer
Designated Manager

SOUTHERN NEVADA WATER
AUTHORITY

By: _____
John J. Entsminger
General Manager

Approved as to Form:


Tabitha Eddymont
Director – Legal Services

**SOUTHERN NEVADA WATER AUTHORITY
BOARD OF DIRECTORS
AGENDA ITEM**

May 31, 2018

Subject: Southern Nevada Smart Community Vision	Director's Backup
Petitioner: Julie A. Wilcox, Deputy General Manager, Administration	
Recommendations: That the Board of Directors approve the Southern Nevada Smart Community Vision document.	

Fiscal Impact:

None by approval of the above recommendation.

Background:

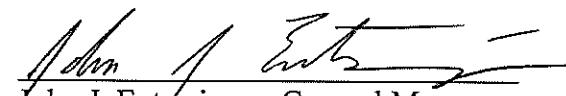
In 2009, the federal government updated its Strategy for American Innovation, acknowledging Smart Cities as an emerging community of civic leaders, data scientists, technologists and companies joining forces to build urban communities that continuously improve using advanced technologies. Generally, a Smart Community is defined as a community with a vision of the future that involves technological solutions and sharing data in an innovative way to empower its residents, institutions and the region as a whole. As technology has continued to advance rapidly, the Smart Community movement has gained momentum and so have both public and private funding opportunities.

Cooperation and coordination among local governments and private stakeholders is a key component when competing for federal funding. As such, over the past year, a working group of local government agencies, non-profits, universities and other key stakeholders came together to discuss how best to become a Smart Community. Through this process, local governments and private stakeholders developed a regional Southern Nevada Smart Community Vision (Vision) that outlines the primary principles of a Smart Community in Southern Nevada. The Vision defines a Smart Community, explains the impact a Smart Community can have on the region, and outlines important steps towards achieving a Smart Community. The Vision represents a collaborative effort among public and private partners to develop the structure necessary to advance the Smart Community in Southern Nevada initiative and avail itself of funding resources. The Vision has been received and approved by other local governments.

Staff asks that the Board accept the Vision and acknowledge the Authority's participation in this joint regional effort.

This action is authorized pursuant to Section 6(p) of the SNWA 1995 Amended Cooperative Agreement. The office of the General Counsel has reviewed and approved this item.

Respectfully submitted:


John J. Entsminger, General Manager
JJE:JAW:AMB:KH:OS
Attachment

AGENDA ITEM #

10

SOUTHERN NEVADA SMART COMMUNITY VISION

I. Smart Communities Defined

Smart Communities are comprised of people who are committed to improving their community and working together to make smart decisions for the future. Those decisions include implementation of technological solutions that seamlessly interact with and complement each other, sharing of data within a governance structure, and addressing community needs through a comprehensive assessment. It is this smart collaboration – across jurisdictions and among public and private partners – that creates a Smart Community. Now is the time to implement a Regional Smart Community Vision throughout Southern Nevada in order to:

- **Increase public sector efficiency** by providing access to crucial and diversified information to optimize deployment and quality of services;
- **Facilitate economic growth** by improving workforce development, deploying innovative and effective infrastructure, and utilizing enhanced data to better deliver products and services; and
- **Improve citizens' quality of life** by ensuring access to resources and services, offering secure and private interaction, bridging the digital divide, building trust in the public sector, and improving safety in their living environment.

II. The Underpinnings of the Smart Community

Smart Communities are Safe Communities that employ data analytics to inform decision makers and first responders; Inclusive Communities that deliver services to a diverse base of users and ensure broad accessibility to shared digital infrastructure; User Friendly Communities that provide platforms to access and share information in a secure and private manner; and Resource Efficient Communities that efficiently leverage existing infrastructure and resources to implement Smart Community initiatives and use data-driven technology to address energy, water and climate challenges.

III. The Vision

Our Smart Community incorporates the concepts of safety, inclusivity, user-friendliness, and resource-efficiency to achieve our Vision of: 1) Livability; 2) Workability; and 3) Sustainability.

- **Livability** measures a community's quality of life by considering built and natural environments, economic prosperity, social stability and equity, quality educational access, and cultural, entertainment, and recreational opportunities community-wide.
- **Workability** reflects a world-class infrastructure that seamlessly and consistently delivers services to users and enables global competitiveness for investment and jobs.
- **Sustainability** is a commitment to reduce resource use through improved Smart Community planning and efficient deployment of key community assets.

SOUTHERN NEVADA SMART COMMUNITY VISION

IV. Smart Community Sectors

Sector-specific organization of potential projects is critical to achieve the Smart Community Vision. These sectors are:

- **Mobility and Transportation**, including both the physical interconnectedness within a community as well as its access to other communities and economic centers;
- **Livable Communities**, involving the planning of a built environment, and the equipping of structures with smart technology;
- **Energy Efficiency**, achieved through the collection and utilization of data to inform energy management systems and the implementation of energy efficient projects;
- **Social Infrastructure and Public Safety**, encompassing educational initiatives at all levels, responsive social services, access to healthcare, and interfacing with public safety entities and first responders; and
- **Water Resource Management**, that incorporates data metrics and technology to responsibly meet current and future demands and maintain the water system, in a way that reduces water waste.

V. Achieving Success

In the successful pursuit of a Smart Community, it is crucial that those dedicated to its implementation do the following:

- **Form collaborative and inclusive partnerships** with relevant public and private stakeholders;
- **Effectively use data** through innovative and cooperative approaches;
- **Assess challenges, needs, and opportunities first**, and then develop tailored projects;
- **Involve the private sector** to assess needs and opportunities for smart initiatives; and
- **Engage the community** to ensure citizen value and prioritize initiatives.

VI. Commitment to Action

Through collaboration, Southern Nevada will transform into a community of the future that realizes the Smart Community Vision by sustaining growth, stimulating economic activity, providing a better quality of life for its citizens, and ensuring the public sector is effective and efficient.

The Stakeholders dedicated to realizing the Smart Community Vision will:

- **Integrate and optimize** existing initiatives to maximize efficiency;
- **Cooperate** on future projects;
- **Share** information and data;
- **Meet** quarterly throughout the year;
- Ensure data **privacy and build trust**; and
- Form an **Acceleration and Innovation Center**.

**SOUTHERN NEVADA WATER AUTHORITY
BOARD OF DIRECTORS
AGENDA ITEM**

May 31, 2018

Subject: Las Vegas Wash Capital Improvements Plan	Director's Backup
Petitioner: David L. Johnson, Deputy General Manager, Engineering/Operations	
Recommendations: That the Board of Directors adopt the 2018 Las Vegas Wash Capital Improvements Plan.	

Fiscal Impact:

None by approval of the above recommendation. Costs associated with specific projects will be identified and presented to the Board of Directors for consideration at future meetings.

Background:

On June 20, 2002, the Board of Directors approved the Las Vegas Wash Cooperative Agreement, which set forth efforts and initiatives to address ongoing issues in the Las Vegas Wash (Wash). On October 18, 2007, the Las Vegas Valley Watershed Advisory Committee (LVVWAC) was established to take a regional approach to watershed management, which included management of the Wash. The LVVWAC's First Amended Agreement, approved by the Board on July 19, 2012, requires the Authority to annually prepare and issue a Las Vegas Wash Capital Improvements Plan (Wash CIP). First issued and approved in 2002, the most recent amended Wash CIP was approved by the Board on May 18, 2017.

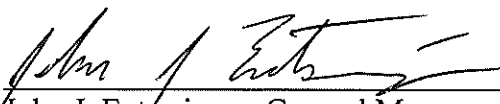
The attached 2018 Wash CIP amends the previous plan by identifying specific facilities planned for design and construction through Fiscal Year 2024/25. The 2018 Wash CIP forecasts a total capital expenditure of \$9,210,206 and represents a decrease of \$19,579,515 over the previous plan forecast. The proposed revisions in the 2018 Wash CIP reflect adjustments in construction schedules, construction unit prices, projected facility construction costs, environmental mitigation requirements, inclusion of interest expenses and completion of previously-planned projects. All currently-planned facilities are scheduled to be complete and no expenditures are anticipated beyond Fiscal Year 2021/22.

The overall Wash capital improvements effort is now approximately 95 percent complete. Since the start of the stabilization effort at the Wash, the Authority has completed 19 of 21 planned gradient control weirs, installed approximately 12 miles of channel bank protection and revegetated over 460 acres of disturbed lands.

On April 10, 2018, the LVVWAC reviewed and approved the attached 2018 Wash CIP.

This action is authorized pursuant to NRS 277.045, Section 6(j) of the SNWA 1995 Amended Cooperative Agreement, and Section 7.1 of the Las Vegas Valley Watershed Advisory Committee First Amended Agreement. The office of the General Counsel has reviewed and approved this agenda item.

Respectfully submitted:


John J. Entsminger, General Manager
JJE:DLJ:PJJ:RCP
Attachment

AGENDA
ITEM #

11



2018 Las Vegas Wash Capital Improvements Plan

Southern Nevada Water Authority
May 31, 2018

Las Vegas Wash Capital Improvements Plan

May 31, 2018



SOUTHERN NEVADA WATER AUTHORITY™

Board of Directors

Marilyn Kirkpatrick, Las Vegas Valley Water District, Chair

Bob Coffin, City of Las Vegas, Vice Chair

James Gibson, Clark County Water Reclamation District

Peggy Leavitt, City of Boulder City

John Lee, City of North Las Vegas

John Marz, City of Henderson

Steve Sisolak, Big Bend Water District

John J. Entsminger

General Manager

Julie A. Wilcox

***DGM:
Administration***

Gregory J. Walch

General Counsel

David L. Johnson

***DGM: Engineering
/Operations***

Brian G. Thomas

***Chief Financial
Officer***

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- 1.2 Background Page 1

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- 2.2 Facility Information Page 3

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SECTION 4: PLAN IMPLEMENTATION

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Las Vegas Wash

Capital Improvements Plan

1.0 Introduction

1.1 Purpose

The Lower Las Vegas Wash (Wash), in Clark County, Nevada, is the primary urban runoff, wastewater and floodwater outlet from the Las Vegas Valley into Lake Mead and the Colorado River. The Wash is considered a critical component in the many environmental and water resource issues facing Southern Nevada today. This Southern Nevada Water Authority Las Vegas Wash Capital Improvements Plan (Wash CIP) presents a summary of planned capital expense activities necessary to support long-term enhancement and management of the Wash.

1.2 Background

Since 1975, the Wash has undergone significant erosion and degradation due to increasing flows resulting from expanding upstream urbanization in the Las Vegas Valley. To combat the changes in the Wash, the Las Vegas Wash Coordination Committee (LVWCC), a 29-member interagency group of federal, state, and local agencies, and private interests, was formed and has developed a Comprehensive Adaptive Management Plan (CAMP). The Southern Nevada Water Authority (SNWA) Board of Directors approved the CAMP in April 2000.

Of 44 recommendations, the CAMP identifies erosion control and stream stabilization of the Wash as one of the highest recommended priority efforts. To accomplish this goal, in 2002, a Cooperative Agreement was signed between the local government agencies considered major stakeholders in the Wash. In 2012, the Cooperative Agreement was amended and retitled as the “First Amended Agreement Regarding the Las Vegas Valley Watershed Advisory Committee” (Amended Agreement). As described in the Amended Agreement, the SNWA has been designated by the members of the Las Vegas Valley Watershed Advisory Committee (LVVWAC), as the lead agency to coordinate and manage the enhancement of the Wash. Among many assigned tasks, the SNWA is responsible for maintaining this Wash CIP.

The Amended Agreement establishes the LVVWAC to provide advice and consultation to SNWA on issues regarding this Wash CIP. Local government agency members of the LVVWAC include:

- City of Las Vegas
- City of Henderson
- City of North Las Vegas
- Clark County
- Las Vegas Valley Water District
- Clark County Water Reclamation District
- Clark County Regional Flood Control District
- Southern Nevada Water Authority

2.0 Plan Scope

2.1 General Scope

This Wash CIP covers the geographical area of the Wash from the City of Las Vegas Wastewater Treatment Plant to the western boundary of the Lake Mead National Recreational Area. The Wash CIP is intended to describe all presently identified construction and construction support projects supporting the management and enhancement of the Wash. Project elements included in this Wash CIP include:

- Channel bed and bank stabilization;
- Revegetation; and
- Comprehensive programs.

The purpose of channel bed stabilization is to reduce channel bed erosion by slowing stream flow to less erosive conditions while providing a stable platform for vegetation re-establishment. Gradient control weirs or dams are planned for installation to accomplish the stabilization needs. Channel bank protection installations are planned to be completed as a part of channel bed stabilization projects, and focus on reducing the ability of Wash flows to undercut, erode and collapse channel banks. Capital expenditures for bank protection will include installation of rock or concrete riprap armor and revegetation of stream banks, where appropriate.

Revegetation of the Wash channel bed, banks, disturbed overbank locations and floodplain areas will provide surface erosion protection, aid ecosystem restoration, support water quality goals and meet environmental permitting requirements. Revegetation activities may include wetlands or dry land revegetation, installation of temporary irrigation systems and establishment of vegetation protection measures.

Comprehensive programs include design and support activities serving multiple capital projects or the Wash as a whole. Activities under this element may include acquisition of rock and concrete materials for use as riprap, installation of construction access roads, location of materials storage sites, long term dust control practices, sediment and sediment transport studies, hydraulic studies, topographic mapping, water quality monitoring, stream gauging, and other supporting capital expense activities which are necessary to support construction efforts.

2.2 Facility Information

The following information pertaining to specific facilities is presented in this Wash CIP:

- General description and location of each planned facility;
- Anticipated construction schedules;
- Estimated cost of each proposed facility;
- Proposed funding mechanism(s) for each facility in the Work Plan;
- Total projected Wash CIP cost in current and midpoint dollars;
- Cash flow forecasts by year; and
- A list of SNWA operated and maintained facilities.

3.0 Organization

General information regarding the background, scope, approval process, current revenues, anticipated expenditures, prioritization, and funded Project Work Plan are presented in this Wash CIP report. Specific details defining anticipated projects, project costs, implementation schedules, prioritization analysis, and other information are included as appendices to this Wash CIP.

All identified, individual projects requiring expenditure of capital funds are described in the Appendix A as Candidate Projects to this Wash CIP. A unique project number and letter designation and a location name describe each project. Channel bank protection and revegetation projects are named and project numbers are assigned with a letter designation which conforms to the name of the next downstream channel bed stabilization facility to which they are associated.

4.0 Plan Implementation

4.1 Cooperative Agreement

In 2002, SNWA entered into a Cooperative Agreement pertaining to the long-term management and enhancement of the Wash with Clark County, City of Las Vegas, City of Henderson, City of North Las Vegas, Clark County Water Reclamation District, and Clark County Regional Flood Control District. The current Amended Agreement establishes roles and responsibilities for the above agencies in managing the Wash. The development, review, and update of this Wash CIP are identified in the Amended Agreement as a responsibility of the SNWA. The Amended Agreement further defines the contents of the Wash CIP as presented herein.

4.2 Annual Plan Review

The SNWA annually reviews, reaffirms, or revises the Wash CIP, as necessary to meet the goals and requirements of the Amended Agreement. In performing the annual review, the SNWA consults with the local agency stakeholders to the Wash through the Operations Study Team of the LVWCC and through the LVVWAC.

SNWA's consultation with local agency stakeholders and revisions to the Wash CIP focus upon current changes in priority, planning, design, cost, funding, and/or capital needs associated with the elements of the Wash CIP. Revisions to the Wash CIP reflect the elimination of capital items previously completed or revisions proposed by a party to the Amended Agreement and agreed to by the LVVWAC.

Upon revision by SNWA and approval by the LVVWAC, the annual Wash CIP update is submitted to the SNWA Board of Directors for review and action.

4.3 Funding Approval

As appropriate, SNWA prepares and submits Wash CIP funding agreements to the LVVWAC for review. Funding agreements prepared and submitted by SNWA may also define the process whereby entities other than the parties to the Amended Agreement may either fund or contribute to the Wash CIP.

Subsequent to the LVVWAC's review of funding agreements, SNWA submits the funding agreements to each of the local governmental agencies comprising the LVVWAC for consideration and possible approval by their respective Governing Boards as a part of the individual Party's overall budgeting process.

5.0 Funding and Expenditures

5.1 Funding-To-Date

Sales Tax and Grant Funding: The Wash CIP has been partially funded through receipt of local sales tax revenues. The Wash currently receives four percent (4%) of a ¼ cent sales tax allocated for funding water and wastewater projects in Clark County. The Wash has also received capital grant funding commitments from the Southern Nevada Public Lands Management Act (SNPLMA).

Other Local Agency Funding: In addition to local sales tax revenues and SNPLMA grants, the Wash CIP has received funding or funding commitments from other local agencies through in-kind construction activities or direct funding to SNWA.

Interfund Loans: Periodically, projected, near-term capital expenses for construction of stabilization facilities in the Wash will exceed available cash on hand generated from sales tax and grant funding. In these cases, the Wash CIP will borrow money from SNWA's New Expansion Debt Service fund account, as available.

Funding and funding sources to-date are shown in Table 1 below:

Table 1
Funding-to-Date
1999 – FY 2017/2018

Funding Source	Estimated Funding-to-Date	%
Sales Tax (Includes Actuals through December 2017 and Estimates through June 2018)	\$ 59,686,568	41.2
US Bureau of Reclamation Grants	\$ 5,979,224	4.1
SNPLMA Funding (Actuals through FY 17 and estimates for FY18)	\$ 55,467,765	38.3
Miscellaneous State and Federal Grants	\$ 445,500	0.3
Other Local Agency Funding	\$ 15,004,000	10.4
Estimated Outstanding Interfund Loan as of June 30, 2018	\$ 8,266,142	5.7
Total:	\$ 144,809,199	100.0

5.2 Expenditures

5.2.1 Expenditures-To-Date

From 1999 through June 2018, Wash CIP total expenditures have been as shown in Table 2 below. These expenditures include contributions by other stakeholder agencies for capital improvements to the Wash.

Other stakeholder agency expenditures have included: Clark County, design and construction of the Pabco Road Weir at approximately \$5,700,000; Lake Las Vegas Resort, design and construction of the Fire Station Weir at approximately \$63,000; SNWA Water CIP, design and construction of the Rainbow Gardens Weir as part of the East Valley Water Lateral crossing of the Wash, at approximately \$7,238,000; SNWA and City of Henderson construction of Demonstration Weir, at approximately \$173,000; construction of Historic Lateral Weir, at approximately \$1,823,000; and US Bureau of Reclamation construction activities.

