

 SOUTHERN NEVADA WATER AUTHORITY®

OPERATING & CAPITAL BUDGET 2016

Fiscal year ending June 30, 2016



On the cover:

Workers completed construction of a 20-foot diameter, 3-mile long tunnel underneath Lake Mead in December 2014 as part of Intake No. 3. The drought-protection project will help assure our community can access its share of Colorado River water even at very low lake levels. Learn more at snwa.com.

Southern Nevada Water Authority

Operating & Capital Budget Fiscal Year Ending June 30, 2016



SOUTHERN NEVADA WATER AUTHORITY®

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(representing Las Vegas Valley Water District)**

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Anita Wood, City of North Las Vegas Councilwoman

**John J. Entsminger
General Manager**

**Gina L. Neilson
Acting Director of Finance**

**Kade W. Stratton
Assistant Chief Financial Officer**

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

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 2015-16 Budget Plan and this budget document.



GOVERNMENT FINANCE OFFICERS ASSOCIATION

*Distinguished
Budget Presentation
Award*

PRESENTED TO

**Southern Nevada Water Authority
Nevada**

For the Fiscal Year Beginning

July 1, 2014

Jeffrey R. Egan

Executive Director

Southern Nevada Water Authority
Operating and Capital Budget
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SECTION 1

GENERAL MANAGER'S INFORMATION REPORT



SOUTHERN NEVADA WATER AUTHORITY®

FISCAL YEAR 2015-16

SOUTHERN NEVADA WATER AUTHORITY

GENERAL MANAGER'S INFORMATION REPORT

DATE: April 20, 2015

NO. 37

SUBJECT: SOUTHERN NEVADA WATER AUTHORITY
PROPOSED OPERATING AND CAPITAL BUDGET FOR FISCAL YEAR 2015-16

The Tentative Operating and Capital Budget of the Southern Nevada Water Authority (SNWA) for fiscal year 2015-16 was submitted by April 15, 2015 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

Southern Nevada, over the past decade, has experienced unprecedented drought and economic uncertainty. In response, water resource management and financial stabilization have been the SNWA's top priorities as the agency has worked to provide a safe and reliable water supply to Southern Nevada. While the economy has shown welcomed signs of recovery, Lake Mead has fallen to 41 percent of capacity—a trend projected to continue.

Regardless of economic hurdles or uncertainty on the Colorado River, nearly 2 million residents and 40 million annual visitors depend on a safe community water supply. Economic improvement and an emphasis on fiscal responsibility have helped the SNWA ensure funding is available for future water infrastructure and system maintenance. Protecting the water supply against the volatility of the impacts of drought on the Colorado River continues to require concerted, innovative and collaborative efforts between the SNWA, the community and regional stakeholders.

The fiscal year 2015-16 Budget Plan reflects initiatives to continue the stabilization of the SNWA's financial foundation and efforts to protect water resources.

New Leadership.

Through an interlocal contract with the Las Vegas Valley Water District (LVVWD), the SNWA Board of Directors (SNWA Board) authorized John Entsminger to serve as the SNWA's new General Manager. Beginning in February 2014, Mr. Entsminger appointed a new leadership team to guide the organization in managing regional water resources and developing solutions to ensure future water supplies for the Las Vegas Valley. Those efforts include sustainable solutions for fiscal stability, enhanced infrastructure management and collaboration among local, state and regional entities.

Strategic Plan.

In 2013, the organization underwent a strategic planning process culminating in the agency's realignment with Southern Nevada's new economic realities. The result was an updated Strategic Plan, which shifts the organization's goals from responding to fast-paced growth to current community needs, including transitioning from system expansion to asset management and enhancing service levels. Because the goals and expectations set forth by the Plan were developed using input from all staff levels,

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the entire workforce has been engaged in its implementation.

Organizational Realignment.

For the goals set forth by the Strategic Plan to be realized, organizational realignment was necessary and will continue as additional opportunities arise. As part of the ongoing realignment process, the SNWA Operations department merged with the LVVWD Operations department. Combining these workgroups has promoted the development of a uniform maintenance methodology used by both organizations to focus on the operation and maintenance of critical water infrastructure.

Additionally, the Facilities division merged with the Water and Environmental Resources department to form the Resources and Facilities department. These changes have resulted in additional efficiency and productivity across the organization.

Integrated Resource Planning.

The SNWA Board appointed a 21-member Integrated Resource Planning Advisory Committee (IRPAC) in 2012 to evaluate the interrelated aspects of water resource management. After two years of committee meetings, the SNWA Board approved a series of IRPAC recommendations. These included the addition of a low-lake level pumping station at Lake Mead to the overall Intake No. 3 project and the implementation of a fixed drought protection surcharge.

Regional Collaboration.

Stakeholder collaboration is critical to cooperation among all seven Colorado River Basin States and Mexico. Identifying creative solutions is vital to ease the drought's impact

on the Colorado River community.

Over the past year, regional collaborative efforts such as the Colorado River System Conservation Pilot Program and the Pilot Drought Response Actions Memorandum of Understanding (MOU) were set into motion to protect Lake Mead from reaching critically low elevations. Additionally, collaboration with Mexico continues as the two nations work to implement Minute 319, which sets forth a framework for the Colorado River's future management. The SNWA will work with the other Basin states and Mexico to negotiate a successor Minute.

Drought and Water Resources

The Colorado River provides approximately 90 percent of Southern Nevada's water supply, and the SNWA works diligently to protect the community from drought by securing short- and long-term water resources. Years 2000 to 2014 experienced the lowest 15-year average inflow into the Colorado River system since record-keeping began in 1906. In April 2015, Lake Mead's elevation was just below 1,083 feet—a decline of over 130 feet since 2000. U.S. Bureau of Reclamation (BOR) forecasts indicate lake levels are likely to continue dropping in the future.

Continued declines in Lake Mead water levels could trigger a federally-declared shortage, at which point Nevada and Arizona would be required to temporarily reduce Colorado River diversions. To protect the community's water supply and avoid such a shortage, community participation and cooperation among stakeholders throughout the basin is imperative. Long-standing community conservation practices have helped the region prepare to meet shortage

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declarations.

Local Efforts.

Integrated Resource Planning Advisory Committee. The SNWA has a long history of seeking input from citizens' advisory committees to help shape policy and program directives. This 21-member committee represents a cross-section of community residents, businesses, chambers of commerce and educational, environmental and financial sectors.

The committee was tasked with addressing issues related to drought, infrastructure funding, the effects of climate change and the impacts that declining reservoir levels would have on the reliability of Southern Nevada's municipal water system. While discussing these issues, the committee determined the risk of Lake Mead's water level falling below 1,000 feet was not acceptable to the community due to the detrimental impacts it could possibly have on water delivery and resource availability.

To protect the community from losing access to the majority of its water supply, the committee recommended the construction of a new low-lake level pumping station as part of the overall Intake No. 3 project, as well as a fixed charge on water bills to generate the revenue necessary to design and construct the facility. The new water rates— which were approved by the LVVWD and are scheduled for approval by the other purveyor members this summer— will take effect in fiscal year 2015-16. The new pumping station will be completed as early as 2021. The SNWA Board approved these recommendations, as well as others to address conservation and water resources, on December 10, 2014.

Intake No. 3 Tunnel. The tunnel boring machine's excavation of Lake Mead's Intake No. 3 tunnel reached the end of its three-mile journey underneath the lake on December 10, 2014, when it "holed through" the intake riser structure secured deep below the lake's surface.

By drawing water from the bottom of Lake Mead, Intake No. 3 increases the flexibility of Southern Nevada's water treatment and delivery system. The new intake tunnel is expected to be operational in 2015.

Water Resource Plan. Work is underway to update the SNWA's Water Resource Plan. This document provides a comprehensive overview of water resources and demands in Southern Nevada influencing future resource planning in Nevada and the Colorado River Basin. The last update was completed in 2009. Updates to the plan include recommendations from the IRPAC process and new regional conservation efforts.

Groundwater Development Project. At the direction of the SNWA Board based on IRPAC's recommendation, the SNWA continues to move forward with permitting and legal review of its Groundwater Development Project to meet the community's long-term demands and provide a supply separate from the Colorado River.

In 2012, the Nevada State Engineer granted nearly 84,000 acre-feet of groundwater rights to the SNWA in four east-central Nevada valleys. A year later, a District Court remanded the ruling and asked the Nevada State Engineer to gather additional data before any rights are granted. The SNWA and Nevada State Engineer filed appeals to the decision, which were dismissed because the Nevada Supreme Court concluded the

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District Court's decision was not a final order. The SNWA and State Engineer also filed writ petitions, which remain pending in the Nevada Supreme Court.

A Record of Decision in 2012 granted the SNWA the rights-of-way for project facilities. In February 2014, project opponents filed separate legal challenges to the Bureau of Land Management's decision on the Environmental Impact Statement and its issuance of project rights-of-way. These actions were consolidated and rights-of-way litigation remains ongoing in the federal District Court, District of Nevada, with the SNWA an active participant.

Regional Cooperation.

In August 2014, Lake Mead reached its lowest elevation since it was first filled more than 75 years ago. If the drought worsens, the water supply for 40 million people, more than 4 million acres of farmland, as well as hydropower production and recreational uses, faces increased peril. With potential impacts of this magnitude, cooperation with other stakeholders along the Colorado River is critical. Over the past year, the SNWA has worked extensively with Colorado River Basin partners to develop, implement and continue programs to mitigate drought impacts on a regional level.

Colorado River System Conservation Pilot Program. In July 2014, the SNWA, along with other Colorado River stakeholders, executed an agreement for a Pilot Program for Funding the Creation of Colorado River System Water Through Voluntary Water Conservation and Reductions in Use (the "Colorado River System Conservation Pilot Program") to determine whether system conservation is a sufficiently cost-effective, robust, and

feasible method to partially mitigate the impacts of ongoing drought. By jointly contributing \$11 million to conservation initiatives along the river, the goal of the Colorado River System Conservation Pilot Program is to keep water levels in Lake Mead and Lake Powell above critically low elevations and to enhance flows in areas upstream of the storage reservoirs.

To date, 14 pre-proposals have been received from Indian tribes, irrigation districts and municipalities for short-term pilot projects.

Pilot Drought Response Actions. The SNWA, along with other Lower Basin partners and the Bureau of Reclamation, entered into a Memorandum of Understanding (MOU) in December 2014 for pilot drought response actions. The goal of the MOU is for the participating entities to voluntarily develop a combined total of 740,000 acre-feet of additional water, or "protection volume," through 2017 to be stored in Lake Mead, reducing its risk of reaching critically low elevations. These commitments are the first step in achieving a larger goal of 1.5 to 3 million acre-feet of protection volume through 2019.

Minute 319. One of the SNWA's objectives over the past year has been to continue collaboration with Colorado River stakeholders in the U.S. and Mexico to implement Minute 319, which allows the two nations to share river resources in times of surplus as well as in times of shortage. As part of Minute 319, a 105,392 acre-foot "pulse flow" from the Colorado River was released to the Sea of Cortez to help restore the parched Mexican delta. In the months since the event, evidence has been observed that the released water has ecologically benefited the intended area.

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Water Banking. Through local and interstate arrangements, the SNWA has acquired a number of banked resources which can be used to offset reductions in permanent supplies due to shortages, meet short-term gaps and serve as a temporary bridge to meet demands while other permanent resources are being developed.

In 2013, the SNWA amended its water banking agreement with Arizona, relieving the organization of a \$217.3 million obligation from 2015 to 2024. In exchange, the Arizona Water Banking Authority agreed to complete any additional storage of Colorado River water on a pay-as-you go basis in the future. Arizona has stored approximately 600,000 acre-feet for the SNWA, which may be utilized at a maximum annual rate of 40,000 consumptive use acre-feet per year (afy) during normal water supply conditions and up to 60,000 acre-feet during a declared shortage.

The SNWA also has a banking agreement in place with the Metropolitan Water District of Southern California (MWD). In 2014, the SNWA directed between 40,000 and 65,000 acre-feet of water to MWD to establish additional banked storage credits, with a final accounting pending. Between 189,000 and 205,000 acre-feet of water has been stored in MWD's bank for the SNWA, which may utilize up to 30,000 acre-feet per year during normal and shortage water supply conditions.

In addition to its interstate banking agreements, the SNWA has partnered with the LVVWD to store approximately 356,000 acre-feet of water within the Las Vegas Valley Groundwater Basin. Per the existing LVVWD/SNWA agreement, the net recoverable amount of water stored by the

SNWA is approximately 337,000 acre-feet, with a maximum annual withdrawal rate of 20,000 afy.

Colorado River Basin Supply and Demand Study. Released in 2012, the Colorado River Basin Water Supply and Demand Study evaluated future water supplies and demands on the Colorado River. This study—the most comprehensive of its kind ever undertaken on the Colorado River—confirmed the likelihood of significant shortfalls between projected water supplies and demands within the Basin in future decades.

In May 2013, the U.S. Secretary of the Interior met with the Basin States to discuss the process for moving forward. This group will continue to coordinate the efforts of the stakeholders representing federal, state, tribal, agricultural, municipal, hydropower, environmental and recreational interests to examine the challenges being faced as well as potential solutions. Now coined "Moving Forward," the report for the first phase is expected to be published in 2015 and contain strategies for water conservation, reuse, transfers and healthy river flows. The SNWA is contributing in-kind resources and research to this process and will continue to lend support to these efforts.

Conservation.

Conservation remains a critical staple within the SNWA's resource portfolio. Through the implementation of aggressive and successful water management initiatives, the SNWA has become a global leader in water conservation.

Community Involvement. Southern Nevada achieved a net gallons per-capita per-day

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(GPCD) of 118 in 2014 and a gross total system GPCD of 205. Net GPCD includes all customer sectors, but refers only to water consumed by customers and is therefore unavailable for recycling processes allowing water to be used more than once.

Gross Total system GPCD reflects total water usage from all sources, including direct and indirect reuse, and is the benchmark for the SNWA's current water conservation goal of 199 GPCD by 2035. In 2014, Southern Nevada's water consumption was approximately 32 billion gallons less than a decade ago, despite the addition of more than 520,000 residents during that span.

Community participation in the Water Smart Landscapes Rebate Program remains steady. In the fiscal year 2013-14, more than 2 million square feet of turf were converted. Over the past fiscal year, nearly 2,000 residential and 200 non-residential Water Smart landscape projects have been completed. Nearly 3,000 coupons for pool covers, smart controllers and rain sensors have been utilized. Additionally, the SNWA has rebated 21 Water Efficiency Technology projects throughout the community, which included the replacement of a cooling tower at the Paris Hotel and Casino.

Sustainability.

The SNWA's conservation efforts are largely focused on water savings, but substantial energy savings also can be realized with proper improvements to water system components. According to the Environmental Protection Agency's ENERGY STAR program, water system upgrades minimizing leaks and improving pump and motor efficiency can achieve energy savings of up to 10 percent.

For its 2015 City Energy Efficiency Scorecard, The American Council for an Energy-Efficiency Economy recently rated U.S. cities based on efficiency within their water systems. Out of the 51 cities examined, Las Vegas was one of only nine receiving a perfect score.

Additionally, the SNWA's commitment to sustainable resource development was demonstrated in 2014 with the approval of an agreement with SunEdison to purchase solar-generated power for on-site use at the River Mountains Water Treatment Facility. This purchase adds to the SNWA's existing renewable energy portfolio, which already includes a solar photovoltaic regional test center, a photovoltaic sun-tracking system and solar-covered parking structures. Combined, the amount of green energy powering operations of the SNWA will total 18 percent. The SNWA plans to have 25 percent renewable energy comprising its energy portfolio by 2025, voluntarily meeting the State of Nevada's Renewable Portfolio Standard.

**Financial Considerations/
Capital Funding**

Key initiatives for fiscal year 2015-16 include the continuation of the Major Construction and Capital Plan (MCCP) projects and water resource management efforts.

Intake No. 3 Project.

Intake No. 3 Tunnel. The Intake No. 3 tunnel continues to represent a significant part of the SNWA's capital commitment for the upcoming fiscal year. With the tunnel boring machine reaching the intake riser, crews will seal and secure the connection and install smaller pipelines to draw water samples and

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control invasive species, such as quagga mussels.

The intake tunnel, which will protect Southern Nevada's access to Colorado River resources, as well as provide access to better quality water, is expected to be operational in 2015.

Low Lake Level Pumping Station. Based on IRPAC's recommendations, the SNWA has begun design on a new low-lake level pumping station as part of the overall Intake No. 3 project, which will ensure access to Colorado River water should Lake Mead's water elevation fall below 1,000 feet. It is estimated design and construction costs for the new pumping station will total approximately \$650 million and could be complete as early as 2021.

Drought Protection Charge.

To fund the anticipated costs of the low-lake level pumping station, IRPAC recommended generating revenue through a fixed charge based upon customer meter size. The new fixed charge will be phased in over a three-year period beginning in fiscal year 2015-16.

Financial Stability.

The SNWA is consistently engaged in proactive long-term planning efforts to identify the financial impact of future infrastructure and resource needs. Anticipating necessary improvements and their costs helps minimize the financial impact to the agency and ratepayers alike. In September 2014, the organization began a two-year process to reduce its debt service by refunding approximately \$915 million of its existing obligations. At current interest rates, it is estimated the resulting cash flow

savings will be \$108 million (\$9 million annually) between 2018 and 2027.

Fiscal Year 2015-16 Objectives

- Continued alignment with the new Strategic Plan.
- Continued collaboration with Colorado River stakeholders to implement Minute 319.
- Implementation of IRPAC recommendations, which include the following actions:
 - Evaluate an increased water conservation target upon achieving the currently established goal of reducing gross water usage to 199 Gallons Per Capita Per Day (GPCD) by 2035
 - Present water usage information to the SNWA Board and the community in both "gross" and "net" terms
 - Continue to partner with other Colorado River Basin States to undertake system conservation projects designed to protect critical elevations in Lake Powell and Lake Mead
 - Classify expenditures associated with Colorado River system conservation projects as one-time capital expenditures
 - Begin design and construction of a new low-lake level water pumping station within the swiftest feasible timeframe
 - Generate needed revenue for the cost of construction of a new low-lake level water pumping station exclusively through fixed charges based upon meter size

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- Phase in the increase to fixed monthly charges over a three-year period
- Continue to include the Groundwater Development Project within the SNWA's Water Resource Portfolio with future resource options
- Continued implementation of infrastructure maintenance and repair strategies to extend the life of facilities and prevent unplanned failures
- Continued assessment of the condition of critical assets
- Continued Regional efforts to protect and increase Colorado River resources
- Continued planning and environmental compliance activities for the Groundwater Development Project

Financial Summary

The table on the following page contains a summary of the SNWA's fiscal years 2013-14, 2014-15 and 2015-16.



Budget Summary (\$ Millions)

| | Actual 2013-14 | Budget 2014-15 | Budget 2015-16 | Budget-to-Budget Variance | |
|------------------------------------|-------------------|-------------------|-------------------|------------------------------|-------------|
| | | | | \$ | % |
| Sources | | | | | |
| Wholesale Delivery Charge | \$ 121.0 | \$ 123.4 | \$ 122.4 | \$ (1.0) | -1% |
| Infrastructure Charge | 80.2 | 87.2 | 112.5 | 25.2 | 29% |
| Commodity Charge | 43.4 | 49.4 | 57.6 | 8.2 | 17% |
| Connection Charge | 44.8 | 30.7 | 53.8 | 23.0 | 75% |
| Reliability Surcharge | 4.8 | 4.9 | 5.1 | 0.2 | 4% |
| Sales Tax | 52.3 | 53.7 | 54.4 | 0.7 | 1% |
| Interest Income | 2.3 | 1.5 | 1.3 | (0.2) | -13% |
| Groundwater Management Fees | 0.8 | 0.9 | 0.9 | (0.0) | -2% |
| LV Wash Program Fees | 0.4 | 0.7 | 0.4 | (0.3) | -43% |
| Grant Proceeds | 9.7 | 9.5 | 0.6 | (8.9) | -94% |
| Other Revenues | 6.8 | 2.7 | 8.9 | 6.2 | 231% |
| Subtotal | \$ 366.7 | \$ 364.7 | \$ 417.9 | \$ 53.2 | 15% |
| Debt Issuance Proceeds | - | - | 520.4 | 520.4 | |
| Total Sources | \$ 366.7 | \$ 364.7 | \$ 938.3 | \$ 573.6 | 157% |
| Uses | | | | | |
| Energy | \$ 53.4 | \$ 45.8 | \$ 37.5 | \$ (8.3) | -18% |
| Payroll & Related | 70.0 | 66.0 | 66.7 | 0.7 | 1% |
| Operating Expenses | 34.5 | 35.7 | 36.6 | 0.9 | 2% |
| Capital Expenditures | 97.9 | 146.0 | 287.4 | 141.3 | 97% |
| Debt Service | 163.4 | 170.5 | 223.8 | 53.2 | 31% |
| Total Uses | \$ 419.2 | \$ 464.1 | \$ 652.0 | \$ 187.9 | 40% |
| Total Net Surplus/(Deficit) | \$ (52.5) | \$ (99.4) | \$ 286.3 | \$ 385.7 | |

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Sources.

The 2015-16 Budget Plan's total sources of funds are projected to be \$938.3 million, or a 157 percent increase compared to the 2014-15 Adopted Budget Plan. The increase is largely due to proceeds from a projected debt issuance. The SNWA anticipates issuing approximately \$520 million in new debt to fund expenditures related to the M CCP. The low-lake level pumping station comprises the majority of those expenditures.

Not including proceeds of debt issuance, sources of funds are budgeted to increase \$53.2 million, which is 15 percent. The rise is primarily attributable to increases in Infrastructure and Connection Charges.

Infrastructure Charges are budgeted to increase \$25.2 million, which is 29 percent above the 2014-15 Adopted Budget Plan. The increase is primarily attributable to IRPAC recommended rate increases being phased-in over multiple years. The IRPAC Phase I rate increases were approved in 2013, and will be phased-in through 2017. The IRPAC Phase II rate increases will be phased-in over three years beginning in 2016.

Connection Charges are projected to increase \$23.0 million, which is 75 percent above the 2014-15 Adopted Budget Plan. This rise is due to new connections to the system from increasing residential and commercial construction throughout the Las Vegas Valley. While still far below the peak of \$188.5 million in fiscal year 2005-06, this projection reflects a notable increase.

Of the remaining sources of funds, Commodity Charges are budgeted to increase \$8.2 million, which is 17 percent. This increase is primarily attributable to further

implementation of the IRPAC Phase I rate increases. Grant proceeds are down \$9.1 million year-over-year as the Las Vegas Wash Capital Improvements Plan winds down and the pre-existing grants become fully expended. Other revenues are up primarily due to the anticipated receipt of funds from land sales under the Southern Nevada Public Lands Management Act (SNPLMA).

Uses.

The 2015-16 Budget Plan's total uses of funds are projected to be \$652.0 million, or a 41% increase compared to the 2014-15 Adopted Budget Plan. The rise is due to increased capital expenditures and debt service.

Capital expenditures are budgeted to increase \$141.3 million. The Intake No. 3 projects of finishing the tunnel and the low lake level pumping station are the largest components of capital expenditures. Fiscal year 2015-16 is the first year of construction for the low-lake level pumping station. The budget includes \$205 million for design and construction of the low-lake level pumping station. Based on IRPAC's recommendations, the SNWA has targeted \$30 million of operating reserves to be utilized for the initial \$30 million of costs for the low-lake pumping station. The first \$15 million is being expended in fiscal year 2014-15, with the remaining \$15 million projected to be spent within the 2015-16 fiscal year. The Intake No. 3 tunnel is expected to be completed in fiscal year 2015-16. The budget includes \$30.6 million for the Intake No. 3 tunnel.

Debt service is projected to increase \$53.2 million, which is 31 percent above the 2014-15 Adopted Budget Plan. This increase in debt service has been anticipated for several years. The IRPAC Phase I rate increases were

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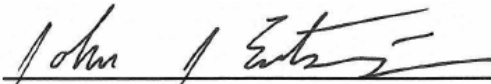
partially based on the future debt service requirements. The projected existing debt service will increase again in fiscal year 2016-17 by another \$23 million before stabilizing for approximately ten years, then declining thereafter. However, this does not include the debt service for the new debt issuance discussed earlier. In addition, there may be savings from future debt refundings.

Payroll costs are anticipated to increase by \$0.7 million, or 1 percent, compared to the 2014-15 Adopted Budget Plan. The full time equivalent (FTE) employee count is projected to remain unchanged. This steadfastness reflects management's commitment to control the costs of providing services and to increase operational efficiencies.

Of the remaining uses of funds, energy is budgeted to decrease \$5.1 million, which is 12 percent. This decrease is due to a combination of lower energy prices and lower operating costs at the Silverhawk Power Generation Facility. Other operating expenses remain relatively flat year-over-year.

Approval

The public hearing for the 2015-16 Budget Plan is scheduled for 9:00 a.m., Thursday, May 21, 2015, in the Colorado River Conference Rooms, 100 City Parkway, Seventh Floor, Las Vegas, Nevada.



John J. Entsminger, General Manager

SECTION 2

INTRODUCTION AND STRATEGIC PLAN



SOUTHERN NEVADA WATER AUTHORITY®

**FISCAL YEAR 2015-16
OPERATING AND CAPITAL BUDGET**

Southern Nevada Water Authority
Operating and Capital Budget
Introduction and Strategic Plan
Fiscal Year Ending June 30, 2016

Introduction and Strategic Plan

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 an Assistant General Manager (AGM) and two Deputy General Managers (DGM's) overseeing the operations of the LVVWD and

the SNWA. Collectively, the GM, AGM and DGM's are known as Executive Management (EM).

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 will contribute \$35,000 to the SNWA operations for the fiscal year 2015-16.

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

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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 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 (2.6 percent), Henderson (15.5 percent), North Las Vegas (11.0 percent), the LVVWD (70.6 percent) and others (0.3 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

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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 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. This amount was derived by discounting future repayment contract payments at 6.08 percent, which was the yield on the 30-year Treasury bond as of September 30, 1999. On July 3, 2001 the SNWA transferred \$116.2 million to the Bureau to prepay the federal repayment contracts realizing a discount of approximately \$48.0 million. This discount amount was added to the Deferred Amount on Refunding and amortized over the life of the SNWA's 0601 Bond Issue, which provided the funds for this prepayment. Because the SNWA used proceeds of the 0601 Bond Issue with an interest rate of 5.31 percent to prepay the federal repayment contracts with an interest rate of 3.25 percent, the cash flow saving to the SNWA is approximately \$13 million on a nominal basis and \$9 million on a present value basis. The 0601 Bond has since

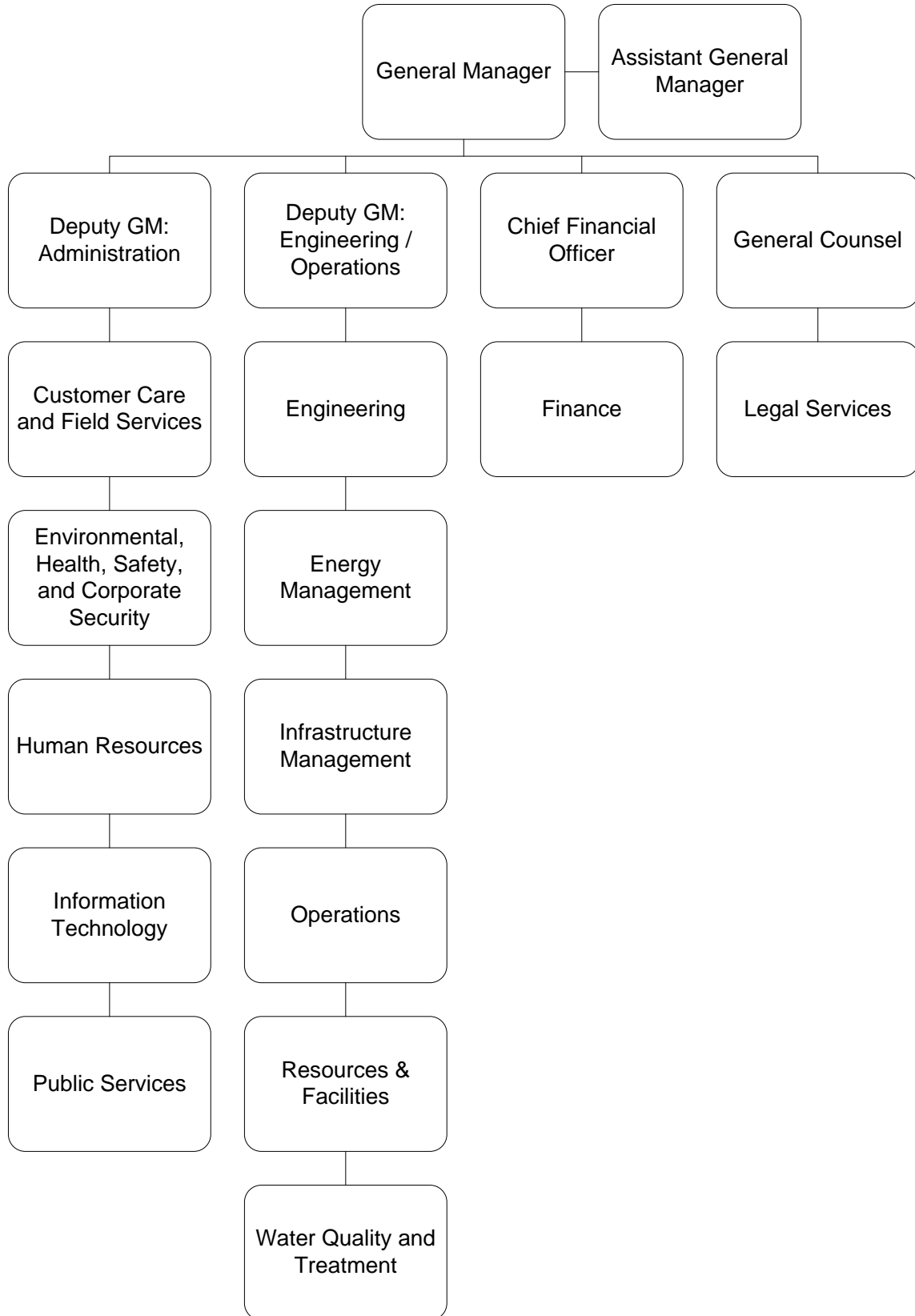
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been refunded / restructured into several other issues.

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

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LVVWD issues short-term 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. The SNWA has received an Issuer Credit Rating of "A+" from Standard and Poor's; however 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 June 30, 2015, the SNWA has \$3.387 billion in outstanding general obligation debt, of which \$356 million is debt the State of Nevada sold for the SNWA, \$1.793 billion is debt the LVVWD has sold for the SNWA, and \$1.238 billion is debt the SNWA sold through the Clark County Bond Bank. 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. The SNWA also purchases employee fidelity

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insurance in the amount of \$3 million, with a \$25,000 deductible per occurrence.

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, 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

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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 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.

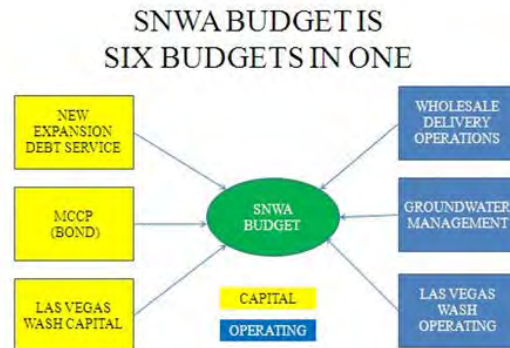
The Engineering department issues capital plans annually. The most recent capital plans can be viewed in Section 6 of this 2015-16 Budget Plan document. The capital plan reflects all capital projects, their projected start and end dates, their projected costs, the gross amount of expended or encumbered 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-operating expenses. A utility, or other enterprise, is a

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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 and quarterly 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 November 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 EM to justify expenditure requests. After all of the departments' budgets have been reviewed and approved by EM, 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.



On the third 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

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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 2015-16 BUDGET CALENDAR

| | All Departments | Financial Services | Executive Management | Human Resources |
|---|--|--|---|--|
|  <p>Dec</p> | <p>Mon Dec 15 – Mon Jan 12 Departments coordinate with Human Resources to determine appropriate position classifications, salary/pay rates, and number of temporary positions</p> | <p>Thu Dec 11 Send Budget instructions and calendar to departments</p> <p>Mon Dec 15 Assigned analysts & departments begin coordinating budget process and schedule</p> <p>Mon Dec 22 Send operating expense template and begin assisting departments</p> | | <p>Tue Dec 2 Distribute organization charts to departments. Changes to org charts due to Human Resources by Tuesday, January 20, 2015</p> <p>Mon Dec 22 Distribute list of existing intern, temporary and summer hire positions to departments. Renewal or elimination of any of those positions due to Human Resources by Tuesday, January 20, 2015</p> |
| | <p>Jan</p> | <p>Tue Jan 20 Submit any changes on organization charts to Human Resources (Exhibit 4)</p> | <p>Mon Jan 5 Begin coordinating with departments incurring intercompany and overtime payroll costs</p> | |
| <p>Tue Jan 20 Submit final requests for interns, temporary and summer hire positions to Human Resources</p> | | | | |
| <p>Mon Jan 26 Submit final 2015-16 operating capital requests (Exhibits 1 & 2) and operating expense budgets (Exhibit 5) to Financial Services</p> | | <p>Mon Jan 26 Submit major data processing and equipment requests from Exhibits 1 to Information Technology and Fleet Services for review and coordination</p> | <p>Mon Jan 26 Send lists of existing intern, temporary and summer hire position renewals to Financial Services</p> |  |

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|  | All Departments | Financial Services | Executive Management | Human Resources |
|---|--|---|---|-----------------|
| Feb | Mon Feb 2 Receive narrative instructions | Mon Feb 2 Send budget narrative instructions to departments | | |
| | | Mon Feb 2 Receive final 2015-16 department capital requests and any changes/comments from IT/Fleet Services | | |
| | | Mon Feb 9 Send summaries and detail of operating expense & operating capital budgets to departments Mon Feb 9 Begin assisting departments in preparation for the Senior Management Team (SMT) budget meeting presentations | | |
| Mar | Mon Mar 16 Department proposed budget meetings with SMT | Mon Mar 2 Budget overview briefing with Executive Management (E-team) | Mon Mar 2 Budget overview briefing with Executive Management (E-team) | |
| | Tue Mar 24 Budget narratives due to Financial Services | Mon Mar 9 Department proposed budget meetings with SMT | Mon Mar 9 Department proposed budget meetings with SMT | |
| Apr | | Thu Apr 9 Complete proposed draft budgets for Budget Workshops with Boards of Directors | Mon Mar 16 – Mon Apr 6 General Manager makes final budget decisions | |
| | Wed Apr 15 File Preliminary Budgets with the Nevada State Department of Taxation | Mon Apr 27 Board of Directors Budget Workshops for LVVWD (including BBWD & Coyote Springs) | Wed Apr 29 Board of Directors Budget Workshops for SNWA | |

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| All Departments | Financial Services | Executive Management | Human Resources |
|---|--|---|-----------------|
|  <p>May</p> | <p>Thu May 7 LVVWD, BBWD, and Coyote Springs Public hearing notice published in LVRJ</p> <p>Tue May 12 SNWA Public hearing notice published in LVRJ</p> <p>Thu May 28 Send adopted budgets to the Nevada State Department of Taxation</p> | <p>Mon May 18 LVVWD Board of Directors conducts public hearings on proposed budgets of LVVWD, Big Bend, and Coyote Springs for possible adoption</p> <p>Thu May 21 SNWA Board of Directors conducts a public hearing on the proposed budget for possible adoption</p> | |
| <p>Jun</p> | <p>Mon Jun 1 Send Adopted budgets to directors and managers</p> <p>Thu Jun 25 Publish LVVWD, SNWA, BBWD & Coyote Springs annual summary fiscal reports in LVRJ</p> | | |
| <p>Jul</p> | | | |
| <p>Aug</p> | <p>Thu Aug 6 Submit proof of publication of fiscal reports to the Nevada State Department of Taxation</p> <p>Thu Aug 13 Submit Budget Award Application to the GFOA</p> | | |

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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 2015-16 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 2015-16 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

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recently, has survived the devastating effects of a historic 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.

Strategic Plan Strategies.

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

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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.

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.

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- 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.

SECTION 3

OPERATING AND CAPITAL BUDGET PLAN



SOUTHERN NEVADA WATER AUTHORITY®

FISCAL YEAR 2015-16

OPERATING AND CAPITAL BUDGET

Southern Nevada Water Authority
Operating and Capital Budget
Operating and Capital Budget Plan
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Operating and Capital Budget Plan

The fiscal year 2015-16 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 2015-16 Budget Plan's total sources of funds are projected to be \$938.3 million, or a 157

percent increase compared to the fiscal year 2014-15 Adopted Budget Plan. The fiscal year 2015-16 Budget Plan's total uses of funds are projected to be \$652.0 million, or a 41 percent increase compared to the fiscal year 2014-15 Adopted Budget Plan. The table below shows the Sources and Uses Summary for the fiscal years 2013-14, 2014-15, and 2015-16.



Budget Summary

| | Actual 2013-14 | Budget 2014-15 | Budget 2015-16 | Budget-to-Budget Variance | |
|------------------------------------|------------------------|------------------------|-----------------------|------------------------------|-------------|
| | | | | \$ | % |
| Sources | | | | | |
| Wholesale Delivery Charge | \$ 121,045,154 | \$ 123,370,688 | \$ 122,401,411 | \$ (969,277) | -1% |
| Infrastructure Charge | 80,244,881 | 87,233,033 | 112,462,115 | 25,229,082 | 29% |
| Commodity Charge | 43,425,961 | 49,423,428 | 57,648,277 | 8,224,849 | 17% |
| Connection Charge | 44,819,669 | 30,748,787 | 53,765,118 | 23,016,331 | 75% |
| Reliability Surcharge | 4,783,683 | 4,921,646 | 5,119,962 | 198,316 | 4% |
| Sales Tax | 52,308,926 | 53,711,463 | 54,448,884 | 737,421 | 1% |
| Interest Income | 2,309,538 | 1,478,268 | 1,283,700 | (194,568) | -13% |
| Groundwater Management Fees | 842,191 | 892,964 | 874,637 | (18,327) | -2% |
| LV Wash Program Fees | 397,408 | 727,398 | 416,715 | (310,683) | -43% |
| Grant Proceeds | 9,744,810 | 9,480,000 | 553,631 | (8,926,369) | -94% |
| Other Revenues | 6,780,260 | 2,692,166 | 8,918,320 | 6,226,154 | 231% |
| Subtotal | \$ 366,702,481 | \$ 364,679,841 | \$ 417,892,771 | \$ 53,212,930 | 15% |
| Debt Issuance Proceeds | - | - | 520,362,957 | 520,362,957 | |
| Total Sources | \$ 366,702,481 | \$ 364,679,841 | \$ 938,255,728 | \$ 573,575,887 | 157% |
| Uses | | | | | |
| Energy | \$ 53,409,820 | \$ 45,814,094 | \$ 37,524,906 | \$ (8,289,188) | -18% |
| Payroll & Related | 70,029,311 | 65,972,117 | 66,684,688 | 712,571 | 1% |
| Operating Expenses | 34,483,860 | 35,747,003 | 36,628,270 | 881,267 | 2% |
| Capital Expenditures | 97,873,595 | 146,037,070 | 287,376,221 | 141,339,151 | 97% |
| Debt Service | 163,383,672 | 170,509,681 | 223,751,702 | 53,242,021 | 31% |
| Total Uses | \$ 419,180,258 | \$ 464,079,965 | \$ 651,965,786 | \$ 187,885,821 | 40% |
| Total Net Surplus/(Deficit) | \$ (52,477,777) | \$ (99,400,124) | \$ 286,289,941 | \$ 385,690,065 | |

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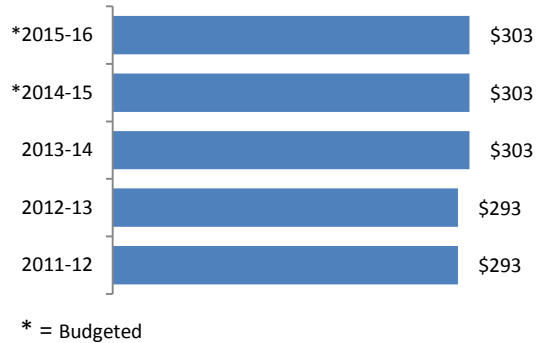
Sources

The fiscal year 2015-16 Budget Plan’s total sources of funds are projected to be \$938.3 million, which is a 157 percent increase compared to the 2014-15 Adopted Budget Plan. The increase is largely due to proceeds from a projected \$520 million debt issuance. Aside from debt proceeds, the remaining 15 percent increase over 2014-15 Adopted Budget Plan is due to a combination of an improved local economy and further implementation of the Phase 1 and 2 water rate increases recommended by the SNWA Board of Directors (Board) appointed 21-member Integrated Resource Planning Advisory Committee (IRPAC), and subsequently approved by the Board.

Wholesale Delivery Charge.

The wholesale delivery charge is the revenue generated from treated 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 2015-16 the wholesale delivery charge will remain at \$303 per acre-foot. Periodic rate increases have kept the wholesale delivery charge revenue relatively stable during periods of declining usage. The decrease of \$1.0 million (-1 percent) in fiscal year 2015-16 is the result of a slight drop 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 as low as possible.

Wholesale Delivery Charge Rate
 (\$ per Acre Foot)



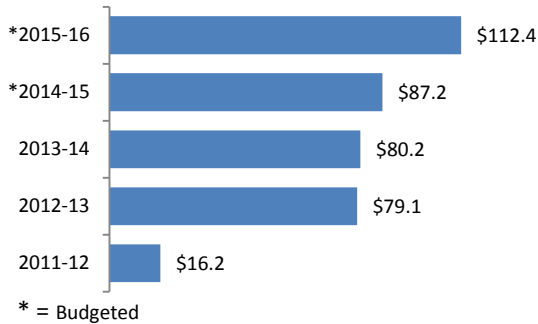
Infrastructure Charge.

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 on a monthly basis. At the same time in 2012, the Board assembled the IRPAC to review future 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, 2014 and increasing annually through January 1, 2017. The fiscal year 2015-16 projections of the infrastructure charge revenue includes six months of the January 1, 2015 increase and six months of the January 1, 2016 increase.

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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. The charge will be added to the infrastructure charge. The fiscal year 2015-16 Budget Plan projects an implementation in January, 2016 for the increase to the infrastructure charge. These IRPAC Phase 1 and 2 recommended, and Board approved, increases account for the rise in the infrastructure charge of \$25.2 million, which is a 29 percent increase compared to the 2014-15 Adopted Budget Plan.

Infrastructure Charge
 (\$ in millions)

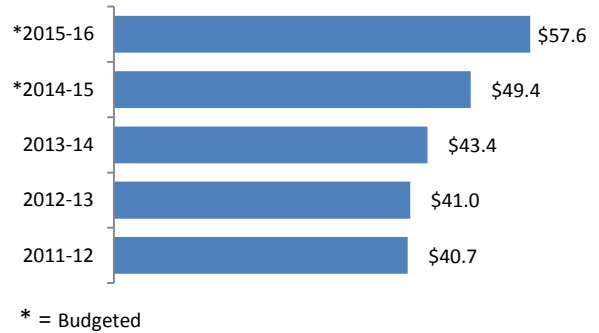


Commodity Charge.

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 rate increased to \$0.34 in January, 2014 and to \$0.38 in January, 2015. It is projected to increase to \$0.44 in January, 2016.

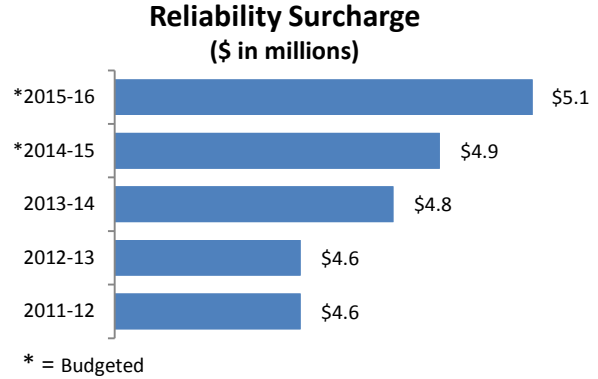
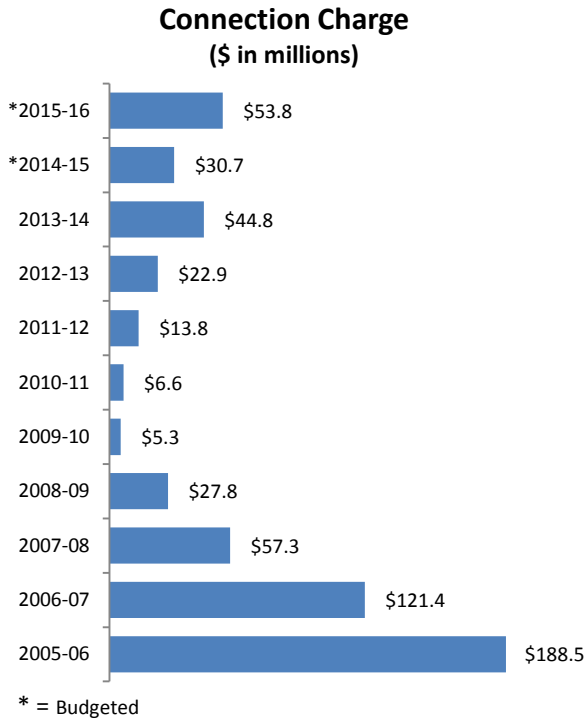
Commodity Charge
 (\$ in millions)



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 2015-16 projection of connection charge revenue is \$53.8 million, which is substantially higher (75 percent) than the 2014-15 Adopted Budget Plan. Connection charge collections were one of the SNWA’s largest sources of funds in the mid-2000s. However, during the recent recession, this revenue fell 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.

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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. 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, 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 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.

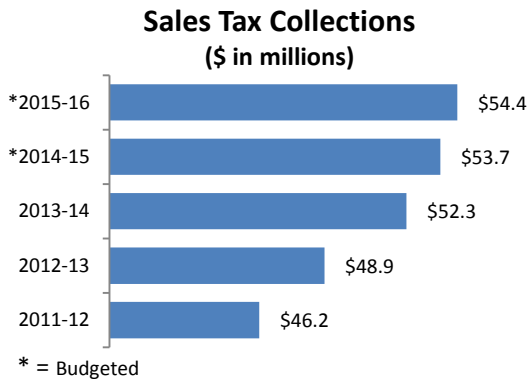
By agreement with the wastewater agencies in the service area, the SNWA received 100 percent of the remaining sales tax proceeds for the first two years. Since then, the remainder has been split between water and wastewater based on the relative size of their capital improvement plans. The fiscal year

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 2015-16 reliability surcharge is projected to increase slightly (\$0.2 million, 4 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.

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2015-16 projection of sales tax revenue is \$0.7 million, or 1 percent, higher than the 2014-15 Adopted Budget Plan, due to an improving economy.



Interest Income.

Interest 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). Interest income is projected to decrease \$0.2 million (-13 percent) over the 2014-15 Adopted Budget Plan. This decrease is primarily attributable to fewer funds to invest. Interest income is based on the amount of funds available to invest and the ROI. The ROI is expected to remain consistent, so the cause is less funds available to invest. There is expected to be less bond funds throughout fiscal year 2015-16 as the bonds funds will be expended throughout the year while the debt issuance will not likely occur until the end of fiscal year 2015-16.

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 2015-16. Consequently, for the fourth 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 2014-15 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 are projected to decrease \$0.3 million (-43 percent) in fiscal year 2015-16 as compared to the 2014-15 Adopted Budget Plan. The decrease in billed fees is primarily a result of an anticipated decrease in grant proceeds which can specifically be used for Las Vegas Wash operations.

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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 decrease \$8.9 million (-94 percent) in fiscal year 2015-16 from the 2014-15 Adopted Budget Plan. This decrease is primarily attributable to the grants related to the Las Vegas Wash. The fiscal year 2014-15 Adopted Budget Plan included \$9.5 million in grants, of which \$8.7 million (91 percent) was for the Las Vegas Wash. The Las Vegas Wash grants are expected to be fully expended by the end of fiscal year 2014-15 and no new grants for the Las Vegas Wash have been secured.

Other Revenues.

Other revenues are budgeted to increase \$6.2 million (231 percent) from the fiscal year 2014-15 Adopted Budget Plan. The most significant other revenue is SNPLMA proceeds. SNPLMA is an acronym for the Southern Nevada Public Lands Management Act. SNPLMA became law in October 1998. It allows the U.S. Bureau of Land Management to sell public land within a specific boundary around Las Vegas, Nevada. The revenue derived from these land sales is split between the State of Nevada General Education Fund (5%), the Southern Nevada Water Authority (10%), and a special account available to the U.S. Secretary of the Interior for various other projects. SNPLMA proceeds were zero in the fiscal year 2014-15 Adopted Budget Plan and are expected to be \$5.0 in fiscal year 2015-16. This increase is due to expected land sales to support growth in the Las Vegas valley.

Debt Issuance Proceeds.

The SNWA expects to expend all of the currently available bond funds in fiscal year 2015-16. Therefore, the SWNA anticipates issuing bonds in fiscal year 2015-16 to fund the next 24 months of capital expenditures related to the Major Capital and Construction Plan, which is discussed in further detail later in this section. The majority of capital expenditures in the next 24 months related to the low lake level pumping station. The last new money debt issuance was in July 2012.

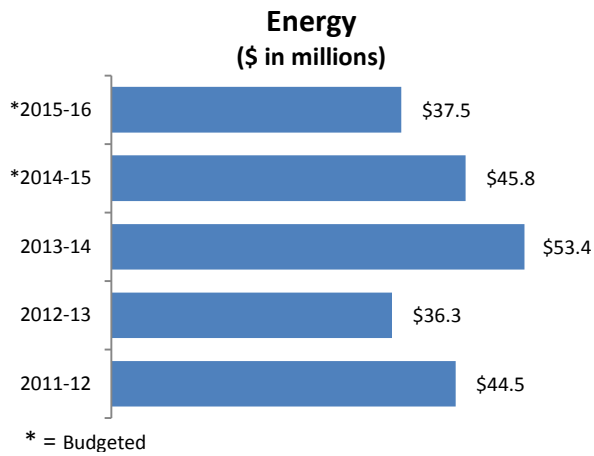
Uses

The fiscal year 2015-16 Budget Plan's total uses of funds are projected to be \$652.0 million, a 41 percent increase compared to the 2014-15 Adopted Budget Plan. The increase is largely due to higher capital expenditures and debt service costs.

Energy.

Treating raw water and delivering it to the Las Vegas valley is energy intensive. The cost of energy for fiscal year 2015-16 is projected to decrease \$8.3 million (-18 percent) over the fiscal year 2014-15 Adopted Budget Plan. This decrease is primarily due to lower anticipated energy prices.

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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 remain approximately the same as the fiscal year 2014-15 Adopted Budget Plan. This steadfastness reflects management's commitment to control its cost of providing services and to increase operational efficiencies. The following chart summarizes the number of equivalent FTE positions by department charging time to the SNWA.

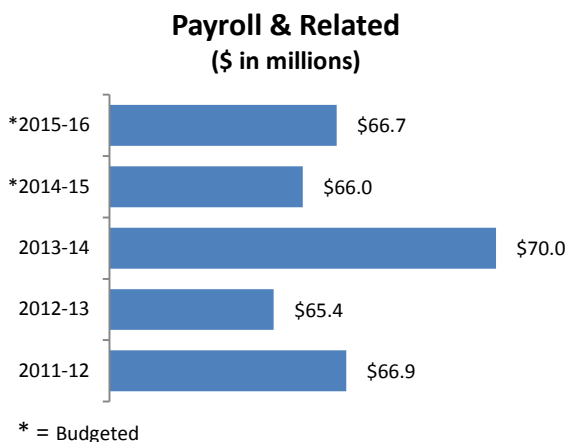
Payroll & Related.

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 2015-16, payroll and related expenses are anticipated to be \$66.7 million. This represents a slight increase of \$0.7 million, or 1 percent, compared to the 2014-15 Adopted Budget Plan.

FTE Summary

| <u>Department</u> | <u>Actual</u> | <u>Budget</u> | <u>Budget</u> |
|--|----------------|----------------|----------------|
| | <u>2013-14</u> | <u>2014-15</u> | <u>2015-16</u> |
| Executive Management | 7.9 | 5.0 | 5.0 |
| Legal Services | 7.8 | 10.0 | 11.0 |
| Finance | 31.6 | 33.5 | 33.2 |
| Energy Management | 4.7 | 5.0 | 6.0 |
| Information Technology | 52.0 | 33.2 | 34.4 |
| Human Resources | - | - | - |
| Public Services | 21.2 | 30.0 | 31.9 |
| Environmental, Health, Safety & Corporate Security | 11.3 | 15.5 | 15.8 |
| Customer Care & Field Services | 1.0 | 1.3 | 1.3 |
| Engineering | 51.0 | 38.7 | 32.9 |
| Resources & Facilities | 112.3 | 101.8 | 98.6 |
| Infrastructure Management | 9.0 | 14.7 | 16.0 |
| Operations | 54.3 | 56.7 | 56.7 |
| Water Quality & Treatment | 82.4 | 84.8 | 87.3 |
| Total | 446.5 | 430.0 | 429.9 |

**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.

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Operating expenses are projected to increase \$0.8 (2 percent) as compared to the 2014-15 Adopted Budget Plan. This modest increase reflects management’s commitment to minimize operating costs without sacrificing the quality of products and services.

Capital Expenditures.

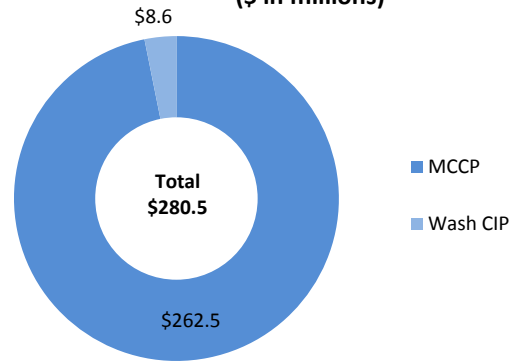
Capital expenditures are projected to increase \$141.3 million (97 percent), compared to the fiscal year 2014-15 Adopted Budget Plan. The increase is primarily attributable to the low-lake level pumping station, which is 71 percent of the projected capital expenditures in the 2015-16 budget. (This project is described later in this section.)

Capital expenditures are different from operating expenses in that they are generally related to assets and those assets have useful lives extending beyond one year 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.

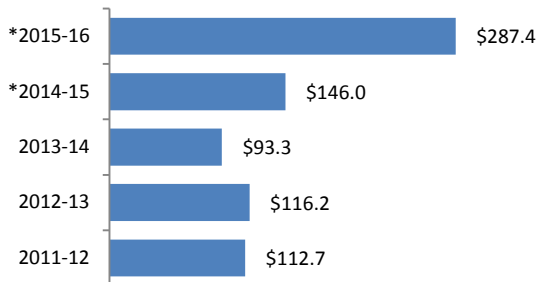
The majority of the SNWA’s capital expenditures are accounted for in the SNWA’s two approved capital improvement plans (CIP):

- 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.

**CIP Related Capital Expenditures
 in Fiscal Year 2015-16 Budget Plan
 (\$ in millions)**



**Capital Expenditures
 (\$ in millions)**



* = Budgeted

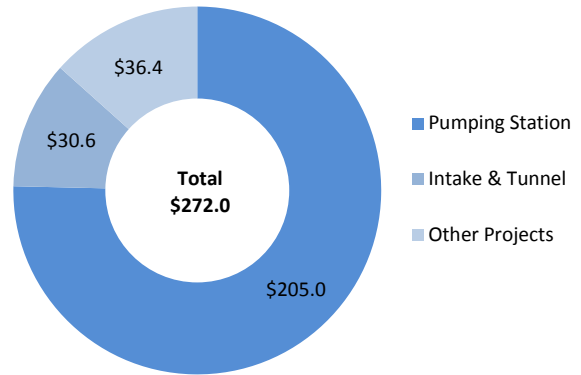
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The following is a brief description of the most significant MCCP projects:

- Intake No.3 Project – Intake Shaft and Tunnel. Construct a submerged water intake riser structure on the lake bottom with an intake elevation of 860 feet above sea level, along with approximately three miles of 20-foot diameter tunnel under the lake from the new intake shaft to a new access shaft at the shoreline of Lake Mead near the Alfred Merritt Smith Water Treatment Facility. This intake and tunnel will replace the at-risk capacity of the existing intakes, provide access to the better quality water deeper in the lake, and allow for operation of the future Intake No. 3 Low Lake Level Pumping Station. This project will also construct the chemical feed systems required to control quagga mussels in the water intake systems. The project is expected to be operational in 2015. The fiscal year 2015-16 Budget Plan includes \$30.6 million to be spent on this project.
- Intake No.3 Project – Low Lake Level Pumping Station. Construct a 900 million gallon per day pumping station to convey water from the new Intake No. 3 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. This pumping station 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 could be complete as early as 2021. The fiscal year 2015-16 Budget

Plan includes \$205.0 million to be spent on this project.

**MCCP Related Capital Expenditures
 in Fiscal Year 2015-16 Budget Plan
 (\$ in millions)**



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 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

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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.

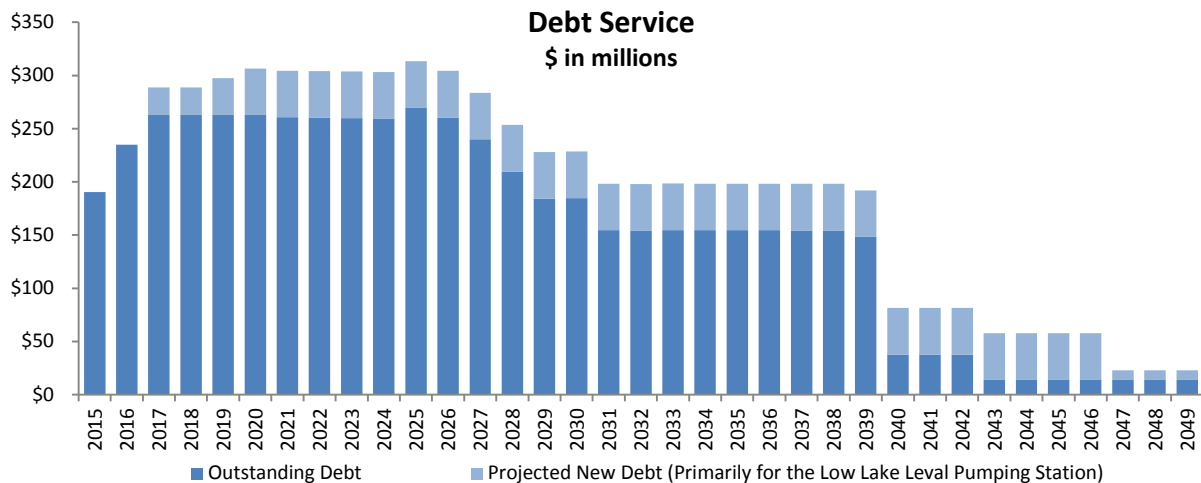
This reflects all outstanding debt of the SNWA. For more detail on the SNWA’s outstanding debt, see the Debt Management Policy, which is section seven of this book.

The Las Vegas valley 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 growth. During the recent recession, 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 \$53.2 million (31 percent) compared to the 2014-15 Adopted Budget Plan. This increase is primarily due to the ending of the cash flow relief as discussed above. This increase in debt service has been anticipated for several years. The IRPAC’s Phase 1 rate increases were partially based on the future debt service requirements. The existing debt service is projected to rise again in fiscal year 2016-17 by another \$28 million before stabilizing for approximately ten years, then declining. This projection does not include the debt service for the new low-lake level pumping station.

As described previously in this section, the SNWA anticipates issuing approximately \$520 million in new debt in the later part of fiscal year 2015-16. The following chart illustrates the outstanding debt service and the projected new debt.



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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 2015-16 Budget Plan.

Estimated Net Assets Detail
Fiscal Year 2015-16 Budget

| | <u>Invested in Capital Assets Net of Related Debt</u> | <u>Restricted</u> | <u>Unrestricted</u> | <u>Total Net Assets</u> |
|--|---|------------------------------|------------------------------|--------------------------------|
| Estimated Net Position on June 30, 2015 | \$ 1,017,892,015 | \$ 142,883,137 | \$ 503,205,053 | \$ 1,663,980,205 |
| <i>From Revenues, Expenses, and Net Income Schedule (RENI), Page 4-5</i> | | | | |
| Operating Revenue | \$ - | \$ - | \$ 134,448,414 | \$ 134,448,414 |
| Capital Contributions | | 54,448,884 | 228,995,472 | 283,444,357 |
| Interest Earned | (77,843) | | 1,283,700 | 1,205,857 |
| Payroll and Related Energy | 17,436,264 | | (66,684,688) | (49,248,424) |
| Operating Expenses | | | (37,524,906) | (37,524,906) |
| Depreciation Expense | (80,000,000) | | (36,628,270) | (36,628,270) |
| Interest Expense (Debt Service) | 172,242,483 | | (223,751,702) | (51,509,219) |
| <i>Subtotal from RENI</i> | <u>\$ 109,600,903</u> | <u>\$ 54,448,884</u> | <u>\$ 138,020</u> | <u>\$ 164,187,808</u> |
| <i>Items not on RENI</i> | | | | |
| Capitalized Expenditures | \$ 287,376,221 | \$ (287,376,221) | \$ - | \$ - |
| Debt Issuance Proceeds | | 520,362,957 | | 520,362,957 |
| <i>Subtotal Items not on RENI</i> | <u>\$ 287,376,221</u> | <u>\$ 232,986,736</u> | <u>\$ -</u> | <u>\$ 520,362,957</u> |
| Estimated Net Position on June 30, 2016 | <u><u>\$ 1,414,869,139</u></u> | <u><u>\$ 430,318,757</u></u> | <u><u>\$ 503,343,073</u></u> | <u><u>\$ 2,348,530,970</u></u> |
| | | | Percent Increase | 41.1% |

Southern Nevada Water Authority
Operating and Capital Budget
Operating and Capital Budget Plan
Fiscal Year Ending June 30, 2016

Sub Funds

According to Generally Accepted Accounting Principles, 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 2015-16

| | Operating Sub Funds | | Capital Sub Funds | | | Total |
|------------------------------------|-------------------------------|-----------------------------|----------------------------|----------------------------------|----------------------|-----------------------|
| | Wholesale Delivery Operations | Groundwater Management Plan | New Expansion Debt Service | Major Capital & Construcion Plan | Las Vegas Wash | |
| Sources | | | | | | |
| Wholesale Delivery Charge | \$ 122,401,411 | \$ - | \$ - | \$ - | \$ - | \$ 122,401,411 |
| Infrastructure Charge | | | 112,462,115 | | | 112,462,115 |
| Commodity Charge | | | 57,648,277 | | | 57,648,277 |
| Connection Charge | | | 53,765,118 | | | 53,765,118 |
| Reliability Surcharge | | | 5,119,962 | | | 5,119,962 |
| Sales Tax | | | 50,904,555 | | 3,544,330 | 54,448,884 |
| Interest Income | 89,684 | 4,044 | 1,112,129 | 77,843 | | 1,283,700 |
| Groundwater Management Fees | | 874,637 | | | | 874,637 |
| LV Wash Program Fees | (736,161) | | | | 1,152,876 | 416,715 |
| Grant Proceeds | 553,631 | | | | | 553,631 |
| Other Revenues | 1,477,520 | | 7,368,799 | 72,000 | | 8,918,320 |
| Intra Sub Fund Loans | | | (8,311,200) | | 8,311,200 | - |
| Debt Issuance Proceeds | - | - | - | 520,362,957 | - | 520,362,957 |
| Total Sources | \$ 123,786,086 | \$ 878,681 | \$ 280,069,755 | \$ 520,512,800 | \$ 13,008,406 | \$ 938,255,728 |
| Uses | | | | | | |
| Energy | \$ 37,524,906 | \$ - | \$ - | \$ - | \$ - | \$ 37,524,906 |
| Payroll & Related | 40,303,025 | 488,616 | 19,815,351 | 4,657,908 | 1,419,787 | 66,684,688 |
| Operating Expenses | 25,478,550 | 727,168 | 9,447,635 | - | 974,918 | 36,628,270 |
| Capital Expenditures | 4,693,982 | - | 26,666,399 | 247,461,734 | 8,554,106 | 287,376,221 |
| Debt Service | 16,948,084 | - | 206,803,618 | - | - | 223,751,702 |
| Total Uses | \$ 124,948,547 | \$ 1,215,784 | \$ 262,733,002 | \$ 252,119,642 | \$ 10,948,812 | \$ 651,965,786 |
| Total Net Surplus/(Deficit) | \$ (1,162,461) | \$ (337,102) | \$ 17,336,753 | \$ 268,393,158 | \$ 2,059,594 | \$ 286,289,941 |

Southern Nevada Water Authority
Operating and Capital Budget
Operating and Capital Budget Plan
Fiscal Year Ending June 30, 2016

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 valley'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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SECTION 4
STATE OF NEVADA
BUDGET DOCUMENTS



SOUTHERN NEVADA WATER AUTHORITY®

FISCAL YEAR 2015-16
OPERATING AND CAPITAL BUDGET



STATE OF NEVADA
DEPARTMENT OF TAXATION

Web Site: <http://tax.state.nv.us>
1550 College Parkway, Suite 115
Carson City, Nevada 89706-7937
Phone: (775) 684-2000 Fax: (775) 684-2020

RENO OFFICE
4600 Kietzke Lane
Building L, Suite 235
Reno, Nevada 89502
Phone: (775) 687-9999
Fax: (775) 688-1303

BRIAN SANDOVAL
Governor
ROBERT R. BARENGO
Chair, Nevada Tax Commission
CHRISTOPHER G. NIELSEN
Executive Director

LAS VEGAS OFFICE
Grant Sawyer Office Building, Suite 1300
555 E. Washington Avenue
Las Vegas, Nevada 89101
Phone: (702) 486-2300 Fax: (702) 486-2373

HENDERSON OFFICE
2550 Paseo Verde Parkway, Suite 180
Henderson, Nevada 89074
Phone: (702) 486-2300
Fax: (702) 486-3377

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, 2016

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 \$ 254,910,819

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, Gina L. Neilson
(Printed Name)
Acting Director of Finance
(Title)

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

Signed: Gina L. Neilson

Dated: 5/18/15

APPROVED BY THE GOVERNING BOARD

Mary Beth Scow, Chairwoman Mary Beth Scow

Sam Bateman, Vice Chairman Sam Bateman

Susan Brager Susan Brager

Bob Coffin Bob Coffin

Duncan McCoy Duncan R. McCoy

Steve Sisolak Steve Sisolak

Anita Wood Anita D. Wood

SCHEDULED PUBLIC HEARING:

Date and Time Thursday, May 21, 2015 9:00 AM

Publication Date May 14, 2015

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

**SOUTHERN NEVADA WATER AUTHORITY
BUDGET DOCUMENT INDEX**

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FULL TIME EQUIVALENT EMPLOYEES BY FUNCTION

| | ACTUAL PRIOR YEAR ENDING 06/30/14 | ESTIMATED CURRENT YEAR ENDING 6/30/15 | BUDGET YEAR ENDING 06/30/16 |
|---------------------------------|---|---|--------------------------------|
| General Government | | | |
| Judicial | | | |
| Public Safety | | | |
| Public Works | | | |
| Sanitation | | | |
| Health | | | |
| Welfare | | | |
| Culture and Recreation | | | |
| Community Support | | | |
| TOTAL GENERAL GOVERNMENT | 446.5 | 430.0 | 429.9 |
| Utilities | | | |
| Hospitals | | | |
| Transit Systems | | | |
| Airports | | | |
| Other | | | |
| TOTAL | 446.5 | 430.0 | 429.9 |

| | | | |
|---|--|--|--|
| POPULATION (AS OF JULY 1) | 2,103,000 | 2,148,000 | 2,188,000 |
| SOURCE OF POPULATION ESTIMATE* | Center for Business & Econ Research UNLV | Center for Business & Econ Research UNLV | Center for Business & Econ Research 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 | N/A | N/A | N/A |