Expenditures include repayment with interest, of funds borrowed from the New Expansion Debt Service fund account.

Capital construction expenditures to-date are shown in Table 2 below:

Table 2
Total Expenditures-to-Date
1999 – FY 2017/2018

Program	Total Expenditures-to-Date	%
Channel Stabilization	\$ 130,317,317	91.1
Revegetation	\$ 2,115,873	1.5
Comprehensive Programs	\$ 8,426,100	5.9
Interfund Borrowing Interest Repayments (Actuals through FY17 and Estimate for FY18)	\$ 2,223,087	1.5
Total:	\$ 143,082,377	100.0

5.2.2 Future Expenditures

Current projections of future capital expenditures for the Wash CIP are detailed in the Construction Program Master Plan shown in Appendix C. Projected expenditures are shown in both current dollars and projected expenses, accelerated to future construction mid-point dollar cost, based upon an estimated current three percent (3%) annual growth. Funding commitments for individual projects will be based upon availability of funds at the time the commitment is made. Estimated capital expenditures are summarized in Table 3 below:

Table 3
Projected Expenditures
2017/2018-2020/2021 (Present \$)

Wash CIP Component	Projected Expenditures	%
Channel Stabilization	\$ 6,300,000	68.4
Revegetation Programs	\$ 1,469,003	15.9
Comprehensive Programs	\$ 300,000	3.3
Interest Expense	\$ 1,141,203	12.4
Total Projected Expenditures:	\$ 9,210,206	100.0

6.0 Priority Assessment

The Operations Study Team of the LVWCC has developed a methodology for prioritization of each proposed gradient control and bank protection capital expenditure in the Wash. Rating factors utilized in establishing proposed project priorities are described in Appendix E of this plan.

Unless otherwise noted, bank protection capital investments will occur during implementation of the next downstream gradient control facility. Where severe bank erosion is occurring, stabilization may precede downstream gradient control implementation. Revegetation investments normally follow channel bed and bank stabilization, where practical. Unless otherwise noted, revegetation projects are planned for implementation following channel stabilization projects and are not shown in a separate priority evaluation within this Wash CIP.

Over the long-term life of the Wash CIP, priorities may change as need, funding, and other issues arise. Therefore SNWA, acting through the Operations Study Team and the LVVWAC, will annually review the prioritization schedule, evaluation criteria, proposed candidate project list, and available funding to assess current priorities. A summary of the criteria applied to assess prioritization, as developed by the Operations Study Team, and as approved by the LVVWAC are as follows:

- Upstream Stability
- System Relationship
- Water Quality Enhancement
- Recreational Opportunity
- Public Safety
- Regulatory Permitting Requirements
- Access
- Cost Avoidance
- Availability of Other Funding

Detailed descriptions of these criteria are found in Appendix F of this plan.

Annually, the SNWA staff calculates priority values for each proposed project based upon the prioritization criteria outlined herein. These values and proposed project rankings are then reviewed, discussed, and/or modified by the Operations Study Team of the LVVWAC. Project activity is then scheduled, as much as practical, to follow priority rankings described in Appendix E. Issues such as land ownership, construction conflict, potential cost savings in grouping several projects together under a single construction contract, and similar issues may cause some projects of lower priority to be scheduled for construction in conjunction with higher priority projects.

After SNWA develops a proposed project implementation schedule, the draft priority and project rankings are submitted to the Operations Study Team of the LVWCC for further review and/or modification. SNWA then publishes those findings in annual updates of the Wash CIP and submits the update to the LVVWAC and SNWA Board of Directors for review and action.

7.0 2018-19 Project Work Plan

The Project Work Plan presented in Appendix A, represents a series of projects scheduled for activity during the next two years for which funding sources have been or are expected to be identified. The funding for individual capital projects will come from revenues generated from sales taxes. Funding commitments for individual projects will be based upon availability of funds at the time the commitment is made. The Project Work Plan is a sub-set of the Construction Program Master Plan detailed in Appendix C.

The Project Work Plan budget is based upon current estimates of present cost and projected actual cost, accelerated to anticipated midpoints of design and construction period activities. Project costs may change depending upon final design configuration, modified design criteria, or construction prices at the time of construction bidding. Where construction cost estimates or bids exceed expected revenues at the scheduled time of construction, a project may be delayed to a future time when revenues become available. Where expenditures are found to be less than available funding, with LVVWAC approval, additional candidate projects may be incorporated into the Project Work Plan for implementation.

8.0 Ownership

The planned erosion control facilities lie within the boundaries of the Clark County Wetlands Park. Consistent with the Amended Agreement, SNWA will transfer ownership to Clark County of stabilization facilities, including channel stabilization facilities, revegetated areas, and other facilities when deemed appropriate by the SNWA and Clark County.

9.0 Operations and Maintenance

In accordance with the Amended Agreement, SNWA operates and maintains Wash facilities, including channel stabilization projects and revegetated areas described in this Wash CIP and Project Work Plan until such time that ownership is transferred to Clark County.

The SNWA conducts these activities in conformance with the Operations and Maintenance Plan for the Wash. Currently, SNWA's operations and maintenance activities are financed through assessments levied to individual LVVWAC member agencies, through the utilization of Bureau of Reclamation construction grant funding or through flood control maintenance funds allocated to SNWA by Clark County.

Appendix A

2018-19 Work Plan Budget Allocation

2018/2019 Las Vegas Wash Capital Improvements Plan
2018-19 WORK PLAN BUDGET ALLOCATION

Proj. No.	Project Title	Project Start Date	Project Finish Date						Total Project Cost
				18/19	19/20	20/21	21/22	22/23	
	<u>Design</u>								
	Design, Total:			\$0	\$0	\$0	\$0	\$0	\$0
	<u>Construction</u>								
810C	Historic Lateral Weir	7/1/2017	7/30/2019	\$3,300,000					\$3,300,000
810W	Sunrise Mountain Weir	7/1/2017	7/30/2019	\$2,700,000					\$2,700,000
810S	Tropicana Weir	10/1/2016	7/31/2018	\$300,000					\$300,000
	Construction, Total:			\$6,300,000	\$0	\$0	\$0	\$0	\$6,300,000
	<u>Revegetation</u>								
880K	Three Kids Weir	9/1/2015	8/30/2020	\$92,527	\$42,527				\$135,054
880U	Silver Bowl Weir	9/1/2015	8/30/2019	\$156,984					\$156,984
880Z	Archery Weir	9/1/2015	8/30/2019						\$0
880C	Historic Lateral Weir	8/1/2019	10/1/2020		\$216,727	\$87,985			\$304,712
880W	Sunrise Mountain Weir	8/1/2019	10/1/2020		\$219,762	\$40,703			\$260,465
880S	Tropicana Weir	5/1/2018	9/30/2019	\$353,879	\$209,521	\$48,388			\$611,788
	Revegetation Total:			\$603,390	\$688,537	\$177,076	\$0	\$0	\$1,469,003
	<u>Comprehensive Programs</u>								
860V	BOR Materials and Equipment	1/1/2017	3/30/2019	\$300,000					\$300,000
	Comprehensive, Total:			\$300,000	\$0	\$0	\$0	\$0	\$300,000
	<u>Work Plan Cost Summary</u>								
	Design								\$0
	Construction			\$6,300,000					\$6,300,000
	Revegetation			\$603,390	\$688,537	\$177,076			\$1,469,003
	Comprehensive			\$300,000					\$300,000
	Interest Expense			\$557,322	\$395,144	\$188,737			\$1,141,203
	Total Program:			\$7,760,712	\$1,083,681	\$365,813	\$0	\$0	\$9,210,206

Appendix B

Project Descriptions

Project Descriptions

<u>Project Title:</u> Historic Lateral Weir		<u>Project Number:</u> 810C <u>Project Status:</u> Construction
<u>Project Description:</u> The existing Historic Lateral Weir was constructed as SNWA Project 910AR in 2000. This facility is located at the site of the first Las Vegas Valley Water Lateral crossing of the Las Vegas Wash. This 600 foot long, 10 foot high, rock riprap structure provides channel bed stabilization upstream to the Pabco Road Weir. This project will increase hydraulic capacity and provide channel bed stabilization to the downstream C-1 Channel outfall. This Project will be funded by sales tax revenues.		

<u>Project Title:</u> Tropicana Weir		<u>Project Number:</u> 810S <u>Project Status:</u> Construction
<u>Project Description:</u> This facility is planned to be located immediately downstream of the Tropicana Channel and Las Vegas Wash confluence, at the Clark County Nature Preserve. The facility will be 10 feet in height and 320 feet long. This Project will be funded by sales tax revenues.		

<u>Project Title:</u> Sunrise Mountain Weir		<u>Project Number:</u> 810W <u>Project Status:</u> Construction
<u>Project Description:</u> This facility will be located approximately 0.4 mile upstream of the Pabco Road Weir. This 500 foot long facility will stabilize four feet of potential channel headcut erosion. This Project will be funded by sales tax revenues.		

Project Descriptions

<u>Project Title:</u> Flood Repair Allocation		<u>Project Number:</u> 860P <u>Project Status:</u> Planned
<u>Project Description:</u> Large flood events may damage existing stabilization facilities or create damage elsewhere in the Las Vegas Wash. This project will allow for the construction repair of stabilization facilities following major flood events where further damage to SNWA stabilization facilities will limit the ability of the facilities to function as intended. This Project will be funded by sales tax revenues.		

<u>Project Title:</u> Historic Lateral Weir Revegetation		<u>Project Number:</u> 880C <u>Project Status:</u> Programmed
<u>Project Description:</u> This project is intended to replace wetlands and other vegetation removed during weir construction, stabilize the stream banks, provide erosion control and habitat benefits. This Project will be funded by sales tax revenues.		

<u>Project Title:</u> Three Kids Weir Revegetation		<u>Project Number:</u> 880K <u>Project Status:</u> Construction
<u>Project Description:</u> This project is intended to replace wetlands and other vegetation removed during weir construction, stabilize the stream banks, provide erosion control and habitat benefits. This Project is being funded by SNPLMA grants and sales tax revenues.		

Project Descriptions

<u>Project Title:</u> Tropicana Weir Revegetation		<u>Project Number:</u> 880S <u>Project Status:</u> Construction
<u>Project Description:</u> This project is intended to replace wetlands and other vegetation removed during weir construction, stabilize the stream banks, provide erosion control and habitat benefits. This Project will be funded by sales tax revenue.		

<u>Project Title:</u> Silver Bowl Weir Revegetation		<u>Project Number:</u> 880U <u>Project Status:</u> Construction
<u>Project Description:</u> This project is intended to replace wetlands and other vegetation removed during weir construction, stabilize the stream banks, provide erosion control and habitat benefits. This Project is being funded by SNPLMA grants and sales tax revenues.		

<u>Project Title:</u> Sunrise Mountain Weir Revegetation		<u>Project Number:</u> 880W <u>Project Status:</u> Programmed
<u>Project Description:</u> This project is intended to replace wetlands and other vegetation removed during weir construction, stabilize the stream banks, provide erosion control and habitat benefits. This Project will be funded by sales tax revenues.		

<u>Project Title:</u> Archery Weir Revegetation		<u>Project Number:</u> 880Z <u>Project Status:</u> Construction
<u>Project Description:</u> This project is intended to replace wetlands and other vegetation removed during weir construction, stabilize the stream banks, provide erosion control and habitat benefits. This Project will be funded by sales tax revenues.		

Appendix C
2018/2019 Las Vegas Wash
Construction Program Master Plan

Fiscal Year 2018/2019 Las Vegas Wash Construction Program Master Plan


Design	Project Name	Start	Finish	Present Value	Future Value	FY18/19	FY19/20	FY20/21	FY21/22	FY22/23	FY23/24	FY24/25	Total
						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
			TOTAL	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction		Start	Finish	Present Value	Future Value	FY18/19	FY19/20	FY20/21	FY21/22	FY22/23	FY23/24	FY24/25	Total
810C	Historic Lateral Weir	6/1/2016	3/30/2018	\$ 3,300,000	\$ 3,300,000	\$ 3,300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,300,000
810W	Sunrise Mountain Weir	6/1/2016	3/30/2018	\$ 2,700,000	\$ 2,700,000	\$ 2,700,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,700,000
810S	Tropicana Weir	7/1/2016	8/31/2017	\$ 300,000	\$ 300,000	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 300,000
			TOTAL	\$ 6,300,000	\$ 6,300,000	\$ 6,300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,300,000
Revegetation		Start	Finish	Present Value	Future Value	FY18/19	FY19/20	FY20/21	FY21/22	FY22/23	FY23/24	FY24/25	Total
880K	Three Kids Weir	9/1/2015	8/30/2017	\$ 242,581	\$ 242,581	\$ 92,527	\$ 42,527	\$ 107,527	\$ -	\$ -	\$ -	\$ -	\$ 242,581
880U	Silver Bowl Weir	9/1/2015	8/30/2017	\$ 313,968	\$ 313,968	\$ 156,984	\$ 156,984	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 313,968
880Z	Archery Weir	9/1/2015	8/30/2017	\$ 176,492	\$ 176,492	\$ 88,246	\$ 88,246	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 176,492
880C	Historic Lateral Weir	6/1/2018	8/31/2019	\$ 128,334	\$ 128,334	\$ -	\$ 94,112	\$ 34,222	\$ -	\$ -	\$ -	\$ -	\$ 128,334
880W	Sunrise Mountain Weir	6/1/2018	8/31/2019	\$ 132,474	\$ 132,474	\$ -	\$ 97,147	\$ 35,327	\$ -	\$ -	\$ -	\$ -	\$ 132,474
880S	Tropicana Weir	10/1/2018	9/30/2019	\$ 475,154	\$ 475,154	\$ 285,633	\$ 209,521	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 475,154
			TOTAL	\$ 1,469,003	\$ 1,469,003	\$ 603,390	\$ 688,537	\$ 177,076	\$ -	\$ -	\$ -	\$ -	\$ 1,469,003
Comprehensive		Start	Finish	Present Value	Future Value	FY18/19	FY19/20	FY20/21	FY21/22	FY22/23	FY23/24	FY24/25	Total
860P	Flood Repair Allocation	1/2/2015	1/1/2017	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
860V	BOR Materials & Equipment	2/10/2015	3/11/2017	\$ 300,000	\$ 300,000	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 300,000
			TOTAL	\$ 300,000	\$ 300,000	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 300,000
			TOTAL FY 18/19 WASH CIP	\$ 8,069,003	\$ 8,069,003	\$ 7,203,390	\$ 688,537	\$ 177,076	\$ -	\$ -	\$ -	\$ -	\$ 8,069,003

Appendix D

Location Map



- 810A 2000 Fire Station Weir
- 810C 2019 Historic Lateral Weir
- 810D 2000 Pabco Road ECS
- 810E 2003 Bostick Weir
- 810F 2008 Upper Diversion Weir
- 810G 2013 Duck Creek Confluence Weir
- 810H 2002 Monson Outfall Weir
- 810J 2002 Visitor Center Weir
- 810K 2015 Three Kids Weir
- 810L 2011 Homestead Weir
- 810M 2011 Lower Narrows Weir
- 810N 2004 Rainbow Gardens Weir
- 810P 2007 Powerline Crossing Weir
- 810R 2005 Calico Ridge Weir
- 810S 2018 Tropicana Outfall Weir
- 810U 2015 Silver Bow Weir
- 810V 2013 DU Wetlands No. 1 Weir
- 810W 2019 Sunrise Mountain Weir
- 810X 2013 Upper Narrows Weir
- 810Y 2009 DU Wetlands No. 2 Weir
- 810Z 2015 Archery Weir



1 inch = 3000 Feet, or Scale = 1:36,000
(Original 11x17 map only, verify scale)

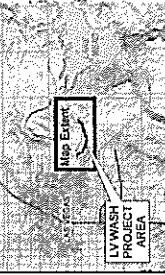
MAP-ID: WFE-CIP
DATE: 17 MAY 2018

SNWA Wash Facilities Engineering
Official Capital Improvements Plan map
Board approval date: May 17, 2018.


Map produced by:
SNWA Spatial Technologies Div.
Mapping and Analysis Team (GIS)
SFC IV-E, NAD83, US Feet.
Analyst: EN

Project Construction

Year of Completion	2000	2004	2008	2013	2015	2018	2019
2000	—	—	—	—	—	—	—
2004	—	—	—	—	—	—	—
2008	—	—	—	—	—	—	—
2013	—	—	—	—	—	—	—
2015	—	—	—	—	—	—	—
2018	—	—	—	—	—	—	—
2019	—	—	—	—	—	—	—



SNWA LAS VEGAS WASH
CAPITAL IMPROVEMENTS PLAN
GRADE CONTROL STRUCTURES
2018



SOUTHERN NEVADA
WATER AUTHORITY

0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
feet

Appendix E

Ranking Criteria Scoring

Channel Bed Stabilization

2018 - 19 Capital Improvements Plan
Ranking Criteria Scoring
Channel Bed Stabilization

Factor	Criteria	Score	Criteria Score																			
			Fire Station	Powerline Crossing	Rainbow Gardens	Three Kids Weir	Homestead	Lower Narrows	Calico Ridge	Bostick	Historic Lateral	Pabco Road	Sunrise Mountain	Upper Narrows	Duck Creek	Archery	Silverbowl	DU Wetlands 1	DU Wetlands 2	Tropicana	Visitor Center	Monson
Upstream Stability	Active headcutting risking upstream channel, structures, or banks	5	5		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Moderate headcutting in silty or sandy channel bed, some bank stability threat	3	3									3				3				3	3	
	Slow headcutting in caliche or bedrock, little bank stability threat	1																	1			
System Relationship	Provides important foundation or stability support for other facilities	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Provides moderate foundation or stability support to other Wash features	3									3			3								
	Provides minor or no foundation or stability support to other facilities	1																				
Cost Avoidance	Will reduce capital cost of other facilities or is a low maintenance facility	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Provides minor capital cost savings for other facilities or minor annual maintenance expected	3																				
	Provides no reduction in capital cost for other facilities, high maintenance expected	1																				
Water Quality	Provides large volume for sediment capture or 5 or more acres potential wetlands area	5		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Provides minor volume of sediment capture or 3 or more acres potential wetlands area	3	3	3							3	3	3	3	3	3	3	3	3	3	3	3
	Provides little or no volume for sediment capture or less than 1 acre of potential wetlands area	1							1										1	1	1	1
Ecosystem Enhancement	Provides platform for ecosystem enhancement covering greater than 5 acres	5		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Provides platform for ecosystem enhancement covering greater than 3 acres	3	3	3							3	3	3	3	3	3	3	3	3	3	3	3
	Provides platform for ecosystem enhancement covering 1 acre or more	1							1											1	1	1
Recreational Opportunities	Directly reduces threat to recreational features	5																				
	Provides possible threat reduction to recreational features	3		3	3					3	3	3	3	3	3	3	3	3	3	3	3	3
	Provides little or no threat reduction to recreational features	1	1						1													
Public Safety	Is strongly beneficial to public safety associated with activities in the Wash	5				5	5	5											5	5	5	5
	Provides some improvement to public safety associated with activities in the Wash	3	3	3				3	3	3	3	3	3	3	3	3	3	3				
	Provides little improvement to public safety associated with activities in the Wash	1	1													1	1					
Permitting	Relatively minor permitting issues to be resolved	5	5			5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Wetlands, WQ, Wildlife, or Archeological issues exist and clearance required	3	3	3	3			3											3			
	A sensitive site requiring mitigation or high level of protection	1										1										
ROW & Access	Local Government Ownership, relatively easy acquisition	5		5	5		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Federal Ownership, requiring federal review and approval	3						3														
	Private Ownership requiring extended negotiations	1	1																			
Other Funding	other local, state, or federal funding assistance for > 50% of project cost	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Identified possibility for additional local, state, federal funding assistance for > 25% of project	3																				
	No additional funding assistance identified beyond local sales tax revenues or < 25% project	1								1		1										

 = In Construction or Completed

Appendix F
2018-19 Project Prioritization
Channel Bed Stabilization

**2018 - 19 Project Prioritization
Channel Bed Stabilization**

Facility Description	Channel Station	Facility ID	Priority Factor and Weight										Priority Value	Ranking	In Construction or Complete
			Stability	Relationship	Cost Avoidance	WQ Enhancement	Ecosystem Enhancement	Recreational Benefit	Public Safety	Permitting	ROW & Access	Other Funding			
			5	5	5	3.5	3.5	3.5	3.5	2.5	2.5	2.5			
Lower Narrows	9470	810M	5 25	5 25	5 25	5 17.5	5 17.5	5 17.5	5 17.5	3 7.5	5 12.5	5 12.5	177.5		X
Homestead	6740	810L	5 25	5 25	5 25	5 17.5	5 17.5	5 17.5	5 17.5	3 7.5	5 12.5	5 12.5	177.5		X
Three Kids Weir	5150	810K	5 25	5 25	5 25	5 17.5	5 17.5	5 17.5	5 17.5	5 12.5	1 2.5	5 12.5	172.5		X
Historic Lateral	15400	810C (910AR)	5 25	5 25	5 25	5 17.5	5 17.5	3 10.5	3 10.5	3 7.5	5 12.5	5 12.5	163.5		X
Rainbow Gardens	3120	810N (170A)	5 25	5 25	5 25	5 17.5	5 17.5	3 10.5	3 10.5	3 7.5	5 12.5	5 12.5	163.5		X
Upper Diversion	35650	810F	5 25	5 25	5 25	3 10.5	3 10.5	5 17.5	5 17.5	3 7.5	5 12.5	5 12.5	163.5		X
Pabco Road	20000	810D	5 25	5 25	5 25	3 10.5	5 17.5	3 10.5	5 17.5	1 2.5	5 12.5	5 12.5	158.5		X
Bostick Weir	13300	810E	5 25.0	5 25.0	5 25.0	5 17.5	5 17.5	3 10.5	3 10.5	5 12.5	5 12.5	1 2.5	158.5		X
Powerline Crossing	1950	810P	5 25	5 25	5 25	3 10.5	3 10.5	5 17.5	3 10.5	3 7.5	5 12.5	5 12.5	156.5		X
DU Wetlands 1	29500	810V	5 25	5 25	5 25	3 10.5	3 10.5	3 10.5	3 10.5	5 12.5	5 12.5	5 12.5	154.5		X
Duck Creek Confluence	25330	810G	5 25.0	3 15.0	5 25.0	5 17.5	5 17.5	5 17.5	3 10.5	3 7.5	5 12.5	3 7.5	155.5		X
Upper Narrows	23500	810X	5 25	5 25	3 15	3 10.5	3 10.5	3 10.5	3 10.5	5 12.5	5 12.5	3 7.5	139.5		X
Visitor Center	33850	810J	3 15	5 25	3 15	1 3.5	1 3.5	5 17.5	5 17.5	5 12.5	5 12.5	5 12.5	134.5		X
Monson Weir	34950	810H	3 15	5 25	3 15	1 3.5	1 3.5	5 17.5	5 17.5	5 12.5	5 12.5	5 12.5	134.5		X
DU Wetlands 2	31100	810Y	3 15	3 15	5 25	3 10.5	5 17.5	5 17.5	3 10.5	3 7.5	3 7.5	3 7.5	133.5		X
Calico Ridge	11400	810R	5 25	5 25	5 25	1 3.5	1 3.5	1 3.5	3 10.5	5 12.5	3 7.5	5 12.5	128.5		X
Archery	26500	810Z	5 25	5 25	5 25	3 10.5	3 10.5	3 10.5	1 3.5	3 7.5	5 12.5	1 2.5	132.5		X
Silver Bowl	28190	810U	3 15	5 25	5 25	3 10.5	3 10.5	3 10.5	1 3.5	1 2.5	5 12.5	3 7.5	122.5		X
Fire Station	690	810A	3 15	5 25	5 25	3 10.5	3 10.5	1 3.5	1 3.5	5 12.5	1 2.5	5 12.5	120.5		X
Tropicana	32300	810S	1 5	5 25	5 25	1 3.5	3 10.5	3 10.5	5 17.5	3 7.5	5 12.5	1 2.5	119.5		X
Sunrise Mountain	22000	810W	3 15	3 15	5 25	3 10.5	3 10.5	1 3.5	3 10.5	5 12.5	3 7.5	1 2.5	112.5		X

X = In Construction or Completed

Appendix G

Sales Tax Received and Distributed

Southern Nevada Water Authority

Sales Tax Received and Distributed

Collection Month	Received Date	Receipts	Distributions			
		Gross Amount	Clark Co. Rural Areas	LV Wash	Wastewater Agencies	Other SNWA Capital
Apr-99	7-Jul-99	\$ 3,995,539	\$ 168,120	\$ 159,822		\$ 3,667,597
May-99	27-Jul-99	\$ 4,083,781	\$ 171,833	\$ 163,351		\$ 3,748,597
Jun-99	27-Aug-99	\$ 4,466,631	\$ 187,942	\$ 178,665		\$ 4,100,023
Fiscal Year 1998-1999		\$ 12,545,951	\$ 527,896	\$ 501,838	\$ -	\$ 11,516,217
Jul-99	24-Sep-99	\$ 3,876,062	\$ 163,093	\$ 155,042		\$ 3,557,926
Aug-99	22-Oct-99	\$ 4,056,713	\$ 170,694	\$ 162,269		\$ 3,723,750
Sep-99	29-Nov-99	\$ 4,389,790	\$ 184,709	\$ 175,592		\$ 4,029,490
Oct-99	27-Dec-99	\$ 4,081,697	\$ 171,746	\$ 163,268		\$ 3,746,683
Nov-99	25-Jan-00	\$ 4,210,101	\$ 177,148	\$ 168,404		\$ 3,864,548
Dec-99	29-Feb-00	\$ 5,077,263	\$ 213,636	\$ 203,091		\$ 4,660,537
Jan-00	24-Mar-00	\$ 4,011,032	\$ 168,772	\$ 160,441		\$ 3,681,819
Feb-00	25-Apr-00	\$ 4,056,425	\$ 170,682	\$ 162,257		\$ 3,723,485
Mar-00	26-May-00	\$ 4,718,344	\$ 198,534	\$ 188,734		\$ 4,331,076
Apr-00	28-Jun-00	\$ 4,285,442	\$ 180,319	\$ 171,418		\$ 3,933,706
May-00	21-Jul-00	\$ 4,403,289	\$ 185,277	\$ 176,132		\$ 4,041,880
Jun-00	25-Aug-00	\$ 4,816,863	\$ 202,679	\$ 192,675		\$ 4,421,510
Fiscal Year 1999-2000		\$ 51,983,020	\$ 2,187,290	\$ 2,079,321	\$ -	\$ 47,716,410
Jul-00	22-Sep-00	\$ 4,316,705	\$ 181,634	\$ 172,668		\$ 3,962,402
Aug-00	20-Oct-00	\$ 4,470,849	\$ 188,120	\$ 178,834		\$ 4,103,895
Sep-00	29-Nov-00	\$ 4,819,576	\$ 202,793	\$ 192,783		\$ 4,424,000
Oct-00	22-Dec-00	\$ 4,363,936	\$ 183,621	\$ 174,557		\$ 4,005,757
Nov-00	22-Jan-01	\$ 4,423,627	\$ 186,133	\$ 176,945		\$ 4,060,549
Dec-00	26-Feb-01	\$ 5,353,220	\$ 225,247	\$ 214,129		\$ 4,913,843
Jan-01	23-Mar-01	\$ 4,196,777	\$ 176,588	\$ 167,871		\$ 3,852,319
Feb-01	20-Apr-01	\$ 4,238,834	\$ 178,357	\$ 169,553		\$ 3,890,923
Mar-01	25-May-01	\$ 5,122,948	\$ 215,558	\$ 204,918		\$ 4,702,472
Apr-01	22-Jun-01	\$ 4,554,600	\$ 191,644	\$ 182,184	\$ 1,588,693	\$ 2,592,078
May-01	20-Jul-01	\$ 4,811,654	\$ 202,460	\$ 192,466	\$ 1,678,357	\$ 2,738,371
Jun-01	24-Aug-01	\$ 4,913,175	\$ 206,732	\$ 196,527	\$ 1,713,768	\$ 2,796,148
Fiscal Year 2000-2001		\$ 55,585,901	\$ 2,338,888	\$ 2,223,436	\$ 4,980,818	\$ 46,042,758

Southern Nevada Water Authority

Sales Tax Received and Distributed (continued)

Collection Month	Received Date	Receipts	Distributions			
		Gross Amount	Clark Co. Rural Areas	LV Wash	Wastewater Agencies	Other SNWA Capital
Jul-01	21-Sep-01	\$ 4,573,130	\$ 192,424	\$ 182,925	\$ 1,595,157	\$ 2,602,625
Aug-01	19-Oct-01	\$ 4,769,281	\$ 200,677	\$ 190,771	\$ 1,663,576	\$ 2,714,256
Sep-01	27-Nov-01	\$ 4,281,399	\$ 180,148	\$ 171,256	\$ 1,493,398	\$ 2,436,597
Oct-01	26-Dec-01	\$ 4,694,971	\$ 197,550	\$ 187,799	\$ 1,637,656	\$ 2,671,966
Nov-01	29-Jan-02	\$ 4,472,344	\$ 188,183	\$ 178,894	\$ 1,560,002	\$ 2,545,266
Dec-01	1-Mar-02	\$ 5,232,197	\$ 220,155	\$ 209,288	\$ 1,825,046	\$ 2,977,707
Jan-02	25-Mar-02	\$ 4,326,825	\$ 182,060	\$ 173,073	\$ 1,509,243	\$ 2,462,449
Feb-02	22-Apr-02	\$ 4,349,265	\$ 183,004	\$ 173,971	\$ 1,517,070	\$ 2,475,220
Mar-02	24-May-02	\$ 5,103,196	\$ 214,727	\$ 204,128	\$ 1,780,050	\$ 2,904,291
Apr-02	26-Jun-02	\$ 4,750,192	\$ 199,874	\$ 190,008	\$ 1,656,918	\$ 2,703,393
May-02	22-Jul-02	\$ 4,821,868	\$ 202,890	\$ 192,875	\$ 1,681,919	\$ 2,744,184
Jun-02	26-Aug-02	\$ 4,970,042	\$ 209,124	\$ 198,802	\$ 1,733,604	\$ 2,828,512
Fiscal Year 2001-2002		\$ 56,344,710	\$ 2,370,816	\$ 2,253,788	\$ 19,653,640	\$ 32,066,465
Jul-02	27-Sep-02	\$ 4,749,455	\$ 199,843	\$ 189,978	\$ 1,656,661	\$ 2,702,973
Aug-02	29-Oct-02	\$ 5,022,283	\$ 211,323	\$ 200,891	\$ 1,751,826	\$ 2,858,243
Sep-02	27-Nov-02	\$ 4,874,256	\$ 205,094	\$ 194,970	\$ 1,700,193	\$ 2,773,999
Oct-02	30-Dec-02	\$ 4,823,952	\$ 202,977	\$ 192,958	\$ 1,682,646	\$ 2,745,370
Nov-02	27-Jan-03	\$ 4,774,929	\$ 200,915	\$ 190,997	\$ 1,665,546	\$ 2,717,470
Dec-02	28-Feb-03	\$ 5,797,103	\$ 243,925	\$ 231,884	\$ 2,022,092	\$ 3,299,203
Jan-03	28-Mar-03	\$ 4,691,519	\$ 197,405	\$ 187,661	\$ 1,636,452	\$ 2,670,001
Feb-03	25-Apr-03	\$ 4,578,090	\$ 192,632	\$ 183,124	\$ 1,596,887	\$ 2,605,447
Mar-03	30-May-03	\$ 5,436,587	\$ 228,755	\$ 217,463	\$ 1,896,340	\$ 3,094,028
Apr-03	27-Jun-03	\$ 5,141,704	\$ 216,347	\$ 205,668	\$ 1,793,481	\$ 2,926,207
May-03	28-Jul-03	\$ 5,209,543	\$ 219,202	\$ 208,382	\$ 1,817,145	\$ 2,964,815
Jun-03	29-Aug-03	\$ 5,479,729	\$ 230,571	\$ 219,189	\$ 1,911,388	\$ 3,118,581
Fiscal Year 2002-2003		\$ 60,579,149	\$ 2,548,989	\$ 2,423,166	\$ 21,130,658	\$ 34,476,336
Jul-03	29-Sep-03	\$ 5,289,908	\$ 222,583	\$ 211,596	\$ 1,845,177	\$ 3,010,551
Aug-03	24-Oct-03	\$ 5,567,909	\$ 234,281	\$ 222,716	\$ 1,942,146	\$ 3,168,765
Sep-03	26-Nov-03	\$ 5,593,449	\$ 235,356	\$ 223,738	\$ 1,976,128	\$ 3,158,228
Oct-03	26-Dec-03	\$ 5,504,945	\$ 166,762	\$ 220,198	\$ 1,944,834	\$ 3,173,151
Nov-03	30-Jan-04	\$ 5,255,726	\$ 159,212	\$ 210,229	\$ 1,856,788	\$ 3,029,497
Dec-03	27-Feb-04	\$ 6,274,646	\$ 190,078	\$ 250,986	\$ 2,216,761	\$ 3,616,821
Jan-04	26-Mar-04	\$ 5,611,388	\$ 169,986	\$ 224,456	\$ 1,982,440	\$ 3,234,507
Feb-04	30-Apr-04	\$ 5,373,733	\$ 162,787	\$ 214,949	\$ 1,898,479	\$ 3,097,518
Mar-04	28-May-04	\$ 6,609,509	\$ 200,222	\$ 264,380	\$ 2,335,065	\$ 3,809,842
Apr-04	25-Jun-04	\$ 5,958,389	\$ 180,498	\$ 238,336	\$ 2,105,031	\$ 3,434,525
May-04	30-Jul-04	\$ 6,248,803	\$ 189,295	\$ 249,952	\$ 2,207,631	\$ 3,601,924
Jun-04	27-Aug-04	\$ 6,435,920	\$ 194,964	\$ 257,437	\$ 2,273,737	\$ 3,709,782
Fiscal Year 2003-2004		\$ 69,724,324	\$ 2,306,023	\$ 2,788,973	\$ 24,584,217	\$ 40,045,111

Southern Nevada Water Authority

Sales Tax Received and Distributed (continued)