* 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

SCHEDULE A-2 PROPRIETARY AND NONEXPENDABLE TRUST FUNDS

Budget for Fiscal Year Ending June 30, 2016

Budget Summary for Southern Nevada Water Authority
(Local Government)

| FUND NAME | * | OPERATING REVENUES (1) | OPERATING EXPENSES (2) ** | NONOPERATING REVENUES (3) | NONOPERATING EXPENSES (4) | OPERATING TRANSFERS | | NET INCOME (7) |
|--|---|------------------------|---------------------------|---------------------------|---------------------------|---------------------|--------|----------------|
| | | | | | | IN (5) | OUT(6) | |
| Southern Nevada Water Authority Proprietary Fund | E | \$134,448,414 | \$203,401,600 | \$284,650,213 | \$51,509,219 | | | \$164,187,808 |
| | | | | | | | | |
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| | | | | | | | | |
| TOTAL | | | | | | | | |

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

** Include Depreciation

| PROPRIETARY FUND | (1) | (2) | (3) (4) BUDGET YEAR ENDING 06/30/16 | |
|---|--|--|--|----------------------|
| | ACTUAL PRIOR YEAR ENDING 6/30/2014 | ESTIMATED CURRENT YEAR ENDING 6/30/2015 | TENTATIVE APPROVED | FINAL APPROVED |
| OPERATING REVENUE | | | | |
| Wholesale Delivery Charge | \$121,045,154 | \$123,370,688 | \$122,401,411 | \$122,401,411 |
| Groundwater Program Revenue | 842,191 | 892,964 | 874,637 | 874,637 |
| Administration Costs Recoveries | 425,765 | 1,185,173 | 459,920 | 459,920 |
| Las Vegas Wash Revenues | 397,408 | 727,398 | 416,715 | 416,715 |
| Other Operating Revenue | 3,843,389 | 1,506,993 | 10,295,730 | 10,295,730 |
| | | | | |
| | | | | |
| | | | | |
| Total Operating Revenue | \$126,553,907 | \$127,683,215 | \$134,448,414 | \$134,448,414 |
| OPERATING EXPENSE | | | | |
| Personnel and Related | \$50,216,887 | \$45,215,400 | \$49,248,424 | \$49,248,424 |
| Energy | 53,409,820 | 44,367,515 | 37,524,906 | 37,524,906 |
| Other | 34,483,860 | 39,599,848 | 36,628,270 | 36,628,270 |
| | | | | |
| | | | | |
| | | | | |
| Depreciation/Amortization | 75,853,379 | 80,000,000 | 80,000,000 | 80,000,000 |
| Total Operating Expense | \$213,963,946 | \$209,182,763 | \$203,401,600 | \$203,401,600 |
| Operating Income or (Loss) | (\$87,410,039) | (\$81,499,548) | (\$68,953,186) | (\$68,953,186) |
| NONOPERATING REVENUES | | | | |
| Interest Earned | \$2,309,538 | \$1,196,376 | \$1,205,857 | \$1,205,857 |
| Property Taxes | | | | |
| Subsidies | | | | |
| Consolidated Tax | | | | |
| Capital Contributions | 237,839,036 | 235,518,357 | 283,444,357 | 283,444,357 |
| other | 44,132 | | - | - |
| | | | | |
| | | | | |
| Total Nonoperating Revenues | \$240,192,706 | \$236,714,733 | \$284,650,213 | \$284,650,213 |
| NONOPERATING EXPENSES | | | | |
| Interest Expense | \$45,253,209 | \$64,584,975 | \$51,509,219 | \$51,509,219 |
| Amortization of Refunding Costs | 2,921,604 | - | - | - |
| Other Bond Costs | (465,526) | - | - | - |
| | | | | |
| Total Nonoperating Expenses | \$47,709,287 | \$64,584,975 | \$51,509,219 | \$51,509,219 |
| Net Income before Operating Transfers | \$105,073,380 | \$90,630,210 | \$164,187,808 | \$164,187,808 |
| Operating Transfers (Schedule T) | | | | |
| In | | | | |
| Out | | | | |
| Net Operating Transfers | \$0 | \$0 | \$0 | \$0 |
| NET INCOME | \$105,073,380 | \$90,630,210 | \$164,187,808 | \$164,187,808 |

Southern Nevada Water Authority
(Local Government)

SCHEDULE F-1 REVENUES, EXPENSES AND NET INCOME

FUND Enterprise

| PROPRIETARY FUND | (1) | (2) | (3) (4) BUDGET YEAR ENDING 06/30/16 | |
|--|--|--|--|-----------------------|
| | ACTUAL PRIOR YEAR ENDING 6/30/2014 | ESTIMATED CURRENT YEAR ENDING 6/30/2015 | TENTATIVE APPROVED | FINAL APPROVED |
| A. CASH FLOWS FROM OPERATING ACTIVITIES: | | | | |
| General and Administrative/Resources Charges | \$1,853,362 | \$1,185,173 | \$459,920 | \$459,920 |
| Groundwater Management Fees | 842,191 | 892,964 | 874,637 | 874,637 |
| Las Vegas Wash Revenues | 397,408 | 727,398 | 416,715 | 416,715 |
| Wholesale Delivery Charges | 119,876,517 | 123,370,688 | 122,401,411 | 122,401,411 |
| Other Revenues | 2,330,093 | 1,506,993 | 10,295,730 | 10,295,730 |
| Cash Payments to Suppliers of Goods and Services | (133,503,645) | (129,182,763) | (123,401,600) | (123,401,600) |
| | | | | |
| | | | | |
| a. Net cash provided by (or used for) operating activities | (\$8,204,074) | (\$1,499,548) | \$11,046,814 | \$11,046,814 |
| B. CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES: | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| b. Net cash provided by (or used for) noncapital financing activities | \$0 | \$0 | \$0 | \$0 |
| C. CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES: | | | | |
| Purchase or Construction of Capital Assets | (\$97,873,595) | (\$130,606,229) | (\$264,897,998) | (\$264,897,998) |
| Proceeds from Disposal of Property and Equipment | 79,997 | - | - | - |
| Proceeds of Debt Issuance | - | - | - | - |
| Principal Paid on Debt | (16,872,459) | (24,290,584) | (78,025,252) | (78,025,252) |
| Interest Paid on Debt | (156,595,796) | (146,219,097) | (145,726,453) | (145,726,453) |
| Capital Contributions | 220,278,434 | 235,518,357 | 283,444,357 | 283,444,357 |
| Credit Payment Income | 10,084,583 | 10,867,008 | (2,236,500) | (2,236,500) |
| | | | | |
| c. Net cash provided by (or used for) capital and related financing activities | (\$40,898,836) | (\$54,730,545) | (\$207,441,846) | (\$207,441,846) |
| D. CASH FLOWS FROM INVESTING ACTIVITIES: | | | | |
| Purchases of Investment Securities | (\$280,153,479) | (\$375,000,000) | (\$375,000,000) | (\$375,000,000) |
| Proceeds from Sales or Maturities of Investment Securities | 279,771,145 | 430,033,716 | 550,000,000 | 550,000,000 |
| Investment Earnings | 10,814,855 | 1,196,376 | 1,283,700 | 1,283,700 |
| | | | | |
| | | | | |
| d. Net cash provided by (or used in) investing activities | \$10,432,521 | \$56,230,092 | \$176,283,700 | \$176,283,700 |
| NET INCREASE (DECREASE) in cash and cash equivalents (a+b+c+d) | (\$38,670,389) | (\$0) | (\$20,111,333) | (\$20,111,333) |
| CASH AND CASH EQUIVALENTS AT JULY 1, 20xx | \$96,655,866 | \$57,985,477 | \$57,985,477 | \$57,985,477 |
| CASH AND CASH EQUIVALENTS AT JUNE 30, 20xx | \$57,985,477 | \$57,985,477 | \$37,874,144 | \$37,874,144 |

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) NAME OF BOND OR LOAN List and Subtotal By Fund | (2) * | (3) TERM | (4) ORIGINAL AMOUNT OF ISSUE | (5) ISSUE DATE | (6) FINAL PAYMENT DATE | (7) INTEREST RATE | (8) BEGINNING OUTSTANDING BALANCE 7/1/2015 | (9) INTEREST PAYABLE | (10) REQUIREMENTS FOR FISCAL YEAR ENDING 06/30/16 PRINCIPAL PAYABLE | (11) (9)+(10) TOTAL |
|---|----------|-------------|---------------------------------------|----------------------|---------------------------------|-------------------------|--|----------------------------|---|---------------------------|
| State Revolving Fund Loan 1 | 2 | 20 Years | \$ 12,269,695 | 12/30/99 | 2/1/20 | 3.61% | \$ 3,932,449 | \$ 135,421 | \$ 731,242 | \$ 866,663 |
| State Revolving Fund Loan 2 | 2 | 20 Years | 10,000,000 | 6/29/01 | 8/1/21 | 3.46% | 4,025,874 | 134,472 | 562,470 | 696,942 |
| LVVWD 2005F Refunding Bonds | 2 | 22 Years | 249,365,000 | 5/1/05 | 12/1/26 | 5.00% | 173,520,000 | 8,676,000 | - | 8,676,000 |
| LVVWD 2005H Refunding Bonds | 2 | 22 Years | 36,130,000 | 4/15/05 | 6/30/27 | 4.75% | 31,620,000 | 1,501,950 | - | 1,501,950 |
| LVVWD 2005I Refunding Bonds | 2 | 24 Years | 65,300,000 | 4/15/05 | 9/15/29 | 4.81% | 47,755,000 | 2,266,938 | - | 2,266,938 |
| SNWA 2006 Refunding Bonds | 2 | 24 Years | 242,880,000 | 5/1/06 | 6/1/30 | 4.67% | 210,210,000 | 9,806,469 | 14,845,000 | 24,651,469 |
| CRC 2006D Refunding Bonds | 2 | 18 Years | 111,840,000 | 7/15/06 | 7/1/24 | 4.94% | 66,200,000 | 3,270,763 | - | 3,270,763 |
| SNWA 1106 Bonds | 2 | 30 Years | 604,140,000 | 11/1/06 | 11/1/36 | 4.41% | 533,020,000 | 23,702,163 | - | 23,702,163 |
| LVVWD 2008B Refunding Bonds | 2 | 21 Years | 171,720,000 | 6/1/08 | 12/1/28 | 4.83% | 116,335,000 | 5,623,931 | 10,445,000 | 16,068,931 |
| SNWA 2008 Bonds | 2 | 30 Years | 400,000,000 | 7/2/08 | 6/1/38 | 5.00% | 362,155,000 | 18,107,750 | 8,740,000 | 26,847,750 |
| SNWA 2008 Clean Energy | 2 | 14 Years | 6,900,000 | 7/30/08 | 12/15/22 | 1.17% | 3,680,000 | 40,365 | 460,000 | 500,365 |
| LVVWD TECP Notes | 2 | N/A | 400,000,000 | 3/10/04 | N/A | 2.00% | 400,000,000 | 5,000,000 | 400,000,000 | 405,000,000 |
| LVVWD 2009A Bonds | 2 | 30 Years | 90,000,000 | 8/10/09 | 6/1/39 | 7.10% | 90,000,000 | 4,153,500 | - | 4,153,500 |
| LVVWD 2009B Bonds | 2 | 23 Years | 10,000,000 | 8/10/09 | 6/1/32 | 4.73% | 9,285,000 | 444,713 | 380,000 | 824,713 |
| SNWA 2009 Refunding | 2 | 20 Years | 50,000,000 | 11/10/09 | 6/1/30 | 5.00% | 44,395,000 | 2,219,750 | 2,060,000 | 4,279,750 |
| SNWA 2009 Water Rev Bond | 4 | 21 Years | 2,214,457 | 11/10/09 | 7/1/30 | 0.00% | 1,834,836 | - | 126,540 | 126,540 |
| LVVWD 2009D Bonds | 2 | 21 Years | 71,965,000 | 12/23/09 | 6/1/30 | 4.99% | 63,195,000 | 3,154,238 | 3,220,000 | 6,374,238 |
| CRC 2010B Bonds | 2 | 10 Years | 7,405,000 | 6/24/10 | 6/1/20 | 3.63% | 5,480,000 | 202,486 | 1,020,000 | 1,222,486 |
| LVVWD 2011A Bonds | 2 | 15 Years | 58,110,000 | 5/20/11 | 6/1/26 | 4.66% | 58,010,000 | 2,702,704 | 4,255,000 | 6,957,704 |
| LVVWD 2011B Bonds | 2 | 26 Years | 129,650,000 | 10/19/11 | 6/1/37 | 5.56% | 129,650,000 | 5,277,078 | 9,220,000 | 14,497,078 |
| LVVWD 2011C Bonds | 2 | 19 Years | 267,815,000 | 10/19/11 | 6/1/38 | 4.92% | 240,610,000 | 12,011,113 | 9,670,000 | 21,681,113 |
| SNWA 2012A Refunding | 2 | 20 Years | 85,015,000 | 6/26/12 | 6/1/32 | 4.07% | 85,015,000 | 3,455,600 | 5,500,000 | 8,955,600 |
| LVVWD 2012B | 2 | 30 Years | 360,000,000 | 7/31/12 | 6/1/42 | 4.73% | 353,405,000 | 16,817,200 | 6,790,000 | 23,607,200 |
| State 2013A Refunding | 2 | 15 Years | 21,720,000 | 2/20/13 | 8/1/27 | 3.00% | 21,720,000 | 651,600 | - | 651,600 |
| LVVWD 2015 Refunding | 2 | 25 Years | 332,405,000 | 1/13/15 | 6/1/39 | 5.00% | 332,405,000 | 16,370,250 | - | 16,370,250 |
| SNWA Bond | 11 | 32 Years | - | 6/1/16 | 6/30/2048 | 4-5% | - | - | - | - |
| TOTAL ALL DEBT SERVICE | | | \$ 3,796,844,152 | | | | \$ 3,387,458,159 | \$ 145,726,453 | \$ 478,025,252 | \$ 623,751,705 |

SCHEDULE C-1 - INDEBTEDNESS

Southern Nevada Water Authority Budget Fiscal Year 2015-2016
(Local Government)

SCHEDULE OF EXISTING CONTRACTS
Budget Year 2015 - 2016

Local Government: Southern Nevada Water Authority
Contact: Gina Neilson
E-mail Address: gina.neilson@snwa.com
Daytime Telephone: 702-862-3434

Total Number of Existing Contracts 84

| Line | Vendor | Effective Date of Contract | Termination Date of Contract | Proposed Expenditure FY 2015-16 | Proposed Expenditure FY 2016-17 | Reason or need for contract: |
|------|--|----------------------------|------------------------------|---------------------------------|---------------------------------|---|
| 1 | Utility Resources | 05/15/97 | upon notice | \$ 300,000 | \$ 300,000 | PUC Consultant |
| 2 | Lionel, Sawyer & Collins | 04/07/04 | upon notice | \$ 24,999 | \$ 24,999 | Legal representation |
| 3 | Utility Resources, Inc. | 03/17/05 | upon notice | \$ 530,000 | \$ 530,000 | Public utility commission regulatory hearings |
| 4 | Finlinson & Finlinson | 01/21/06 | upon notice | \$ 30,000 | \$ 30,000 | Natural resource consulting services |
| 5 | Taggart & Taggart | 01/18/07 | upon notice | \$ 286,000 | \$ 286,000 | Legal services for environmental compliance |
| 6 | Eureka Vet Service | 02/01/08 | 12/31/15 | \$ 17,500 | \$ - | Veterinarian services |
| 7 | Woods & Aitken | 02/21/08 | upon notice | \$ 600,000 | \$ 600,000 | Construction related legal services |
| 8 | JH Davenport | 12/24/08 | upon notice | \$ 10,150 | \$ 10,150 | Water resource and administrative consulting services |
| 9 | R&R Partners | 11/05/09 | 10/31/15 | \$ 766,666 | \$ - | Professional services for water conservation promotion |
| 10 | Hispana Comunicacion | 02/16/10 | 01/31/16 | \$ 58,333 | \$ - | SNWA Hispanic oriented advertising and marketing services |
| 11 | Piercy Bowler Taylor & Kern | 03/02/10 | 06/30/17 | \$ 191,442 | \$ 191,442 | Auditing Services |
| 12 | Lewis & Roca | 03/22/10 | upon notice | \$ 100,000 | \$ 100,000 | Legal Services |
| 13 | Kay Brothers | 05/05/10 | upon notice | \$ 100,000 | \$ 100,000 | Consulting services on water issues |
| 14 | Aspen Environmental Group | 10/13/10 | upon notice | \$ 100,000 | \$ 100,000 | Legal services for reporting and expert testimony |
| 15 | Stratus Consulting | 11/17/10 | 09/30/17 | \$ 70,689 | \$ 70,689 | Support for WUCA workshop and whitepaper |
| 16 | Atkins North America Inc. | 07/28/11 | upon notice | \$ 50,000 | \$ 50,000 | Surveying services |
| 17 | Eurofins Eaton Analytical, Inc. | 08/01/11 | 07/31/15 | \$ 18,744 | \$ - | Water sampling analysis |
| 18 | Creel Printing Company | 08/29/11 | 08/28/16 | \$ 50,000 | \$ 50,000 | Printing services for Water Smart Newsletter |
| 19 | Soil Tech | 09/01/11 | 08/31/16 | \$ 225,000 | \$ 50,000 | Revegetation of Las Vegas Wash |
| 20 | PhycoTech Inc. | 10/25/11 | upon notice | \$ 50,000 | \$ 50,000 | Water Quality Analysis for Phytoplankton |
| 21 | C. Joseph Guild III | 01/02/12 | upon notice | \$ 92,000 | \$ 92,000 | Natural Resource and Water Issues Consulting |
| 22 | R&R Public Affairs | 01/22/12 | 01/21/18 | \$ 75,000 | \$ 75,000 | Consulting services for state and federal natural resource issues |
| 23 | C. Joseph Guild III | 01/31/12 | upon notice | \$ 64,000 | \$ 64,000 | Ranch and Agricultural Consulting |
| 24 | R&R Public Affairs | 02/16/12 | 01/21/19 | \$ 75,000 | \$ 75,000 | Professional services related to statewide and federal natural resources issues |
| 25 | Snell & Wilmer, LLP | 04/11/12 | 04/11/20 | \$ 100,000 | \$ 100,000 | Glen Canyon Dam environmental compliance |
| 26 | Hobbs, Ong and Associates | 04/19/12 | upon notice | \$ 150,000 | \$ 150,000 | Financial advisory services |
| 27 | Holland & Hart | 05/22/12 | 05/22/19 | \$ 100,000 | \$ 100,000 | Litigation related services |
| 28 | Simplex Grinnell LP | 06/13/12 | 06/30/17 | \$ 50,077 | \$ 50,077 | Fire systems maintenance |
| 29 | Safe Electronics, Inc. | 06/13/12 | 06/30/17 | \$ 42,000 | \$ 42,000 | Fire systems maintenance |
| 30 | G&G Systems | 06/13/12 | 06/30/17 | \$ 38,484 | \$ 38,484 | Fire systems maintenance |
| 31 | ABC Fire & Cylinder | 06/13/12 | 06/30/17 | \$ 17,800 | \$ 17,800 | Fire systems maintenance |
| 32 | Greenberg Traurig, LLP | 06/19/12 | upon notice | \$ 100,000 | \$ 100,000 | Bond counsel |
| 33 | Warren Turkett | 06/25/12 | upon notice | \$ 81,680 | \$ 81,680 | Lower Colorado River water quality database |
| 34 | Conservation District of Southern Nevada | 07/31/12 | 07/31/17 | \$ 85,000 | \$ 85,000 | Warm Springs Nat Area property management |
| 35 | Michael J Brennan | 08/23/12 | 07/01/18 | \$ 100,000 | \$ 100,000 | Environmental compliance consulting |
| 36 | Holland & Hart | 08/23/12 | 08/23/20 | \$ 100,000 | \$ 100,000 | Nevada Power integrated resource plan litigation |
| 37 | Nevada Conservation Corps | 11/20/12 | 11/20/19 | \$ 24,500 | \$ 24,500 | Reduce streamside vegetation in Warm Springs Natural Area |
| 38 | Laguna Productions | 02/21/13 | 02/20/19 | \$ 145,000 | \$ 145,000 | Production assistance |
| 39 | Market Decision Corporation | 03/04/13 | 03/04/17 | \$ 100,000 | \$ 75,000 | Data collection services |
| 40 | Desert Research Institute | 04/02/13 | upon notice | \$ 69,878 | \$ 69,878 | Monthly evaporation analysis |
| 41 | Vogue Linen Service | 05/01/13 | 05/01/17 | \$ 1,000 | \$ 1,000 | Uniform cleaning services for Wahoo Ranch |
| 42 | Rogich Communications | 06/17/13 | 06/30/17 | \$ 75,000 | \$ 75,000 | Communication support for SNWA community outreach programs |
| 43 | Digital Mapping | 07/02/13 | 06/30/16 | \$ 98,950 | \$ - | Muddy and Virgin rivers imagery project |
| 44 | Flow Science | 07/18/13 | 07/01/17 | \$ 125,000 | \$ 125,000 | Lake Mead Modeling (Watersmart Grant Reclamation) |
| 45 | Global Water Technologies LTD | 07/25/13 | upon notice | \$ 70,000 | \$ 70,000 | Innovation development assistance |
| 46 | Faiss Foley Warren | 08/01/13 | 07/31/19 | \$ 900,000 | \$ 900,000 | Integrated communications and support services for SNWA |

Local Government: Southern Nevada Water Authority
Contact: Gina Neilson
E-mail Address: gina.neilson@snwa.com
Daytime Telephone: 702-862-3434

Total Number of Existing Contracts _____ 84 _____

| | | | | | | |
|----|---|----------|-------------|---------------|--------------|--|
| 47 | Institute for Executive Development | 08/29/13 | 08/28/20 | \$ 90,000 | \$ 90,000 | Development of organizational initiatives |
| 48 | Simplot Growers Solutions | 10/01/13 | 09/30/19 | \$ 10,000 | \$ 10,000 | Soil testing services for SNWA ranches |
| 49 | Ballard Spahr LLP | 11/26/13 | 11/27/21 | \$ 20,000 | \$ 20,000 | Legal services regarding the Glen Canyon Dam |
| 50 | Tri-County Weed Control | 12/30/13 | 12/30/18 | \$ 50,000 | \$ 50,000 | Noxious invasive weed control |
| 51 | Litigation Services | 01/01/14 | 01/02/16 | \$ 25,000 | \$ - | Legal transcription services |
| 52 | Stinson Leonard Street LLP | 01/02/14 | upon notice | \$ 100,000 | \$ 100,000 | Legal services |
| 53 | Muddy River Regional Environmental Impact Alleviation Committee | 01/06/14 | 01/07/19 | \$ 50,000 | \$ 50,000 | Tamarisk removal services for fire control |
| 54 | CDM Smith, Inc. | 01/16/14 | 01/16/16 | \$ 125,000 | - | Facilitation services |
| 55 | Ronald E. Zegers | 03/03/14 | upon notice | \$ 100,000 | \$ 100,000 | Water quality issue consulting |
| 56 | AB Sciex | 03/11/14 | 03/10/19 | \$ 183,627 | \$ 183,627 | Service agreement for lab equipment |
| 57 | Hobbs, Ong and Associates | 03/20/14 | upon notice | \$ 400,000 | \$ 400,000 | IRPAC Financial advisory services |
| 58 | Agilent Technologies, Inc. | 04/01/14 | 03/31/19 | \$ 148,050 | \$ 148,050 | Laboratory equipment repair services |
| 59 | Ranch Advisory Partners LLC | 05/15/14 | 05/19/14 | \$ 75,000 | \$ 75,000 | Environmental compliance permit support services |
| 60 | Henderson Electric Motors, Inc. | 05/21/14 | 05/20/19 | \$ 175,050 | \$ 175,050 | Repair of electric motors |
| 61 | Las Vegas Color Graphics | 07/01/14 | 06/30/19 | \$ 50,000 | \$ 50,000 | Mailing services for Water Smart Newsletter |
| 62 | Orange Legal Technologies | 07/15/14 | upon notice | \$ 40,000 | \$ 40,000 | Production of an administrative record |
| 63 | Robin Rockey | 07/29/14 | 07/31/16 | \$ 45,000 | \$ 45,000 | PSA related to River Mountains Solar Project |
| 64 | Tri-County Weed Control | 08/01/14 | 06/30/19 | \$ 30,000 | \$ 30,000 | Weed control in Warm Springs Nat Area |
| 65 | Millipore Corporation | 08/01/14 | 07/31/15 | \$ 7,004 | \$ - | Service agreement for lab equipment |
| 66 | High Sierra Water Laboratory | 08/27/14 | 01/28/19 | \$ 40,000 | \$ 40,000 | Water sample analysis services |
| 67 | Great Basin Bird Observatory | 08/28/14 | 12/31/20 | \$ 52,239 | \$ 52,239 | Bird Inventory, habitat assessment & data anal. |
| 68 | Sunbelt Controls | 09/24/14 | 09/23/15 | \$ 4,285 | \$ - | Ventilation system maintenance |
| 69 | U.S. Geological Survey | 10/01/14 | 09/30/15 | \$ 21,250 | \$ - | Surface and groundwater monitoring |
| 70 | Black & Veatch | 10/01/14 | upon notice | \$ 45,740 | \$ 45,740 | Mixing zone modeling services |
| 71 | Shimazdu Scientific | 10/02/14 | 10/01/15 | \$ 3,300 | \$ - | Service agreement for lab equipment |
| 72 | Molecular Devices | 10/08/14 | 10/07/15 | \$ 3,846 | \$ - | Service agreement for lab equipment |
| 73 | Booky Oren Global Water Technologies Ltd. | 10/16/14 | upon notice | \$ 100,000 | \$ 100,000 | Organizational development assistance |
| 74 | Conservation District of So. Nevada | 12/01/14 | 11/30/15 | \$ 285,499 | \$ - | Consultant for wildlife surveys |
| 75 | Spring Valley Associates | 12/10/14 | 12/10/20 | \$ 975,000 | \$ 975,000 | Ranch Operations and Maintenance Services |
| 76 | Quantum Spatial, Inc. | 12/10/14 | 12/31/15 | \$ 65,000 | \$ - | Digital aerial imagery |
| 77 | NV Division of Forestry | 12/10/14 | 11/30/16 | \$ 200,000 | \$ 83,333 | Conservation camp work detail services |
| 78 | Qiagen | 12/28/14 | 12/27/15 | \$ 8,206 | \$ - | Service agreement for lab equipment |
| 79 | Koffler Electrical | 01/13/15 | 01/12/16 | \$ 400,000 | \$ - | Repair of electric motors |
| 80 | Power Plus Engineering | 02/15/15 | 02/14/16 | \$ 24,000 | \$ - | Service agreement for treatment equipment |
| 81 | Emcor Services Nevada | 03/01/15 | 02/29/16 | \$ 17,700 | \$ - | Cooled chiller services |
| 82 | Capital Project Law Group, PLLC | 03/16/15 | 03/16/23 | \$ 50,000 | \$ 50,000 | Legal advisory services |
| 83 | Bio-West, Inc. | 03/18/15 | 03/18/19 | \$ 52,000 | \$ 52,000 | Biological consulting services- Virgin River |
| 84 | Bio-West, Inc. | 03/18/15 | 03/18/19 | \$ 58,000 | \$ 58,000 | Biological consulting services- Muddy River |
| | Total Proposed Expenditures | | | \$ 10,589,688 | \$ 8,322,738 | |

Additional Explanations (Reference Line Number and Vendor)

Form 31
1/20/2015

**SCHEDULE OF PRIVATIZATION CONTRACTS
Budget Year 2015 - 2016**

Local Government: Southern Nevada Water Authority
Contact: Gina Neilson
E-mail Address: gina.neilson@snwa.com
Daytime Telephone: 702-862-3434

Total Number of Privatization Contracts: None

| Line | Vendor | Effective Date of Contract | Termination Date of Contract | Duration (Months/ Years) | Proposed Expenditure FY 2015-16 | Proposed Expenditure FY 2016-17 | 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 | | | | | | | | | | |
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| 8 | | | | | | | | | | |
| 9 | | | | | | | | | | |
| 10 | | | | | | | | | | |
| 11 | Total | | | | | | | | | |

Attach additional sheets if necessary.

Affidavit of Publication

STATE OF NEVADA)
COUNTY OF CLARK) SS:

**LV WATER DISTRICT
1001 S VALLEY VIEW BLVD
LAS VEGAS NV 89153-0001**

**Account # 22455
Ad Number 0000514396**

Stacey M. Lewis, being 1st duly sworn, deposes and says: That she is the Legal Clerk for the Las Vegas Review-Journal and the Las Vegas Sun, daily newspapers regularly issued, published and circulated in the City of Las Vegas, County of Clark, State of Nevada, and that the advertisement, a true copy attached for, was continuously published in said Las Vegas Review-Journal and / or Las Vegas Sun in 1 edition(s) of said newspaper issued from 05/14/2015 to 05/14/2015, on the following days:

05 / 14 / 15

NOTICE IS HEREBY GIVEN
that the Board of Directors of the Southern Nevada Water Authority (SNWA) will hold a Public Hearing on Thursday, May 21, 2015, at the hour of 9:00 a.m. at the SNWA Board Chambers at the Molasky Corporate Center, 100 City Parkway, Suite 700, Las Vegas, NV 89106, on the Tentative Budget and possible adoption of the Final Budget for the fiscal year 2015/2016.


Copies of the Budget, which have been prepared on forms and in such detail as is prescribed by the Nevada Department of Taxation, are on file for public inspection at the Las Vegas Valley Water District, 1001 South Valley View Boulevard, Las Vegas, Nevada 89153.

JOHN J. ENTSMINGER,
General Manager
PUB: May 14, 2015
LV Review-Journal

Stacey M. Lewis
181 _____
LEGAL ADVERTISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this 14th day of May, 2015

Notary *Mary A. Lee*

 **MARY A. LEE**
Notary Public State of Nevada
No. 09-8941-1
My Appt. Exp. Nov. 13, 2016



STATE OF NEVADA
DEPARTMENT OF TAXATION

Web Site: <http://tax.state.nv.us>

1550 College Parkway, Suite 115
Carson City, Nevada 89706-7937
Phone: (775) 684-2000 Fax: (775) 684-2020

RENO OFFICE
4600 Kietzke Lane
Building L, Suite 235
Reno, Nevada 89502
Phone: (775) 687-9999
Fax: (775) 688-1303

BRIAN SANDOVAL
Governor
ROBERT R. BARENGO
Chair, Nevada Tax Commission
DEONNE E. CONTINE
Executive Director

LAS VEGAS OFFICE
Grant Sawyer Office Building, Suite 1300
555 E. Washington Avenue
Las Vegas, Nevada 89101
Phone: (702) 486-2300 Fax: (702) 486-2373

HENDERSON OFFICE
2550 Paseo Verde Parkway, Suite 180
Henderson, Nevada 89074
Phone: (702) 486-2300
Fax: (702) 486-3377

May 29, 2015

Ms. Gina L. Neilson, Acting Director of Finance
Las Vegas Valley Water District
1001 South Valley View Blvd.
Las Vegas, NV 89153

Re: Final Budgets – Fiscal Year 2015-2016 –Southern Nevada Water Authority

Dear Ms. Neilson:

The Department of Taxation has examined the Fiscal Year 2015-2016 final budget for the above named entity in accordance with NRS 354.598. We find it to be in compliance with applicable statutes and regulations.

Based upon the review of the final budget, the following tax rates will be presented to the Nevada Tax Commission on June 25, 2015 for certification;

| | |
|---------------------------|-----------------|
| Operating tax rate | \$0.0000 |
| Voter approved rate | \$0.0000 |
| Legislative override rate | \$0.0000 |
| Debt service rate | <u>\$0.0000</u> |
| Total tax rate | <u>\$0.0000</u> |

If you should have any questions, please call me at (775) 684-2077, or my email address is: bfarrar@tax.state.nv.us.

Sincerely,

Bill D. Farrar, Budget Analyst
Local Government Finance
Division of Local Government Services

SECTION 5

DEPARTMENT BUDGETS



SOUTHERN NEVADA WATER AUTHORITY®

FISCAL YEAR 2015-16

OPERATING AND CAPITAL BUDGET

Southern Nevada Water Authority
Operating and Capital Budget
Department Budgets
Fiscal Year Ending June 30, 2016

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 2015-16 Budget Plan. The following table presents the 2013-14 actual, 2014-15 Adopted Budget and 2015-16 Budget Plan for each of the departments.