Collection Month	Received Date	Receipts	Distributions			
		Gross Amount	Clark Co. Rural Areas	LV Wash	Wastewater Agencies	Other SNWA Capital
Jul-04	24-Sep-04	\$ 6,376,348	\$ 193,159	\$ 255,054	\$ 2,252,691	\$ 3,675,444
Aug-04	28-Oct-04	\$ 6,277,281	\$ 190,158	\$ 251,091	\$ 2,217,692	\$ 3,618,339
Sep-04	29-Nov-04	\$ 6,646,048	\$ 201,329	\$ 265,842	\$ 2,347,973	\$ 3,830,904
Oct-04	23-Dec-04	\$ 6,403,724	\$ 193,988	\$ 256,149	\$ 2,262,363	\$ 3,691,224
Nov-04	28-Jan-05	\$ 6,306,345	\$ 191,038	\$ 252,254	\$ 2,227,960	\$ 3,635,093
Dec-04	25-Feb-05	\$ 7,757,964	\$ 235,012	\$ 310,319	\$ 2,740,801	\$ 4,471,833
Jan-05	28-Mar-05	\$ 6,057,705	\$ 183,506	\$ 242,308	\$ 2,140,118	\$ 3,491,772
Feb-05	29-Apr-05	\$ 6,093,734	\$ 184,598	\$ 243,749	\$ 2,152,847	\$ 3,512,540
Mar-05	27-May-05	\$ 7,596,622	\$ 230,125	\$ 303,865	\$ 2,683,800	\$ 4,378,832
Apr-05	24-Jun-05	\$ 6,875,146	\$ 208,269	\$ 275,006	\$ 2,428,911	\$ 3,962,960
May-05	29-Jul-05	\$ 7,140,352	\$ 216,303	\$ 285,614	\$ 2,522,605	\$ 4,115,830
Jun-05	26-Aug-05	\$ 7,494,219	\$ 227,023	\$ 299,769	\$ 2,647,622	\$ 4,319,805
Fiscal Year 2004-2005		\$ 81,025,486	\$ 2,454,508	\$ 3,241,019	\$ 28,625,384	\$ 46,704,574
Jul-05	30-Sep-05	\$ 7,024,506	\$ 212,794	\$ 280,980	\$ 2,481,678	\$ 4,049,054
Aug-05	27-Oct-05	\$ 7,060,064	\$ 213,871	\$ 282,403	\$ 2,494,240	\$ 4,069,550
Sep-05	29-Nov-05	\$ 7,338,501	\$ 222,306	\$ 293,540	\$ 2,592,609	\$ 4,230,046
Oct-05	30-Dec-05	\$ 7,016,781	\$ 212,560	\$ 280,671	\$ 2,478,949	\$ 4,044,601
Nov-05	27-Jan-06	\$ 6,888,714	\$ 208,680	\$ 275,549	\$ 2,433,704	\$ 3,970,781
Dec-05	1-Mar-06	\$ 8,587,151	\$ 260,131	\$ 343,486	\$ 3,033,743	\$ 4,949,791
Jan-06	31-Mar-06	\$ 6,743,203	\$ 204,272	\$ 269,728	\$ 2,382,297	\$ 3,886,905
Feb-06	28-Apr-06	\$ 6,815,659	\$ 488,723	\$ 272,626	\$ 2,334,259	\$ 3,720,050
Mar-06	1-Jun-06	\$ 8,081,356	\$ 441,313	\$ 323,254	\$ 2,780,380	\$ 4,536,409
Apr-06	3-Jul-06	\$ 7,394,368	\$ 233,876	\$ 295,775	\$ 2,608,593	\$ 4,256,125
May-06	28-Jul-06	\$ 7,484,835	\$ 236,737	\$ 299,393	\$ 2,640,508	\$ 4,308,197
Jun-06	30-Aug-06	\$ 7,993,628	\$ 252,830	\$ 319,745	\$ 2,820,000	\$ 4,601,053
Fiscal Year 2005-2006		\$ 88,428,765	\$ 3,188,091	\$ 3,537,151	\$ 31,080,961	\$ 50,622,562
Jul-06	2-Oct-06	\$ 7,199,840	\$ 227,723	\$ 287,994	\$ 2,539,967	\$ 4,144,157
Aug-06	31-Oct-06	\$ 7,323,145	\$ 231,623	\$ 292,926	\$ 2,583,467	\$ 4,215,130
Sep-06	29-Nov-06	\$ 7,582,818	\$ 239,836	\$ 303,313	\$ 2,675,074	\$ 4,364,595
Oct-06	29-Dec-06	\$ 7,100,583	\$ 224,584	\$ 284,023	\$ 2,504,951	\$ 4,087,025
Nov-06	27-Jan-07	\$ 7,046,861	\$ 222,884	\$ 281,874	\$ 2,485,999	\$ 4,056,103
Dec-06	28-Feb-07	\$ 8,573,457	\$ 271,169	\$ 342,938	\$ 3,024,553	\$ 4,934,797
Jan-07	30-Mar-07	\$ 6,910,453	\$ 218,570	\$ 276,418	\$ 2,437,877	\$ 3,977,588
Feb-07	27-Apr-07	\$ 6,986,205	\$ 220,966	\$ 279,448	\$ 2,464,601	\$ 4,021,191
Mar-07	31-May-07	\$ 8,161,105	\$ 258,127	\$ 326,444	\$ 2,879,083	\$ 4,697,451
Apr-07	29-Jun-07	\$ 7,153,765	\$ 226,266	\$ 286,151	\$ 2,523,712	\$ 4,117,636
May-07	30-Jul-07	\$ 7,417,299	\$ 201,355	\$ 296,692	\$ 2,629,316	\$ 4,289,936
Jun-07	31-Aug-07	\$ 7,918,593	\$ 210,795	\$ 316,744	\$ 2,808,601	\$ 4,582,454
Fiscal Year 2006-2007		\$ 89,374,124	\$ 2,753,898	\$ 3,574,965	\$ 31,557,199	\$ 51,488,062

Southern Nevada Water Authority

Sales Tax Received and Distributed (continued)

Collection Month	Received Date	Receipts	Distributions			
		Gross Amount	Clark Co. Rural Areas	LV Wash	Wastewater Agencies	Other SNWA Capital
Jul-07	28-Sep-07	\$ 7,035,191	\$ 187,279	\$ 281,408	\$ 2,495,272	\$ 4,071,233
Aug-07	31-Oct-07	\$ 7,030,120	\$ 187,144	\$ 281,205	\$ 2,493,473	\$ 4,068,298
Sep-07	30-Nov-07	\$ 7,371,728	\$ 196,238	\$ 294,869	\$ 2,614,636	\$ 4,265,985
Oct-07	31-Dec-07	\$ 7,203,147	\$ 191,750	\$ 288,126	\$ 2,554,843	\$ 4,168,428
Nov-07	30-Jan-08	\$ 7,001,344	\$ 186,378	\$ 280,054	\$ 2,483,267	\$ 4,051,646
Dec-07	29-Feb-08	\$ 8,565,788	\$ 241,384	\$ 342,632	\$ 3,033,074	\$ 4,948,699
Jan-08	28-Mar-08	\$ 6,498,944	\$ 205,938	\$ 259,958	\$ 2,292,558	\$ 3,740,490
Feb-08	30-Apr-08	\$ 6,544,565	\$ 184,426	\$ 261,783	\$ 2,317,376	\$ 3,780,981
Mar-08	30-May-08	\$ 7,683,503	\$ 216,521	\$ 307,340	\$ 2,720,664	\$ 4,438,978
Apr-08	27-Jun-08	\$ 6,927,960	\$ 195,230	\$ 277,118	\$ 2,453,132	\$ 4,002,479
May-08	31-Jul-08	\$ 7,171,987	\$ 202,107	\$ 286,879	\$ 2,539,540	\$ 4,143,461
Jun-08	29-Aug-08	\$ 7,242,215	\$ 204,086	\$ 289,689	\$ 2,564,408	\$ 4,184,033
Fiscal Year 2007-2008		\$ 86,276,491	\$ 2,398,479	\$ 3,451,060	\$ 30,562,242	\$ 49,864,710
Jul-08	29-Sep-08	\$ 6,712,162	\$ 189,149	\$ 268,486	\$ 2,376,720	\$ 3,877,807
Aug-08	30-Oct-08	\$ 7,180,618	\$ 205,186	\$ 287,225	\$ 2,541,519	\$ 4,146,688
Sep-08	25-Nov-08	\$ 6,622,651	\$ 189,242	\$ 264,906	\$ 2,344,031	\$ 3,824,472
Oct-08	28-Dec-08	\$ 6,608,538	\$ 188,839	\$ 264,342	\$ 2,339,036	\$ 3,816,322
Nov-08	30-Jan-09	\$ 6,058,233	\$ 173,114	\$ 242,329	\$ 2,144,260	\$ 3,498,530
Dec-08	27-Feb-09	\$ 6,913,934	\$ 197,566	\$ 276,557	\$ 2,447,128	\$ 3,992,683
Jan-09	30-Mar-09	\$ 5,440,196	\$ 155,454	\$ 217,608	\$ 1,925,511	\$ 3,141,624
Feb-09	30-Apr-09	\$ 5,320,986	\$ 152,047	\$ 212,839	\$ 1,883,318	\$ 3,072,781
Mar-09	29-May-09	\$ 6,589,177	\$ 188,286	\$ 263,567	\$ 2,332,183	\$ 3,805,141
Apr-09	26-Jun-09	\$ 5,838,658	\$ 166,840	\$ 233,546	\$ 2,066,543	\$ 3,371,728
May-09	30-Jul-09	\$ 5,790,455	\$ 165,462	\$ 231,618	\$ 2,049,482	\$ 3,343,892
Jun-09	28-Aug-09	\$ 5,958,459	\$ 170,263	\$ 238,338	\$ 2,108,946	\$ 3,440,912
Fiscal Year 2008-2009		\$ 75,034,067	\$ 2,141,447	\$ 3,001,363	\$ 26,558,678	\$ 43,332,579
Jul-09	29-Sep-09	\$ 5,411,301	\$ 167,577	\$ 216,452	\$ 1,910,363	\$ 3,116,908
Aug-09	29-Oct-09	\$ 5,435,528	\$ 168,327	\$ 217,421	\$ 1,918,916	\$ 3,130,863
Sep-09	30-Nov-09	\$ 5,630,829	\$ 174,376	\$ 225,233	\$ 1,987,864	\$ 3,243,357
Oct-09	30-Dec-09	\$ 5,467,931	\$ 169,331	\$ 218,717	\$ 1,930,356	\$ 3,149,527
Nov-09	29-Jan-10	\$ 5,421,077	\$ 167,880	\$ 216,843	\$ 1,913,815	\$ 3,122,540
Dec-09	26-Feb-10	\$ 6,590,956	\$ 204,109	\$ 263,638	\$ 2,326,819	\$ 3,796,390
Jan-10	31-Mar-10	\$ 5,108,796	\$ 158,209	\$ 204,352	\$ 1,803,569	\$ 2,942,666
Feb-10	30-Apr-10	\$ 5,108,584	\$ 158,203	\$ 204,343	\$ 1,803,495	\$ 2,942,544
Mar-10	28-May-10	\$ 6,069,444	\$ 187,959	\$ 242,778	\$ 2,142,709	\$ 3,495,999
Apr-10	30-Jun-10	\$ 5,998,218	\$ 185,753	\$ 239,929	\$ 2,117,564	\$ 3,454,972
May-10	2-Aug-10	\$ 5,735,351	\$ 177,612	\$ 229,414	\$ 2,024,763	\$ 3,303,561
Jun-10	31-Aug-10	\$ 5,928,143	\$ 183,583	\$ 237,126	\$ 2,092,825	\$ 3,414,610
Fiscal Year 2009-2010		\$ 67,906,159	\$ 2,102,918	\$ 2,716,246	\$ 23,973,058	\$ 39,113,937

Southern Nevada Water Authority

Sales Tax Received and Distributed (continued)

Collection Month	Received Date	Receipts	Distributions			
		Gross Amount	Clark Co. Rural Areas	LV Wash	Wastewater Agencies	Other SNWA Capital
Jul-10	30-Sep-10	\$ 5,654,890	\$ 188,891	\$ 226,196	\$ 1,991,125	\$ 3,248,678
Aug-10	28-Oct-10	\$ 5,803,042	\$ 193,840	\$ 232,122	\$ 2,043,291	\$ 3,333,790
Sep-10	30-Nov-10	\$ 5,711,560	\$ 190,784	\$ 228,462	\$ 2,011,079	\$ 3,281,234
Oct-10	30-Dec-10	\$ 5,601,461	\$ 187,106	\$ 224,058	\$ 1,972,313	\$ 3,217,984
Nov-10	31-Jan-11	\$ 5,584,548	\$ 186,541	\$ 223,382	\$ 1,966,357	\$ 3,208,267
Dec-10	28-Feb-11	\$ 6,606,719	\$ 220,685	\$ 264,269	\$ 2,326,271	\$ 3,795,494
Jan-11	31-Mar-11	\$ 5,405,921	\$ 180,575	\$ 216,237	\$ 1,903,462	\$ 3,105,648
Feb-11	29-Apr-11	\$ 5,353,999	\$ 178,840	\$ 214,160	\$ 1,885,180	\$ 3,075,819
Mar-11	31-May-11	\$ 6,697,136	\$ 223,705	\$ 267,885	\$ 2,358,107	\$ 3,847,438
Apr-11	30-Jun-11	\$ 6,063,186	\$ 202,529	\$ 242,527	\$ 2,134,889	\$ 3,483,240
May-11	1-Aug-11	\$ 6,036,786	\$ 201,647	\$ 241,471	\$ 2,125,593	\$ 3,468,073
Jun-11	31-Aug-11	\$ 6,397,099	\$ 213,683	\$ 255,884	\$ 2,252,462	\$ 3,675,070
Fiscal Year 2010-2011		\$ 70,916,346	\$ 2,368,827	\$ 2,836,654	\$ 24,970,129	\$ 40,740,737
Jul-11	3-Oct-11	\$ 5,879,272	\$ 196,386	\$ 235,171	\$ 2,134,328	\$ 3,313,388
Aug-11	31-Oct-11	\$ 5,859,385	\$ 195,722	\$ 234,375	\$ 1,998,934	\$ 3,430,354
Sep-11	29-Nov-11	\$ 6,305,007	\$ 210,607	\$ 252,200	\$ 2,220,036	\$ 3,622,164
Oct-11	29-Dec-11	\$ 6,129,515	\$ 204,745	\$ 245,181	\$ 2,158,244	\$ 3,521,346
Nov-11	31-Jan-12	\$ 6,055,230	\$ 202,264	\$ 242,209	\$ 2,132,088	\$ 3,478,670
Dec-11	29-Feb-12	\$ 7,144,138	\$ 238,636	\$ 285,766	\$ 2,515,500	\$ 4,104,236
Jan-12	30-Mar-12	\$ 5,658,196	\$ 189,001	\$ 226,328	\$ 1,992,289	\$ 3,250,577
Feb-12	30-Apr-12	\$ 5,922,925	\$ 197,844	\$ 236,917	\$ 2,085,502	\$ 3,402,662
Mar-12	31-May-12	\$ 6,790,048	\$ 226,809	\$ 271,602	\$ 2,390,822	\$ 3,900,815
Apr-12	29-Jun-12	\$ 6,212,889	\$ 207,530	\$ 248,516	\$ 2,187,601	\$ 3,569,243
May-12	30-Jul-12	\$ 6,522,232	\$ 217,863	\$ 260,889	\$ 2,296,522	\$ 3,746,957
Jun-12	31-Aug-12	\$ 6,742,691	\$ 225,227	\$ 269,708	\$ 2,374,147	\$ 3,873,609
Fiscal Year 2011-2012		\$ 75,221,529	\$ 2,512,633	\$ 3,008,861	\$ 26,486,013	\$ 43,214,022
Jul-12	28-Sep-12	\$ 6,167,979	\$ 206,030	\$ 246,719	\$ 2,171,787	\$ 3,543,443
Aug-12	31-Oct-12	\$ 6,347,611	\$ 212,030	\$ 253,904	\$ 2,235,037	\$ 3,646,640
Sep-12	30-Nov-12	\$ 6,574,756	\$ 219,617	\$ 262,990	\$ 2,315,017	\$ 3,777,132
Oct-12	31-Dec-12	\$ 6,472,579	\$ 216,204	\$ 258,903	\$ 2,279,039	\$ 3,718,432
Nov-12	31-Jan-13	\$ 6,355,187	\$ 212,283	\$ 254,207	\$ 2,237,705	\$ 3,650,992
Dec-12	1-Mar-13	\$ 7,550,851	\$ 252,222	\$ 302,034	\$ 2,658,706	\$ 4,337,889
Jan-13	29-Mar-13	\$ 6,218,961	\$ 207,733	\$ 248,758	\$ 2,189,739	\$ 3,572,731
Feb-13	30-Apr-13	\$ 6,019,983	\$ 201,086	\$ 240,799	\$ 2,119,677	\$ 3,458,421
Mar-13	31-May-13	\$ 7,289,672	\$ 243,498	\$ 291,587	\$ 2,566,743	\$ 4,187,844
Apr-13	28-Jun-13	\$ 6,577,240	\$ 219,700	\$ 263,090	\$ 2,315,891	\$ 3,778,559
May-13	31-Jul-13	\$ 6,958,034	\$ 232,420	\$ 278,321	\$ 2,449,972	\$ 3,997,321
Jun-13	30-Aug-13	\$ 6,959,568	\$ 232,471	\$ 278,383	\$ 2,450,511	\$ 3,998,203
Fiscal Year 2012-2013		\$ 79,492,423	\$ 2,655,294	\$ 3,179,697	\$ 27,989,825	\$ 45,667,607

Southern Nevada Water Authority

Sales Tax Received and Distributed (continued)

Collection Month	Received Date	Receipts	Distributions			
		Gross Amount	Clark Co. Rural Areas	LV Wash	Wastewater Agencies	Other SNWA Capital
Jul-13	30-Sep-13	\$ 6,482,578	\$ 216,538	\$ 259,303	\$ 2,282,560	\$ 3,724,177
Aug-13	31-Oct-13	\$ 6,620,714	\$ 221,152	\$ 264,829	\$ 2,331,198	\$ 3,803,534
Sep-13	27-Nov-13	\$ 7,386,823	\$ 246,743	\$ 295,473	\$ 2,600,951	\$ 4,243,656
Oct-13	30-Dec-13	\$ 6,795,439	\$ 226,989	\$ 271,818	\$ 2,392,720	\$ 3,903,912
Nov-13	31-Jan-14	\$ 6,824,227	\$ 227,950	\$ 272,969	\$ 2,402,857	\$ 3,920,451
Dec-13	28-Feb-14	\$ 7,869,507	\$ 262,866	\$ 314,780	\$ 2,770,907	\$ 4,520,954
Jan-14	31-Mar-14	\$ 6,437,277	\$ 215,025	\$ 257,491	\$ 2,266,609	\$ 3,698,152
Feb-14	30-Apr-14	\$ 6,539,509	\$ 218,440	\$ 261,580	\$ 2,302,606	\$ 3,756,883
Mar-14	30-May-14	\$ 8,009,796	\$ 267,552	\$ 320,392	\$ 2,820,304	\$ 4,601,548
Apr-14	30-Jun-14	\$ 7,023,201	\$ 234,597	\$ 280,928	\$ 2,472,917	\$ 4,034,760
May-14	31-Jul-14	\$ 7,704,199	\$ 257,344	\$ 308,168	\$ 2,712,701	\$ 4,425,986
Jun-14	29-Aug-14	\$ 7,432,478	\$ 248,268	\$ 297,299	\$ 2,617,026	\$ 4,269,885
Fiscal Year 2013-2014		\$ 85,125,747	\$ 2,843,465	\$ 3,405,030	\$ 29,973,356	\$ 48,903,896
Jul-14	30-Sep-14	\$ 7,125,008	\$ 237,997	\$ 285,000	\$ 2,508,764	\$ 4,093,246
Aug-14	30-Oct-14	\$ 7,372,269	\$ 246,257	\$ 294,891	\$ 2,595,826	\$ 4,235,295
Sep-14	26-Nov-14	\$ 7,516,962	\$ 251,090	\$ 300,678	\$ 2,646,773	\$ 4,318,420
Oct-14	31-Dec-14	\$ 7,346,330	\$ 245,390	\$ 293,853	\$ 2,586,693	\$ 4,220,394
Nov-14	30-Jan-15	\$ 7,220,317	\$ 241,181	\$ 288,813	\$ 2,542,323	\$ 4,148,000
Dec-14	27-Feb-15	\$ 8,658,396	\$ 289,217	\$ 346,336	\$ 3,048,680	\$ 4,974,162
Jan-15	31-Mar-15	\$ 6,942,624	\$ 231,905	\$ 277,705	\$ 2,444,545	\$ 3,988,469
Feb-15	30-Apr-15	\$ 7,068,251	\$ 236,102	\$ 282,730	\$ 2,488,780	\$ 4,060,640
Mar-15	29-May-15	\$ 8,338,855	\$ 278,544	\$ 333,554	\$ 2,936,168	\$ 4,790,589
Apr-15	30-Jun-15	\$ 7,577,749	\$ 253,120	\$ 303,110	\$ 2,668,177	\$ 4,353,342
May-15	31-Jul-15	\$ 7,953,792	\$ 265,681	\$ 318,152	\$ 2,800,584	\$ 4,569,375
Jun-15	31-Aug-15	\$ 7,903,402	\$ 263,998	\$ 316,136	\$ 2,782,842	\$ 4,540,426
Fiscal Year 2014-2015		\$ 91,023,954	\$ 3,040,483	\$ 3,640,958	\$ 32,050,155	\$ 52,292,358
Jul-15	30-Sep-15	\$ 7,615,944	\$ 254,396	\$ 304,638	\$ 2,681,626	\$ 4,375,284
Aug-15	29-Oct-15	\$ 7,370,222	\$ 246,188	\$ 294,809	\$ 2,595,105	\$ 4,234,119
Sep-15	30-Nov-15	\$ 7,791,472	\$ 260,259	\$ 311,659	\$ 2,743,431	\$ 4,476,123
Oct-15	31-Dec-15	\$ 7,719,746	\$ 257,864	\$ 308,790	\$ 2,718,175	\$ 4,434,917
Nov-15	30-Jan-16	\$ 7,640,067	\$ 255,202	\$ 305,603	\$ 2,690,120	\$ 4,389,143
Dec-15	27-Feb-16	\$ 9,090,136	\$ 303,639	\$ 363,605	\$ 3,200,699	\$ 5,222,193
Jan-16	31-Mar-16	\$ 7,144,279	\$ 238,641	\$ 285,771	\$ 2,515,549	\$ 4,104,317
Feb-16	29-Apr-16	\$ 7,329,879	\$ 244,841	\$ 293,195	\$ 2,580,901	\$ 4,210,943
Mar-16	31-May-16	\$ 8,568,311	\$ 286,208	\$ 342,732	\$ 3,016,961	\$ 4,922,410
Apr-16	30-Jun-16	\$ 7,738,151	\$ 258,478	\$ 309,526	\$ 2,724,656	\$ 4,445,491
May-16	29-Jul-16	\$ 7,925,935	\$ 264,751	\$ 317,037	\$ 2,790,776	\$ 4,553,371
Jun-16	31-Aug-16	\$ 8,524,710	\$ 284,752	\$ 340,988	\$ 3,001,608	\$ 4,897,361
Fiscal Year 2015-2016		\$ 94,458,852	\$ 3,155,219	\$ 3,778,354	\$ 33,259,606	\$ 54,265,673

Southern Nevada Water Authority Sales Tax Received and Distributed (continued)

Collection Month	Received Date	Receipts	Distributions			
		Gross Amount	Clark Co. Rural Areas	LV Wash	Wastewater Agencies	Other SNWA Capital
Jul-16	30-Sep-16	\$ 7,826,866	\$ 261,442	\$ 313,075	\$ 2,755,893	\$ 4,496,457
Aug-16	28-Oct-16	\$ 7,949,572	\$ 265,540	\$ 317,983	\$ 2,799,098	\$ 4,566,950
Sep-16	30-Nov-16	\$ 8,289,925	\$ 276,909	\$ 331,597	\$ 2,918,939	\$ 4,762,479
Oct-16	30-Dec-16	\$ 7,917,066	\$ 264,455	\$ 316,683	\$ 2,787,653	\$ 4,548,276
Nov-16	31-Jan-17	\$ 7,960,048	\$ 265,890	\$ 318,402	\$ 2,802,787	\$ 4,572,968
Dec-16	28-Feb-17	\$ 9,381,188	\$ 313,361	\$ 375,248	\$ 3,303,180	\$ 5,389,399
Jan-17	31-Mar-17	\$ 7,693,802	\$ 256,997	\$ 307,752	\$ 2,709,040	\$ 4,420,013
Feb-17	28-Apr-17	\$ 7,402,524	\$ 247,267	\$ 296,101	\$ 2,606,479	\$ 4,252,676
Mar-17	31-May-17	\$ 9,256,755	\$ 309,204	\$ 370,270	\$ 3,259,367	\$ 5,317,914
Apr-17	30-Jun-17	\$ 8,062,831	\$ 269,324	\$ 322,513	\$ 2,838,978	\$ 4,632,016
May-17	31-Jul-17	\$ 8,467,039	\$ 282,825	\$ 338,682	\$ 2,981,302	\$ 4,864,230
Jun-17	31-Aug-17	\$ 8,828,866	\$ 294,912	\$ 353,155	\$ 3,108,704	\$ 5,072,096
Fiscal Year 2016-2017		\$ 99,036,481	\$ 3,308,126	\$ 3,961,459	\$ 34,871,420	\$ 56,895,475
Jul-17	29-Sep-17	\$ 8,094,287	\$ 300,732	\$ 323,771	\$ 2,838,518	\$ 4,631,266
Aug-17	31-Oct-17	\$ 8,270,086	\$ 307,264	\$ 330,803	\$ 2,900,167	\$ 4,731,852
Sep-17	30-Nov-17	\$ 8,579,965	\$ 318,777	\$ 343,199	\$ 3,008,836	\$ 4,909,153
Oct-17	29-Dec-17	\$ 8,235,502	\$ 305,979	\$ 329,420	\$ 2,888,039	\$ 4,712,064
Nov-17	31-Jan-18	\$ 8,325,334	\$ 309,316	\$ 333,013	\$ 2,919,542	\$ 4,763,463
Dec-17	28-Feb-18	\$ 9,575,549	\$ 355,766	\$ 383,022	\$ 3,357,969	\$ 5,478,792
Fiscal Year 2017-2018 through Dec-17		\$ 51,080,723	\$ 1,897,834	\$ 2,043,229	\$ 17,913,071	\$ 29,226,589
Total Actuals Through December 2017		<u>\$ 1,441,164,200</u>	<u>\$ 49,101,124</u>	<u>\$ 57,646,568</u>	<u>\$ 470,220,429</u>	<u>\$ 864,196,079</u>
Estimate of remainder for fiscal year 2017-2018						
Jan-18	Estimate - Mar18	\$ 8,500,000	\$ 315,806	\$ 340,000	\$ 2,980,794	\$ 4,863,400
Feb-18	Estimate - Apr18	\$ 8,500,000	\$ 315,806	\$ 340,000	\$ 2,980,794	\$ 4,863,400
Mar-18	Estimate - May18	\$ 8,500,000	\$ 315,806	\$ 340,000	\$ 2,980,794	\$ 4,863,400
Apr-18	Estimate - Jun18	\$ 8,500,000	\$ 315,806	\$ 340,000	\$ 2,980,794	\$ 4,863,400
May-18	Estimate - Jul18	\$ 8,500,000	\$ 315,806	\$ 340,000	\$ 2,980,794	\$ 4,863,400
Jun-18	Estimate - Aug18	\$ 8,500,000	\$ 315,806	\$ 340,000	\$ 2,980,794	\$ 4,863,400
Total estimate for January through June 2018		\$ 51,000,000	\$ 1,894,835	\$ 2,040,000	\$ 17,884,763	\$ 29,180,402
Total Actuals and Estimate as of June 2018		<u>\$ 1,492,164,200</u>	<u>\$ 50,995,959</u>	<u>\$ 59,686,568</u>	<u>\$ 488,105,192</u>	<u>\$ 893,376,481</u>

Appendix H

Sales Tax Revenue Projection

CLARK COUNTY WATER AND WASTEWATER INFRASTRUCTURE (QUARTER CENT) SALES TAX
Sales Tax Received and Distributed

Original Data In Calendar Year				Data Converted to Fiscal Year												
Calendar Year	Clark Co. Population ⁽¹⁾		Clark Co. Population FY		Fiscal Year	Gross Sales Tax Receipts ⁽¹⁾			Clark Co Rural Areas	LV Wash	Wastewater Agencies	Other SNWA Capital				
	Count	% Change	Count	% Change		Per Person	Receipts	% Change								
Actual Sales Tax Received	1999	1,321,319		1,321,319	1998-1999	\$	12,545,951		\$	527,896	\$	501,838	\$	-	\$	11,516,217
	2000	1,428,689	8.1%	1,375,004	8.1%	1999-2000	36.39	51,983,020		2,187,290	2,079,321	-				47,716,410
	2001	1,498,278	4.9%	1,463,484	6.5%	2000-2001	37.10	55,585,901	6.9%	2,338,888	2,223,436	4,980,818				46,042,758
	2002	1,578,332	5.3%	1,538,305	5.1%	2001-2002	35.70	56,344,710	1.4%	2,370,816	2,253,788	19,653,640				32,056,465
	2003	1,641,529	4.0%	1,609,931	4.7%	2002-2003	36.90	60,579,149	7.5%	2,548,989	2,423,166	21,130,658				34,476,336
	2004	1,747,025	6.4%	1,694,277	5.2%	2003-2004	39.91	69,724,324	15.1%	2,306,023	2,788,973	24,584,217				40,045,111
	2005	1,815,700	3.9%	1,781,363	5.2%	2004-2005	44.62	81,025,486	16.2%	2,454,508	3,241,019	28,625,384				46,704,574
	2006	1,912,654	5.3%	1,864,177	4.6%	2005-2006	46.23	88,428,765	9.1%	3,188,091	3,537,151	31,080,961				50,622,562
	2007	1,996,542	4.4%	1,954,598	4.9%	2006-2007	44.76	89,374,124	1.1%	2,753,898	3,574,965	31,557,199				51,488,062
	2008	1,986,145	-0.5%	1,991,344	1.9%	2007-2008	43.44	86,276,491	-3.5%	2,398,479	3,451,050	30,562,242				49,864,710
	2009	2,006,347	1.0%	1,996,246	0.2%	2008-2009	37.40	75,034,067	-13.0%	2,141,447	3,001,363	26,558,678				43,332,579
	2010	1,951,269	-2.7%	1,978,808	-0.9%	2009-2010	34.80	67,906,159	-9.5%	2,102,918	2,716,246	23,973,058				39,113,937
	2011	1,966,630	0.8%	1,958,950	-1.0%	2010-2011	36.06	70,916,346	4.4%	2,368,827	2,836,654	24,970,129				40,740,737
	2012	2,008,654	2.1%	1,987,642	1.5%	2011-2012	37.45	75,221,529	6.1%	2,512,633	3,008,861	26,486,013				43,214,022
	2013	2,062,253	2.7%	2,035,454	2.4%	2012-2013	38.55	79,492,423	5.7%	2,655,294	3,179,697	27,989,825				45,667,607
	2014	2,102,238	1.9%	2,082,246	2.3%	2013-2014	40.49	85,125,747	7.1%	2,843,465	3,405,030	29,973,356				48,903,896
	2015	2,147,641	2.2%	2,124,940	2.0%	2014-2015	42.38	91,023,954	6.9%	3,040,483	3,640,958	32,050,155				52,292,358
2016	2,205,207	2.7%	2,176,424	2.4%	2015-2016	42.83	94,458,852	3.8%	3,155,219	3,778,354	33,259,606				54,265,673	
2017	2,248,000	1.9%	2,226,604	2.3%	2016-2017	44.06	99,036,481	4.8%	3,308,126	3,961,459	34,871,420				56,895,475	
Projected Sales Tax ⁽²⁾	2018	2,291,000	1.9%	2,269,500	1.9%	2017-2018	44.98	102,080,723	3.1%	3,792,669	4,083,229	35,797,833				58,406,991
	2019	2,334,000	1.9%	2,312,500	1.9%	2018-2019	46.30	107,077,431	4.9%	3,978,315	4,283,097	37,550,087				61,265,932
	2020	2,375,000	1.8%	2,354,500	1.8%	2018-2019	47.67	112,235,109	4.8%	4,169,941	4,489,404	39,358,790				64,216,974
	2021	2,414,000	1.6%	2,394,500	1.7%	2019-2020	49.07	117,509,455	4.7%	4,365,902	4,700,378	41,208,406				67,234,769
	2022	2,449,000	1.4%	2,431,500	1.5%	2020-2021	50.52	122,851,423	4.5%	4,564,375	4,914,057	43,081,736				70,291,255
	2023	2,483,000	1.4%	2,466,000	1.4%	2021-2022	52.02	128,280,348	4.4%	4,766,079	5,131,214	44,985,560				73,397,495
	2024	2,514,000	1.2%	2,498,500	1.3%	2022-2023	53.56	133,820,015	4.3%	4,971,898	5,352,801	46,928,219				76,567,097
	2025	2,542,000	1.1%	2,528,000	1.2%	2023-2024	34.04	86,052,019		3,197,516	3,442,481	30,180,368				49,241,654
						\$	2,309,000,000		\$	81,009,985	\$	92,000,000	\$	771,398,357	\$	1,355,591,658

Totals may be off slightly due to rounding

(1) Source: Center for Business and Economic Research UNLV <http://cber.unlv.edu/reports/2017-CBER-Population-Forecasts.pdf>

(2) The projected sales tax receipts are calculated using the most recent fiscal year's actual sales tax received and adding the Clark County's population growth percentage and adding a 3% for inflation.

(3) The 2011 Nevada State Legislature passed legislation (NRS 377B.1(2)) allowing the June 30, 2025 (or \$2.3 billion), sunset of sales tax collection to be lifted subject to Clark County approval. At this writing, Clark County has not approved the sunset lift. If the sunset is lifted, additional construction might be allowed to be funded with the revenue source.

Appendix I

Interfund Loan Activity

Southern Nevada Water Authority
INTERFUND LOAN ACTIVITY
Historical Through June 30, 2017
Projected From July 1, 2017 - June 2023

HISTORICAL				SOURCES		
Fiscal Year	Beginning Balance	Borrowings	Total Payback	From Sales Tax ⁽¹⁾	From Grants	Total
2005-2006	\$ -	\$ 1,771,721	\$ 3,246	\$ 3,207,620	\$ -	\$ 3,207,620
2006-2007	1,768,475	3,043,206	243,901	3,876,451	255,000	4,131,451
2007-2008	4,567,781	8,128,593	9,997,688	3,487,927	9,322,409	12,810,336
2008-2009	2,698,686	2,145,993	2,775,949	3,107,974	2,553,086	5,661,060
2009-2010	2,068,730	4,884,051	2,194,931	2,719,663	1,063,408	3,783,071
2010-2011	4,757,850	994,459	5,123,444	2,805,838	6,256,818	9,062,656
2011-2012	628,865	2,855,066	1,887,910	2,975,620	5,888,857	8,864,477
2012-2013	1,596,021	51,453	1,647,474	3,153,590	10,831,754	13,985,344
2013-2014	-	4,894,069	144,767	3,356,267	3,593,596	6,949,863
2014-2015	4,749,302	4,939,231	778,204	3,612,138	8,287,704	11,899,841
2015-2016	8,910,329	-	5,572,917	3,754,616	3,377,201	7,131,817
2016-2017	3,337,411	-	279,761	3,927,649	37,934	3,965,583
2017-2018	3,057,650					
	<u>\$ 33,707,841</u>	<u>\$ 30,650,191</u>	<u>\$ 39,985,352</u>	<u>\$ 51,467,766</u>	<u>\$ 91,453,118</u>	

PROJECTED						
Fiscal Year	Beginning Balance	Estimated Construction To be Financed ⁽²⁾	Construction To be Financed With Sales Tax ⁽³⁾	Construction To be Paid With Grants	Interest Expense	Sales Tax Receipts
2017-2018	\$ 3,057,650	\$ 12,860,000	\$ 8,860,000	\$ 4,000,000	\$ 391,721	\$ 4,083,229
2018-2019	8,226,142	7,203,390	7,203,390	-	557,322	4,283,097
2019-2020	11,703,757	688,537	688,537	-	395,144	4,489,404
2020-2021	8,298,034	177,076	177,073	-	188,737	4,700,378
2021-2022	3,963,469	-	-	-	-	3,963,469
2022-2023	-	-	-	-	-	-
	<u>\$ 20,929,003</u>	<u>\$ 16,929,000</u>	<u>\$ 4,000,000</u>	<u>\$ 1,532,924</u>	<u>\$ 21,519,577</u>	

(1) Sales tax received during the corresponding fiscal year. Sales tax has also been used for pay-as-you-go construction costs.

(2) Estimated construction is based on cash flow projections in the Las Vegas Wash Capital Plan.

(3) The 2011 Nevada State Legislature passed legislation (NRS 377B.1(2)) allowing the June 30, 2025 (or \$2.3 billion), sunset of sales tax collection to be lifted subject to Clark County approval. At this writing, Clark County has not approved the sunset lift. If the sunset is lifted, additional construction might be allowed to be funded with the revenue source.