Summary of Department Expenditures

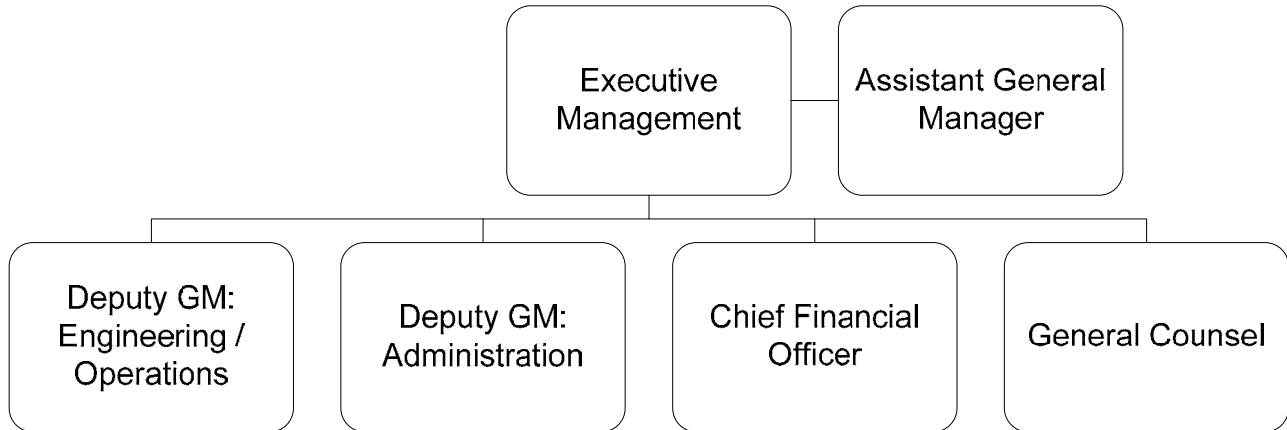
| Departments* | 2013-14 Actual | 2014-15 Budget | 2015-16 Budget | Budget-to-Budget Variance |
|--|-----------------------|-----------------------|-----------------------|------------------------------|
| Executive Management | \$ 2,139,276 | \$ 1,605,536 | \$ 1,665,283 | \$ 59,747 |
| Legal Services | 8,971,186 | 8,603,326 | 15,659,318 | 7,055,992 |
| Finance | 5,324,335 | 8,270,654 | 11,195,476 | 2,924,822 |
| Energy Management | 54,638,094 | 47,157,531 | 39,139,906 | (8,017,624) |
| Information Technology | 9,657,984 | 6,531,573 | 7,116,898 | 585,325 |
| Human Resources | - | 25,000 | 100,000 | 75,000 |
| Public Services | 7,532,697 | 9,905,457 | 10,593,624 | 688,167 |
| Environmental Health Safety & Corporate Security | 3,290,920 | 2,217,138 | 2,459,223 | 242,085 |
| Customer Care & Field Services | 153,162 | 197,098 | 205,473 | 8,375 |
| Engineering | 104,642,924 | 122,620,757 | 251,166,654 | 128,545,897 |
| Resources & Facilities | 21,479,861 | 39,666,426 | 39,331,295 | (335,131) |
| Infrastructure Management | 1,710,400 | 6,685,752 | 6,708,469 | 22,716 |
| Operations | 12,021,642 | 18,394,372 | 19,588,128 | 1,193,756 |
| Water Quality & Treatment | 20,491,120 | 22,962,512 | 23,284,337 | 321,825 |
| Total Department Expense | \$ 252,053,602 | \$ 294,843,131 | \$ 428,214,084 | \$ 133,370,954 |
| Bond Payments | 163,383,672 | 170,509,681 | 223,751,702 | 53,242,021 |
| Restructuring Adjustments | 3,742,984 | (1,272,847) | - | 1,272,847 |
| Total Uses of Funds | \$ 419,180,258 | \$ 464,079,965 | \$ 651,965,786 | \$ 187,885,821 |

* Certain reclassifications have been made in the 2013-14 Actuals and the 2014-15 Adopted Budget Plan to conform with the 2015-16 Budget Plan Presentation

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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.

Department Description

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. One Assistant General Manager, two Deputy

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

The Executive Management Team implements policy as established by the LVVWD and SNWA Boards of Directors. The team is responsible for anticipating organizational needs and implementing appropriate strategies to ensure these needs are met. To fulfill the LVVWD and SNWA missions, the Executive Management Team petitions the 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.

Southern Nevada Water Authority
Operating and Capital Budget
Department Budgets
Fiscal Year Ending June 30, 2016

Expenditures

| SNWA Uses | Actual 2013-14 | Budget 2014-15 | Budget 2015-16 |
|----------------------------------|---------------------------|---------------------------|---------------------------|
| Materials & Supplies | \$ 3,989 | \$ 8,500 | \$ 8,500 |
| Maintenance & Repairs | 12,971 | 15,000 | 15,000 |
| Other Employee Expenses | 201,992 | 216,200 | 216,200 |
| Other Expenses | 236,970 | 103,325 | 153,325 |
| Total Operating Expenses | \$ 455,922 | \$ 343,025 | \$ 393,025 |
| | | | |
| Bond Capital | - | 222,000 | 222,000 |
| Total Capital | \$ - | \$ 222,000 | \$ 222,000 |
| | | | |
| Payroll Expenses | 1,683,354 | 1,040,511 | 1,050,258 |
| | | | |
| Total Department Expenses | \$ 2,139,276 | \$ 1,605,536 | \$ 1,665,283 |
| | | | |
| FTE Positions | 7.9 | 5.0 | 5.0 |

Department Performance

During the past year, the Executive Management Team has directed a wide range of initiatives to stabilize the financial foundation of both organizations and move forward with planning efforts that will protect critical water supplies and infrastructure. These activities will help ensure Southern Nevada has access to adequate future water resources. Significant initiatives include:

- Implementation of a new strategic plan emphasizing asset management and enhanced service levels;
- Organizational realignment to meet strategic plan objectives;
- Completion of the Integrated Resource Planning Advisory Committee process and implementation of the resulting recommendations;
- Collaboration with Colorado River partners to develop and implement conservation programs that will protect Lake Mead water elevations;
- Completion of Intake No. 3 tunnel;
- Continued leadership and involvement in Colorado River issues and initiatives;
- Assessment of infrastructure repair and maintenance needs;
- Continued implementation of programs to increase efficiency and enhance the

Southern Nevada Water Authority
Operating and Capital Budget
Department Budgets
Fiscal Year Ending June 30, 2016

customer service experience; and

- Continued emphasis on the Springs Preserve’s guest experience to increase revenue through new programming and attractions.

Strategic Planning

A new strategic plan has been implemented over the past year to emphasize customer response, asset management and enhanced service levels. Because the standards and expectations set forth by the plan were developed using input from all staff levels during the planning process, the entire workforce has been engaged in its implementation.

Organizational Realignment

For the newly-developed Strategic Plan to be successful, staff realignment was necessary to increase efficiency and streamline processes. Within the past year, the SNWA Operations department merged with the LVVWD Operations department. Combining these workgroups resulted in a uniform maintenance methodology across both organizations focusing on the operation and maintenance of critical water infrastructure.

Additionally, the Facilities workgroup was merged with the Water and Environmental Resources department to form the Resources and Facilities department. These changes have encouraged closer communication and collaboration, resulting in additional efficiency and productivity across the organization.

Integrated Resource Planning Advisory Committee

In 2012, the SNWA Board appointed 21 members representing a cross-section of community residents, businesses, chambers of commerce and educational, environmental and financial sectors to an Integrated Resource Planning Advisory Committee (IRPAC).

The committee was charged with the task of addressing current issues impacting reservoir levels and the reliability of Southern Nevada’s municipal water system. While discussing these topics, the committee determined the risk of Lake Mead’s water level falling below 1,000 feet was not acceptable to the community due to the detrimental impacts it could have on water delivery and resource availability.

To protect the community’s water supply, the committee recommended the construction of a new low-lake level pumping station, as well as a fixed charge on water bills to generate the revenue necessary to construct the facility. Once approved by local purveyors later this year, the new water rates will take effect in 2016 and the new pumping station could be complete as early as 2021. The SNWA Board approved these recommendations, as well as others to address conservation and water resources, on December 10, 2014.

Intake No. 3

The tunnel boring machine excavating the Intake No. 3 tunnel reached the end of its three-mile journey on December 10, 2014, when it “holed through” the intake riser

Southern Nevada Water Authority
Operating and Capital Budget
Department Budgets
Fiscal Year Ending June 30, 2016

structure secured deep below the lake's surface.

By drawing water from the bottom of Lake Mead, Intake No. 3 increases the flexibility of Southern Nevada's water treatment and delivery system. The new intake is expected to make its first deliveries this year.

Colorado River Basin Supply and Demand Study

The SNWA continues to contribute in-kind resources and research to the Colorado River Basin Water Supply and Demand Study. Released in 2012, the study evaluates future water supplies and demands on the Colorado River. It also confirms the likelihood of significant shortfalls between projected water supplies and demands within the Basin in coming decades.

The Secretary of the Interior has since met with the Basin States to discuss the next steps in the process. These will include coordinated efforts of various Colorado River stakeholders to examine the challenges being faced, as well as potential solutions. The results of this work will be published this year and contain strategies for water conservation, reuse, transfers and healthy river flows.

Groundwater Development Project

The Executive Management Team continues to implement Board direction to move forward with permitting and legal review of its Groundwater Development Project. The project will help meet the community's long-term demands and provide a supply separate from the Colorado River.

In 2012, the Nevada State Engineer granted nearly 84,000 acre-feet of groundwater rights to the SNWA in four east-central Nevada valleys. A year later, a District Court remanded the ruling and asked the Nevada State Engineer to gather additional data before any rights are granted. The SNWA and Nevada State Engineer filed appeals to the decision, which were dismissed because the Nevada Supreme Court concluded the District Court's decision was not a final order. The SNWA and State Engineer also filed writ petitions, which remain pending in the Nevada Supreme Court.

A Record of Decision in 2012 granted the SNWA the rights-of-way for project facilities. In February 2014, project opponents filed separate legal challenges to the Bureau of Land Management's decision on the Environmental Impact Statement and its issuance of project rights-of-way. These actions were consolidated and rights-of-way litigation remains ongoing in the federal District Court, District of Nevada, with the SNWA an active participant. Despite ongoing litigation, the project remains a critical component of the Water Resource Plan. Project construction will be dictated by Colorado River conditions and the community's water needs.

District Operations

As existing infrastructure ages, maintenance, rehabilitation and replacement are required to continue to meet conservation objectives and customer needs. The LVVWD continues to emphasize responsible and efficient maintenance of the community water system.

Southern Nevada Water Authority
Operating and Capital Budget
Department Budgets
Fiscal Year Ending June 30, 2016

In November 2012, the LVVWD Board approved the inclusion of a water meter replacement program within the LVVWD's Major Capital Project fund, allowing for the replacement of approximately 247,000 meters and Automatic Meter Reader (AMR) devices. Since then, more than 193,000 meters and AMR devices have been replaced within the LVVWD's service area. The new devices are more reliable and dramatically reduce the time it takes to read meters.

Under the LVVWD Asset Management Program, the condition of existing infrastructure—such as water meters—is assessed to forecast short- and long-term capital replacement needs. Based on these assessments, staff determines costs and timelines associated with major capital projects and ensures financial resources are available to replace or repair infrastructure reaching the end of its useful life.

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

2015-16 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 work with federal, state and local agencies to develop and operate joint facilities providing 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's Major Construction Program and the SNWA's Major Construction and Capital Plan, including the completion of Lake Mead Intake No. 3 and the new low-lake level pumping station.
- Update the SNWA Water Resource Plan to include recommendations from the IRPAC process and new regional conservation efforts.

2014-15 Major Accomplishments

- Replacement of nearly 97,500 meters and AMR devices. The new meters provide improved reliability, increased accuracy and dramatically reduce the time it takes to read meters.
- Completion of the three-mile Intake No. 3 tunnel beneath Lake Mead.
- Concluded the IRPAC process and presented recommendations to the SNWA Board. Recommendations included a new water pumping station to secure access to water supplies during extreme drought conditions and a rate modification to fund the pumping station.
- Implementation of the Colorado River Conservation Pilot Program to determine

Southern Nevada Water Authority
Operating and Capital Budget
Department Budgets
Fiscal Year Ending June 30, 2016

whether system conservation is a feasible method to partially mitigate the impacts of ongoing drought and protect Lake Mead water levels.

- Execution of a Memorandum of Understanding (MOU) with other Lower Basin partners and the Bureau of Reclamation for pilot drought response actions. The goal of the MOU is for the participating entities to voluntarily develop additional water, or “protection volume,” to be stored in Lake Mead, reducing its risk of reaching critically low elevations.

Strategic Plan Goal - Deliver an outstanding customer service experience.

2015-16 Performance Objectives

- Identify and implement further operational and management practices to maintain service levels with greater efficiency.

2014-15 Major Accomplishments

- In 2014, the LVVWD delivered nearly 103 billion gallons of water to approximately 368,000 active services in Southern Nevada.
- In 2014, Customer Care handled nearly 600,000 customer interactions and generated 4 million bills.
- Reduced customer call wait time to approximately four minutes by proactively contacting customers who are receiving bill corrections and notifying customers in advance of a high consumption bill being received. By making these calls during non-peak

hours, overall call times are reduced.

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

2015-16 Performance Objectives

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

2014-15 Major Accomplishments

- Las Vegas was one of only nine U.S. cities receiving a perfect score on the American Council for an Energy Efficient Economy’s 2015 City Energy Efficiency Scorecard. The scorecard examined 51 U.S. cities based on efficiency within their water systems.
- Ranked 11th in the 2014 Green Fleets Awards, which recognizes 100 best fleets in North America. The LVVWD has been ranked in the top 50 green fleets for seven consecutive years.
- Executed power purchase agreement with SunEdison to purchase solar-generated power for onsite use at the

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River Mountains Water Treatment Facility.

- The Origen Museum and Desert Living Center at the Springs Preserve received the 2014 Earth Award from the Building Owners and Managers Association (BOMA) of Nevada.
- Since habitat restoration efforts began at the Warm Springs Natural Area, the Moapa Dace population has nearly quintupled, from 459 in early 2008 to 2,248 in 2014. The most recent count reflected the highest Dace population since 1994.
- Received the National Water and Energy Conservation Program Award from the Irrigation Association.
- As part of Minute 319, a 105,392 acre-foot “pulse flow” from the Colorado River was released to the Sea of Cortez to help restore the parched Mexican delta. In the months since the event, evidence has been observed that the released water produced has an ecological benefit to the intended area.

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

2015-16 Performance Objectives

- Implement recommendations made by IRPAC, including the design and construction of a new low-lake level pump station, as well as a fixed charge on water bills to generate the revenue necessary to design and construct the facility.

- Continue to lead the implementation of the Las Vegas Wash Comprehensive Adaptive Management Plan.
- Begin development of a long-term Operations and Maintenance Plan with associated costs and funding options.

2014-15 Major Accomplishments

- Continued to contribute in-kind resources and research to the “next steps” phase of the Colorado River Basin Supply and Demand Study process. Reports published later this year will contain strategies for water conservation, reuse, transfers and healthy river flows.
- Continued leadership in the implementation of the Las Vegas Wash Comprehensive Adaptive Management Plan, Las Vegas Wash Capital Improvements Plan and coordination of the Las Vegas Wash Coordination Committee. Since 2008, 18 of 21 planned weirs have been installed along a 6-mile section of the Wash. More than a mile of bank protection also was installed along the channel, bringing the total to more than 11 miles. The weirs and bank protection reduce erosion in the environmentally sensitive zone and reduce sediment loading into Lake Mead.
- Management of the Northern Resources in and around Spring Valley continued to support the Groundwater Development Project by putting primary groundwater rights to beneficial use. Ranch staff maintains critical assets and provides services to technical staff conducting research and monitoring activities.

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

2015-16 Performance Objectives

- Plan and develop opportunities to increase the LVVWD and SNWA investments in alternative and renewable energy supplies.
- Continue to respond to current economic conditions and evaluate revenue needs and opportunities for additional efficiencies.

2014-15 Major Accomplishments

- In September 2014, the SNWA and LVVWD began a two-year process to reduce debt service obligations by refunding approximately \$1.24 billion of existing debt. At current interest rates, it is estimated that this action will result in approximately \$150 million in cash flow savings through 2027.
- The SNWA continues to administer one of the most aggressive and successful conservation programs in the country. In 2014, the Southern Nevada community consumed approximately 32 billion gallons less water than it did a decade ago, despite the addition of nearly a half-million new residents during that span. The SNWA is on track to meet its goal of 199 gallons per capita per day by 2035, which would result in an estimated 276,000 acre-feet of water savings.
- Community participation in the Water Smart Landscapes Rebate Program remains steady. Over the past year, nearly 2,200 Water Smart Landscapes

projects were completed, resulting in the conversion of more than 2 million square feet of turf.

- Last year, the LVVWD issued 2,282 water waste letters and completed 1,068 water waste investigations, resulting in \$10,560 in assessed fees.
- In 2014, Springs Preserve attendance increased by more than 20 percent, general admission tickets sold increased by 16 percent and train operations generated approximately \$95,000 during its first full year of operation.
- The Butterfly Habitat at the Spring Preserve has welcomed nearly 27,000 visitors since opening in September 2014.
- Divine Events assumed operations of the Springs Preserve café in July 2014. During its first six months of operation, revenues were 38 percent higher than they were over the same time span the previous year.

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

2015-16 Performance Objectives

- Ensure continual security and safety of the LVVWD and the SNWA facilities, and promote an organizational climate and culture of safety and security for employees, customers and the community.
- Continue work on the Clark, Lincoln and White Pine Counties Groundwater Development Project to enable design and construction to begin when needed.

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2014-15 Major Accomplishments

- In 2014, staff contacted approximately 20,000 customers regarding nearly 140 LVVWD/SNWA construction projects and system maintenance activities..

- During 2014, employees reduced injuries by 10 percent and at-fault vehicle accidents by 9 percent compared to the previous year.

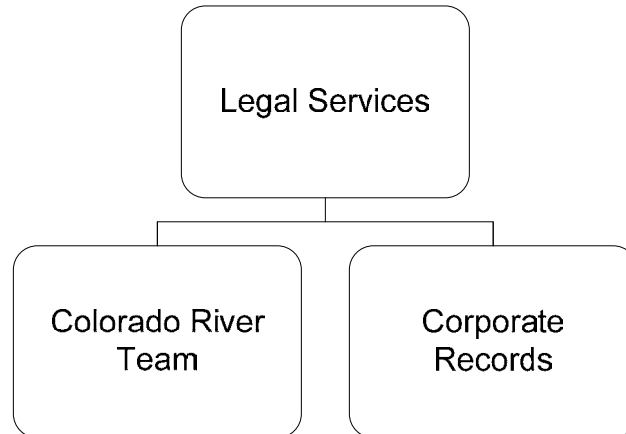
- Springs Preserve’s social media program received a Pinnacle Award and was named “Best of Show” out of nearly 100 entries by the Las Vegas chapter of the Public Relations Society of America (PRSA). The PRSA Awards recognize the best public relations programs, tools and professionals in Southern Nevada, Northern Arizona and Southern Utah.

- Since 1999, the SNWA has assisted more than 500 well users to connect to a 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, 395 sub-meters have been distributed to well owners, 209 rebates have been issued for the installation of those sub-meters, and more than 350 wells have been plugged and abandoned.

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LEGAL SERVICES

Level: 1200



Mission

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

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 has recently become more active in resource planning with the establishment

of the Colorado River Team division and continues to advise on electrical power issues. The Corporate Records division works to ensure compliance with document preservation, retention, and disposition regulations and internal policies. 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 2015-16 budget contains continuing funding to support these efforts and for outside counsel who perform a variety of other legal services for the organization. Funds have been retained in the budget to continue the corporate records effort. The document management effort has

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reached significant milestones but project objectives remain to be accomplished. This year, the risk management function will be

integrated into the department until recruitment for the Chief Financial Officer position is complete.

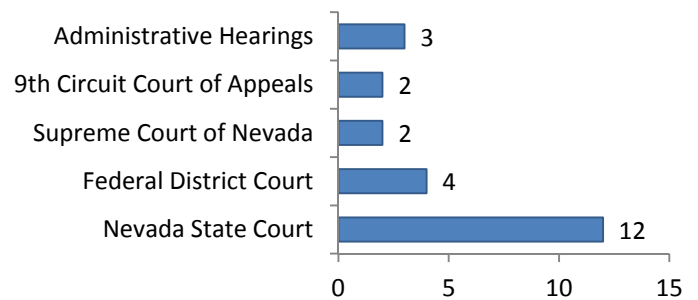
Expenditures

| SNWA Uses | Actual 2013-14 | Budget 2014-15 | Budget 2015-16 |
|----------------------------------|---------------------------|---------------------------|---------------------------|
| Materials & Supplies | \$ 161 | \$ 9,000 | \$ 9,000 |
| Rental & Leases | 274,454 | - | - |
| Other Employee Expenses | 21,582 | 28,000 | 52,000 |
| Other Expenses | 7,309,401 | 6,100,000 | 3,800,000 |
| Total Operating Expenses | \$ 7,605,598 | \$ 6,137,000 | \$ 3,861,000 |
| | | | |
| Bond Capital | - | 667,000 | 9,786,667 |
| Total Capital | \$ - | \$ 667,000 | \$ 9,786,667 |
| | | | |
| Payroll Expenses | 1,365,588 | 1,799,326 | 2,011,651 |
| | | | |
| Total Department Expenses | \$ 8,971,186 | \$ 8,603,326 | \$15,659,318 |
| | | | |
| FTE Positions | 7.8 | 10.0 | 11.0 |

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. The Colorado River Team works to protect and enhance Nevada's Colorado River entitlement, while the Corporate Records division manages the organization's records retention policy.

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, the Colorado River Team and Corporate Records plan to offer training sessions to organization staff to develop internal capacity and strengthen the culture of excellence.

2015-16 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 assist staff with legislative issues, reviewing and drafting proposed legislation when requested.

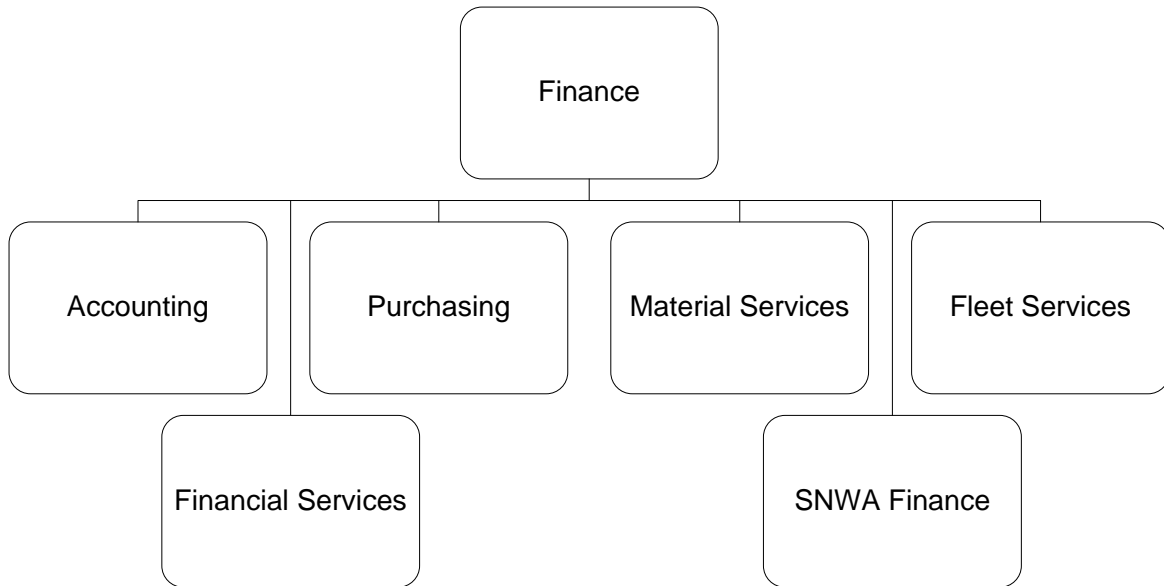
2014-2015 Major Accomplishments

- 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.
- Implemented corporate records management, legal hold, and e-discovery programs.

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FINANCE
Level: 2100



Mission

To provide leadership in finance, accounting, budgeting and debt management, ensuring the financial integrity and safeguarding assets of the Las Vegas Valley Water District (LVVWD) and the Southern Nevada Water Authority (SNWA).

Department Description

The Finance department is responsible for day-to-day accounting and financial operations of the LVVWD and the SNWA. Following the principles of governmental accounting, the department maintains, on an accrual basis, an Enterprise Fund and a Pension Trust Fund. In the Enterprise Fund, financial activities are recorded in a manner similar 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 LVVWD’s Pension 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 in safeguarding property and in preparing financial statements. The department maintains a debt management policy for managing its general obligation debt. Presently, the functions under the Finance department include Accounting, Purchasing, Material Services, SNWA Finance, Fleet Services, Financial Services and Investment & Cash Management.

Budget Objectives and Highlights

The 2015-16 Finance department budget contains funding to maintain the necessary functions the LVVWD and the SNWA require for its services to their customers.

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Expenditures

| SNWA Uses | Actual 2013-14 | Budget 2014-15 | Budget 2015-16 |
|----------------------------------|---------------------------|---------------------------|---------------------------|
| Materials & Supplies | \$ 84,169 | \$ 514,750 | \$ 646,350 |
| Maintenance & Repairs | 517,618 | 154,600 | 204,300 |
| Rental & Leases | 50,038 | 56,650 | 58,450 |
| Other Employee Expenses | 18,806 | 47,750 | 54,550 |
| Other Expenses | 406,429 | 2,988,027 | 4,528,682 |
| Total Operating Expenses | \$ 1,077,060 | \$ 3,761,777 | \$ 5,492,332 |
| Operating Capital | - | 70,200 | 951,000 |
| Bond Capital | - | - | 134,000 |
| Total Capital | \$ - | \$ 70,200 | \$ 1,085,000 |
| Payroll Expenses | 4,247,275 | 4,438,677 | 4,618,144 |
| Total Department Expenses | \$ 5,324,335 | \$ 8,270,654 | \$ 11,195,476 |
| FTE Positions | 31.6 | 33.5 | 33.2 |

Department Performance

Accounting. The Accounting division is responsible for the development, maintenance and administration of the LVVWD's accounting system. The division ensures adequate controls over all revenues, expenditures, assets and liabilities and prepares the LVVWD's 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-six (36) 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.

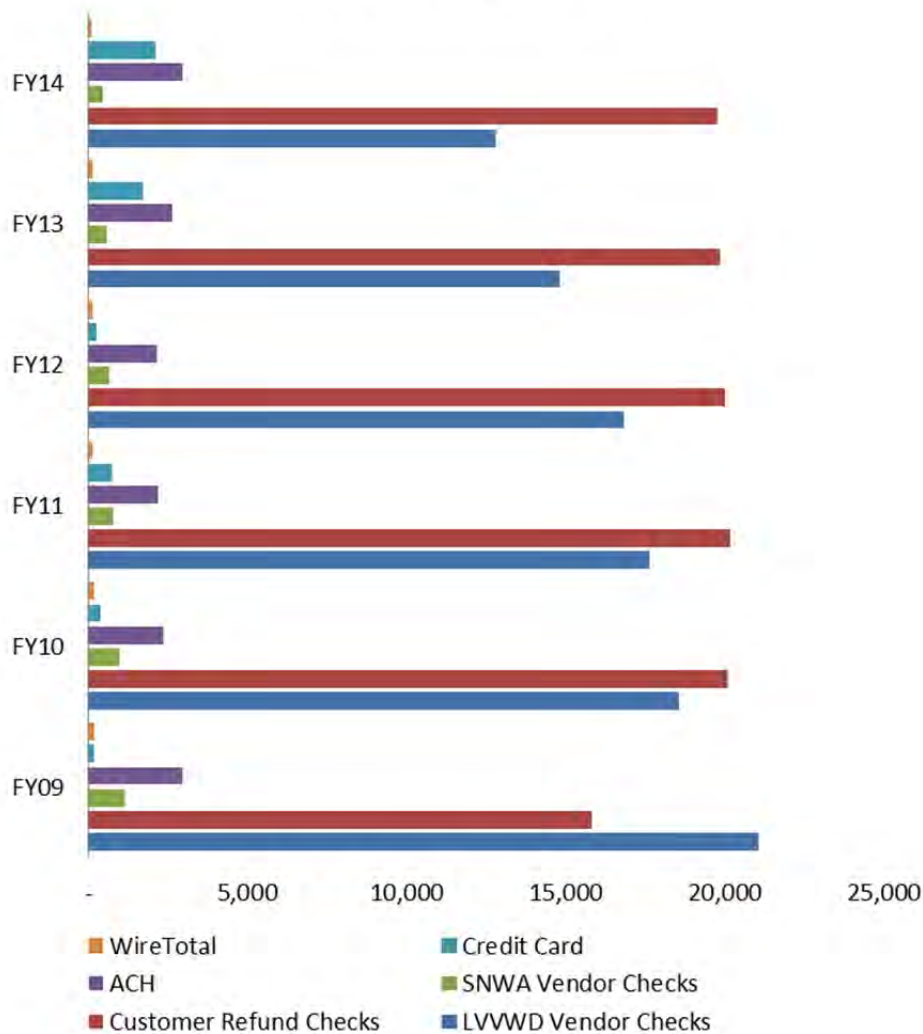
Accounting functions include: ensuring financial statements and reports are accurate, complete and consistent; maintaining the general ledger, inventory, fixed asset and other system records; cash management and the accounting and reporting of investments of the LVVWD's funds; reconciling bank statements with thousands of disbursements; processing payroll for approximately 1,250 employees; processing accounts payable for approximately 40,000 payments annually, which earned more than \$230,000 in

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discounts in fiscal year 2013-14 including an annual credit card rebate of \$94,000; 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 following chart shows the annual volume of vendor payments paid through various payment methods.

**Vendor Payments Method
by Annual Volume**



In October 2014, the LVVWD began outsourcing 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

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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 variety of financial services are provided by the Financial Services 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; and overseeing risk management. The division is comprised of two sections: Financial Analysis and Risk Management.

The Financial Analysis section is responsible for preparing an annual line item operating and capital budget for the LVVWD and the SNWA. The Financial Analysis section also performs a variety of financial and rate modeling and feasibility analyses for the LVVWD and the SNWA departments, projects and programs. This section is also involved in the debt financing process and tracking capital expenditures. On an annual basis, the section conducts a survey of water rates from over 60 cities located in the western United States, closely monitors water production and consumption data, and prepares Annual Statistical Reports.

The Risk Management section is responsible for handling all the activities related to the transfer, elimination, avoidance, reduction, and/or assumption of risk of loss to personnel and property. This includes the management of self-insurance programs, the purchase of insurance from the commercial insurance market to cover direct physical loss to property and equipment, and general and automobile liability insurance. The Risk Management section identifies and performs analyses on areas and sources of potential risk to personnel and property and develops recommendations to minimize those risks. The section also manages the financial aspects of the Self-Insured Workers' Compensation Program, liability claims and claims resulting in damage to property.

Purchasing Services. The Purchasing division is responsible for all purchasing related activities for the LVVWD, the SNWA and the Springs Preserve. These activities include: market analysis; developing new, expanded or alternative sources of supply; systems contracting; formal and informal bids; personal property sales; sustainable purchasing program; and the diversity program. Negotiations of renewed contracts and other cost saving measures continue to be the division's priority. Purchase orders are issued to award contracts and reflect the work processed by the division.

Material and Mail Services. The division is comprised of two sections: Material Services and Mail Services.

Material Services Section's primary role is material storage, retrieval, management and customer service. To ensure their internal customers' material needs are met, Material Services relies on coordination with their

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supplier partnerships. Materials are received, inspected and processed at both the LVVWD and Southern Nevada Water System (SNWS) Main warehouses for final delivery to the internal customers at the LVVWD, SNWS and eleven satellite facilities. For the period ending March 2015, the inventory assets were valued at \$15.8 million, which consists of 16,317 inventory items (SKUs) with an average monthly utilization of \$1.8 million. Material Services supports sustainability through use of recycled paper, repurposed shipping materials, recycled cardboard and paper, inactive inventory reduction. This division also coordinates and manages the investment recovery efforts through the auction program, bid sales, and the public sales auction for various recyclable and repurposed materials. Additional services include supply chain management; O&M and/or Capital projects; material coordination for treatment plant outages; emergency job site deliveries; safety garments administration; coordination of semi-annual first-aid kit inspection and replenishment; Safety Data Sheet (SDS) administration; courier services for business needs which include lab samples; loanable tool support; and FedEx and UPS shipping services.

Mail Services Section is the central depository for processing incoming and outgoing intercompany mail and United States Postal Service (USPS) mail and is located at the LVVWD's Valley View campus. Core responsibilities include the administration, management, receipt, sorting, processing and timely delivery of all interoffice and incoming USPS correspondence. Mail Services delivers daily to the SNWA, SNWS and Springs Preserve campuses and to all outlying remote facilities throughout the

LVVWD's service area. All Mail Services personnel are required annually to attend terrorism training conducted by the U.S. Postal Inspector. Mail Services' high profile activities include the delivery and posting of public notices. Mail Services consistently evaluates their work distribution and processes to add organizational value, maximize resources, gain productivity and efficiency.

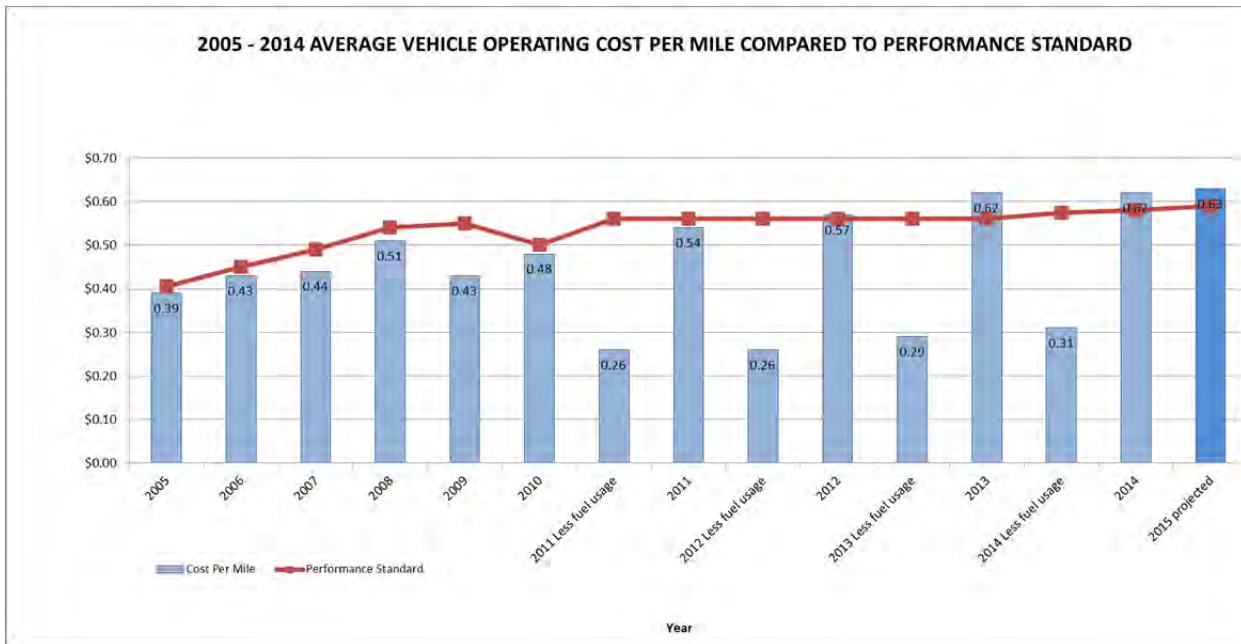
SNWA Finance. The SNWA Finance division supports the strategic objectives of the Finance department by providing accounting services, financial reporting, budgeting, financial analysis, cash management, and coordination with the financial staffs of the SNWA purveyors and other agencies. The SNWA Finance division is charged with the following responsibilities: the day-to-day accounting of the SNWA; the accounting and reporting associated with investment of the SNWA's funds; reconciliation of receivables and payables between the LVVWD and the SNWA; the preparation and tracking of purveyor billings; the collection, tracking, and forecasting of regional connection charges, infrastructure charges, commodity charges, reliability surcharges, sales tax revenues, and other miscellaneous revenue sources; preparing and filing forms and narratives in connection with the SNWA's grant receipts; financial tracking, posting and analyses concerning the SNWA's land and water rights holdings in northern Nevada; preparation of the SNWA's CAFR and other financial reports; fixed assets tracking; construction contract tracking; cash management; and helps in preparation of the SNWA annual budget. The SNWA Finance division also conducts numerous financial analyses such as: arbitrage calculations, cash requirements forecasts, and operating funds analyses.