Appendix J

Completed Las Vegas Wash Weir Projects Summary

Completed Projects Summary

Project No.	Project Title	Year Completed	Cost (\$1,000)
	Temporary Demonstration Weir	1999	\$173
810A	Fire Station Weir	2000	\$63
810C	Historic Lateral Weir (preliminary structure installed in year 2000)	2019	\$1,823
810D	Pabco Weir	2000	\$5,700
810H	Monson Weir	2002	\$152
810J	Visitor Center Weir	2002	\$172
810E	Bostick Weir	2003	\$5,020
170-A (810N)	Rainbow Gardens Weir	2004	\$7,238
810R	Calico Ridge (previously named Landfill Weir)	2005	\$1,868
810P	Powerline Weir	2007	\$5,883
810F	Upper Diversion Weir	2008	\$12,850
810Y	DU Wetlands No. 2 Weir	2009	\$3,470
810M	Lower Narrows Weir	2011	\$3,494
810L	Homestead Weir	2011	\$6,490
810V	DU Wetlands No. 1 Weir	2012	\$4,126
810X	Upper Narrows Weir	2013	\$6,683
810G	Duck Creek Confluence Weir	2013	\$6,683
810U	Silver Bowl Weir	2015	\$5,846
810Z	Archery Weir	2015	\$5,846
810K	Three Kids Weir (prelim. Structure aka Temp. Demo. Weir installed yr, 1999)	2015	\$11,942
830C/840C	Bank Protection - Historic Lateral (5,000 lf)	2001	\$428
840J	Bank Protection South - Visitor Center (1,100 lf)	2001	\$88
840B	Bank Protection South - Demonstration (1,200 lf)	2001	\$177
840T	Bank Protection South - D-14 Extension (400 lf)	2001	\$44
830N/840N	Bank Protection - Three Kids Wash (Rainbow Gardens) (2,600 lf)	2002	\$92
830J	Bank Protection North - Visitor Center (400 lf)	2002	\$41
830H/840H	Bank Protection - Monson (400 lf)	2002	\$40
830T	Bank Protection North - D-14 Extension (300 lf)	2002	\$10
840Q	Bank Protection South - Wells (1,100 lf)	2003	\$95
830L	Bank Protection North - Homestead (1,600 lf)	2003	\$146
840V	Bank Protection South - DU Wetlands No. 1 (800 lf)	2003	\$62
830M	Bank Protection North - Lower Narrows (1,500 lf)	2003	\$129
840R	Bank Protection South - Calico Ridge (Landfill) (600 lf)	2003	\$50
840X	Bank Protection South - Upper Narrows (900 lf)	2003	\$78
830N/840N	Bank Protection - Rainbow Gardens (1,585 lf)	2005	\$74
830D	Bank Protection North - Pabco (640 lf)	2005	\$68
830E/840E	Bank Protection - Bostick (2,205 lf)	2005	\$127
830D/840D	Bank Protection - Pabco (1,725 lf)	2006	\$48
830W/840W	Bank Protection - Sunrise Mtn (1,765 lf)	2006	\$74
840S	Bank Protection South - Tropicana (575 lf)	2006	\$21
830C/840C	Bank Protection - Historic Lateral (3,075 lf)	2008	\$321
840D	Bank Protection South - Pabco (520 lf)	2008	\$40
840A	Bank Protection South - Fire Station (630 lf)	2010	\$469
840G	Bank Protection South - Duck Creek Confluence (700 lf)	2010	\$90
840D	Bank Protection South - Pabco (320 lf)	2011	\$122
830C	Bank Protection North - Historic Lateral (400 lf)	2011	\$152
830E	Bank Protection North - Bostick (155 lf)	2011	\$59
830D	Bank Protection North - Pabco (690 lf)	2012	\$65
880B	Revegetation South - Demonstration (4.23 ac)	2000	\$63
870C/880C	Revegetation - Historic Lateral (4.90 ac)	2001	\$74

Completed Projects Summary

Project No.	Project Title	Year Completed	Cost (\$1,000)
880D/870D	Revegetation - Pabco (7.40 ac)	2001	\$111
870H/880H	Revegetation - Monson (2.78 ac)	2002	\$48
870J/880J	Revegetation - Visitor Center (1.84 ac)	2002	\$32
880E	Revegetation South - Bostick (6.55 ac)	2004	\$115
870R/880R	Revegetation - Calico Ridge (Landfill) (6.80 ac)	2005	\$117
870E	Revegetation North - Bostick (7.85 ac)	2005	\$47
870D	Revegetation North - Pabco (3.40 ac)	2005	\$2
880P	Revegetation South - Powerline (14.91 ac)	2007	\$245
880F	Revegetation South - Upper Diversion (17.58 Ac)	2009	\$145
870Y/880Y	Revegetation - DU Wetlands No. 2 (0.89 Ac)	2010	\$2
870M/880M	Revegetation - Lower Narrows & Homestead (22.64 Ac)	2011	\$3
870M/880M	Revegetation - Lower Narrows & Homestead (5.14 Ac)	2012	\$23
870G/880G	Revegetation - Duck Creek Confluence (23.4 Ac)	2013	\$223
860A	2000 Materials Transportation Program	2000	\$304
860B	2001 Materials Transportation Program	2001	\$753
860C	2002 Materials Transportation Program	2002	\$866
860D	2003 Materials Transportation Program	2003	\$489
860E	2004 Materials Transportation Program	2004	\$806
860F	2005 Materials Transportation Program	2005	\$216
860G	2006 Materials Transportation Program	2006	\$590
860H	2007 Materials Transportation Program	2007	\$513
860J	2008 Materials Transportation Program	2008	\$667
860K	2009 Materials Transportation Program	2009	\$209
860Q	2010 Materials Transportation Program	2010	\$329
890A	2011 Materials Transportation Program	2011	\$178
890A	2012 Materials Transportation Program	2012	\$194
860L	2001 Topographic Mapping	2001	\$80
860M	2005 Topographic Mapping	2005	\$80
860N	2008 Topographic Mapping	2008	\$63
860S	Sediment Study I	2003	\$177
860T	Sediment Study 11	2008	\$236
	Total		\$106,732

SOUTHERN NEVADA WATER AUTHORITY
BOARD OF DIRECTORS
AGENDA ITEM
May 31, 2018

Subject: FERC Intervention	Director's Backup
Petitioner: Gregory J. Walch, General Counsel	
Recommendations: That the Board of Directors ratify the General Counsel’s intervention in Federal Energy Regulatory Commission Docket EL18-102-000 involving possible revisions to NV Energy’s transmission rates to reflect the recent change in the federal corporate income tax rate.	

Fiscal Impact:

None by approval of the above recommendation. Legal and professional service fees associated with these interventions are paid under separate agreements.

Background:


On January 1, 2018, the Tax Cuts and Jobs Act of 2017 became effective, lowering the federal corporate income tax rate from a maximum 35 percent to a flat 21 percent rate. Thus, beginning January 1, 2018, Nevada Power Company (doing business as NV Energy [NV Energy]), owed income taxes based on a 21 percent flat tax rate, resulting in a lower income tax expense going forward and a reduction in accumulated deferred income taxes on the books. The federal corporate income tax rate is a component of NV Energy's transmission rate.

The Federal Energy Regulatory Commission (FERC) has determined that NV Energy's current transmission rates may not properly reflect the reduced federal corporate tax rate. As such, on March 15, 2018, FERC issued an order directing NV Energy and other FERC-jurisdictional public utilities to either: (1) propose revisions to its transmission rates to reflect the recent change in the federal corporate income tax rate and describe the methodology used for making those revisions; or (2) show cause why it should not be required to do so.

As a NV Energy transmission customer, the Authority has a direct interest in any revisions in NV Energy's transmission rates reflecting the change in the federal corporate income tax rate. Therefore, pursuant to the November 16, 2017, resolution authorizing the General Manager or its designee to take action to protect the Authority's legal interests, an intervention in the NV Energy matter was filed on April 4, 2018, to protect the interests of the Authority. At this point, the potential rate impacts of the federal corporate income tax rate are unknown.

This action is authorized pursuant to 18 CFR 385.214 and Section 6(n) of the SNWA 1995 Amended Cooperative Agreement. The office of the General Counsel has reviewed and approved this agenda item

Respectfully submitted:


John J. Entsminger, General Manager
JJE:GJW:LEB:td

AGENDA
ITEM #

12

SOUTHERN NEVADA WATER AUTHORITY
BOARD OF DIRECTORS
AGENDA ITEM

May 31, 2018

Subject: Construction Award	Director's Backup
Petitioner: David L. Johnson, Deputy General Manager, Engineering/Operations	
Recommendations: That the Board of Directors award a contract to provide on-call operation and maintenance support services to MMC, Inc., for the amount of \$1,414,000, authorize a change order contingency amount not to exceed \$86,000, authorize renewal for four additional one-year periods, and authorize the General Manager to sign the construction agreement.	

Fiscal Impact:

Funds requested for initial term expenditures are included in the Authority's Fiscal Year 2018/19 tentative Operating Budget. Funds for future year expenditures will be budgeted accordingly.

Background:

Contract No. R8542, SNWA On-Call Operation and Maintenance Support Services (Contract), provides for critical on-call assistance during emergency main breaks and support of in-house maintenance personnel performing high-priority distribution facility maintenance. Services under this Contract will be related to the maintenance of water pipelines, valves, hydrants, vaults, backflows and associated water delivery facilities, as well as assistance with emergency repairs and site restorations throughout the Authority's service area.


Sealed bids were received and publicly opened on April 11, 2018. A tabulation of bids received is listed below:

MMC, Inc.	\$1,414,000
Lone Mountain Excavation & Utilities, LLC	\$1,445,310
Contri Construction Company	\$1,448,360
Rafael Construction, Inc.	\$1,532,500

The MMC, Inc. (MMC), proposal is considered to be the best bid received as defined by NRS 338.1389. The attached construction agreement provides for MMC to accept and agree to all Contract terms. MMC is a Nevada corporation located in Las Vegas.

This agreement is being entered into pursuant to NRS 338.1389 and Section 6(j) of the SNWA 1995 Amended Cooperative Agreement. The office of the General Counsel has reviewed and approved the agreement.

Respectfully submitted:


John J. Entsminger, General Manager
JJE:DLJ:GPK:MB:am
Attachments

AGENDA
ITEM #

13

DISCLOSURE OF OWNERSHIP/PRINCIPALS

Business Entity Type (Please select one)						
<input type="checkbox"/> Sole Proprietorship	<input type="checkbox"/> Partnership	<input type="checkbox"/> Limited Liability Company	<input checked="" type="checkbox"/> Privately Held Corporation	<input type="checkbox"/> Publicly Held Corporation	<input type="checkbox"/> Trust	<input type="checkbox"/> Non-Profit Organization <input type="checkbox"/> Other
Business Designation Group (Please select all that apply)						
<input type="checkbox"/> MBE	<input type="checkbox"/> WBE	<input type="checkbox"/> SBE	<input type="checkbox"/> PBE	<input type="checkbox"/> VET	<input type="checkbox"/> DVET	<input type="checkbox"/> ESB
Minority Business Enterprise	Women-Owned Business Enterprise	Small Business Enterprise	Physically Challenged Business Enterprise	Veteran Owned Business	Disabled Veteran Owned Business	Emerging Small Business
Number of Clark County Nevada Residents Employed: 65						
Corporate/Business Entity Name: MMC, Inc.						
(Include d.b.a., if applicable)						
Street Address:		6600 Amelia Earhart Ct., Suite B		Website: www.nclasvegas/MMC		
City, State and Zip Code:		Las Vegas, NV 89119		POC Name: Mark Urban		
				Email: murban@nclasvegas.com		
Telephone No:		702-642-3332		Fax No: 702-642-9876		
Nevada Local Street Address:		same as above		Website:		
(If different from above)						
City, State and Zip Code:				Local Fax No:		
Local Telephone No:				Local POC Name:		
				Email:		

All entities, with the exception of publicly-traded corporations and non-profit organizations, must list the names of individuals, either directly or indirectly, holding more than five percent (5%) ownership or financial interest in the business entity appearing before the Board of Directors.

Publicly-traded corporations and non-profit organizations shall list all Corporate Officers and Directors in lieu of disclosing the names of individuals with ownership or financial interest.

Entities include all business associations organized under or governed by Title 7 of the Nevada Revised Statutes, including but not limited to private corporations, close corporations, foreign corporations, limited liability companies, partnerships, limited partnerships, and professional corporations.

Full Name	Title	% Owned (Not required for Publicly Traded Corporations/Non-profit organizations)
<u>Greg J. Paulk</u>	<u>President</u>	<u>74%</u>
<u>Brady W. Stevens</u>	<u>Secretary / Treasurer</u>	<u>11%</u>

This section is not required for publicly-traded corporations.

1. Are any individual members, partners, owners or principals, involved in the business entity, an Entity full-time employee(s), or appointed/elected official(s)?

☐ Yes

☒ No

(If yes, please note that the employee(s), or appointed/elected official(s) may not perform any work on professional service contracts, or other contracts, which are not subject to competitive bid.)

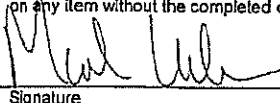
2. Do any individual members, partners, owners or principals have a spouse, registered domestic partner, child, parent, in-law or brother/sister, half-brother/half-sister, grandchild, grandparent, related to an Entity full-time employee(s), or appointed/elected official(s)?

☐ Yes

☒ No

(If yes, please complete the Disclosure of Relationship form on Page 2. If no, please print N/A on Page 2.)

I certify under penalty of perjury, that all of the information provided herein is current, complete, and accurate. I also understand that the Board will not take action on any item without the completed disclosure form.



Signature

Mark Urban

Print Name

Vice President

Title

April 16, 2018

Date

DISCLOSURE OF RELATIONSHIP

List any disclosures below:
(Mark N/A, If not applicable.)

NAME OF BUSINESS OWNER/PRINCIPAL	NAME OF ENTITY* EMPLOYEE/OFFICIAL AND JOB TITLE	RELATIONSHIP TO ENTITY* EMPLOYEE/ OFFICIAL	ENTITY* EMPLOYEE'S/ OFFICIAL'S DEPARTMENT
	N/A		

* Entity employee means an employee of Las Vegas Valley Water District, Southern Nevada Water Authority, or Silver State Energy Association .

"Consanguinity" is a relationship by blood. "Affinity" is a relationship by marriage.

"To the second degree of consanguinity" applies to the candidate's first and second degree of blood relatives as follows:

- Spouse – Registered Domestic Partners – Children – Parents – In-laws (first degree)
- Brothers/Sisters – Half-Brothers/Half-Sisters – Grandchildren – Grandparents – In-laws (second degree)

For Entity Use Only:

If no Disclosure or Relationship is noted above or the section is marked N/A, please check this box.

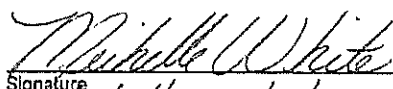
☒ No Disclosure

If any Disclosure of Relationship is noted above, please complete the following:

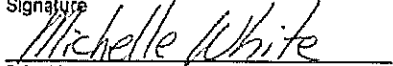
☐ Yes ☐ No Is the Entity employee(s) noted above involved in the contracting/selection process for this particular agenda item?

☐ Yes ☐ No Is the Entity employee(s) noted above involved in any way with the business in performance of the contract?

Notes/Comments:



Signature



Print Name

Authorized Department Representative

AGREEMENT

THIS AGREEMENT, made and entered into, by and between Southern Nevada Water Authority, hereinafter referred to as Owner, and MMC, INC.

, hereinafter referred to as Contractor, with both Owner and Contractor collectively referred to as the Parties,

WITNESSETH: That the Parties do mutually agree as follows:

1. Owner has awarded to Contractor the Contract for:

Contract Title: SNWA ON-CALL OPERATION AND MAINTENANCE SUPPORT SERVICES

Contract No: R8542

Public Works Project Identifying Number: CL-2018-189

2. For and in consideration of the payments and agreements hereinafter mentioned to be made and performed by said Owner, Contractor agrees to perform and complete in a good and workmanlike manner Work as defined in the Contract Documents and to furnish materials and tools and labor necessary to properly perform and complete the Work ready for use in strict accordance with the Contract Documents and under the penalty expressed in the attached bonds, which are hereby declared and accepted as essential parts of this Agreement and to accept as full compensation therefor the Contract Price as defined in the Contract Documents.
3. The Contractor hereby certifies that the Contractor has read and understands every provision contained in the Contract Documents. Contractor shall be bound and shall comply with each and every term, condition, and covenant set forth in the Contract Documents.
4. For performing all Work and furnishing materials and labor necessary thereto, Owner will pay and Contractor shall receive in full compensation the Contract Price, in the manner and upon the conditions set forth in the Contract Documents.
5. Contract Documents which comprise the entire agreement between the Owner and Contractor for the performance of Work consist of the following:
 - a. Addenda
 - b. General Requirements
 - c. Supplementary Conditions
 - d. General Conditions
 - e. Agreement
 - f. Drawings
 - g. Technical Specifications
 - h. Permits

- i. Bid form and accompanying documents, including without limitation, affidavit pertaining to preference eligibility.
 - j. Bonds
 - k. Instructions to Bidders
 - l. Invitation to Bid and Legal Notice
 - m. Notice of Award
 - n. Notice to Proceed
6. Affirmative Agreement to Arbitrate. By the signing of this Agreement, Contractor expressly authorizes Article 16 of the General Conditions and affirmatively agrees to settle all disputes, claims, or questions by binding arbitration.

IN WITNESS WHEREOF: The Contractor has caused this agreement to be executed this 24th day of April, 2018.

[CONTRACTOR'S NAME]

MMC, INC.

By:



Signatory Empowered to Bind Contractor

MARK URBAN

Type or Print Name

VICE PRESIDENT

Official Title

THIS AGREEMENT shall be in full force and effect as of the _____ day of _____, 20____, when it was duly signed by the proper officer of the Southern Nevada Water Authority.

SOUTHERN NEVADA WATER AUTHORITY

By:

John J. Entsminger
General Manager

Approved as to Form:



Laura Ellen Browning, Esq.
Attorney for Southern Nevada Water Authority

END OF DOCUMENT

SOUTHERN NEVADA WATER AUTHORITY
BOARD OF DIRECTORS
AGENDA ITEM

May 31, 2018

Subject: Agreement	Director's Backup
Petitioner: David L. Johnson, Deputy General Manager Engineering/Operations	
Recommendations: That the Board of Directors approve the Agreement Establishing Programmatic Funding for Colorado River Basin Weather Modification, in substantially the same form as that attached hereto, among California's Six Agency Committee, Central Arizona Water Conservation District, Colorado Water Conservation Board, Utah Division of Water Resources, Wyoming Water Development Office, the New Mexico Interstate Stream Commission and the Authority for an amount not to exceed \$4,000,000 over the next eight years.	

Fiscal Impact:

Funds requested for initial term expenditures are included in the Authority's Fiscal Year 2018/19 tentative Operating Budget. Funds for future year expenditures will be budgeted accordingly.

Background:

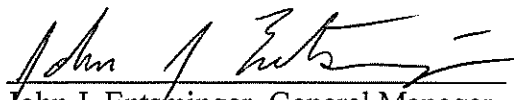
The U.S. Bureau of Reclamation's Colorado River Basin Water Supply and Demand Study (Basin Study), published in December 2012, defined current and future imbalances in water supply and demand in the Colorado River Basin for approximately the next 50 years, and developed and analyzed adaptation and mitigation strategies to resolve those imbalances. Weather modification was included in the Basin Study as a strategy to increase snowfall in mountainous regions. The Basin Study also noted that previous studies have concluded that the potential exists to generate a significant amount of additional runoff through weather modification in the Colorado River Basin. This additional runoff will benefit all users of Colorado River water by increasing reservoir elevations.