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Fleet Services. The Fleet Services division provides safe, reliable and functional vehicles, equipment, tools, fuel, and communications equipment in support of the LVVWD, SNWA and BBWD operations. Fleet Services currently maintains more than 1,500 vehicles and support equipment pieces and 1,200 pieces of communications equipment, supporting the LVVWD, SNWA, and BBWD. Services include repair, maintenance, acquisition and disposition of all vehicles, support equipment, communications equipment and loanable tools. Fleet Services also operates six service facilities and six fueling facilities located in Las Vegas, Boulder City, Henderson and White Pine County.

division has requested seventy-five new & replacement vehicles and related equipment at a cost of approximately \$4,674,494. The replacements are for vehicles and equipment having reached their end of life cycle. Best management practices suggest these vehicles be replaced to maintain serviceability, reliability, repair costs and downtime at acceptable levels. Apart from new and replacement vehicles, Fleet Services is also requesting new GPS equipment for fleet vehicles. This equipment will be used to better manage the fleet as well as reduce fuel usage and enhance safety. The chart below reflects the LVVWD’s average vehicle operating cost per mile for compared to accepted performance standards.

For fiscal year 2015-16, the Fleet Services



Strategic Plan Objectives and Accomplishments

By the very nature of its activities, the Finance department either directly or

indirectly impacts all of the Strategic Plan Goals through the prudent and strategic funding of all of the various activities and services provided by the LVVWD and the SNWA.

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

2015-16 Performance Objectives

- Continue to develop the Logistics section of the Emergency Response Plan.
- 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.

2014-15 Major Accomplishments

- Contributed to the cross departmental Emergency Response Plan (ERP) Logistics Sub-team to identify Logistics' role in the event of an emergency or mutual aid agreement support.
- In support of and compliance with the Safe Drinking Water Act (SDWA), secured and delivered critical temperature and time sensitive sample media required for the State's monthly mandated cryptosporidium monitoring.
- Requisitioned and inventoried critical items to prevent backflow apparatus failures for major hotel properties.
- Provided timely support to Meter Services, the Meter Repair Shop and the Meter Change-out Retrofit team for the ten-year meter change-out program.

Strategic Plan Goal - Deliver an outstanding customer service experience.

2015-16 Performance Objectives

- Continue to improve and streamline day-to-day accounting practices, specialized processes, and improved financial analyses, reporting, and information sharing for the departments.
- Expand payment options for Springs Preserve group sales.
- Continue to reduce customer payment suspense volume through customer outreach.
- Continue to evaluate repair versus buy decisions.
- Provide the best possible equipment choices to the departments to assist them in meeting their goals efficiently and effectively.

2014-15 Major Accomplishments

- Enhanced customer service in outlying areas through the use of technology and improved parts availability.
- Processed all mail payments received by Remittance Processing on the same day 100 percent of the time.
- Developed and implemented a tracking method for the Springs Preserve event vendor agreements and payments to streamline and improve the shared process.
- Reduced customer payment suspense volume by more than 70 percent through customer outreach.
- More than doubled dollars awarded to small businesses under AB294 program.
- Spent \$9.8 million with small, minority, challenged and woman-owned businesses.

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

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demonstrating stewardship of our environment.

2015-16 Performance Objectives

- Increase purchases of recycled and environmentally friendly products.
- Continue to lead and develop the alternative fuel vehicle program in support of clean air in the Las Vegas Valley.
- Recondition and reuse service bodies for light duty vehicles.
- Run pilot study for plug-in electric vehicles to evaluate the cost effectiveness of electric verses other alternatives.
- Provide weights and categories for all purchase orders to assist in the computation of the company's carbon footprint.

2014-15 Major Accomplishments

- Replaced older diesel and CNG powered vehicles with flex fuel vehicles, saving an estimated \$80,000.
- Reconditioned and reused several service bodies and mounted equipment on light and medium duty utility vehicles saving over \$50,000.
- Recycled used oil to be used as heating fuel for the fleet maintenance facility in Spring Valley.
- Reduced greenhouse gas emissions by over 8,500 pounds by using recycled paper versus virgin paper.
- Selected as one of Government Fleet Magazines "Top one hundred Alternative Fuel Vehicle Fleets in North America".

- Added two plug-in electric vehicles to the LVVWD's fleet, resulting in a total number of six electric vehicles.

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

2015-16 Performance Objectives

- Begin the implementation of an upgrade to the general ledger accounting system that better automates information for more timely and beneficial information for users.
- Reduce resources spent on accounting for unclaimed property by expanding the use of an online service.
- Research and initiate policy changes and alternative payment methods resulting in a reduction in the number of paper customer refund payments issued.
- Maximize the productivity of the existing Accounting System by implementing new functionality before and after a planned system upgrade.
- Encourage the purchase of sustainable products by facilitating meetings with suppliers and interested departments.

2014-15 Major Accomplishments

- Automated several manual payment processes to improve accuracy and efficiency.
- Identified and implemented a new method of establishing and tracking clients for group sales at the Springs Preserve to enhance monitoring and reporting.
- In compliance with the "Reduction of Lead in Drinking Water Act," which

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became effective January 4, 2014, successfully implemented the organizational initiative to remove and replace over 879 leaded inventory items with “no/low lead” replacement items valued at \$941,400.

- As a result of decommissioned variable drive frequency (VFD) equipment at Alfred Merritt Smith Water Treatment Facility (AMSWTF), fifteen power cells were returned to inventory for repurposing and reparability. This effort resulted in a one-time annual soft savings of \$428,000 by preventing future purchases of new cells.

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

2015-16 Performance Objectives

- Continue to monitor the short-term and long-term financial health of the LVVWD and the SNWA, and implement the appropriate actions necessary to ensure the financial viability of both organizations.
- 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 in order to increase the credit card rebate.
- Reduce the volume of manually processed payments through customer outreach efforts.
- Without compromising safety and/or service level, reduce operating costs through material substitutions and standardization opportunities, inactive

inventory reduction, and continuous process improvements. Create supply chain integrity for critical material and equipment in the event of an emergency or supply shortage.

- Reduce the overall cost per mile/hour of operation for the LVVWD’s vehicles and equipment. (Based on market economics).
- Develop a water bill customer database to be used to analyze rate changes.

2014-15 Major Accomplishments

- Successfully implemented procedures with the U.S. Army for billing/reimbursement of the Sloan Water System.
- Successfully implemented the State Revolving Fund loan process and reimbursements.
- Installed vehicle fueling facility at the Montessori satellite location to better support the fueling needs of the LVVWD’s vehicles and cut labor costs and travel time.
- Saved over \$148,000 by repairing equipment versus buying new.
- Recovered \$430,429 in vehicle resale at auction.
- Provided analytical support for implementations of the SNWA rate increases.

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

2015-16 Performance Objectives

- Collaborate with Human Resources on supplier diversity outreach efforts.

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- Submit the LVVWD's and the SNWA's CAFR's for the year June 30, 2015, to the GFOA and receive the Certificate of Excellence in Financial Reporting.
- Receive unqualified opinion from external auditors for the LVVWD's and the SNWA's fiscal year 2015 audit.

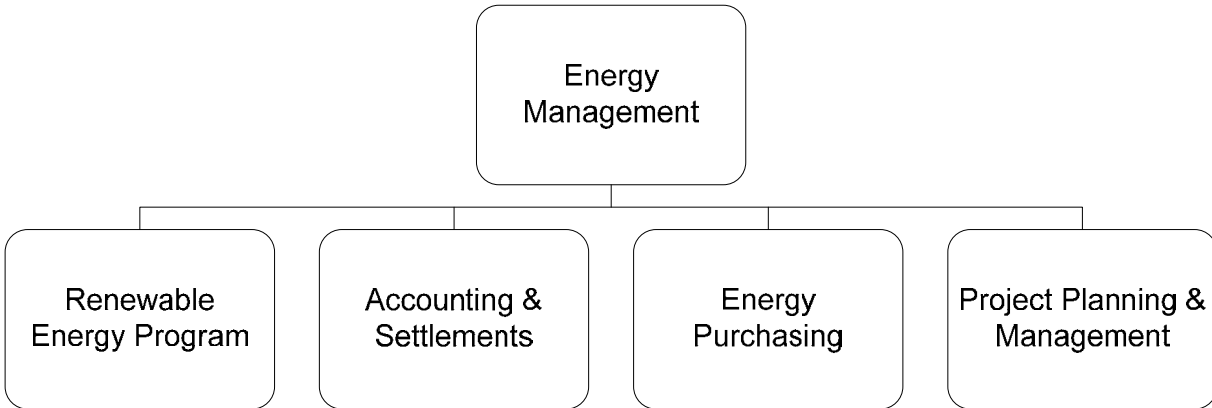
management and response Incident Command System (ICS) specific training requirements for all division and management staff.

2014-15 Major Accomplishments

- The LVVWD CAFR for the year ended June 30, 2014, received the Certificate of Excellence in Financial Reporting from the Government Finance Officers Association (GFOA) of the United State and Canada for the thirty-sixth (36th) consecutive year.
- Received an unqualified opinion from external auditors for the LVVWD's fiscal year 2014 audit.
- Received the Distinguished Budget Presentation Award from the GFOA for the SNWA Operating and Capital Budget for the year ended June 30, 2015.
- The SNWA CAFR for the year ended June 30, 2014, received the Certificate of Excellence in Financial Reporting from the GFOA for the 19th consecutive year.
- Recertified Fleet Services as an "Industry Competitive Fleet Management Operation" through the Fleet Counselor Services (FCS) and the Rocky Mountain Fleet Management Associations (RMFMA).
- Maintained Automotive Service Excellence (ASE) "Blue Seal of Service Award."
- Maintained Automotive Service Excellence (ASE) "World Class Technician Status."
- Completed all National Incident Management System (NIMS) emergency

ENERGY MANAGEMENT

Level: 2200



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), 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 their own 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 also support the renewable energy initiatives of the SNWA and the LVVWD.

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Budget Objectives and Highlights

The fiscal year 2015-16 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 2013-14 | Budget 2014-15 | Budget 2015-16 |
|----------------------------------|---------------------------|---------------------------|---------------------------|
| Energy | \$53,409,820 | \$45,814,094 | \$37,524,906 |
| Materials & Supplies | 7,464 | 13,000 | 6,500 |
| Maintenance & Repairs | 488 | - | - |
| Rental & Leases | 247,288 | 254,206 | 267,467 |
| Other Employee Expenses | 1,477 | 8,750 | 8,750 |
| Other Expenses | (3,759) | 1,250 | 1,250 |
| Total Operating Expenses | \$53,662,778 | \$46,091,300 | \$37,808,873 |
| Operating Capital | - | 34,000 | - |
| Bond Capital | - | - | 25,000 |
| Total Capital | \$ - | \$ 34,000 | \$ 25,000 |
| Payroll Expenses | 975,316 | 1,032,231 | 1,306,033 |
| Total Department Expenses | \$54,638,094 | \$47,157,531 | \$39,139,906 |
| FTE Positions | 4.7 | 5.0 | 6.0 |

Department Performance

Silver State Energy Association.

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

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Energy Management department and the CRC Energy Services group have met this need for many years now.

Expanding the energy portfolio managed by this group to include the SNWA member 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 without increasing 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.

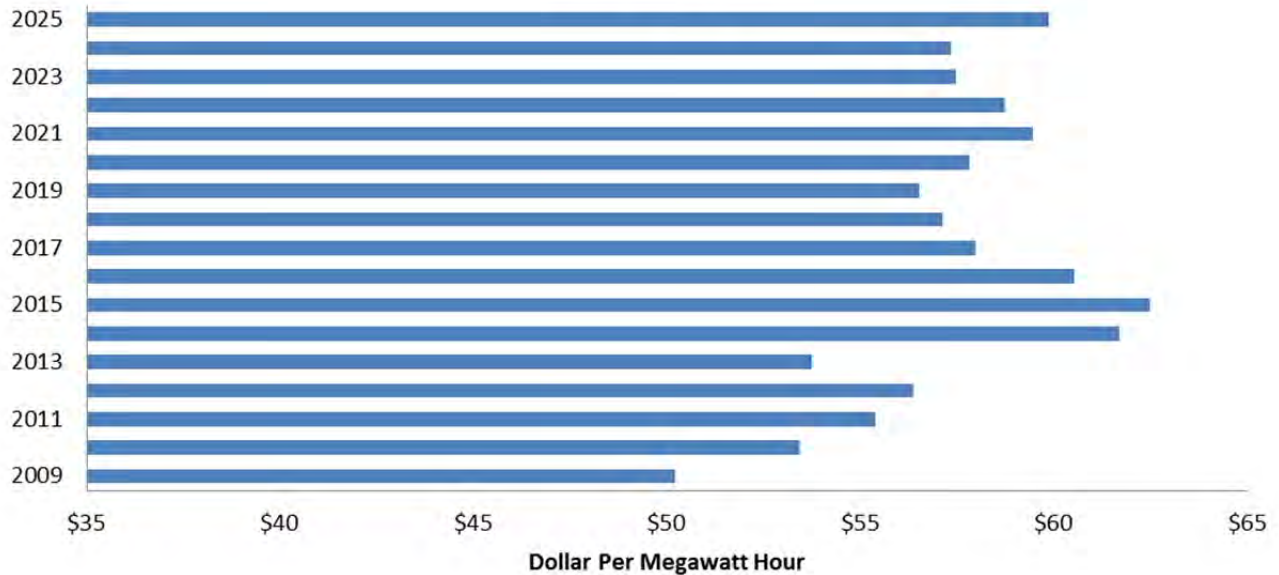
Some of the benefits the SNWA realizes by participating in the SSEA include 1) economies of scale when purchasing energy; 2) lower overhead costs; 3) lower balancing, imbalance and ancillary services costs due to the synergies of serving a single larger portfolio vs. serving the different load shapes 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 and predictable prices. Consistent with the SSEA's Energy Risk Procedures, the SNWA's energy portfolio cost has been "fixed" through calendar year 2019. 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 2019, changes in the market price of energy are expected to have little effect on the SNWA's expected costs during the hedged period. The chart below shows the SNWA's actual and projected energy costs through calendar year 2025 as of the end of January 2015.

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Energy Costs
SNWA 2009-25
 (As of Jan-15)



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 certainty in planning for the future. 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.

water delivery charge.

The SSEA’s budget, administered by Energy Management, is expected to be approximately \$76 million in the fiscal year 2015-16. The SNWA’s energy budget is expected to be approximately \$39 million, excluding the estimated cost of capital associated with the SNWA’s energy assets for the fiscal year 2015-16 budget. This amount is recovered through the SNWA wholesale

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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 for the ENTP and is awaiting a right-of-way grant and permits from the Bureau of Land Management.

SNWA and LVVWD Sustainability Initiatives.

In addition to the work performed by Energy Management on behalf of the SSEA, the SNWA is currently working on the following renewable energy and energy efficiency projects that will contribute to the SNWA's and the LVVWD's overall supply portfolio:

Solar Photovoltaic (PV): The SNWA is in the process of constructing a 14 MW solar PV facility at the River Mountains Water Treatment Facility. The project is expected to be complete by the end of calendar year 2015.

Energy Conservation: Efforts are underway to evaluate the merits of implementing a campus-wide energy conservation program. If the project moves forward, it is expected to be completed by the end of calendar year 2016.

Strategic Plan Objectives and Accomplishments

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

2015-16 Performance Objectives

- Complete the installation of a 14 MW solar PV plant at the River Mountains Water Treatment Facility and receive power by the end of calendar year 2015.
- Continue to assess opportunities to expand PV installations on company-owned sites and seek project sponsors within the organization.
- Maximize the value of existing renewable energy facilities.
- Obtain support to complete a campus-wide SNWA/LVVWD energy conservation retrofit by the end of calendar year 2016.
- Determine the requirements for, and coordinate the installation of, the electric power delivery system for Lower Lake Level Pumping Station 3.

2014-15 Major Accomplishments

- Completed the Environmental Assessment for the ENTP. Coordinated line routing with other project developers to avoid routing conflicts through the Lava Butte/Lake Las Vegas corridor, allowing the SSEA to receive a right-of-way and permits from the Bureau of Land Management.
- Signed a 20-year power purchase agreement with SunEdison for a solar PV plant installation at the River Mountains Water Treatment Facility.

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- Transitioned primary responsibility for maintaining the LVVWD's existing solar PV facilities from the Engineering department to Energy Management.
- Selected a potential performance contractor to provide conservation work at the LVVWD's main campus.

Strategic Plan Goal – Deliver an outstanding customer service experience.

2015-16 Performance Objectives

- Continue to work with the SSEA members and the SNWA member agencies to understand and meet their information and reporting needs.
- Complete the migration of additional City of Henderson meters to the Energy Supply Program by the end of calendar year 2015.
- Evaluate potential cost savings of moving additional LVVWD sites/meters to the Energy Supply Program by the end of calendar year 2015.
- Support the member agencies' efforts to determine the most optimal use of their new Hoover Dam allocations.

2014-15 Major Accomplishments

- Provided technical support and assistance to the member agencies in their pursuit of an allocation of Hoover Dam. All of the member agencies were successful in obtaining an allocation of Hoover Dam from the federal government.
- Completed a thorough analysis for the City of Henderson to reevaluate which meters to move to the Energy Supply Program.

- Collaborated with the SNWA Finance department to define and implement improved reporting and accounting practices.

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

2015-16 Performance Objectives

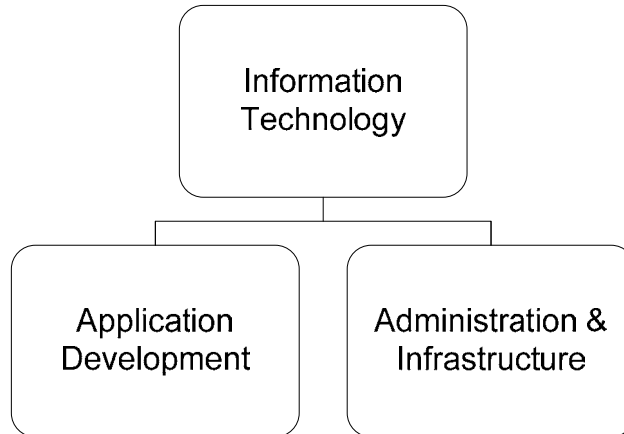
- Reduce or eliminate unexpected changes to the cost of energy provided to customers.
- Develop internal tools and/or streamline internal processes, allowing for production of energy information that is accurate, understandable, and easily accessible to our internal and external customers.
- Increase the efficiency of SSEA financial operations and improve financial reporting.

2014-15 Major Accomplishments

- Maintained a fixed cost energy portfolio for our customers within compliance requirements.
- Completed the migration of the SSEA's financial records from Excel to QuickBooks, allowing for the regular production of improved financial reports.
- Participated in various regulatory forums to mitigate transmission and ancillary cost increases proposed by NV Energy at an estimated savings of over \$2 million annually.

INFORMATION TECHNOLOGY

Level: 2300



Mission

Establish a leadership position in 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) and Southern Nevada Water Authority's (SNWA) acquisition, administration, and maintenance of software products, installation and maintenance of all computer-related and office management hardware products, ongoing related support, cyber security, and telecommunications. The department is also responsible for the

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

Budget Objectives and Highlights

The 2015-16 Information Technology department budget contains funding to continue the development and implementation of technology projects and provide daily operational support to the LVVWD, the SNWA, the Springs Preserve, and Big Bend Water District's (BBWD) information technology systems.

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Expenditures

| SNWA Uses | Actual 2013-14 | Budget 2014-15 | Budget 2015-16 |
|----------------------------------|---------------------------|---------------------------|---------------------------|
| Materials & Supplies | \$ 5,501 | \$ 24,000 | \$ 60,400 |
| Maintenance & Repairs | 117,311 | 118,775 | 7,000 |
| Rental & Leases | 130,019 | 3,000 | 149,000 |
| Other Employee Expenses | 279 | 3,000 | 21,150 |
| Other Expenses | 167,304 | 378,665 | 561,200 |
| Total Operating Expenses | \$ 420,414 | \$ 527,440 | \$ 798,850 |
| Operating Capital | 60,000 | - | 20,000 |
| Bond Capital | - | 132,000 | 353,000 |
| Total Capital | \$ 60,000 | \$ 132,000 | \$ 373,000 |
| Payroll Expenses | 9,177,570 | 5,872,133 | 5,945,048 |
| Total Department Expenses | \$ 9,657,984 | \$ 6,531,573 | \$ 7,116,898 |
| FTE Positions | 52.0 | 33.2 | 34.4 |

Department Performance

Information Technology completed a number of projects to improve business processes, functionality, system operations, and security, while reducing expenses. Major projects during the year included an upgrade of ViryaNet, our mobile workforce management application, continuation on the joint effort with the SNWA on multi-year SCADA system replacement project, upgrade to Windows 7, development and deployment of mobile data collection and mapping applications, upgraded core corporate

network infrastructure, and upgrades to Oracle servers and operating systems.

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

Software Development's 2015-16 objectives target upgrades to enterprise systems critical to Customer Care & Field Services, Operations, Infrastructure Management, Engineering, and Finance. A major upgrade to the Organization's financial and accounting system will be performed

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including enhancements to payment processing, reporting, and the chart of accounts. The organization will also re-examine and refine business processes by taking advantage of new software capabilities addressing long-standing pain-points.

The Customer Care and Billing System will be upgraded to ensure continued warranty support and improvements in customer support by taking advantage of product enhancements. Improvements include new product integrations and enhancements in customer information, billing, payment, and meter data management areas.

An Automated Outbound Dialing Interactive Voice Response (IVR) system will be implemented this fiscal year. This system will be used for customer outreach for delinquent accounts, outage notifications, return mail, and return check events. Besides the importance of proactive customer service; automated outbound notifications has proven to save the LVVWD over \$1,200,000 in annual operating costs through reduction in truck roles.

The Avantis Enterprise Asset Management system is undergoing an upgrade that will extend into late 2015-16. Operations and Infrastructure Management rely on this system for maintenance management and asset performance assessment. The system is long overdue for an upgrade which will reduce software maintenance and support costs and improve efficiencies by taking advantage of new product features.

Software Development will initiate improvements in a number of other important areas. This includes upgrades to

the ViryaNet Work Order System for needed improvements in Dispatching, refinements in the LVVWD's customer self-serve portal, including the implementation of a mobile online payment application, and technical evaluation, planning, and implementation of a Developer Project Management System to replace Engineering's Legacy system. Other initiatives include maintaining and updating applications which support the Ground Water Management Program, Conservation's Water Smart Landscape Program, development and maintenance of mobile data collection, and mapping applications for Resources and Facilities department

Information Technology Administration and Infrastructure. This multi-division team is comprised of the Technical Services division and the Support Services division. The Technical Services division is responsible for the application administration of critical business systems utilized throughout the organization. It is also responsible for the architecture and administrative support for the corporate system to include database infrastructure, server administration, enterprise storage, e-mail and mobile communication, web services, cyber security, and network infrastructure. Additionally, this division is responsible for the maintenance of the Supervisory Control and Data Acquisition (SCADA) systems for the LVVWD, SNWA, and BBWD. The division maintains and configures the Laboratory Information Management System (LIMS), which supports both the Water Quality and Applied Research Laboratories.

The Support Services division is responsible for many diverse functions within the company. The Telecom group manages wireless communications devices (cell

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phones, modems, and air cards) and the main Telecom switch for all campuses. The Desktop Hardware support group provides remote and on-site support for over 4,000 computers, monitors, and printers. The Desktop Software support group researches, installs and supports over 1,000 applications, on all company desktop and laptop devices. The Documentation and Training group provides materials and hands-on experience for many of the applications and functions throughout the organization.

Major emphasis will continue to be on cyber security as world-wide security breaches increase at an alarming rate. Emphasis will continue to be directed toward providing an operationally stable and secure computer system infrastructure, as well as educating employees on cyber security topics.

Ongoing initiatives include continued work to provide off-site disaster recovery capability, allowing continuous service and disaster protection, defense against cyber security threats and vulnerabilities including employee awareness briefings, system upgrades/replacements to critical infrastructure hardware reaching end of life, implementation of technology to meet required Payment Card Industry (PCI) standards, increasing network performance and data storage capacity, ensuring high availability of applications and databases, support to mobile devices, as well as to develop and refine processes to support the infrastructure.

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.

Security efforts include continual review and enhancement to security procedures, timely application of security patches, and audited/controlled system and data access. In addition, the division focuses on ensuring software technologies and business processes meet all required PCI standards.

Major on-going initiatives include replacement of an aged SNWS SCADA system, which is a multi-year, multi-million dollar, joint effort with the SNWA. The replacement project is in progress and will continue for approximately another year. Other major initiatives include the completion of the LIMS at River Mountains Water Treatment Facility and the completion of the BBWD SCADA system.

Spatial technology initiatives include the acquisition and delivery of high-resolution imagery to partner agencies of the Clark County Imagery Project, obtaining imagery for the Muddy and Virgin Rivers Intentionally Created Surplus program, and mapping and analysis support for a wide variety of customers.

Strategic Plan Objectives and Accomplishments

Information Technology provides support to all departments to achieve Strategic Plan goals through the acquisition, development,

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administration, and maintenance of technology-related products and services.

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

2015-16 Performance Objectives

- Enhance corporate data security with emerging technology to identify threats and mitigate risk.
- Complete upgrade of Oracle 12 Financials and implement financial business process improvements to streamline accounting processes, ensure legal and regulatory continuity, and maintain software vendor support.
- Implement Automated Outbound Dialing IVR System for Customer Care to improve customer outreach, reduce delinquent shut-offs, and alert customers to outage notifications.
- Initiate upgrade to the Customer Care and Billing application to provide new functionality improving customer service and overall account management.
- Continue existing cooperative agreements and search for additional cost-sharing and grant opportunities for the Clark County Imagery Project and other required projects.
- Continue the enhancement of data-centric applications by integrating mapping and spatial query functionality and continue to manage data pertaining to regional water resource procurement, protection, and conservation.

2014-15 Major Accomplishments

- Upgraded core corporate network infrastructure and added additional high speed capacity. The new equipment has a lower annual maintenance cost as well as to provide faster communication and outage reduction.
- A new self-service payment kiosk was installed, reducing customer wait-times and labor costs.
- A new enterprise document management system was developed in-house, saving nearly a million dollars in software replacement and acquisition costs, and added much needed records management functionality.
- Established cooperative agreements and secured grants for cost-sharing opportunities for the Clark County Imagery and other required projects.
- Developed and deployed mobile data collection and mapping applications for the Resources and Facilities department personnel to streamline field data collection and data management processes.

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

2015-16 Performance Objectives

- Continue Oracle server replacement with new hardware which will increase performance and operational stability.
- Maintain and update applications which support multiple Las Vegas Valley Groundwater Management Program (GMP) projects and the Well Conversion Grant Program, including training of other department's personnel.

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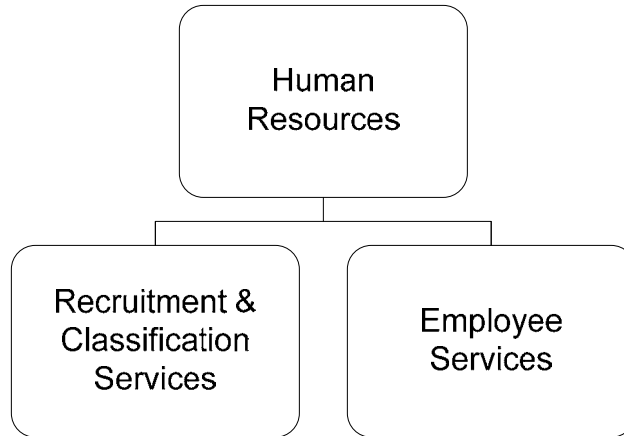
- Continue to partner with Public Information to support public outreach programs through the use of technology and in support of conservation, sustainability and other water related issues such as impacts from a sustained drought.
- Develop new self-service programs to allow customers and businesses to interact and conduct business with the LVVWD and the SNWA through new technologies such as mobile devices.
- Updated applications for the Las Vegas Valley Groundwater Management Program (GMP) projects and the Well Conversion Grant Program to streamline processes and improve data accuracy.
- IT partnered with Human Resources to upgrade the organization's Saba Learning Management System. The new cloud-based architecture enhances the employee's learning environment and provides more effective tools for Human Resource to manage programs and educational content.

2014-15 Major Accomplishments

- Upgraded Oracle servers and operating systems to retire outdated systems and provide a current technology platform to our customers.
- Meet the higher standards of PCI Data Security Standard (DSS) 3.0 for payment card processing infrastructure. This enables an organization to monitor the effectiveness of security controls on an ongoing basis, and maintain a PCI DSS compliant environment in between PCI DSS assessments.
- Developed Strategic Plan Application to allow for a collaborative environment for staff to enter and manage their respective department's goals, strategies, and initiatives in support of the Strategic Plan.

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 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 two service groups within the department: Recruitment & Classification Services and Employee Services.

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

| <u>Activity</u> | <u>2009</u> | <u>2010</u> | <u>2011</u> | <u>2012</u> | <u>2013</u> |
|--|-------------|-------------|-------------|-------------|-------------|
| Total Hires | 10 | 54 | 98 | 106 | 83 |
| Job Notices | 33 | 47 | 74 | 80 | 59 |
| Written Exams | 203 | 21 | 648 | 106 | 457 |
| Interviews | 727 | 532 | 653 | 693 | 527 |
| Job Applications Accepted/Processed | 1,435 | 1,253 | 3,302 | 1,905 | 3,021 |
| Job Interest Forms | 12,974 | 10,418 | 10,980 | 11,716 | 8,871 |
| Recruitment Letters Sent | 3,735 | 2,710 | 4,293 | 6,053 | 8,513 |
| Training Hours | 20,191 | 16,261 | 5,902 | 9,111 | 9,705 |

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 hiring; 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.

2015-16 Performance Objectives

- Design and implement multi-pronged training to include group and individual web based instruction

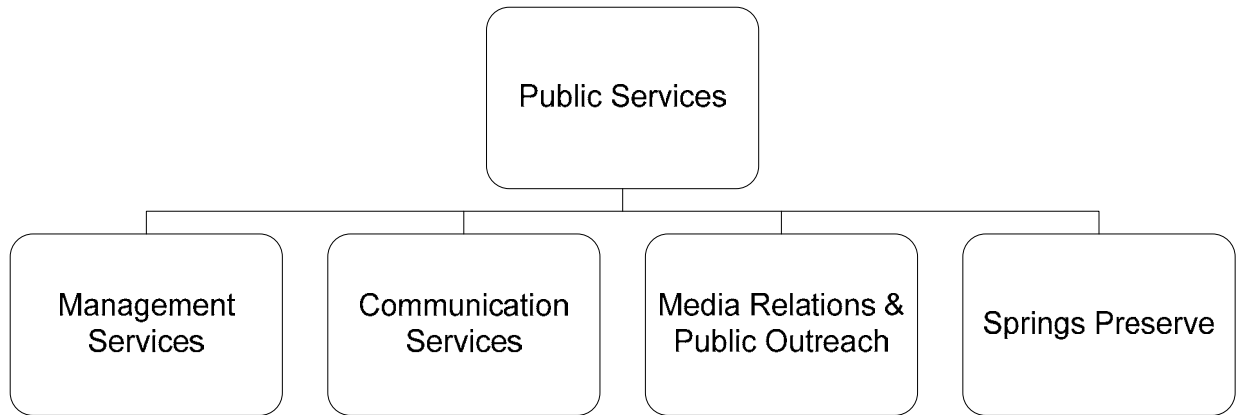
2014-15 Major Accomplishments

- Developed and implemented department Key Performance Indicators to reflect current business priorities
- Began first of three Leadership Development series for Managers and key professionals

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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. The divisions include: Management Services; Communication Services; Media Relations and Public Outreach; and the Springs Preserve.

Together, the four divisions work together to provide exceptional customer service to the organization's internal and external customers. 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 its websites, social media platforms, video production, and its numerous printed materials, such as bill inserts. The Media Relations and 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.

Budget Objectives and Highlights

The 2015-16 Budget Plan remains consistent with the organization's efforts to restrict non-critical expenditures, while enhancing efficiency and service to internal and external customers.

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Expenditures

| SNWA Uses | Actual 2013-14 | Budget 2014-15 | Budget 2015-16 |
|----------------------------------|---------------------------|---------------------------|---------------------------|
| Materials & Supplies | \$ 172,383 | \$ 388,290 | \$ 368,880 |
| Maintenance & Repairs | 31,036 | 182,698 | 182,700 |
| Rental & Leases | 19,793 | 25,500 | 29,500 |
| Other Employee Expenses | 103,613 | 188,364 | 120,544 |
| Other Expenses | 4,237,766 | 5,003,557 | 5,523,100 |
| Total Operating Expenses | \$ 4,564,591 | \$ 5,788,409 | \$ 6,224,724 |
| | | | |
| Payroll Expenses | 2,968,106 | 4,117,048 | 4,368,900 |
| | | | |
| Total Department Expenses | \$ 7,532,697 | \$ 9,905,457 | \$10,593,624 |
| | | | |
| FTE Positions | 21.2 | 30.0 | 31.9 |

Department Performance

In fiscal year 2014-15, the Public Services department continued efforts to provide exceptional service to support organizational initiatives and priorities.

Management Services. Over the past fiscal year, the division supported organizational initiatives through a wide variety of activities. Its principal achievements include completion of the Integrated Resource Planning Advisory Committee (IRPAC) stakeholder process, coordination of a rate increase process, and support during the 78th Nevada State Legislative Session. The division is also responsible for board administration, special events, tours, meeting monitoring, presentations and the coordination of special processes.

Communication Services. Communication Services is responsible for developing the materials that reach customers through web, social media, TV and print. Specifically, the effectiveness of social media as a means for communication continues to grow, as does the Las Vegas Valley Water District’s (LVVWD) and the Southern Nevada Water Authority’s (SNWA) ability to reach different types of customers. During the fiscal year, much of the messaging for the LVVWD, the SNWA and the Springs Preserve was conveyed through the organizations’ numerous social media vehicles, including Twitter, Facebook and Instagram.

Media Relations and Public Outreach. The organization hit critical milestones within the fiscal year, and the division remained prepared to effectively communicate those milestones to the public. Recent strategic

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communication efforts focused on the IRPAC process, the SNWA rate increase, the need for a low lake level pumping station and the progress of Lake Mead's Intake No. 3 project. Ongoing communication efforts include conservation programs, water quality issues, water resources and Springs Preserve activities.

Springs Preserve. Springs Preserve staff is responsible for not only facility operations, but developing programs and events improving the visitor experience. In fiscal year 2014-15, the summer camp program was expanded to include mission-themed weeks, new exhibits were opened and a new live animal show featuring parrots was offered. Special events continued to grow, and new offerings yielded higher revenues.

Strategic Plan Objectives and Accomplishments

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

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

2015-16 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 high quality local and regional water resources through comprehensive water quality and watershed management.

2014-15 Major Accomplishments

- Secured more than \$500,000 in grant funding to support water-related initiatives.
- Assisted eight well users to connect to the municipal water supply and responded to approximately 380 phone inquiries on the groundwater information line.
- Continued to support public outreach efforts associated with the construction of the Intake No. 3 Project.
- Secured \$20 million in low-interest loan funding from the state of Nevada to improve and rehabilitate the LVVWD's water system.

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Strategic Plan Goal – Deliver an outstanding customer service experience.

2015-16 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.

2014-15 Major Accomplishments

- Hosted nearly 25,000 students as part of the Springs Preserve Field Trip program.
- Contacted approximately 20,000 customers regarding anticipated construction projects or emergency water outages.
- Launched a mobile version of the Springs Preserve website, enabling users to purchase event tickets, register for classes and purchase memberships via their smartphones and tablets. Mobile users account for nearly one-half of all website visits.
- Planned and executed nearly 20 special events at the Springs Preserve, drawing a cumulative attendance of more than 55,000 people.

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

2015-16 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.

2014-15 Major Accomplishments

- Continued support of the Sustainability Cross-Departmental Team (CDT) to examine internal processes and develop sustainable practices within the organization.
- Concluded the IRPAC process, which included the evaluation and consideration of climate change modeling into its recommendations.
- The Springs Preserve's Nature Exchange added more than 1,000 new traders, becoming the first Nature Exchange in North America to reach the 10,000 trader plateau in less than eight years.
- Coordinated the WaterSmart Innovations Conference.

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

2014-15 Performance Objectives

- Increase customer communication to foster a better understanding of the value of the organization’s products and services.
- Ensure predictable rates aligned with community expectations.
- Establish and utilize benchmarks to explore new opportunities for improved efficiencies.
- Formulate risk assessments and develop alternatives for expenditure decisions.

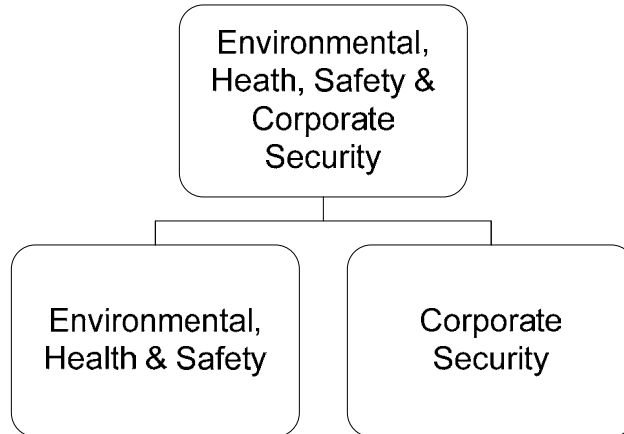
2014-15 Major Accomplishments

- Concluded the second phase of the IRPAC, which resulted in a phased-in, fixed rate increase that considered customer impacts and equity.
- Increased the Springs Preserve’s per visitor profitability by more than 20 percent by adding value through special ticket items, retail items and café sales.
- Sold out Springs Preserve special events, including the Ice Cream Festival, Grapes and Hops Festival and several nights during Haunted Harvest and Dia de Muertos.

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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 a high performance Environmental, Health and Safety (EHS) culture, develop strategies and programs to eliminate or mitigate risk and cost exposure, and maintain the safety and security of our employees, facilities and customers.

Budget Objectives and Highlights

The 2015-16 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 2013-14 | Budget 2014-15 | Budget 2015-16 |
|----------------------------------|---------------------------|---------------------------|---------------------------|
| Materials & Supplies | \$ 15,372 | \$ 35,000 | \$ 28,000 |
| Other Employee Expenses | 273 | - | - |
| Other Expenses | 307,169 | 375,000 | 375,000 |
| Total Operating Expenses | \$ 322,814 | \$ 410,000 | \$ 403,000 |
| Payroll Expenses | 2,968,106 | 1,807,138 | 2,056,223 |
| Total Department Expenses | \$ 3,290,920 | \$ 2,217,138 | \$ 2,459,223 |
| FTE Positions | 11.3 | 15.5 | 15.8 |

Department Performance

Environmental, Health and Safety Division.

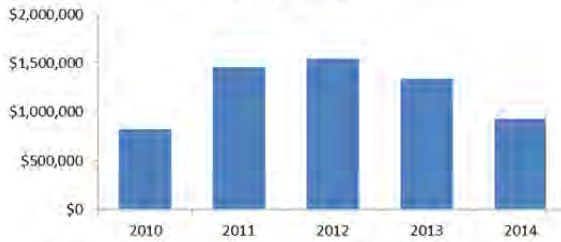
The EHS division provides ongoing environmental, health and safety training for all employees. The group is responsible for permitting and compliance with the Federal, State and local agency environmental regulations regarding pollution control (including air pollution, water pollution, land disturbances, implementation of chemical control and waste management) and also manages environmental permitting and compliance reporting for operations and maintenance. Proactive development, implementation and management of environmental management systems and process safety programs are also led by this team. The group develops and publishes safety procedures ensuring compliance with Occupational Safety and Health Administration and state regulations; investigates on-the-job accidents and administers the Commercial Drivers' License

Program. The group conducts monthly meetings of the EHS Steering Committee, comprised of employees from various departments and bargaining representatives. Additionally, this division manages the Workers' Compensation, Asbestos and Lead Awareness and Hearing Conservation Programs for the organization.

As shown in the following bar chart, environmental cost savings of over \$6.1 million has been generated during the past five years from recycling revenue, pesticide, disposal savings, LED energy savings and Hazardous Waste Operations and Emergency Response in-house training savings.

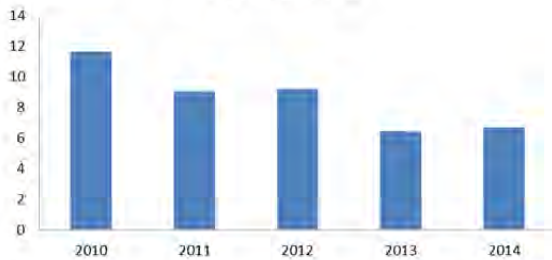
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Environmental Cost Savings
 Las Vegas Valley Water District
 Calendar Year



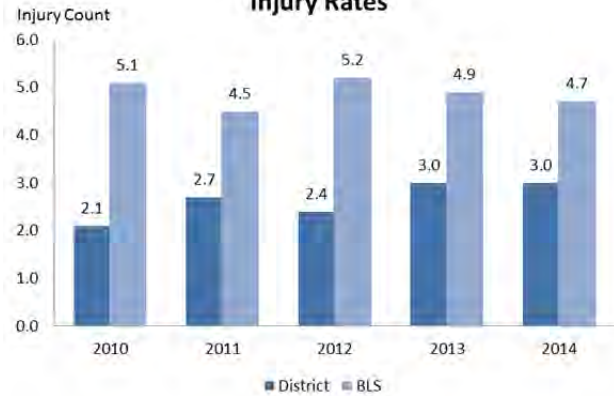
The following chart is a depiction of the Las Vegas Valley Water District's (LVVWD) vehicle accident rates over the past five years. In 2014, the LVVWD drove a total of 4.8 million miles, compared to 5.1 million in 2013. The slight increase in the vehicle accident rate can be attributed to the miles driven for 2014.

Vehicle Accident Rate
 by Calendar Year



The following chart reflects the injury rates for the past five years. The LVVWD's injury rate in 2014 was 3.0, well below the Bureau of Labor Statistics (BLS) Injury and Illness Incidence Rate average for similar industries. Injury reduction remains a primary goal for EHS in 2015.

Injury Rates



Corporate Security. The mission of the Corporate Security division is to provide security services on a system-wide basis assuring the protection of people, property, facilities, and water treatment and delivery systems. The Security division is responsible for the protection of the water supply, employees, and customers during and after business hours. Security provides fire protection equipment inspections, assists with customer parking, escorts customers and visitors to areas where they can conduct their business, provides information assistance, monitors access to restricted areas, and allows access and monitors vendors during and after business hours. They patrol and protect all properties of the LVVWD and the SNWA by responding to intrusion alarms at outlying properties and patrol reservoir and pumping station sites. Physical security networks and systems (card access, closed-circuit television, alarms, and locking systems) are in place and monitored by security officers. The Security division staffs and operates a 24/7 security center for central response to alarms, calls for assistance, accidents, video surveillance, and communication. Security provides first responder services in emergency situations. The Security division has formed partnerships with Federal, State and local law

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enforcement authorities and partners with other utilities and infrastructures in the 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.

2015-16 Performance Objectives

- Operate the Security Center and continue to implement automated security systems to improve the protection of facilities.
- Expand the use of security system technologies to enhance efficiency. Expand the use of card activated access control.
- Review contracts to ensure EHS operational compliance.
- Continue to train and test the Emergency Response Plan (ERP). The LVVWD and Southern Nevada Water Authority (SNWA) ERPs are in the process of being combined.
- Progressing on a formal cross training program for all security officers to be trained on all security locations, responsibilities and assignments.
- Continue to expand and maintain the security surveillance system.
- Partner with Department of Homeland Security and the Southern Nevada Counter-Terrorism Center for potential threats to facilities.
- Safety and Health conducts weekend/after-hour spot audits of industrialized work activities supporting

water treatment, water quality, water distribution or other activities.

- Staff will review and update the EHS Manual and all internal 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.

2014-15 Major Accomplishments

- The LVVWD played a critical role during the Mt. Charleston rain event, safely returning the water system to a serviceable condition.
- EHS conducted 80 instructor-led training classes, which included 702 participants adding up to 3,387 training hours.
- Continuing support of the “See Something, Say Something” program with our workforce.
- Safety and Health conducted over 85 spot audits and participated in five comprehensive audits
- EHS conducted 86 investigations related to recordable injuries, at-fault vehicle accidents and at-fault property damage incidents. Providing recommendations for each event to reduce the chance of reoccurrence.
- Recordable injuries were decreased in 2014 as compared to 2013 – 36 vs. 39.
- Obtained five new environmental permits, renewed 171 environmental permits, and modified four environmental permits to meet changing permit conditions.

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Strategic Plan Goal – Deliver an outstanding customer service experience.

2015-16 Performance Objectives

- Continue preventive efforts to reduce injuries and their fiscal impact.
- Continue to refine security systems in support of over 100 protected sites.
- Identify additional opportunities for security service and collaboration with internal departments.
- Continue to attend and provide support to Utility and Pipeline Coordinating Group, Nevada Department of Homeland Security (DHS), DHS Critical Infrastructure Committee, and InfraGard.
- Provide electronic quick reference for specific knowledge of related information on the EHSCS webpage.
- Participate in local association meetings to gather information on best management practices to compliment the Safety and Health Management System; adopt and implement proven work methods.
- EHS will participate in internal and external committees or groups to improve communication and enhance customer service in 2015-16.
- Completed implementation of Hazard Communication Global Harmonized System.

2014-15 Major Accomplishments

- Provided EHS communications throughout 14 department Safety Action Teams.
- The severity of recordable injuries decreased in 2014 resulting in approximately a \$228,000 reduction in Workers' Compensation incurred costs.

- Aggressively pursued backflow theft and illegal water users resulting in multiple arrests and a noticeable reduction in theft.
- Increased employee awareness of potentially dangerous situations – created Active Shooter class on LMS for employees to take.
- Security is the main first responder for vehicle on vehicle third-party accidents.
- Continuing progress on internal cross-training to ensure all officers are able to perform at all posts.
- Collaborated with internal work groups to improve rural and local security systems.
- Updated electronic material on the Hydroweb to ensure the LVVWD supervision and employees have significant amount of useful safety and health literature, information and videos for training.
- Updated evacuation procedures and maps including all facilities and remote areas on the Hydroweb.
- Worked extensively with HR to update DuPont safety training material.
- Monitored health related events potentially affecting staff; provided informational fact sheets to the company.

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

2015-16 Performance Objectives

- Identify non-compliance items through organization-wide collaboration.
- Ensure environmental reporting is submitted to regulatory agencies.
- EHS will focus on how changes to the environment affect customers and the

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need to adjust current programs to accommodate said changes.

- Identify process changes needed to increase recycling efforts by 10 percent in 2015-16.

2014-15 Major Accomplishments

- Collaborated and increased environmental awareness among all departments and divisions.
- Recycled 1,890,752 pounds of materials in 2014; generating \$806,947 in revenue.
- Hazardous waste generation was reduced by 20 percent in 2014.
- Reduced the discharge of water to surface water from various facilities and pipelines by approximately 60 percent.
- Pollution prevention projects such as using the State of Nevada Pesticide Disposal program, LED change outs and in house trainings totaled a savings of over \$123,379.
- Initiated single stream recycling at all work stations and offices at key facilities.
- Springs Preserve EMS received its first Recertification Audit in July and was found to be in conformance with ISO 14001.
- Unintentional releases of regulated materials were reduced by 20 percent compared to previous years – contributing factors include a greater sense of awareness among employees.

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

2015-16 Performance Objectives

- Ensure Environmental Management Systems continue to be implemented

with ongoing improvement, incorporating sustainability goals into each activity.

- Coordinate with Records Management to streamline the records inventory and utilize electronic documentation capabilities and accessibility.
- Experiment with new security technologies such as the Pixcontroller 4G camera system for remote locations having no power or communication path for conventional security systems.
- Work with Information Technology (IT) staff to develop a Safety Management System to automate injury/accident recordkeeping activities.
- Continue to review and provide EHS forms in electronic format as well as look for new opportunities to enhance current selection.
- Develop innovative solutions to security vulnerabilities; fabricated and installed ladder guards.
- Replace the analog video wall in the Security Center with new digital HDTV monitors.
- Identify pollution prevention opportunities using technology and innovation.

2014-15 Major Accomplishments

- Creation and implementation of the Security Blotter, completed in-house by IT, for standardization and automated incident reporting and tracking security system.
- Automated Safety Management System for Recordkeeping developed and is currently being tested.
- Assisted two departments in purchasing two new cleaner burning engines to replace aging diesel engines to reduce air emissions by more than 70 percent.

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

2015-16 Performance Objective

- Ensure projects are evaluated proactively using EMS to ensure environmental compliance within Clark County.
- Identify new regulations and policy changes and collaborate with other agencies.
- Examine and update all security processes, priorities, and resource utilization to improve efficiency.
- The Environmental Team will implement one improvement in 2015-16 from the results of the 2013 environmental benchmark.

2014-15 Major Accomplishments

- Collaborated with Clark County Storm Water Quality Management Committee on compliance of storm water regulations.
- Collaborated with the Sustainability CDT to develop new organization-wide sustainability goals.
- Implemented opacity observation systems to ensure compliance with air permit conditions.
- Adjusted security patrols and procedures to absorb additional facilities at the Springs Preserve; Butterfly Exhibit, Cottages, Solar House, without additional costs or manpower.
- Implemented opacity observations on dust omitting processes as a result of the 2013 environmental benchmark.

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

2015-16 Performance Objectives

- Utilize the security monthly reports to measure performance objectives and track issues.
- Conduct a division monthly staff meeting to update EHS employees on all major projects and communicate status changes and challenges.
- Conduct instructor-led Safety and Health courses for company employees.
- Provide EHS information updates to the company through an electronic Management Advisory, Pipeline, Hydroweb, Safety Alert Messages, etc.
- Continue to provide diverse learning opportunities.
- Participate in EHS annual off-site to discuss future initiatives, evaluate and update EHS programs, policies and procedures.
- Recognize employees/teams for their unique talents and accomplishments.
- Lead environmental programs including air pollution control, water pollution control, hazardous materials, hazardous waste and Process Safety Management.
- Continue to disseminate an EHS Trend Analysis Report.

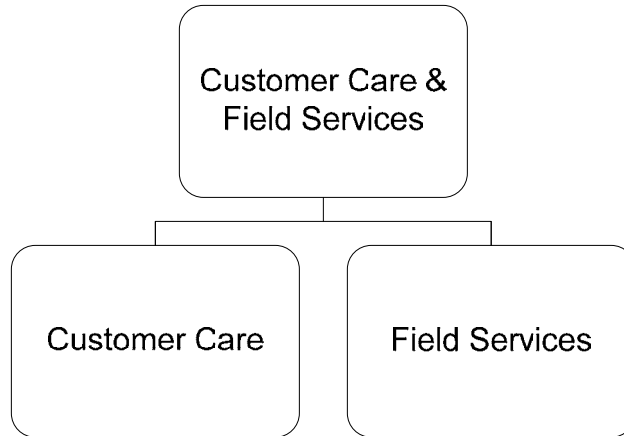
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2014-15 Major Accomplishments

- Professional development is ongoing and analysts continually look for and participate in low or no cost training opportunities.
- Over 330 employees participated in 9 educational classes during the 2014 Safety Stand Down Day.
- EHS worked with HR to improve upcoming and overdue training notification emails to improve compliance training.
- Over 500 employees participated in the EHSCS department educational booth at the annual Employee Expo.
- The annual Trend Analysis was completed highlighting major EHS accomplishments throughout 2014 and initiatives for 2015.
- Accommodated 34 regulatory agency inspections and received zero Notice of Violations or fines in 2014.
- Updated employee badges company-wide; new photos taken, ensured correct department and job title on badge, and correct access given. Adjusted security procedures to ensure all employees had their badge on property at all times.

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 2015-16 budget for the Customer Care and Field Services department is consistent with the organization's efforts to reduce costs where possible while continuing to

ensure departmental efficiency and meet increased customer demand.

Customer Care. Continuing efforts to enhance in-house collections, anticipating a budget reduction for 2015-16 in uncollectible accounts, and reengineering business processes around the meter to cash philosophy. This should improve inactive inventory management, advance lien processing, minimize field impacts and expand proactive customer notification which is expected to further reduce year-end write-offs.

Field Services. The 2015-16 Budget Plan contains funding for a read verification program, mobile devices, ten replacement vehicles, the continued implementation of an analytical application for consumption data, advanced metering infrastructure, and operational costs for the continued deployment of a new automated meter reading (AMR) system.

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Expenditures

| SNWA Uses | Actual 2013-14 | Budget 2014-15 | Budget 2015-16 |
|----------------------------------|---------------------------|---------------------------|---------------------------|
| Materials & Supplies | - | 6,000 | 6,000 |
| Maintenance & Repairs | - | - | 3,500 |
| Total Operating Expenses | \$ - | \$ 6,000 | \$ 9,500 |
| Payroll Expenses | 153,162 | 191,098 | 195,973 |
| Total Department Expenses | \$ 153,162 | \$ 197,098 | \$ 205,473 |
| FTE Positions | 1.0 | 1.3 | 1.3 |

Department Performance

In 2014-15, the Customer Care and Field Services department continued to refine business processes and advance technology in service to the Las Vegas Valley Water District’s (LVVWD) customers. The department focused efforts on maximizing the customer experience through four strategic goals: Delivering an Outstanding Customer Experience; Anticipate and Adapt to Changing Climatic Conditions while Demonstrating Stewardship for our Environment; Develop Innovative and Sustainable Solutions through Research and Technology; Strengthen and Uphold a Culture of Service, Excellence, and Accountability.

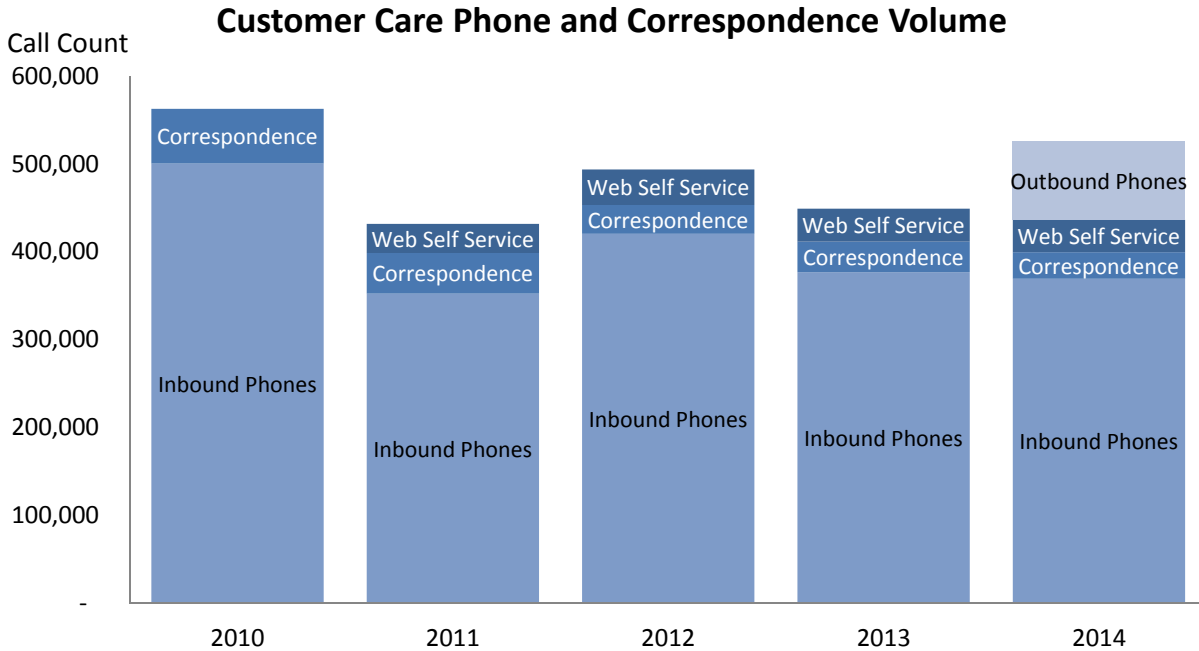
Customer Care. The Customer Care division serves as the primary point of contact for internal and external service inquiries—

supporting approximately 381,000 active services. The division manages the customer care phones, web requests, correspondence inquiries, walk-in requests, payments, credit assistance with payment arrangements, collection courtesy calls, delinquent account processing, high consumption requests, water-waste complaints, 24/7 emergency phone coverage, and producing monthly billing to the LVVWD’s customers.

Customer care demands continue to be consistently high as the division has taken a proactive approach to customer education and service through outbound customer service calls.

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

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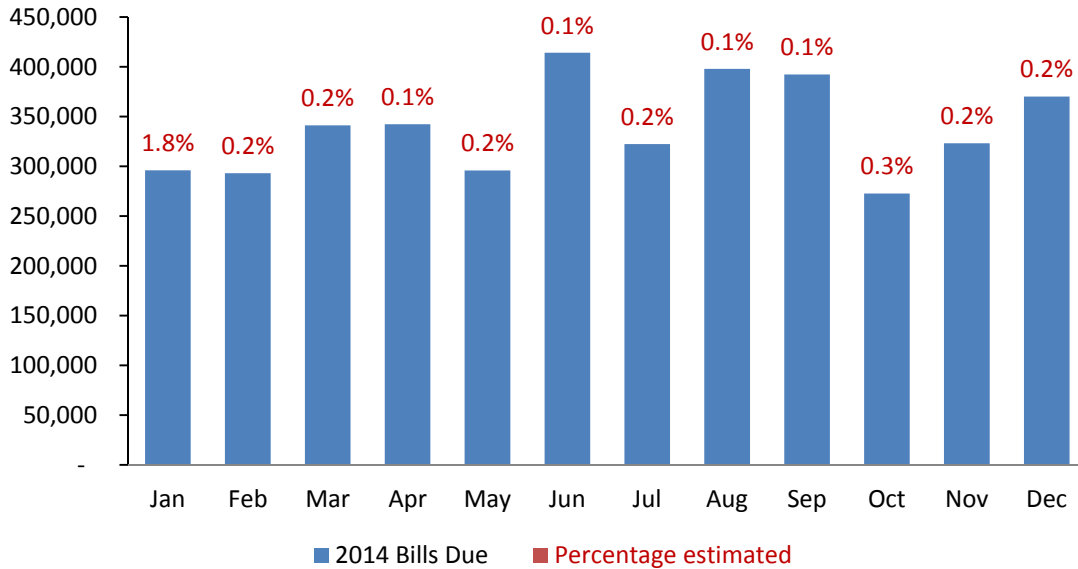
Advanced metering technology and proactive outreach has improved service performance and bill outcomes. These efforts are best illustrated in a low percentage of estimated bills. Customer Care and Field Services manages the monthly billing process from meter to cash for large services, developer accounts, adjustments, investigations, quality control, supplemental, fire protection services,

consumption notifications and mobile meters.

The following chart depicts the percentage of the total bills due that are estimated each month for 2014.

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Percent of Bills Due that are Estimated



Field Service: The Field Services division is responsible for reading meters for approximately 381,000 services in Las Vegas, Searchlight, Blue Diamond, Kyle Canyon, Laughlin and Jean. The division also responds to leak investigations, low pressure, high consumption, water waste inquiries, billing requests, and turn ons/shut offs. In 2014, close to 262,000 new Itron meters and electronic reading devices were installed and manual reads dropped from 61,645 to 18,220.

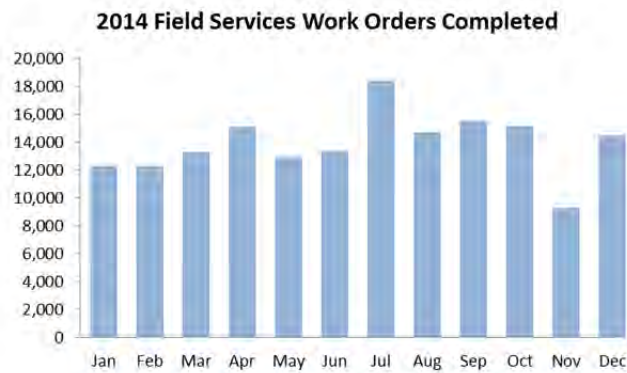
2014 Meter Reads



The 2014 Meter Reads chart illustrates the number of meter reads processed by Field Services in 2014.

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The following chart illustrates the number of work orders processed by Field Services in 2014.



Strategic Plan Objectives and Accomplishments

Strategic Plan Goal – Deliver on Outstanding Customer Service Experience.

2015-16 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.
- 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.

- Improve the accuracy, detail, and timeliness of meter reads.
- Develop a quality program for Field Services.
- Continue read verification project for all meters 2” and smaller.
- Enhance current quality systems for improved call assessment and coaching.
- Assess customer satisfaction results against overall quality outcomes for actionable improvement.
- Host, facilitate and attend local and industry venues to glean and share best practices for improving the customer experience from industry leaders and innovators.
- Continue to improve customer care technologies, tools, training and implementation.
- Continue the implement of a new mobile reading system.
- Create a quality assessment tool for consistency in business processes.
- Identify and resolve inaccurate meters.

2014-15 Major Accomplishments

- Business process re-engineering around the meter to cash philosophy improved internal communications and reduced unnecessary field work.
- Eliminated bill edit overtime through streamlined processes and work prioritization project.
- Implemented and completed Customer Service Training for field personnel.
- Re-engineered meter and AMR and meter installation process for increased efficiencies and cost reduction.
- Completed 2014 with no missed reads.
- Verified Reads on over 100,000 meters.

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- Installed over 100,000 new automated reading devices.
- Installed new mobile workforce management software.
- Redesigned customer door hanger for improved communication with customers.
- AMR data incorporated into bill edit process to reduce estimated bills.
- Implemented bill comparison tools for improved efficiencies with adjustment processing

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

2015-16 Performance Objectives

- Reduce and dispose of waste responsibly.
- Train field staff to report water waste during the course of their daily work.
- Maintain proper disposal of scrap and waste products, especially lithium batteries.

2014-2015 Major Accomplishments

- Increased Springs Preserve promotions through inbound traffic to increase awareness and enrollment in conservation driven programming.
- Lobby payments and transactions continue to decline with successful expanded payment and self-service options, reducing lobby traffic and carbon footprint.
- Procured a vendor for waste disposal which reduced costs.

- Disposed of toxic waste material in compliance with OSHA regulations.
- Recycled tons of cardboard boxes through Opportunity Village, a not-for-profit organization.
- Processed 2,282 courtesy water waste letters and 503 formal notifications in 2014.
- Completed 1,068 water waste investigations in 2014.

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

2015-16 Performance Objectives

- Identify, prioritize and implement sustainable and cost-effective solutions to organizational challenges.
- Develop and strengthen global partnerships to leverage resources and advance innovations in Customer Service.
- Utilize new meter reading technology to improve customer service and reduce truck rolls.
- Enhance lien process through advance reporting and streamlined system processes.
- Broaden outbound collection call scope to improve revenue collection and payment arrangement performance.
- Convert manual returned mail processing to electronic format.
- Continue to educate customers through field meets and courtesy letters.
- Implement out of route reads functionality.

2014-15 Major Accomplishments

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- Reduced manual meter reads by 30 percent resulting in increased productivity.
- Implemented a meter and automated reading device asset table and reducing truck rolls.
- Implemented ability to capture 40 days of read information with drive by reading.
- Reduced zero consumption account review to 3 months.
- Installed payment kiosk in the lobby, reducing wait times and minimize costs.
- Host and participate in education and technical venues for business advancement throughout 2014.
- Expanded lien process reporting to realize increased activity against active account files, lowering collections activities and overall write-offs by more than \$1 million.
- Expand outbound collection call programming window to realize annual cost savings of \$4 million.
- Initiated variable hold time for the IVR to improve the customer experience.
- Participated in the judging of Gartner & 1 to 1 Media 2013 CRM Excellence Awards.
- Pushed high/low read parameter edits to the front of the upload process to minimize bill corrections and estimates.
- Enhance automation of 3rd party collection file transfer for increased efficiencies.
- Helped with the selection and implementation of New AMR system.
- Implemented the use of wireless transfer of meter reading routes and data.

- Use of new technology for team communication and for assistance in completing assignments.

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

2015-16 Performance Objectives

- Improve the consistency and openness of communication to ensure employees are engaged and well informed.
- 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.
- Continue Read Verification Program to resolve any discrepancies from AMR to meter reads.
- Ensure timely and consistent communication with team to provide feedback and solicit recommendations.
- Conduct monthly team meetings.
- Maintain weekly communications to keep the team informed of business impacts and process improvements.
- Continue weekly communication forum between workgroups to address interdepartmental challenges and business impacts.
- Share service level results across workgroups.
- Generate read verification results and validation.
- Leverage the existing resources for expert training classes to employee skill development.

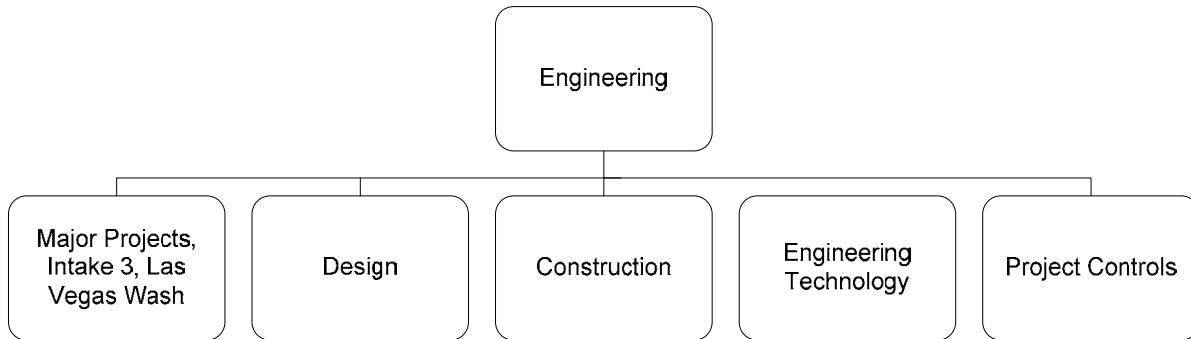
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2014-15 Major Accomplishments

- Service verification project verified 36 percent of services.
- Developed weekly business update communication for bill related impacts and results.
- User instruction documentation project continues to improve consistency and efficiency in call processing.
- Initiated proactive letter notification process for inactive consumption to mitigate revenue loss and improve the customer experience.
- Developed large meter replacement team to promote customer communication and education.
- Continued the implementation of new AMR system.

ENGINEERING

Level: 3400



Mission

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

Department Description

The Engineering Department is responsible for implementing capital improvements projects for both the Las Vegas Valley Water District (LVVWD) and the Southern Nevada Water Authority (SNWA).

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 vast Las Vegas Valley and in nearby rural areas. In coordination with the Operations and Infrastructure Management departments, Engineering provides the design and construction services for many of the larger LVVWD projects.

The SNWA owns and operates the regional water supply system, the Southern Nevada

Water System (SNWS) which treats Colorado River water and delivers it to 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 and Infrastructure Management departments, Engineering provides the design and construction services for many of the larger MCCP projects.

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 the projects defined by the Wash CIP.

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Using its project and construction management resources and technology systems, Engineering offers support services to other departments for their operating capital projects. Engineering also develops

and maintains advanced technical systems enabling the LVVWD and the SNWA to efficiently access technical data and records pertaining to water infrastructure.