Between 2007 and 2017, the Authority, along with partners in California and Arizona, entered into weather modification funding agreements to supplement weather modification activities in Colorado, Utah and Wyoming.

If approved, the Authority, Central Arizona Water Conservation District and California's Six Agency Committee would each contribute up to \$500,000 per year for eight years (2018 to 2026) towards weather modification programs administered by the Colorado Water Conservation Board, Utah Division of Water Resources and Wyoming Water Development Office. The New Mexico Interstate Stream Commission would contribute \$20,000 per year to weather modification programs administered by the Colorado Water Conservation Board for the term of this agreement.

This action is authorized pursuant to NRS 277.180 and Section 6(j) of the SNWA 1995 Amended Cooperative Agreement. The office of the General Counsel has reviewed and approved this item.

Respectfully submitted:



John J. Entsminger, General Manager

JJE:DLJ:CNP:AB:SC:cmc

Attachment

AGENDA
ITEM #

14

**AGREEMENT ESTABLISHING PROGRAMMATIC FUNDING FOR COLORADO
RIVER BASIN WEATHER MODIFICATION**

This Agreement Establishing a Colorado River Basin Weather Modification Funding Mechanism (“Agreement”) is made and entered into on _____, 2018, by and among California’s Six Agency Committee, Central Arizona Water Conservation District, and Southern Nevada Water Authority (collectively “Funding Parties”), Colorado Water Conservation Board, Utah Division of Water Resources, Wyoming Water Development Office (collectively “Upper Basin Entities”) and the New Mexico Interstate Stream Commission (“NMISC”). The Funding Parties, Upper Basin Entities, and the NMISC are collectively referred to as the “Parties” and each individually as “Party.”

RECITALS

Parties

1. The Six Agency Committee (“SAC”), which was created in 1950 to support the Colorado River Board of California (“CRB”), represents six Southern California public agencies that have interests in Colorado River water and power resources: Coachella Valley Water District, Imperial Irrigation District, Los Angeles Department of Water and Power, Palo Verde Irrigation District, San Diego County Water Authority and The Metropolitan Water District of Southern California. The Six Agency Committee administers funds contributed by the represented agencies to protect and advance the agencies’ rights and interests in the Colorado River System.

2. The Southern Nevada Water Authority (“SNWA”) is a Nevada joint powers agency and political subdivision of the State of Nevada, created by Cooperative Agreement dated July 25, 1991, as amended November 17, 1994, and January 1, 1996. SNWA was formed to address Southern Nevada’s unique water needs on a regional basis. SNWA manages the region’s water resources, including water from the Colorado River, to provide for the Las Vegas Valley’s present and future water needs.

3. The Central Arizona Water Conservation District (“CAWCD”) is a multi-county water conservation district established under Arizona Revised Statutes (“A.R.S.”) §§ 48-3701 *et seq.* that operates and maintains the Central Arizona Project. CAWCD is authorized to, among other things, contract for and deliver Colorado River water for Central Arizona Project and execute contracts and perform all acts necessary for the furtherance of its purposes and authorities. CAWCD has entered into a contract with the Secretary of the Interior for the delivery to CAWCD of all Colorado River water to which Arizona is entitled under *Arizona v. California*, 376 U.S. 340 (1964), that is not needed to satisfy the water orders of those water users in Arizona with an equal or higher priority to Colorado River water. CAWCD and the users of Central Arizona Project water benefit from efforts to improve the reliability of Arizona’s apportionment to Colorado River and CAWCD’s participation and funding of such efforts are in furtherance of its purposes and authorities.

4. The Colorado Water Conservation Board (“CWCB”) is a division of the State of Colorado, Department of Natural Resources, created to aid in the protection and development of the state’s

waters. Pursuant to Colorado Revised Statutes (“C.R.S.”) §§ 36-20-101 *et seq.* (2016), CWCB administers the state’s weather modification program and has regulatory authority over cloud seeding operators. Typically, such operators contract with local program sponsors, such as water districts and water utilities, for cloud seeding services in specific watersheds. The state, through CWCB, has established a weather modification program. C.R.S. §§ 36-20-102. CWCB receives appropriations for the weather modification program from the Colorado Legislature. The appropriations are deposited in the Construction Fund. In addition, CWCB may accept funds from other entities. C.R.S § 37-60-121.

5. The Utah Division of Water Resources (“UDWRe”) is a division of the State of Utah, Department of Natural Resources. UDWRe’s mission is to plan, conserve, develop, and protect Utah’s water resources. In 1973, the Utah Legislature passed the Utah Cloud Seeding Act which allowed for the licensing of operators and permitting of cloud seeding projects by UDWRe. Cloud seeding operators contract with local program sponsors, such as water districts and counties within the state, for cloud seeding activities in specific project areas. The projects are funded by local sponsors with a cost share from the State of Utah of up to fifty percent (50%) of the total cost. The State’s share is currently limited to three hundred thousand dollars (\$300,000). In addition, UDWRe may accept funds from other entities.

6. The Wyoming Water Development Office (“WWDO”) is an agency of the State of Wyoming. WWDO administers the Wyoming Water Development Program (Wyoming Statutes § 41-2-112), which was established in 1975 to promote the optimal development of the State’s human, industrial, mineral, agricultural, water, and recreational resources. This program provides, through the Wyoming Water Development Commission, procedures and policies for planning, selecting, financing, constructing, acquiring, and operating water projects, such as cloud seeding activities. Weather modification programs are partially funded through annual Legislative appropriations passed in the Omnibus Water Bills. In addition, WWDO may acquire funding from other entities.

7. The NMISC is an agency of the State of New Mexico. Pursuant to NMSA 1978, § 72-14-3, the NMISC is authorized to investigate water supply; to develop, to conserve, and protect the water supply; and to do any and all other things necessary to protect, conserve, and develop the waters and stream systems of the State of New Mexico, interstate or otherwise. The NMISC also administers and regulates New Mexico’s weather control and cloud modification operations pursuant to the state’s Weather Control Act, NMSA 1978, § 75-3-1 to 75-3-15. The State of New Mexico does not have its own weather modification program. Instead, the NMISC currently provides funds to the CWCB for weather modification programs in Southwestern Colorado.

Background

8. The Upper Basin Entities have a variety of existing operational weather modification programs within the Colorado River Basin. Historically, these weather modification programs were funded, operated, and regulated at the state and local level. Since 2007, the Funding Parties have funded portions of these programs. The NMISC first provided funds for a portion of these programs in 2007.

9. The Parties agree that properly designed and operated winter season orographic weather modification programs may increase winter snowpack in the Colorado River Basin. Increased snowpack may augment the Colorado River Basin's water supply by increasing precipitation and runoff.

10. All seven of the Colorado River Basin States — Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming (the "Basin States") — and their water users benefit from increased water supply in the Colorado River Basin. Any increase in runoff is additional Colorado River System water that benefits the entire Colorado River Basin.

11. The Parties recognize opportunities for augmenting Colorado River System runoff through a cooperative weather modification cost-share funding mechanism. From 2007 through 2017, the Funding Parties and Upper Basin Entities implemented a collaborative effort to enhance Colorado River System water supply conditions through annual amendments to three base agreements to provide supplemental funding for weather modification activities in the Upper Basin. During that period, the Funding Parties contributed funds to the Upper Basin Entities for cloud seeding of appropriate orographic storms in the respective states. The NMISC also provided supplemental funding, through a separate agreement, to operations in southwestern Colorado.

Guiding Principles for the Establishment of the Colorado River Basin Weather Modification Funding Mechanism

12. The Parties intend for this Agreement to allow a continuation of efforts to pursue weather modification activities in a more efficient and long-term programmatic approach. The terms of this Agreement are informed by the Parties' past efforts and are intended to provide greater certainty and efficiency going forward.

13. As with previous collaborative efforts, the Parties understand that the Funding Parties' financial contributions to the Upper Basin Entities are not intended to replace existing weather modification programs, or the cooperative funding provided by Colorado, New Mexico, Utah, and Wyoming. Through this Agreement, rather, the Funding Parties seek to supplement, improve, expand, and extend the Upper Basin Programs, as defined herein.

14. This Agreement is intended to reflect a cost-sharing relationship of generally fifty/fifty percent (50%/50%) between the Funding Parties and the NMISC, and funds contributed by Upper Basin Entities, including local contributions.

15. No minimum annual funding contribution and commitment will be required of the Funding Parties and the NMISC by any Upper Basin Entity.

16. Funding contributions provided by the Funding Parties shall only be matched to funds contributed by Upper Basin Entities, including local contributions, that are to be utilized for weather modification activities that contribute to increased water supply within the Colorado River Basin.

17. Funding contributions provided by the NMISC are to be utilized only for weather modification activities that contribute to increased water supply within the Western and Eastern San Juan Basin.

18. Funds to be provided by the Funding Parties and the NMISC may be subject to annual approval by the respective Boards, committees or agencies.

19. Accordingly, through this Agreement, the Parties will establish a nine-year Colorado River Basin Weather Modification Funding Mechanism ("Funding Mechanism"). This Agreement, undertaken with funding provided by the Funding Parties and the NMISC, will be directed by a Technical Committee ("Technical Committee") as described below. The purpose of this Agreement is to efficiently supplement, improve, expand, and extend weather modification activities through the Upper Basin Entities by reducing the time and resources devoted to project review and approval, streamlining funding authorization efforts, providing flexibility in implementing weather modification operations, and facilitating the Upper Basin programs' geographic and temporal expansion of weather modification programs through long-term funding.

Agreement

1. Definitions.¹

- a. Accomplishment Summary. A brief annual summary compiled by the Funding Party Technical Committee representatives that summarizes the information presented in the Annual Reports.
- b. Activities. Those weather modification practices, performances, transactions, project feasibility studies, operations, or other actions undertaken pursuant to this Agreement or any amendments thereto.
- c. Activity Exhibit. The Activity Exhibit is a document detailing each Upper Basin Entity's Activities and budget estimates for an upcoming Water Year. The finalized Activity Exhibit will outline the Upper Basin Entities' Approved Activities, Funding Party Yearly Contributions, NMISC Annual Funding for an upcoming Water Year, and any additional funding provided by other entities.
- d. Annual Reports. Reports submitted by the Upper Basin Entities that document the Activities completed during the Water Year.
- e. Approved Activities. Activities identified in a Water Year's finalized Activity Exhibit that has been approved and executed by each Party based on the Notice of Recommendation.
- f. Colorado River Basin States ("Basin States"). The states of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming.

¹ Additional terms are defined throughout the Agreement.

- g. Colorado River System. This term has the meaning set forth in Article II(a) of the Colorado River Compact of 1922.
- h. Funds. Those monies contributed by the Funding Parties and the NMISC to the Upper Basin Entities to be disbursed for Activities and administration pursuant to this Agreement.
- i. Funding Parties. Lower Basin entities (i.e., SAC, SNWA, and CAWCD) providing Funds to the Upper Basin Entities. The NMISC is not considered a Funding Party because New Mexico is an Upper Basin State and is providing funding in lieu of implementing its own weather modification program.
- j. Local Contributions. Funding contributions detailed in the Activity Exhibit that are acquired or accepted by an Upper Basin Entity to be used for Activities that benefit the Colorado River Basin.
- k. Notice of Recommendation. A recommendation from the Technical Committee to approve and execute a final Activity Exhibit.
- l. Party or Parties. Any signatory to this Agreement or collectively all signatories to this Agreement.
- m. Upper Basin Entities. The Upper Colorado River Basin agencies (CWCB, UDWRe, and WWDO) responsible for the implementation and management of state specific weather modification programs within the Upper Colorado River Basin.
- n. Upper Basin Programs. The weather modification programs operated and administered by CWCB, UDWRe, or WWDO.
- o. Upper Colorado River Basin. This term has the meaning set forth in Article II(f) of the Colorado River Compact of 1922.
- p. Water Year. The twelve (12) month period for which Funds are provided, from October 1 of any year through September 30 of the next year.

2. Term of Agreement.

- a. This Agreement shall have a duration of up to eight (8) years ("Term").
- b. The Term shall commence on October 1, 2018 ("Commencement Date"), and continue for up to eight (8) years, through September 30, 2026 ("Termination Date").
- c. The Agreement may be terminated prior to the Termination Date and during the Term of the Agreement according to the conditions set forth in Section 8.

3. **Funding Contributions.**

- a. The Funding Parties agree to contribute up to five hundred thousand dollars (\$500,000) each, and up to one million five hundred thousand dollars (\$1,500,000) collectively, in funding for Approved Activities in a single Water Year (“Yearly Contribution”).
- b. The NMISC agrees to contribute up to twenty thousand dollars (\$20,000) in annual funding for Approved Activities in a single Water Year (“Annual Funding”). The NMISC and any funds contributed by the NMISC are considered separate and distinct from the Funding Parties and the Yearly Contribution because New Mexico is an Upper Basin State that is providing funding to other Upper Basin States in lieu of implementing its own weather modification program.
- c. The Yearly Contribution, Total Contribution, and Annual Funding amounts are subject to the availability of funds and the terms and conditions otherwise set forth in this Agreement.

4. **Technical Committee.** The Parties authorize the creation of a Technical Committee to direct and administer the provisions of this Agreement. The Technical Committee is responsible for the coordination of Activities and the allocation of Funds established as part of the Funding Mechanism, and will serve as a forum for the Parties to work collaboratively in fulfilling those responsibilities.

- a. **Composition.** The Technical Committee shall be comprised of one representative from each of the Parties. Unless a party objects, representatives from third-party organizations (e.g. consultants and researchers) may be asked to participate on the Technical Committee periodically. Parties’ decision-making authority will not be granted to any third-party representative regarding the allocation of Funds or coordination of Activities.
- b. **Chairperson.** A Chairperson shall coordinate and preside over the Technical Committee’s affairs including, but not limited to, organizing and hosting conference calls and meetings, disseminating information, and/or other Committee business. The Chairperson shall provide a meeting summary and list of action items after each meeting to all Technical Committee representatives. The Chairperson position shall be fulfilled by a Funding Party Technical Committee representative. Upon execution of this Agreement, a Funding Party Technical Committee representative from SNWA shall be appointed the position of Chairperson. The length of the Chairperson’s term of service and the selection of a subsequent Chairperson is at the discretion of the Technical Committee.
- c. **Meetings.** An annual Committee Meeting (“Committee Meeting”) shall occur prior to June 30 of each year. The objective of the Committee Meeting is to coordinate and

evaluate the Upper Basin Entities' Activity Exhibits; determine the Funding Parties' Yearly Contribution and NMISC's Annual Funding for the upcoming Water Year; and discuss Activities completed during the current Water Year.

- i. All Technical Committee representatives are expected to participate in each annual Committee Meeting by teleconference or attend in person, as is reasonable and appropriate.
- ii. Activity Exhibits. The Upper Basin Entities' proposed Activity Exhibits for the upcoming Water Year are due to the Technical Committee for review by May 15 of each year.
 1. The Funding Party and NMISC Technical Committee representatives will review each Activity Exhibit in advance of the Committee Meeting, and provide preliminary approval of the proposed Activity Exhibits or recommend modification thereto to each Upper Basin Entity as appropriate, during the Committee Meeting.
 2. Each Upper Basin Entity shall inform the Chairperson of their respective agency's concurrence with, or proposed modifications to, the Activity Exhibit, Yearly Contribution, and Annual Funding amounts for the upcoming Water Year, no later than July 31 of each year.
- d. Approval. The Chairperson will provide a Notice of Recommendation and a final Activities Exhibit for the upcoming Water Year to the Parties no later than August 31 of each year.
 - i. The final Activity Exhibit will serve as a Technical Committee recommended Addendum to the Agreement, and as such be submitted to each Party for execution.
 - ii. The final Activity Exhibit will identify the Yearly Contribution and Annual Funding each Funding Party and the NMISC will respectively contribute to each Upper Basin Entity for the implementation and management of the Activities described therein.
- e. Focus. The Parties will direct their efforts primarily at the implementation of Activities in Colorado, Utah, and Wyoming, utilizing a long-term, programmatic funding approach. The scientific study and research of weather modification and its effectiveness are not a primary purpose of this Agreement.
- f. Considerations. The Technical Committee shall consider the following Activities in relation to the allocation of Funds for any Water Year.
 - i. WWDO Activities: Supplementation of weather modification operations in the Colorado River Basin portion of Wyoming.

- ii. CWCBC Activities: Extension and/or expansion of weather modification operations in the Colorado River Basin portions of Colorado.
- iii. UDWRe Activities: Extension and/or expansion of weather modification operations in the Colorado River Basin portions of Utah.
- iv. The Funding Parties may reduce the funding of Activities when Lake Powell and Lake Mead are projected to collectively exceed eighty percent (80%) of live storage capacity in the upcoming Water Year. Notice of the decision of whether to fund Activities based on the results of the United States ("U.S.") Bureau of Reclamation's August Twenty Four (24) Month Study Report projections of collective inflow and storage at Lake Powell and Lake Mead shall be provided to the Upper Basin Entities no later than August 31 of each year, and is not subject to change for the Water Year following that determination.
- v. The funding and operations of the Upper Basin Programs are anticipated to be expanded gradually throughout the Term of this Agreement. The Funding Parties will only provide funding to the extent that the Upper Basin Entities are providing funds in an amount equal to or greater than that funded in the previous Water Year. Approval of Funding Parties' Yearly Contributions in excess of fifty percent (50%) of the total cost for Activities will be evaluated by the Technical Committee on an as-needed basis.
- vi. The Funding Parties' primary goal is to maximize weather modification operations. However, funding for scientific research related to the effectiveness or quantification of weather modification may be considered at the discretion of the Technical Committee.
- g. Purchased Equipment. The appropriate Upper Basin Entity, upon receipt of the equipment or instrumentation, will be responsible for costs associated with storage, shipping, maintenance and disposal of such equipment or instrumentation.
- h. Disbursement of Funds. Yearly Contributions and Annual Funding will be provided to Upper Basin Entities by the Funding Parties and the NMISC within forty-five (45) days from the execution of the final Activity Exhibit, or within forty-five (days) of invoicing, at the discretion of each Upper Basin Entity.
- i. Invoices. The Technical Committee is responsible for establishing an invoicing procedure consistent with Section 4.h of this Agreement, and considering the accounting requirements of the Upper Basin Entities, to be followed by the Upper Basin Entities in submitting invoices to the Funding Parties and the NMISC, as appropriate.