Expenditures

| SNWA Uses | Actual 2013-14 | Budget 2014-15 | Budget 2015-16 |
|----------------------------------|---------------------------|---------------------------|---------------------------|
| Materials & Supplies | \$ 91,996 | \$ 21,300 | \$ 7,800 |
| Maintenance & Repairs | 307 | 2,750 | 702,750 |
| Rental & Leases | 1,978,913 | 254,115 | - |
| Other Employee Expenses | 18,995 | 7,675 | 7,175 |
| Other Expenses | 47,603 | 5,395 | 5,220 |
| Total Operating Expenses | \$ 2,137,814 | \$ 291,235 | \$ 722,945 |
| Operating Capital | 27,048 | - | 305,000 |
| Bond Capital | 93,425,576 | 115,542,055 | 244,527,882 |
| Total Capital | \$ 93,452,624 | \$ 115,542,055 | \$ 244,832,882 |
| Payroll Expenses | 9,052,486 | 6,787,467 | 5,610,827 |
| Total Department Expenses | \$ 104,642,924 | \$ 122,620,757 | \$ 251,166,654 |
| FTE Positions | 51.0 | 38.7 | 32.9 |

Budget Objectives and Highlights

The 2015-16 Engineering Department budget demonstrates significant commitment for the major projects associated with Lake Mead Intake No. 3 and the Wash CIP. In addition, a significant portion of the department staff will continue to be focused on many projects directly supporting the Operations and Infrastructure Management departments in preserving the facilities needed to assure a reliable, quality water supply for water

customers.

The Intake No. 3 tunnel and intake project is expected to be operational by the summer of 2015. This will achieve 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. During 2014, this reality was discussed by the Integrated Resource Planning Advisory Committee (IRPAC),

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leading to a recommendation by the committee that the SNWA reactivate the previously deferred pumping station project. Acting on the committee's recommendation, the SNWA Board of Directors approved funding for a Low Lake Level Pumping Station 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. As a result, there will be an increase in capital expenditures on the Intake No. 3 project and the activity level for this project will remain high for approximately another five years.

Progress was achieved on the Wash CIP projects in the prior fiscal year. Construction of the Historic Lateral Expansion, Tropicana and Sunrise Weirs can begin as soon as funding priorities are established.

The Engineering department will also advance various capital projects for the LVVWD by designing and managing construction of projects to replace water mains, rehabilitate valve or meter vaults, 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 projects of the LVVWD and the SNWA capital plans. Currently, there are two active major project efforts, one for Intake No. 3 and one for the Las Vegas Wash, and individual teams are dedicated to those projects activities.

Design. The design team is a collection of professional engineers, surveyors, technicians, permit coordinators, right-of-way agents, 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, and consistent with generally accepted engineering standards.

Construction Management. The construction management team is comprised of engineers and inspectors who have extensive experience in construction of public works and water utilities. These team members are involved in development of the design packages to assure construction complexities are properly considered and addressed in the design before inviting contractor bids. They also coordinate with the Legal Department to assure laws, regulations, and contract provisions are properly observed.

Project Cost and Schedule Controls. A small team is organized to assist the design and construction management teams and other involved departments with cost tracking and reporting and with scheduling analysis on capital projects. This team makes use of computer-based tools which compile relevant data, both from the design and construction teams and from the Finance Department. The cost database is comprehensive and detailed in capturing actual payments to every vendor and all

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labor hours applied on each capital project. This team also performs a vital function in collecting projected capital project expenditures as a tool to forecasting future funding requirements.

Engineering Technology Services. A team of professionals with computer-aided drafting, geospatial, data management and analysis, and computer programming skills provides computer support services to many departments in the organization. These services are vital to the efficient management of computer-based tools in the modern engineering environment of the water industry.

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.

The chart below (Completed LVVWD Construction Projects) represents the number of the LVVWD construction projects completed by Engineering since 2007 and the number expected to be completed in 2015.



The following chart (Completed LVVWD Design Projects) illustrates the number of projects Engineering has designed since 2007 to support the infrastructure management requirements of the LVVWD.



The facility databases managed by the Technology Services Division in the Engineering Department contain millions of records about various infrastructure assets such as treatment facilities, pumping stations, buildings, wells, reservoirs, pipelines, fire hydrants, valves, meters, and real property. The database information goes beyond simply defining the physical character of the assets. They also include dates when assets were acquired, constructed or

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modified, the original cost of the assets, rights-of-way provisions, pertinent warranty information, and relevant supporting documentation. Managing all of this data and keeping it current is a major ongoing effort.

The chart below shows how many hundreds of thousands of features of the water facility assets for both the LVVWD and SNWA have been edited (added or updated) within the geographic information system facility database each year from 2009 to 2014. The peak activity indicated in the year 2009 is mostly the result of the work performed by a larger intern staff that was available at that time.



Strategic Plan Objectives and Accomplishments

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

2015-16 Performance Objectives

- Complete design and construction of projects according to the budgets and schedules identified in the capital plans.

- Provide the Infrastructure Management and Operations departments with a high level of technical services and capital project support.
- Consolidate applications and align work processes to improve staff efficiency.
- Maintain and improve databases providing customers with easy and reliable access to accurate facility drawings and infrastructure asset information. A particular emphasis of this objective is to consolidate disparate asset and facility databases across the LVVWD and the SNWA to establish a unified asset inventory and improve data quality control.
- Consolidate and streamline engineering processes and standards for consistency and improved efficiency.
- Even with the pressures of increasing developer project inspection requests, maintain a level of inspection service meeting both developer and organizational needs.

2014-15 Major Accomplishments

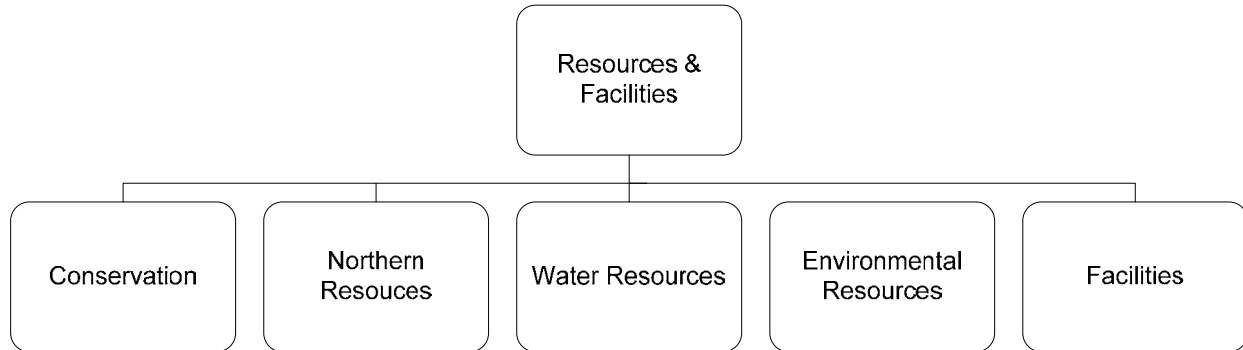
- Completed construction of the \$503 million Intake No. 3 Shafts and Tunnel.
- Completed construction of the \$11.6 million Three Kids Weir in the Las Vegas Wash.
- Completed construction of the \$11.7 million Archery and Sliver Bowl weirs in the Las Vegas Wash.
- Completed construction of 15 LVVWD projects valued at \$8.7 million related to improvement of the LVVWD’s facilities.
- Awarded 18 LVVWD construction contracts valued at \$6.7 million related to improvement of the LVVWD’s facilities.
- Performed inspections on approximately 520 different projects, involving over

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- 25,000 individual inspection actions.
- Optimized and consolidated many task management systems and identified opportunities for improving process efficiencies.
 - Captured nearly 170,000 new or modified asset features in the geographical information systems database.

RESOURCES & FACILITIES

Level: 3600



Mission

The mission of the Resources & Facilities department is to sustainably manage the Southern Nevada Water Authority's (SNWA) water 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 through cost effective strategies supporting operations and organizational business.

Department Description

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

Budget Objectives and Highlights

The 2015-16 Resources & Facilities department budget contains funding for a wide-range of initiatives discussed below.

Facilities. The Facilities division budget contains \$4.2 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.

Water Resources. The fiscal year 2015-16 Budget Plan contains \$5.3 million to continue efforts to evaluate the distribution, quantity and quality of water resources available for use by the LVVWD and the SNWA. Included in this total is \$2.7 million for developing Tributary Conservation Intentionally Created Surplus (ICS) through leases of Muddy River and Virgin River water. The division will continue hydrologic data collection, monitoring, and reporting programs to ensure regulatory compliance with the terms of the LVVWD and the SNWA held water-right permits and project right-of-ways. The division will also continue long-range

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resource planning and water resource management efforts necessary to ensure a reliable water supply while hydrological and climatological uncertainty exists. These activities include analyzing climate-change science and policy initiatives, and providing technical support for activities associated with the Colorado River operations and decree accounting, administration of interstate banking agreements, the Colorado River Salinity Control Program, and the implementation of Minute 319 to the 1944 Water Treaty with Mexico.

Environmental Resources. The Environmental Resources budget contains \$3.1 million in operational funding to continue environmental and biological 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, Virgin and Muddy River programs, Northern Resources, 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 2015-16, the division anticipates receiving \$1.6 million in revenue from Federal grants and local contributions.

Conservation. The Conservation division budget contains \$8.8 million in operational funding to continue implementing tactics to achieve the 199 Gallons Per Capita Per Day

(GPCD) goal by 2035. The O&M budget is allocated to customer incentive programs.

Northern Resources. The Northern Resources division budget totals \$4.5 million, of which, approximately 38.5 percent is for livestock inventory purchase and capital improvements to develop, utilize and maintain primary groundwater rights. Total gross revenues are projected to exceed \$2.8 million. The Northern Resources division consists of seven individual properties that have been consolidated into one independent operating company (IOC). The consolidation and management of these ranch properties has created operational efficiency, but increased gross operating costs. Increased operating costs are attributed to building livestock populations and re-establishment of perennial crops on irrigated fields, replacing aging non-functional infrastructure, renovation of historical ranch structures and construction of additional facilities. Program diversification including water development, nutrient management, cropping structure, propagation of multiple species of livestock, water and energy application 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 source of supply.

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Expenditures

| SNWA Uses | Actual 2013-14 | Budget 2014-15 | Budget 2015-16 |
|----------------------------------|---------------------------|---------------------------|---------------------------|
| Water | \$ - | \$ 1,200 | \$ 500 |
| Energy | 304,670 | 275,000 | 270,000 |
| Materials & Supplies | 1,601,298 | 3,070,169 | 3,330,000 |
| Maintenance & Repairs | 1,647,350 | 2,256,300 | 1,800,800 |
| Rental & Leases | 318,225 | 483,685 | 359,154 |
| Other Employee Expenses | 82,019 | 201,500 | 211,700 |
| Other Expenses | 913,352 | 1,252,100 | 1,704,700 |
| Total Operating Expenses | \$ 4,866,914 | \$ 7,539,954 | \$ 7,676,854 |
| Operating Capital | - | 273,000 | 2,503,500 |
| Bond Capital | - | 17,225,693 | 14,621,673 |
| Total Capital | \$ - | \$17,498,693 | \$17,125,173 |
| Payroll Expenses | 16,612,947 | 14,627,779 | 14,529,268 |
| Total Department Expenses | \$21,479,861 | \$39,666,426 | \$39,331,295 |
| FTE Positions | 112.3 | 101.8 | 98.6 |

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. Provides support during the design and construction of new facilities, as well as, site remodeling and/or retro-fit support for existing structures.

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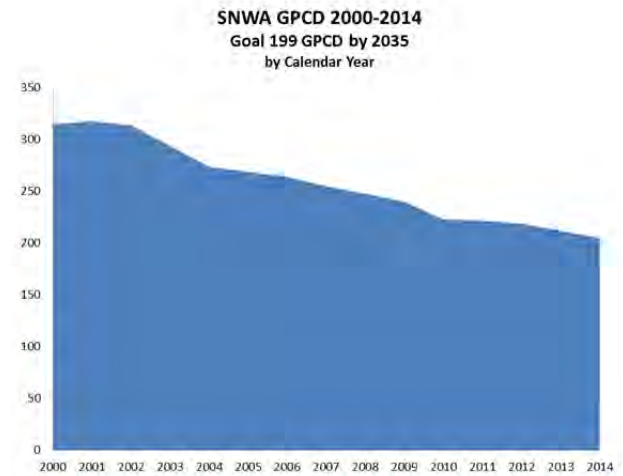


Water Resources. The Water Resources division is responsible for securing and managing regional groundwater and surface-water resources to ensure a reliable water supply for Southern Nevada. This responsibility involves conducting regional water resource planning efforts, including: climate change assessments, integrated water resource planning, population forecasting, regional water demand analyses, and water accounting; identifying, evaluating, and developing sources of additional groundwater and surface water; managing the Southern Nevada Water Bank; establishing hydrologic and climatological monitoring networks; securing water rights from the Nevada State Engineer’s (NSE) Office; and, ensuring all water-right permits remain in good standing.

Environmental Resources. The division is responsible for conducting environmental and biological research, monitoring and planning to ensure compliance with Federal and State environmental laws, permits, and agreements. The division prepares environmental compliance documents, and assists Federal agencies in completing those regulatory processes necessary to construct and operate water resource related infrastructure. Biological studies, monitoring and reporting are conducted in accordance with Federal environmental regulatory

requirements, state water right rulings, and interagency environmental agreements such as Stipulated Agreements. The division is also responsible for fulfilling organizational responsibilities related to the Las Vegas Wash, Las Vegas Valley Watershed and the Warm Springs Natural Area.

Conservation. The Conservation division develops and implements programs and strategies to achieve the SNWA’s goal of 199 total system gallons per capita per day (GPCD) by 2035.



In calendar year 2014, the SNWA achieved a total system GPCD of 205. The chart above shows the decline in total system GPCD from 2000 to 2014. Since the SNWA directly or indirectly reuses virtually all wastewater, the SNWA also monitors water use in terms of net GPCD. Net GPCD does not include recycled water use and reflects the community’s use of water resources and is calculated in a manner similar to a method employed by many communities in California. The SNWA’s net GPCD was 114 in 2014.

In addition to supporting water supply planning, the Conservation division ensures the SNWA is compliant with state and federal

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requirements ensuring beneficial use of water.

In 2014, the SNWA supported more than 2,000 projects comprising 4.4 million square feet of landscape conversion. These conversions produce perpetual savings of more than 245 million gallons annually. The cumulative benefit of landscape conversions completed since 2000 reduced the SNWA's 2014 consumptive demand by more than 9.6 billion gallons, averted demand for 507,000 megawatt hours of energy, and reduced CO2 discharge by nearly 250,000 metric tons. In 2014, these projects reduced power costs by approximately \$4.7 million.

The Conservation division employs three major strategies to effect water efficiency: 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.

Northern Resources. The 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 \$2.8 million in projected ranch revenue for fiscal year 2015-16. 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. The ranch infrastructure, resource stewardship, water rights, personnel development, and financial stability are priorities integrated into the management program. 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.

2015-16 Performance Objectives

- Maintain critical equipment and building systems to ensure a safe and comfortable work environment; measure equipment uptime percentage.
- Develop and implement 5 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 in the Las Vegas Wash in accordance with agreements and the Las Vegas Wash Comprehensive Adaptive Management Plan (LVWCAMP).

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- Measure and report on water quality in Las Vegas Valley Watershed according to the Las Vegas Wash Surface Water Quality Monitoring and Assessment Plan.
- Create and implement a long term operating plan for the Las Vegas Wash assets.
- Maintain zero incidents of noncompliance with permit conditions associated with the LVVWD's groundwater rights.
- Maintain zero incidents of noncompliance with permits associated with the LVVWD's artificial recharge program.
- Ensure billing information for the Groundwater Management Program is at least 98 percent accurate.
- Comply with environmental permit requirements for construction and operation of new and existing Small Systems facilities.
- Organized 21 meetings of the LVVWAC, LVWCC, and technical subcommittees in 2014.
- Completed an evaluation of work activities necessary to support a Long Term Operating Plan on the Las Vegas Wash.
- Replanted native vegetation around the Searchlight Water System pipeline and power line rights-of-way.
- Removed tamarisk and monitored compliance for the Jean Water System.
- Completed all compliance monitoring and reporting for the LVVWD's groundwater rights associated with Small Systems, and permits to recharge, store, and recover water from the Southern Nevada Water Bank.
- Published the annual monitoring report for the small system at Jean and submitted the report to Nevada Division of Water Resources (NDWR) in accordance with permit terms.

2014-15 Major Accomplishments

- Conducted aquatic bird, marsh bird, and invertebrate surveys along the Las Vegas Wash.
- 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 40 acres along the Las Vegas Wash, removed more than 20 acres of tamarisk, and conducted vegetation monitoring on nearly 300 acres.
- Conducted two Las Vegas Wash Green-Up events, where more than 1,000 volunteers planted approximately 20 acres.
- Coordinated a science symposium as part of World Wetlands Day.
- Published the annual report of the LVVWD's groundwater production and artificial recharge in Las Vegas Valley and submitted the report to the Nevada Division of Water Resources (NDWR) and Nevada Division of Environmental Protection (NDEP) in accordance with permit terms.
- Filed water-right applications with NDWR to align the LVVWD's operations associated with groundwater production in Las Vegas Valley with NDWR permit terms and the LVVWD's water rights.
- Coordinate and accompanied AIG, Lexington and Hartford representatives on the Insurance Carrier inspections.
- Completed Operating Capital projects; 4S005 – Roof replacement on Pump Station 1a at the Alfred Merritt Smith

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Water Treatment Facility (AMSWTF); 3S00 – Waterproofing and caulking seven (7) SNWA Pump Stations; 44209 – Heat exchanger upgrade at AMSWTF; 3S004 – Fall protection upgrade for several AMSWTF and River Mountains Water Treatment Facility (RMWTF) roofs.

- Support the Valley View underground gas pipe upgrade project.

Strategic Plan Goal – Deliver an Outstanding Customer Service Experience.

2015-16 Performance Objectives

- Maintain 90 percent or greater client satisfaction rating for delivery of the Water Smart landscapes program.
- Achieve an 80 percent or greater satisfaction rating for facilities-related customer interactions.

2014-15 Major Accomplishments

- Maintained a conservation customer feedback rating of 4.6 out of 5. Customer service satisfaction exceeded 90 percent.
- Provided over 2,000 customers with rebates for participation in conservation programs including conversion of over two million square feet of turf grass to water efficient landscaping.
- Implemented programming in accordance with the approved 2014-2018 Conservation Plan.
- Completed workstation modifications and facilitated the associated moves for the Molasky 14th Floor consolidation project.
- Completed the construction and facilitated the associated moves for the Human Resources Department.

- Completed the Valley View security viewing room construction project.
- Completed the construction and relocation of the Corporate Records division.
- Installed light fixtures throughout the visitors parking lots at the Springs Preserve to improve the customer experience.
- Facilitated major internal events including: all Divisional holiday parties, Safety Stand-Down Day, Celebrating You week, etc.
- 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.

2015-16 Performance Objectives

- Sustain the SNWA’s right-of-way grant for the Groundwater Development Project (GDP).
- Conduct monitoring and submit annual hydrologic and biological data and reports to the Nevada State Engineer as required by water right permits.
- Complete actions as required under the Department of Interior Stipulated Agreements.
- 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.

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- Maintain Great Basin Ranch assets, including property, facilities, water rights, and grazing allotments in accordance with annual work plans.
- 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.
- Ensure zero incidents of noncompliance with permits and interagency agreements for continued use and development of Coyote Spring, Garnet, and Hidden valleys groundwater and Virgin and Muddy Rivers surface water.
- Ensure 100 percent compliance with agreements to maintain the Muddy River and Virgin rivers lease programs.
- Submit documentation annually as necessary to obtain Intentionally Created Surplus credits or other beneficial use of Muddy and Virgin River water rights and leases.
- Provide comments within comment period deadlines for all proposed environmental rules, policies, and projects which may affect the SNWA's resources.
- Complete environmental compliance for Silver State Energy Association Eastern Nevada Transmission Project.
- Complete environmental compliance for projects initiated by other divisions and departments.
- Collaborate on all major local and regional climate change initiatives relevant to the SNWA.
- Review and update, as necessary, the SNWA Resource Plan and Water Budget annually.
- Ensure 100 percent 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.
- Meet or exceed projected Gallons per Capita per day (GPCD) reductions within the 5-year Conservation Plan and ensure GPCD reductions are achieved annually.
- Annually increase the numbers of Moapa dace and/or dace habitat to make progress towards achieving the goals of the Recovery Plan.
- Provide public access at the Warm Springs Natural Area in accordance with the Southern Nevada Public Land Management Plan funding agreement.
- Mow fields at least once annually, and trim palms and maintain fire breaks annually as needed at the Warm Springs Natural Area in accordance with the Fire Management Plan.
- Communicate sustainability goals and progress to the organization.

2014-15 Major Accomplishments

- Achieved total system 2014 GPCD of 205 and a net GPCD of 114, well ahead of conservation goals for GPCD for the year.
- Provided rebates from conservation programs saving the community over 225 million gallons per year.
- Hosted approximately 1,000 attendees from 37 U.S. states at the 8th Annual WaterSmart Innovations Conference and Expo.
- Recipient of the Irrigation Association National Water and Energy Conservation Award.
- Completed the administrative record in defense of the legal challenge on the Groundwater Development Project rights-of-way.

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- Completed an updated Class I cultural resources records inventory and jurisdictional delineation for the Groundwater Development Project.
- Conducted weed control at existing monitoring well rights-of-way, and completed enhanced restoration at seven sites.
- Established more than 300 ground photography fixed monitoring locations across the SNWA's grazing allotments and collected data prior to and following sheep and cattle grazing at these locations to show our use of the rangeland, drought conditions, and general range health.
- Monitored restoration for Coyote Springs pipeline, and obtained project restoration release from the BLM.
- Reviewed 55 draft policies, regulations, and projects potentially relevant to the SNWA and the LVVWD, and submitted 23 formal comments letters.
- Completed a draft Environmental Assessment and Biological Assessment for the Eastern Nevada Transmission Project.
- Moapa Dace counts increased 17 percent from winter 2014 to winter 2015, and the summer 2014 count was the highest recorded since 1994.
- Completed a trail, kiosks, landscaping, and viewing platform for the first phase of public use in October 2014.
- Treated 74 acres on the WSNA for weeds, and grew over 15,000 native plants at the greenhouse for restoration planning at Warm Springs and the Las Vegas Wash.
- Trimmed palm trees, maintained fire breaks, and replaced fencing to preserve defensible space around structures and Moapa dace streams.
- Maintained and improved Great Basin Ranch properties through building renovations at all Robison ranches, Harbecke and Bastian; improving calving areas, shipping facilities feedlot facilities enhancement to support livestock program; fencing and pond projects on several deeded sites; clearing all ranches of waste.
- Supported better range ecology by controlling livestock distribution, forage utilization and protection of riparian areas with installation of diversion/drift fence between Scotty Meadows and South Spring Valley and replacing Pine Creek collection pond fence; assisting with mitigation of Sage Grouse issued by removal of cross fencing at Meadow Creek and McCoy Ranches.
- Assisted environmental personnel to help protect Pahrump Pool fish by fencing Shoshone livestock ponds located in Scotty Meadows during an emergency situation due to a failed well.
- Increased water resource, energy and manpower efficiency by removal of wheel and hand lines on Wahoo, Phillips and Huntsman properties, replaced with center pivot irrigation systems.
- Rebuilding three Phillips irrigation wells allowed for more efficient and reliable pumping capacity. Installed new pipeline for increased efficiency for livestock watering at Huntsman/Phillips sites.
- Installation of two solar pumps in South Spring Valley to provide reliable stock water.
- Installed three phase line extensions at Bastian Creek for increased energy efficiency and upgraded power source for water well pump.

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- Placed approximately 50 percent of permitted AUMs in non-use for conservation and preservation of range resources.
- Continued to partner with a wide variety of groups on climate change initiatives and worked with the Environmental Protection Agency (EPA) to assess the vulnerability of critical LVVWD and SNWA assets to climate-related impacts.
- Completed all compliance monitoring and reporting for the SNWA's groundwater and surface-water rights associated with the Northern Resources Ranch properties, Groundwater Development Project, Coyote Springs, Garnet and Hidden valleys and the Virgin and Muddy Rivers.
- Analyzed water demand and resource conditions in support of the re-adoption of the 2009 Water Resource Plan and adoption of the 2014 Water Budget by the SNWA Board of Directors.
- Banked between 40,000 and 65,000 acre feet of Nevada's unused Colorado River apportionment in California for future use.
- Performed monthly monitoring of the Colorado River Basin water-supply conditions and the SNWA's water use, and summarized data to convey drought impacts to Southern Nevada.
- Delivered approximately 29,300 acre feet of Tributary Conservation ICS from the Muddy and Virgin Rivers to Lake Mead.
- Participated in the Colorado River Basin Study Next Step process and water-use accounting.
- 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.

- Implemented a maintenance and repair plan to optimize efficiencies of irrigation wells and the development of water rights associated with the Northern Resources Ranch properties.
- Completed water-quality sampling in support of an inter-local agreement with the Clark County Water Reclamation District to characterize the chemistry of the Las Vegas Valley's shallow groundwater system.
- Participated in the annual holiday drive, recycling 2,500 Christmas trees.
- Installed Electric Vehicle charging stations at AMSWTF and RMWTF.
- Supported and implemented the installation of the company-wide single-stream recycling program.

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

2015-16 Performance Objectives

- Annual department expenditures remain within budget.
- Measure fiscal accountability whenever utilizing outsourced vendors, and ensure contractor costs are less than 20 percent of all repair expenditures.

2014-15 Major Accomplishments

- Increased beef and sheep herd numbers substantially to provide future revenue growth.
- Continued to provide proper care and operation of fire protection and life safety systems, climate control for personnel

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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.

- Screened and recycled 600 tons of distribution spoils reducing purchase of new soil, and disposal costs.
- Utilized in-house labor to minimize vendor expenses.
- Negotiated and rebid contracts and service agreements to significantly (up to 20 percent) reduce costs.

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

2015-16 Performance Objectives

- Department staff completes 90 percent of mandatory Knowledge Reservoir training on schedule.
- Department average annual incident rate exhibits a downward trend, based on a five-year average.
- Ensure 90 percent of Facilities preventive maintenance work is completed by the due date.
- Ensure 98 percent or greater, fire and life safety inspections or tests are completed by the due date.
- Measure and monitor the ratio between proactive and reactive Facilities maintenance.
- Perform quarterly reviews of Strategic Plan and Tactics and KPIs will be updated at least quarterly.

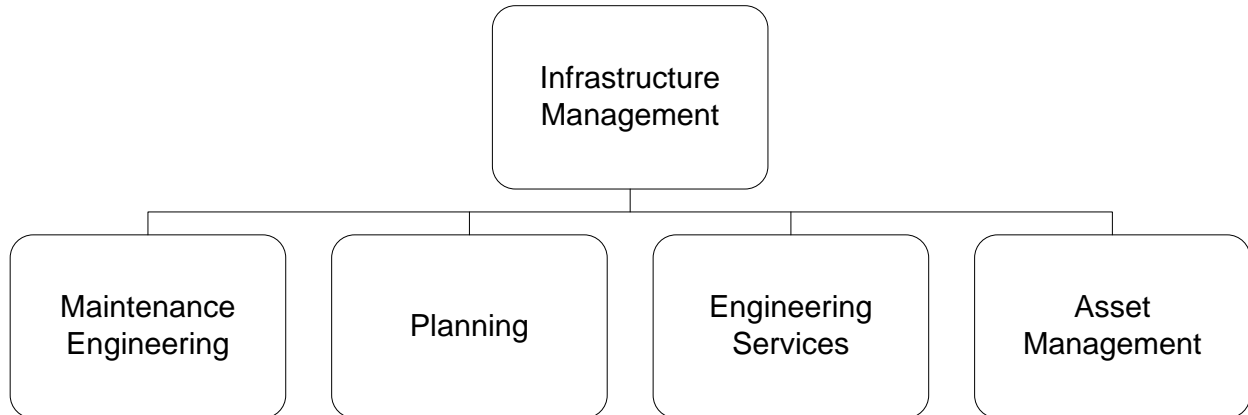
2014-15 Major Accomplishments

- Renovations for safer operation of El Tejon Ranch irrigation lift station; replacement of hazardous irrigation electrical CT stand at Shoshone.
- Successfully completed modifications for safety issues identified by EHS&CS Staff.
- The Facilities division comprised of a team of custodians reliably maintains an orderly, clean and compliant environment at all sites.
- Facilitated approximately 5,000 meeting room set-ups over the past 12-months.
- Through mentoring, increased the proactive work ratio from 14 percent to 26 percent.
- Completed nearly 47,000 Work Tasks over the past 12-months.

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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 and Planning divisions review water plan submittals for proposed development to ensure they meet the LVVWD's construction standards, and provide adequate pressures and fireflow. The Maintenance Engineering division conducts pumping unit efficiency tests, provides technical support, and develops capital projects for the Operating

department. The Asset Management division tests for leaks on large diameter pipelines, provides inspection support, develops future cost projections, and maintains the LVVWD and the SNWA cathodic protection systems. All of these efforts are directly in support of the department's mission.

Budget Objectives and Highlights

The 2015-16 Budget Plan contains a comprehensive view of Infrastructure Management's efforts to maintain costs at current levels. The Infrastructure Management total operating expense budget between the LVVWD and the SNWA increased \$300,000 from budget year 2014-15 to 2015-16. Seven transferred employees and Supervisory Control and Data Acquisition (SCADA) software support are contributing factors to the expense increase. Additionally, the Department will focus efforts into maintaining cathodic protection, SCADA, and the 4-1-1 developer review process.

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Expenditures

| SNWA Uses | Actual 2013-14 | Budget 2014-15 | Budget 2015-16 |
|----------------------------------|---------------------------|---------------------------|---------------------------|
| Materials & Supplies | \$ - | \$ 121,500 | \$ 85,800 |
| Maintenance & Repairs | - | - | 265,000 |
| Rental & Leases | - | 40,000 | - |
| Other Employee Expenses | - | 22,525 | 20,750 |
| Other Expenses | - | 100,500 | 426,700 |
| Total Operating Expenses | \$ - | \$ 284,525 | \$ 798,250 |
| Operating Capital | - | - | 1,171,000 |
| Bond Capital | - | 3,618,977 | 1,681,900 |
| Total Capital | \$ - | \$ 3,618,977 | \$ 2,852,900 |
| Payroll Expenses | 1,710,400 | 2,782,250 | 3,057,319 |
| Total Department Expenses | \$ 1,710,400 | \$ 6,685,752 | \$ 6,708,469 |
| FTE Positions | 9.0 | 14.7 | 16.0 |

Department Performance

Maintenance Engineering. The Maintenance Engineering division is responsible for engineering design enhancements and modifications needed to operate and maintain pumping stations, reservoirs, the pipeline network, and wells in a safe and efficient manner. Specific responsibilities include SCADA and PLC/HMI programming, security system design and equipment procurement, water quality improvement projects, electrical coordination study analysis, electrical equipment pre-purchase, well rehabilitation and maintenance, 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, and facilities improvements. The division also provides day-to-day engineering support for the LVVWD, Big Bend Water District (BBWD), Alfred Merritt Smith Water Treatment Facility (AMSWTF), and River Mountains Water Treatment Facility (RMWTF).

The division is currently managing over 150 projects between the LVVWD and the SNWA, with a budget of more than \$13 million dollars. Major projects include the SCADA upgrade at the SNWA, Automation Controller upgrades at the SNWA and the LVVWD,

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electrical equipment upgrades at wells 83, 84, 45, Rice South Pump Station and Charleston Boulevard, Fayle Pump Station MOV replacements, Eagle tank THM mitigation, Sloan Army Reserve Center Public Water System Nitrate work plan, VFD replacement at BPS2, Simmons ROFC valve replacement, and the ozone and oxygen equipment evaluation and replacement.

Planning. The Planning division provides research, analysis, modeling, and forecasting to support a number of activities at both the LVVWD and the SNWA. It provides long-term forecasts, water use analyses, and conservation analyses to the SNWA as inputs into regional water resource planning, as well as water resource demand projections, population distributions and water demand distributions for the LVVWD, small systems and the recycled water distribution systems. 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 a well-calibrated hydraulic model of the distribution system which is utilized for engineering analysis and decision support.

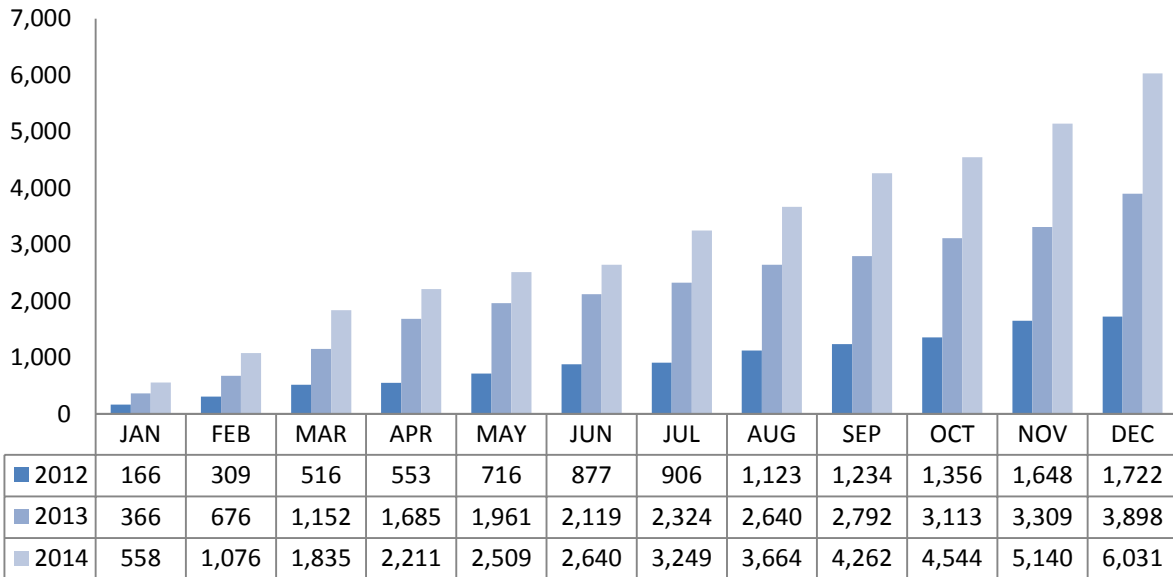
The division locates, sizes and schedules new pumping stations, reservoirs, wells and major pipelines. In coordination with the Operations department, the division develops operating and emergency strategies to improve water quality and reduce energy consumption. The division collaborates with

the Engineering Services division in the review of 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 Water Quality & Treatment 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 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 system additions meet the LVVWD'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 also coordinates with other public works construction to minimize both the LVVWD costs and inconvenience to the public. The following chart represents the LVVWD's cumulative data representing new service points.