This procedure will be documented in written format, and may be modified or amended at the discretion of the Technical Committee.

- j. Approved Activity Funding. Yearly Contributions and Annual Funding may only be used to fund Approved Activities specifically described in the final Activity Exhibit for that Water Year.
- k. Unused Funds. Yearly Contributions and Annual Funding provided to the Upper Basin Entities that are unused and uncommitted by the end of the Water Year may be credited towards future Approved Activities or reimbursed to the Funding Parties and the NMISC, at the discretion of the respective Funding Party and the NMISC. At no time will the sum of any current and subsequent Yearly Contribution provided by any single Funding Party exceed five hundred thousand dollars (\$500,000) in a given Water Year.

5. Reporting

- a. Annual Reports. Each Upper Basin Entity will submit four (4) hard-copy Annual Reports and one (1) electronic version to the Chairperson no later than September 30 of each year. At a minimum, each Annual Report should include the following information:
 - i. Maps showing the locations of any weather modification equipment (for example: generators, icing rate meters, radiometers and aircraft flight paths) funded through this Agreement.
 - ii. Maps showing the target areas of the Activities funded through this Agreement.
 - iii. A list of any equipment purchased using funds from this Agreement.
 - iv. A monthly timescale accounting of the number of seeding events, amount of silver iodide or seeding agent used, and the number of generator hours or flight hours where applicable.
 - v. As available, an expense report comparing the budgeted versus actual costs for the Water Year.
- b. Accomplishment Summary. The Funding Party Technical Committee representatives will complete an annual Accomplishment Summary synthesizing the information contained in the Annual Reports referenced above.
- c. If any Upper Basin Entity fails to provide their Annual Report under Section 5.a, the Funding Parties and the NMISC are released from any obligation to continue funding Activities to that Upper Basin Entity until the past due reports have been provided.

6. Timeline.

- a. April/May
 - i. The Chairperson of the Technical Committee schedules the annual Committee Meeting to be held prior to June 30 of each year.
 - ii. The Upper Basin Entities' proposed Activity Exhibits will be submitted to the Chairperson for review by the Technical Committee Funding Party representatives by May 15 of each year.
- b. June
 - i. The Technical Committee shall meet annually prior to June 30 of each year to coordinate and evaluate the Upper Basin Programs' Activity Exhibits, the Funding Parties' Yearly Contribution, and the NMISC's Annual Funding for the upcoming Water Year.
 - ii. The proposed Activity Exhibits shall contain maps of proposed generator locations and weather modification equipment. Generators and equipment that are proposed for operations using funds provided by the Funding Parties and the NMISC shall be clearly identified. The Funding Parties and the NMISC shall have an opportunity to review and approve existing or proposed locations for generators and equipment prior to the start of annual cloud seeding operations.
 - iii. The Funding Party and the NMISC Technical Committee representatives will review and provide preliminary approval of all Upper Basin Entity Activity Exhibits or recommend any modifications thereto to the respective Upper Basin Entity, as appropriate, during the Committee Meeting.
- c. July
 - i. Upper Basin Entities shall inform the Chairperson of their respective agency's concurrence with, or proposed modifications to, their Activity Exhibit, Yearly Contribution, and Annual Funding amounts for the upcoming Water Year no later than July 31 of each year.
 - ii. Upper Basin Entity draft Annual Reports from the previous operational season (current Water Year) are due to the Chairperson no later than July 31 of each year.
- d. August
 - i. The Funding Parties will provide notice to the Upper Basin Entities and the NMISC regarding the decision of whether or not to fund future Activities based on the results of the U.S. Bureau of Reclamation's Twenty Four (24) Month

Study Report, Operation Plan for Colorado River System Reservoirs, no later than August 31 of each year.

- ii. Funding Party Technical Committee representatives will complete an Accomplishment Summary for the previous operational season (current Water Year) no later than August 31 of each year.
 - iii. The Chairperson will provide Notice of Recommendation and the final Activities Exhibit for the upcoming Water Year to the Parties no later than August 31 of each year. The final Activity Exhibit will serve as a Technical Committee recommended Addendum to the Agreement, and as such be submitted for execution by each Party.
- e. September
- i. Each Party's Technical Committee representative will submit the recommended Addendum for entity-specific legal, and managerial review and execution.
 - ii. Upper Basin Entity final Annual Reports are due to the Chairperson no later than September 30 of each year.
- f. October
- i. Operational weather modification contracts are negotiated and executed as needed by the appropriate Consultant(s) and Upper Basin Entity for the current Water Year.
- g. November
- i. Water Year Activities start.
 - ii. Funding Party Yearly Contributions and NMISC Annual Funding are disbursed to Upper Basin Entities as appropriate.
- h. December/January
- i. Funds provided to the Upper Basin Entities that are unused and uncommitted by the end of the previous Water Year may be credited towards future Approved Activities or reimbursed to the Funding Parties and the NMISC, at the discretion of the Funding Parties and the NMISC.
- i. March/April
- i. Water Year Activities end.

Any dates are subject to review and amendment by the Technical Committee during the Term.

7. **Insurance.** The Upper Basin Entities shall ensure that, in contracting with third-party weather modification vendors, the third-party contractors procure general liability insurance coverage for at least one million dollars (\$1,000,000) and maintain such policy for the duration of the Activities that are funded in part through this Agreement. Such insurance policies shall name the Funding Parties and the NMISC, as appropriate, as additional insureds. If the third-party contractor is a governmental entity, then it may demonstrate that it is self-insured for up to at least one million dollars (\$1,000,000) in lieu of the general liability insurance requirements in this paragraph.
8. **Termination.** A Party may terminate its rights and obligations under this Agreement and participation in the Funding Mechanism by providing written notice to each of the other Parties.
- a. If a Funding Party, and/or the NMISC, provides notice of termination, that Funding Party's and/or the NMISC's participation in the Agreement shall terminate at the conclusion of the Water Year in which the notice is given. A terminating party shall remain responsible for funding Approved Activities for the Water Year in which notice of termination is given.
 - b. If CWCB, UDWRe, or WWDO provide notice of termination, the respective Party shall withdraw from participating in the Agreement upon its completion of all Approved Activities that the Party was responsible for completing in that Water Year. If CWCB, UDWRe, or WWDO is unable to complete all Approved Activities that the Party was responsible for in that Water Year, the respective Party will inform the other Parties of this in the notice of termination. Any unused funds shall be delivered by hand, electronic transfer, or certified mail to the respective Funding Parties and the NMISC.
 - c. A Party's withdrawal from this Agreement will not terminate the Agreement among the remaining Parties. The Funding Parties' Yearly Contribution, the NMISC's Annual Funding, and Upper Basin Entities' Activities will be re-negotiated between the remaining Parties and agreed upon in writing. If a revised Yearly Contribution, Annual Funding, and Activity arrangement cannot be reached, the Agreement shall terminate when all the remaining Parties' responsibilities for that current Water Year are complete.
 - d. No penalty shall accrue to any Party that provides notice of termination and no Party shall be obligated to implement Activities or contribute Funds for Activities not already authorized.
9. **Existing Law.**
- a. **Reaffirmation of Existing Law.** Nothing in this Agreement is intended to, nor shall this Agreement be construed to, diminish or modify the right of any Party under existing

federal and/or state law, including, but not limited to, the 1922 Colorado River Compact, the 1948 Upper Colorado River Basin Compact, and the U.S. Supreme Court's 2006 Consolidated Decree in *Arizona v. California* (547 U.S. 150). The Parties hereby affirm the entitlement and right of each State under such existing law to use and develop Colorado River System water.

- b. Consistency with Existing Law. This Agreement is consistent with, and shall be interpreted to be consistent with, existing federal and/or state law, including, but not limited to, Article III(a)-(e) inclusive of the 1922 Colorado River Compact, Sections 601 and 602(a) of the Colorado River Basin Project Act of 1968 (43 United States Code §§ 1551 and 1552(a)), and all applicable rules and regulations promulgated thereunder.

10. Authority. Each person executing this Agreement on behalf of a Party, has the full power and authority to bind that respective Party to the terms of this Agreement.

11. Sovereign Immunity and Limitations. By executing this Agreement the Parties expressly reserve sovereign immunity and specifically retain all immunities available to them as sovereigns, governmental entities, or political subdivisions under the law of their respective states. The Parties further acknowledge that there are constitutional and statutory limitations on the authority of the Parties and their agencies or instrumentalities to enter into certain terms and conditions, including, but not limited to, the following: liability for damages; choice of law; conflicts of law; governing law; venue and forum-selection clauses; defense or control of litigation or settlement; liability for acts or omissions of third parties; payment of attorney's fees or costs; additional insured provisions; dispute resolution, including, but not limited to, arbitration; indemnification of another party; and confidentiality. Any such provisions in the Agreement, or in any attachments or documents incorporated into this agreement by reference, will be binding on the Parties only to the extent authorized by the laws and Constitutions of their respective states. Designations of venue, choice of law, governing law, enforcement actions, and similar provisions shall not be construed as a waiver of sovereign immunity. The Parties agree that any ambiguity in this Agreement shall not be strictly construed, either against or for any Party, except that any ambiguity as to sovereign immunity shall be construed in favor of sovereign immunity.

12. Availability of Funds and Legislative Authorization. Each payment obligation of the Parties is conditioned upon authorization and the availability of funds which are appropriated or allocated for the payment of this obligation and which may be limited for any reason including, but not limited to, congressional, legislative, gubernatorial, or administrative action. If authorization and/or funds are not allocated and available for continued performance of the Agreement, the Agreement may be terminated by the Parties at the end of the period for which the funds are available. No penalty shall accrue to the Parties in the event this provision is exercised, and the Parties shall not be obligated or liable for any future payments due or for any damages as a result of termination under this

Section. Nothing in this Agreement may be construed to obligate the Funding Parties or the NMISC to any current or future expenditure of resources in advance of the availability of appropriations.

13. **Severability.** Should any portion of this Agreement be judicially determined to be illegal or unenforceable, the remainder of the Agreement shall continue in full force and effect, and the Parties may renegotiate the terms affected by the severance.
14. **Third-Party Beneficiary Rights.** The Parties do not intend to create in any other individual or entity the status of third-party beneficiary. This Agreement shall not be construed to create such status. The rights, duties, and obligations contained in this Agreement shall operate only among the Parties to this Agreement, and shall inure solely to the benefit of the Parties to this Agreement. The provisions of this Agreement are intended only to assist the Parties in determining and performing their obligations under this Agreement.
15. **Waiver.** The waiver of any breach of any term or condition in this Agreement shall not be deemed a waiver of any prior or subsequent breach. Failure to object to a breach shall not constitute a waiver.
16. **Indemnification.** Each Party to this Agreement shall assume the risk of any liability arising from its own conduct. The Parties do not agree to insure, defend, or indemnify each other.
17. **Miscellaneous.**
 - a. **Modification/Amendments.** The Parties may mutually agree in writing to modify or amend the terms of this Agreement. Modifications and/or amendments to this Agreement will be valid only if they are in a written document signed by all the Parties hereto.
 - b. **Notices.** All notices required to be given hereunder shall be in writing and hand delivered, or sent by certified U.S. mail, to such Party's representative or designee at the addresses set forth below. E-mail notices will be accepted, but not as the singular form of notice. Any Party from time to time may by written notice substitute addresses or persons to whom such notices shall be sent. Unless otherwise provided herein, all notices shall be effective upon receipt.

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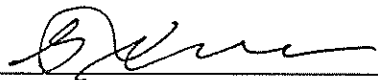
- c. Entirety of Agreement. This Agreement, comprised of 22 pages, and any associated attachments constitute the entire understanding of the Parties hereto.
- d. Assignment. The Upper Basin Entities and the NMISC shall not assign or transfer their interest in this Agreement without the prior written consent of the Funding Parties and/or the NMISC, as appropriate.

SOUTHERN NEVADA WATER AUTHORITY

John J. Entsminger
General Manager

Date

APPROVED AS TO FORM:



Gregory J. Walch, Esq.
General Counsel

5/2/19
Date

SIX AGENCY COMMITTEE

Dana B. Fisher
Chairman

Date

CENTRAL ARIZONA WATER CONSERVATION DISTRICT

Theodore C. Cooke
General Manager

Date

APPROVED AS TO FORM:

Jay Johnson
General Counsel

Date

WYOMING WATER DEVELOPMENT OFFICE

Harry C. LaBonde, Jr.
Director

Date

APPROVED AS TO FORM:

Tyler M. Renner
Assistant Attorney General
State of Wyoming

Date

UTAH DIVISION OF WATER RESOURCES

Eric Millis
Director

Date

COLORADO WATER CONSERVATION BOARD

Rebecca Mitchell
Director

Date

NEW MEXICO INTERSTATE STREAM COMMISSION

Tom Blaine
New Mexico State Engineer

Date

APPROVED AS TO FORM:

Dominique Work
Office of the General Counsel
New Mexico Interstate Stream Commission

Date

**SOUTHERN NEVADA WATER AUTHORITY
BOARD OF DIRECTORS
AGENDA ITEM**

May 31, 2018

Subject: Conservation Program Update and Rebate Increases	Director's Backup
Petitioner: David L. Johnson, Deputy General Manager, Engineering/Operations	
Recommendations: That the Board of Directors receive a conservation update; authorize conservation program rebate increases to 1) the Authority's Water Smart Landscapes Program for an amount not to exceed \$3 per square foot for the first 10,000 square feet of turf removed and \$1.50 per square foot thereafter, and an amount not to exceed \$3 per square foot for up to 2,500 square feet for well users; and 2) the Authority's Water Efficient Technologies program for amounts not to exceed \$45 per 1,000 gallons of annual consumptive use reduction and \$15 per 1,000 gallons of annual non-consumptive use reduction; authorize the General Manager to adjust rebates in the future not to exceed cumulative inflation beginning June 2018; and authorize the General Manager or his designee to execute any ministerial documents necessary to effectuate related transactions.	

Fiscal Impact:

Funds requested for initial term expenditures are included in the Authority's Fiscal Year 2018/19 tentative Operating and Capital Budgets. Funds for future year expenditures will be budgeted accordingly. Funds requested for well-user rebates are available in the Authority's Groundwater Management Program fund.

Background:

The Authority remains committed to the efficient use of water resources in Southern Nevada. Its internationally-recognized conservation programs have reduced water use throughout Southern Nevada through a mix of incentives, regulations, education and pricing. While the Authority remains committed to reducing all uses of water and maximizing efficient use of the resource, conservation program focus is on reducing non-essential outdoor water uses that cannot be recovered through return-flow credits.

The Authority's cornerstone conservation program – the Water Smart Landscapes Rebate Program (WSL) – has converted more than 185 million square feet of ornamental turf to water-efficient landscaping; however, participation has waned in recent years. As the Authority continues to address drought conditions and the near-term threat of shortage declarations, stimulating participation in conservation programs is appropriate. In past years, boosting rebate amounts has stimulated WSL participation and generated additional water savings.

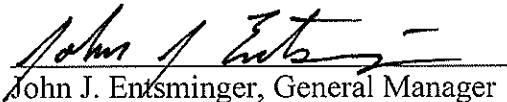
Staff recommends that the Board of Directors increase the WSL rebate to \$3 per square foot for the first 10,000 square feet and \$1.50 per square foot thereafter for turf conversion. For well users under the Groundwater Management Program, staff recommends increasing the rebate to \$3 per square foot for up to 2,500 square feet of turf conversion. Staff also recommends that the Board

approve increases to the Water Efficient Technologies (WET) program to maintain parity with WSL by allowing \$45 per 1,000 gallons of annual consumptive use reduction and \$15 per 1,000 gallons of annual non-consumptive use reduction, with a maximum amount of 50 percent of the equipment cost or \$100,000 per applicant per fiscal year, whichever is less.

The Board is also being asked to authorize the General Manager to increase the conservation rebates not to exceed the cumulative Consumer Price Index, All Items, All Urban Consumers (CPI -U), Pacific Cities, West Size Class A change beginning June 2018 as necessary to stimulate program participation. As part of this item, the Board will receive an update on the Authority's conservation program, including a review of additional opportunities to reduce non-essential water use and maximize water efficiency.

This action is authorized pursuant to Chapter 572, Statutes of Nevada, 1997, and Sections 5(m) and 6(p) of the SNWA 1995 Amended Cooperative Agreement. The office of the General Counsel has reviewed and approved this item.

Respectfully submitted:

A handwritten signature in black ink, appearing to read "John J. Entsminger", is written over a horizontal line.

John J. Entsminger, General Manager
JJE:DLJ:CNP:DB

**SOUTHERN NEVADA WATER AUTHORITY
BOARD OF DIRECTORS
AGENDA ITEM**

May 31, 2018

Subject: Update on Water Resources	Director's Backup
Petitioner: Gregory J. Walch, General Counsel	
Recommendations: That the Board of Directors receive an update from staff on water resources including, but not limited to, drought conditions in the Colorado River Basin, the results of the implementation of the Authority's Water Resource and Conservation Plan, activities on the Colorado River, the development of in-state water resources, and the status of construction activities near Lake Mead.	

Fiscal Impact:

None by approval of the above recommendation.

Background:

The Colorado River Basin has been experiencing severe drought conditions that began in 2000. The severity of these conditions has become increasingly evident in lake levels along the lower Colorado River Basin, where major reservoirs such as Lake Powell and Lake Mead are experiencing some of the lowest water levels since their initial filling.


The nature of the drought in the Colorado River Basin has direct effects on water resources and future planning. The drought has prompted communities to launch major conservation initiatives to reduce water use among citizens and businesses, and has resulted in the development and implementation of the Authority's Water Resource and Conservation Plans.

In May 2005, the Board of Directors approved a project for design and construction of a third intake in Lake Mead to ensure Southern Nevada has access to the best quality water in Lake Mead. The project design and environmental approvals were completed by 2007. Construction began on the project in March 2008. On December 10, 2014, the Board approved a low lake level pumping station for design and construction. When constructed, the pumping station will work together with Intake No. 3 to protect access to the majority of Southern Nevada's water supply despite severe drought conditions.

This agenda item provides for an update from staff on the drought, the results of the implementation of the Authority's Water Resource and Conservation Plans, activities on the Colorado River, the development of in-state water resources, and the status of construction activities near Lake Mead.

The office of the General Counsel has reviewed and approved this agenda item.

Respectfully submitted:


John J. Entsminger, General Manager
JJE:GJW:td

AGENDA
ITEM #

16