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New Service Points
2012-2014 Cumulative New Service Points Received

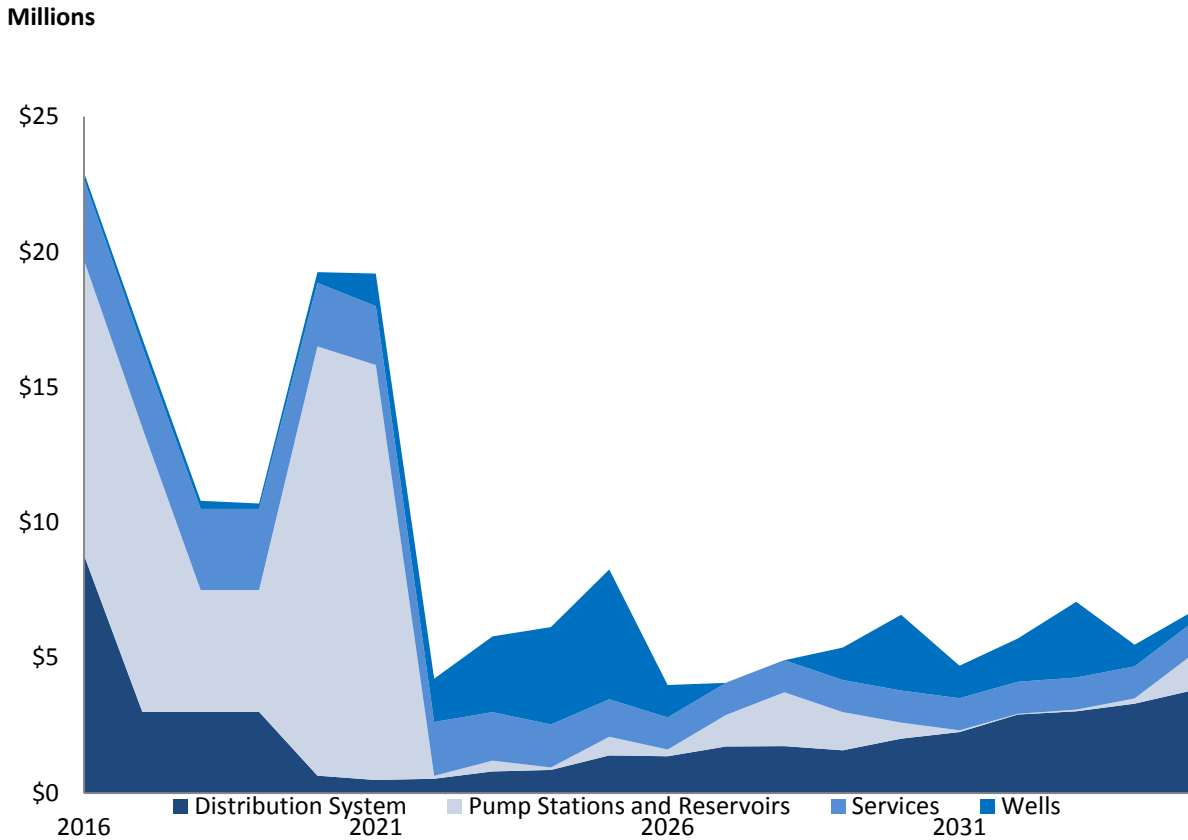


Asset Management. The Asset Management division assesses infrastructure conditions and forecasts short and long-term capital renewal needs to meet service level expectations. The division is responsible for managing the corrosion control program for the LVVWD, SNWA, and associated small systems. The goal of the corrosion control program is to extend the life of steel pipe and other steel structures by applying and maintaining cathodic protection (CP). Corrosion Control Systems Technicians collect annual corrosion data on over 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. The following chart represents the LVVWD’s estimated annual infrastructure renewal needs for all infrastructure including pipelines, service laterals, valves, vaults, wells, pump stations and reservoirs.

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Estimated Annual Infrastructure Renewal Needs



The LVVWD’s distribution infrastructure is comprised of over 4,462 miles of piping, 4-inch in diameter and larger, 1,680 miles of ¾-inch to 3-inch services, 117,715 valves, and 36,801 fire-hydrants. In order to meet conservation objectives and rate-payer expectations, the distribution infrastructure must be maintained, replaced, or rehabilitated at an appropriate level. Currently, the Asset Management division has identified \$14.4 million dollars of pipe renewal projects through its pipe condition assessment and risk ranking program. The division will continue to update renewal needs based on condition assessments, water losses, break rates and overall risk.

Strategic Plan Objectives and Accomplishments

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

2015-16 Performance Objectives

- Replace obsolete site automation equipment with current technology utilizing industry standard protocol.
- Maintain a capital improvements program for the LVVWD and small systems, and monitor and review development to support future growth.
- Monitor and evaluate water quality in the distribution system, and recommend

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improvements in response to changing water quality and regulatory conditions.

- Provide stewardship of the chemical processes used at all water treatment facilities.

2014-15 Major Accomplishments

- Completed the WRC Main Pump Station bypass to improve station discharge pressure control. The existing sleeve valve provided only on-off control of 500 GPM and was unable to control station discharge pressure without major pressure fluctuations. The lack of adequate station discharge pressure control contributed to pressure swings at Cheyenne and Rampart water reclamation system pump stations.
- PLC controller upgrades completed; twenty-one controller upgrades for transmission and twenty-one controller upgrades at the LVVWD.
- Evaluation and mitigation of high TTHMs in the BBWD 1130 Pressure Zone Storage Tank, by providing locations for automatic flushing and options for mitigation.

Strategic Plan Goal – Deliver an outstanding customer service experience.

2015-16 Performance Objectives

- Reduce the length of time to review 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.

- Continue to work with other agencies to include water facility upgrades and replacements in road improvement projects.

2014-15 Major Accomplishments

- Approved 6,031 new water service connections.
- Reviewed 1,368 sets of developer and public works plans for the LVVWD and the SNWA, including brand new submittals, re-submittals and revisions.
- Emergency/drought response for the Kyle Canyon Water System. Evaluated existing operations of water wells under current drought conditions and anticipated when to implement mitigation strategies to keep wells and well pumps operational. Compared costs of well mitigation strategies with those of providing emergency alternative water supplies. Evaluate the water system's ability to cope with future drought and make recommendations for system improvements and mitigations.
- Completed and distributed the 2013 Desert Breeze WRC & RWDS Summary, and assisted Finance with billing discrepancies. Provided guidance to consulting engineers for new development water system design, water age analyses and water quality mitigation plans.
- Completed 9 service connections under the well conversion program, resulting in the abandonment of existing private wells and connections through the Residential Main Extension Program.

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

2015-16 Performance Objectives

- Perform a detailed update of master planning areas and associated facilities needed to serve developed and vacant acreages.
- Keep as-built drawing turnaround time under five months and ensure sponsor receives copy of finished drawings.
- Ensure all budgeted projects are completed on time and within the approved budget.

2014-15 Major Accomplishments

- Maximized the use of grant funding from the Army Corps of Engineers and the State of Nevada for the Arsenic Treatment at Searchlight Well S-2, Searchlight 3732 Zone Pipeline - SR164, and environmental restoration projects.
- Prepared projected revenue and expenditure reports for each of the small systems to monitor availability of funds and to optimize the use of grant funding.
- Incorporated the LVVWD facility replacements and improvements into City, County, and Nevada Department of Transportation projects, reducing future costs and minimizing the public's impact due to construction.
- All record drawing requests are now 100 percent digital, reducing plotter paper and ink supply costs.

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

2015-16 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.
- Conduct regular meetings with team members to discuss all ongoing and upcoming projects, operational issues, and ensure timelines are met.

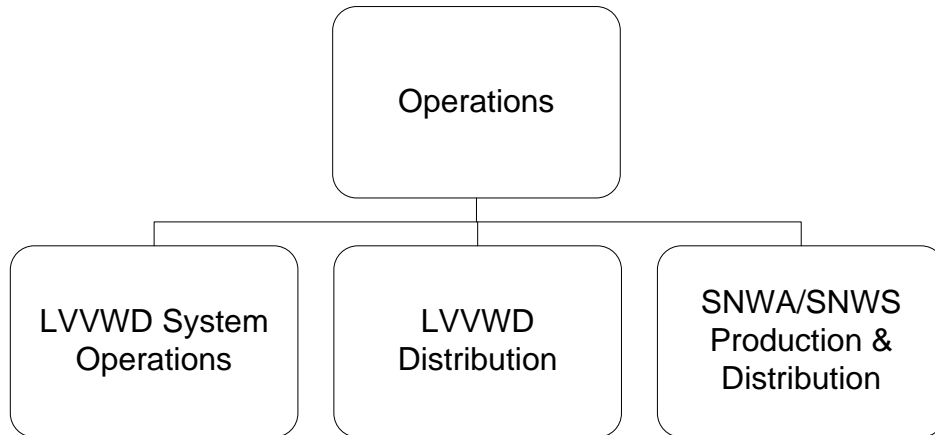
2014-15 Major Accomplishments

- Processed 122 amendments to extend the completion date for agreements/projects.
- The initial steps have been taken to incorporate the survey group into the Digital Review Process, reducing review time for Developer project submittals.
- Conducted on-site UDACS (Uniform Design and Construction Standards) training sessions for five separate engineering firms, specifically to address the needs of each of the firms and to assist them in submitting more accurate plans.
- Processed 1,042 record drawing requests for developer and public works projects for the facilities.

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OPERATIONS

Level: 4200



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

In October 2014, the SNWA/SNWS and LVVWD Operations department's divisions and functions were merged into a single department.

The LVVWD Systems Operations and Distribution divisions are responsible for the day-to-day and long term operation and quality of the LVVWD's water delivery system. The 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.

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.

The Southern Nevada Water System (SNWS) Production and Distribution division is the operation and maintenance department of the SNWA responsible for a regional system of water treatment plants, pumping stations and transmission facilities supplying water to water purveyors in Southern Nevada.

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The primary responsibility of the division is to deliver the water supply drawn from Lake Mead to the following five water purveyors in Southern Nevada: The Cities of Boulder City, Henderson and North Las Vegas, the LVVWD, and Nellis Air Force Base. The SNWS Operations division consists of the Production division which is comprised of the 24/7 operations section, three mechanical sections, two electrical sections, the communications section and the Energy and Data Analysis section. These sections work cooperatively in a team atmosphere to solve daily challenges and meet water delivery requirements of the SNWS.

Budget Objectives and Highlights

Operations' fiscal year 2015-16 overall budget totals \$68,728,268 between the LVVWD and the SNWA. This is the first year's budget as currently organized and will be considered a baseline to compare future budgets against.

The SNWA/SNWS Production division budget represents a continuation of maintaining operations and meeting the 2015-16 budget objectives. The SNWA/SNWS Production division is holding the line on maintenance material costs by rebuilding and repairing failed equipment as opposed to replacement where possible, which is reflective in the budget reduction.

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 \$11,034,917 for the fiscal year 2015-16 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 2015-16 Budget Plan are shown on the following table.

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Expenditures

| SNWA Uses | Actual 2013-14 | Budget 2014-15 | Budget 2015-16 |
|----------------------------------|---------------------------|---------------------------|---------------------------|
| Water | \$ 181,574 | \$ 250,000 | \$ 250,000 |
| Energy | 79,724 | - | - |
| Materials & Supplies | 1,069,301 | 3,288,700 | 1,254,700 |
| Maintenance & Repairs | 101,328 | 280,000 | 280,000 |
| Rental & Leases | 167,035 | 150,000 | 175,000 |
| Other Employee Expenses | 37,008 | 52,700 | 74,300 |
| Other Expenses | 360,948 | 791,041 | 821,350 |
| Total Operating Expenses | \$ 1,996,918 | \$ 4,812,441 | \$ 2,855,350 |
| Operating Capital | 2,259,338 | 2,689,500 | 1,029,000 |
| Bond Capital | - | 2,870,000 | 7,736,617 |
| Total Capital | \$ 2,259,338 | \$ 5,559,500 | \$ 8,765,617 |
| Payroll Expenses | 7,765,386 | 8,022,431 | 7,967,161 |
| Total Department Expenses | \$12,021,642 | \$18,394,372 | \$19,588,128 |
| FTE Positions | 54.3 | 56.7 | 56.7 |

Department Performance

SNWA/SNWS Production and Distribution.

The division is responsible for the operation 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 SNWA/SNWS Production and Distribution division is also responsible for operating and monitoring the system from a central location via the Supervisory Control and Data Acquisition (SCADA) system. Operators control pumps and valves at all pump stations, and monitor flows, tank levels, system pressures, chlorine residuals and other information through the SCADA network. Purveyor 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

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for effective system operation. Over the next two years, the installation of the new SCADA system will continue.

The following table is a comparative listing of the major SNWS water facilities over time:

1998-2015 Increase In Major Water Facilities
Fiscal Year Ending June 30

| <u>Facility Type</u> | <u>1998</u> | <u>2000</u> | <u>2002</u> | <u>2004</u> | <u>2008</u> | <u>2015</u> |
|----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Plant Facilities | 1 | 1 | 2 | 2 | 2 | 3 |
| Plant Capacity | 400 | 600 | 750 | 750 | 900 | 1,015 |
| Metering Stations | 19 | 25 | 30 | 31 | 35 | 36 |
| Pumping Plants | 14 | 21 | 26 | 27 | 28 | 31 |
| Reservoirs and Forebays | 16 | 23 | 27 | 27 | 28 | 32 |
| Rechlorination Facilities | - | 8 | 12 | 12 | 9 | 11 |
| Ozone Treatment Facilities | - | - | 2 | 2 | 2 | 3 |
| Ozone Treatment Capacity | - | - | 750 | 750 | 900 | 1,015 |
| Miles of Pipeline | 77 | 119 | 136 | 155 | 163 | 163 |
| Acres | 122 | 161 | 508 | 508 | 559 | 560 |
| Square Feet | 138,875 | 353,403 | 509,405 | 509,405 | 610,133 | 624,804 |
| Total Facilities | 50 | 78 | 99 | 101 | 104 | 116 |

***Totals include facilities located at Big Bend Water District, Laughlin, NV

The Communications Systems section is responsible for the SNWS communication systems including fiber optics, SONET, T-1 multiplexing, as well as the installation and maintenance of the equipment associated with these systems. This section is also responsible for supporting field devices in the SNWS SCADA system. These responsibilities include the construction of remote terminal units, and installation, maintenance and repair services for the SCADA network hardware equipment. Communications Systems work closely with contractors to ensure the communication needs of SNWS

are not disrupted during new construction. The section repairs all of the SNWS fiber optic and telemetry cables, and manages the SNWS fiber optic and telemetry cable infrastructure.

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

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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). In cooperation with the Water Quality and Treatment department, these sections also maintain all process control monitoring equipment with close tolerance of prescribed limits, ensuring the accuracy and reliability of the high quality water the SNWS delivers to its customers.

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.

The Raw Water Mechanical section is responsible for the raw water facilities including re-staging, repair, refurbishment, and maintenance issues with pumps, motors, and valves associated with Intake Pumping Stations 1 and 2, Booster Pumping Stations 1A and 2, and the Boulder City Raw Pump Station.

The Energy and Data Analysis section's efforts are focused on improving the accountability and efficiency of Production and Distribution and supporting the activities

of the Computerized Maintenance Management System (CMMS). The main areas of emphasis are: Improve the efficiency and the quality of the water billing data; work with our purveyors to increase the reliability and accuracy of the data; develop a methodology for tracking both revenue and non-revenue water flows and quantify the amount of non-revenue water; track pumping costs at every ROFCS in the system; work with the CRC to ensure electric power costs are minimized; measure the efficiency of the pump stations throughout the SNWS system and compare to historical data for accountability; and develop, with the assistance of the CRC accountants, an accurate and timely cost tracking system for the SNWS power costs.

LVVWD Distribution. The Distribution division (Distribution) is responsible for maintaining 6,451 miles of pipeline and laterals, 119,752 valves, 383,337 service laterals, 37,557 fire hydrants, and appurtenances comprising the LVVWD's distribution system. In fiscal year 2013-14, Distribution crews completed 8,714 work orders consisting of repairs to pipelines, and repairing and replacing vales and fire hydrants; additionally, replaced 2,120 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 54,000 of these services have been replaced, leaving 26,000 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.

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Distribution continues the preventative maintenance valve program which locates, operates, and maintains valves within the distribution system. Distribution located and exercised 10,086 valves in fiscal year 2013-14, 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's 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 28,000 backflow prevention devices.

LVVWD Production. The Production division is comprised of seven sections:

Field Booster Pump/Valve Repair
Supervisory Control and Data Acquisition (SCADA)
Disinfection and Reservoir
Pump System Repair
Electrical
Telemetry
Well Crew

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

select small system sites, and recycled water valve vaults.

The SCADA Operations section provides around-the-clock monitoring and control of the water distribution system 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 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.

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's 300 plus motors. Another major responsibility is to maintain the natural gas industrial engines at the Campbell Pumping Station and field deployed emergency generators.

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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.

Strategic Plan Objectives and Accomplishments

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

2015-16 Performance Objectives

- Prepare all equipment and sites to support the Fayle Construction Project to ensure minimal service issues to customers.
- Utilize the reorganized SCADA section to actively develop and implement daily pumping plans.
- Continue rehabilitation work on the pumps at PS1A, 1B, 2A and 2B as well as the cone valves at PSFH and PS1C.
- Repair/replace numerous control valves and actuators through ROFC's at Fayle, Oakey and ROFC No. 6 as well as the isolation valves at Oakey and Fayle.

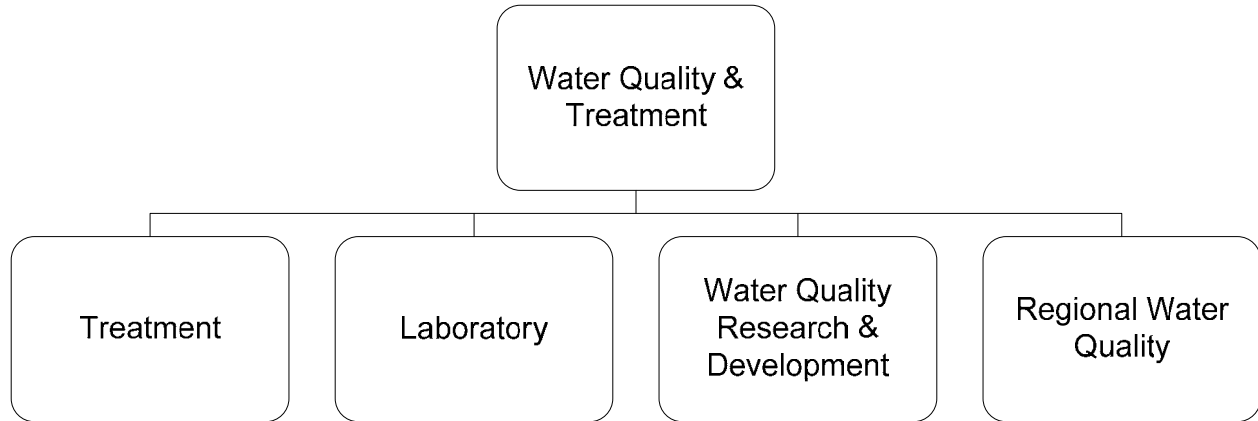
2014-15 Major Accomplishments

- To reduce non-revenue water loss, Distribution is utilizing a system-wide leak detection program (Permalog). This program typically detects leaks before they surface, which in turn reduces the overall damage that can be caused by a long running leak, inconvenience to the LVVWD's customers, and energy costs due to water loss within the distribution system. There were 167 subsurface leaks detected by Permalog for calendar year 2014.

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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, 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 Water Quality 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 two treatment facilities, Alfred Merritt Smith Water Treatment Facility (AMSWTF) and River Mountains Water Treatment Facility (RMWTF), with a combined design treatment capacity of 1 billion gallons per day. The division, through a Supervisory Control and Data

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Expenditures

| SNWA Uses | Actual 2013-14 | Budget 2014-15 | Budget 2015-16 |
|----------------------------------|---------------------------|---------------------------|---------------------------|
| Energy | \$ 64,327 | \$ 150,000 | \$ 100,000 |
| Materials & Supplies | 3,851,686 | 4,066,738 | 4,163,500 |
| Maintenance & Repairs | 856,808 | 971,000 | 1,011,000 |
| Other Employee Expenses | 147,715 | 426,575 | 455,845 |
| Other Expenses | 411,483 | 1,201,525 | 1,278,128 |
| Total Operating Expenses | \$ 5,332,019 | \$ 6,815,838 | \$ 7,008,473 |
| Operating Capital | 2,101,633 | 1,537,645 | 1,217,982 |
| Bond Capital | - | 1,155,000 | 1,090,000 |
| Total Capital | \$ 2,101,633 | \$ 2,692,645 | \$ 2,307,982 |
| Payroll Expenses | 13,057,468 | 13,454,029 | 13,967,882 |
| Total Department Expenses | \$20,491,120 | \$22,962,512 | \$23,284,337 |
| FTE Positions | 82.4 | 84.8 | 87.3 |

Acquisition System (SCADA), 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 optimizing treatment while minimizing cost. One significant area of cost control for treatment operations is in optimal use of treatment chemicals.

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 and testing. 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.

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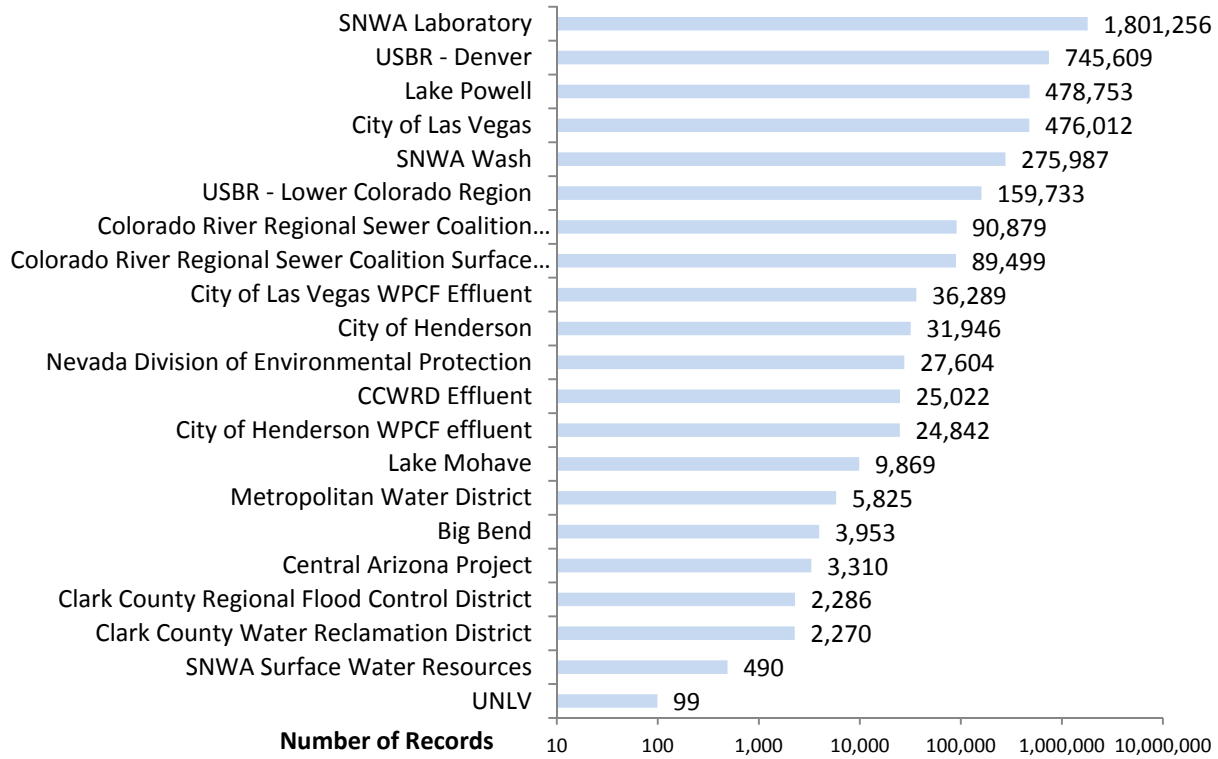
Analyses associated with the SDWA compliance testing are the highest priority in the laboratory. The SDWA requires each public water system to perform or have performed a comprehensive set of analyses on its delivered water. The Laboratory Services section is responsible for scheduling all the routine 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 Southern Nevada water purveyors. The Monitoring, Chemistry and Microbiology sections subsequently perform a variety of analyses on these

samples. In addition, the Laboratory completed all the 2014 SDWA monitoring requirements for the 16 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 36 employees, approximately 36,000 samples were collected and 317,789 analyses performed in 2014. The chart below presents the total number of laboratory analyses through calendar years 2009-2014 (2015 estimate).

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**SNWA Number of Records in Lower Colorado River Water
 Quality Database (Logrithmic Scale) - Dec 2014**



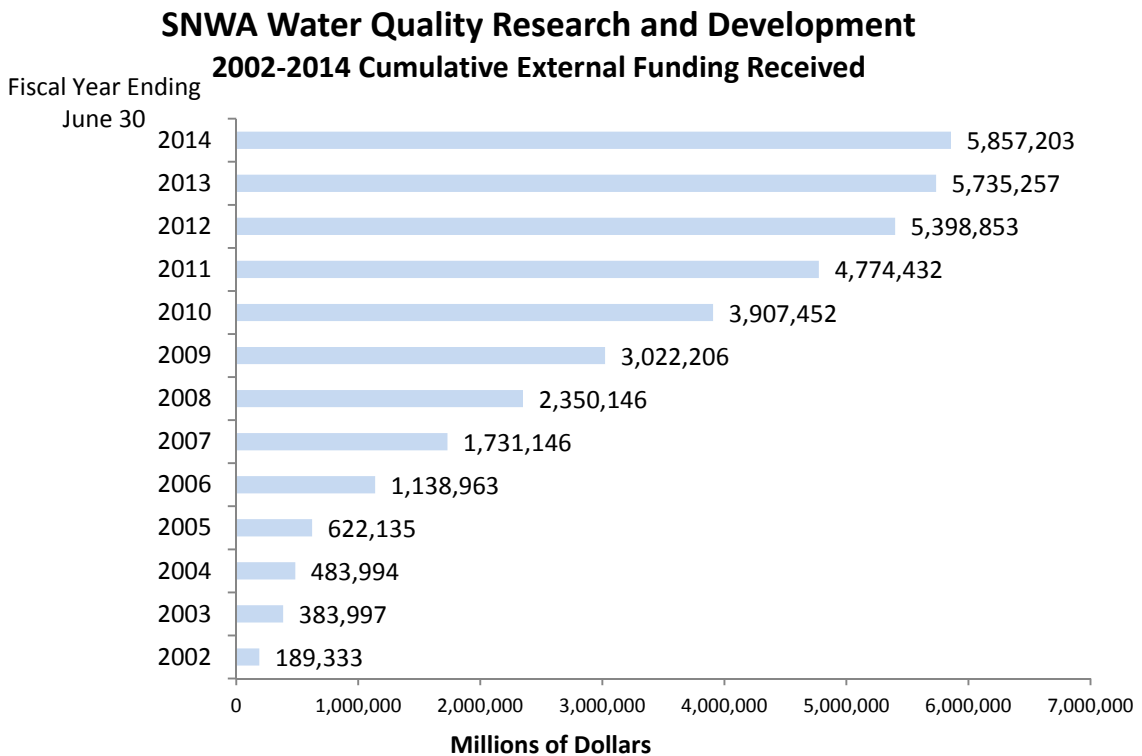
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Water Quality Research and Development.

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 United States 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 mission statement of the R&D Division is: "We perform leading-edge water quality research and provide innovative treatment solutions for the drinking water community." The chart below represents the cumulative amount of water quality research funding received from outside sources through calendar years 2002 - 2014.



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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 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 determine impacts of nutrients, quagga mussels, perchlorate, total dissolved solids, selenium and other contaminants on the water quality in Lake Mead and the drinking water supply.

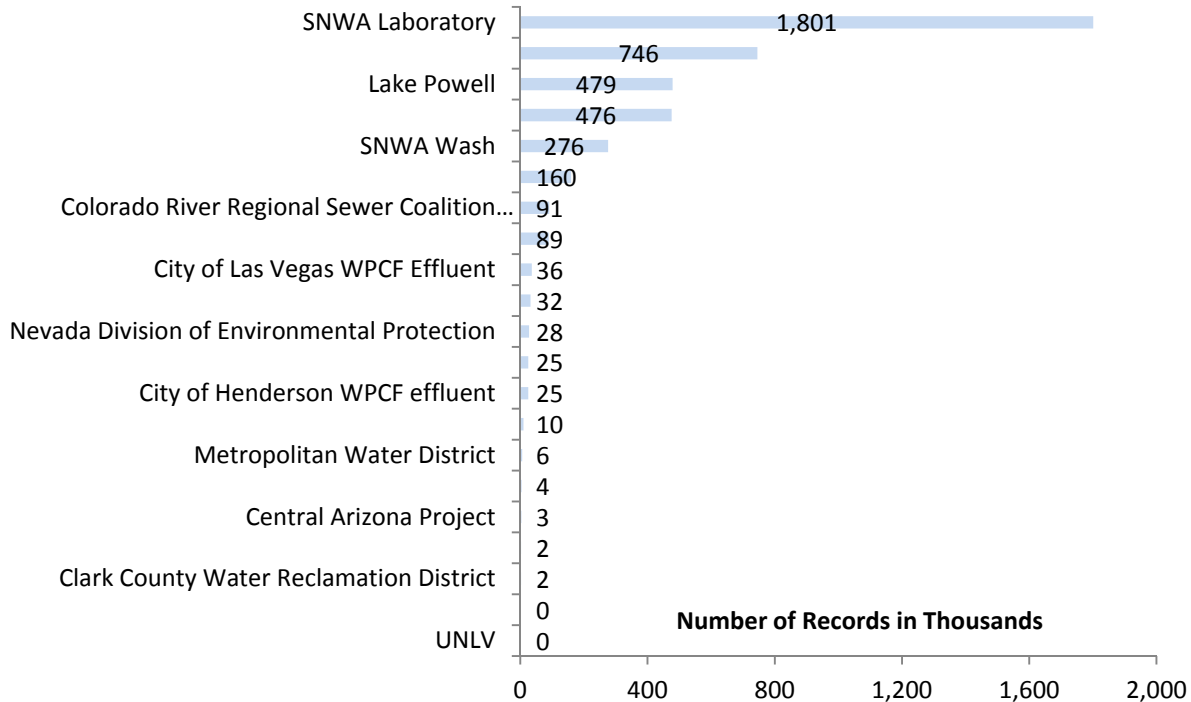
In 2014-15, the Regional Water Quality division received a grant for the amount of \$100,000 from the Clark County Water Reclamation District to develop a shallow groundwater database, conduct monitoring

of the shallow groundwater in the Las Vegas Valley, and to assess the data available for data gaps and make recommendations for future monitoring. The division has also continued the WaterSmart grant funded project to assess the impacts of nutrient released from sediments on the water quality in Lake Mead with low dissolved oxygen conditions using the three dimensional model developed by Flow Science, Inc. In 2014, an approximate 30 mile area of anaerobic water developed in the upper basins of Lake Mead. Modeling will be conducted to replicate these conditions and determine potential phosphorus releases.

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 4,291,533 records in the Database. The chart below 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
 (Logrithmic Scale) - Dec 2014**



Strategic Plan Objectives and Accomplishments

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

2015-16 Performance Objectives

- Complete Flow Science Inc., three dimensional modeling of nutrient flux in Lake Mead using the WaterSmart Grant from the Bureau of Reclamation.
- Commence with the rehabilitation of the filters and associated infrastructure of the AMSWTF.

- Relocate the AMSWTF finished water compliance station to utilize additional disinfection contact time through the clearwells.
- Complete a major overhaul of the RMWTF ozone system mechanical components.
- Complete a comprehensive comparative study of options for the RMWTF sodium hypochlorite generation.
- Begin rehabilitation of the filters at AMSWTF.

2014-15 Major Accomplishments

- Met or surpassed all SDWA requirements for, the Las Vegas Valley Water District

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(LVVWD), SNWS Nellis Air Force Base, Coyote Spring Valley/Moapa (SVM), the Big Bend Water District (BBWD), Blue Diamond, Kyle Canyon, Jean, Searchlight, Apex and the Cities of North Las Vegas (NLV), Henderson, and Boulder City.

- Continued to coordinate with the Metropolitan Water District of Southern California and the Central Arizona Project to ensure they were informed about dewatering activities in the Las Vegas Wash that had the potential to raise the perchlorate concentrations in the Colorado River, and on other water quality issues through the Lower Colorado River Water Quality Partnership.
- Provided document summarizing potential impacts of changes in water quality from Lake Powell on Lake Mead due to the Long Term Experimental and Management Plan (LTEMP). Conducted numerous model runs in support of this effort.
- Constructed second phase of ammonia systems to supply chloramine disinfectant to Intake 3 for quagga mussel control.
- Completed a major overhaul of AMSWTF ozone system mechanical components.
- Completed all SDWA monitoring requirements for the Southern Nevada Water System (SNWS), LVVWD, NLV, Henderson, Boulder City, Nellis Air Force Base, SVM, BBWD, Blue Diamond, Kyle Canyon, Jean, Searchlight, and Kapex.

Strategic Plan Goal – Deliver an outstanding customer service experience

2015-16 Performance Objectives

- Coordinate with internal and external

customers to ensure sampling needs are met.

- Prepare accurate and thorough Water Quality Monitoring Plans for the member agencies.

2014-15 Major Accomplishments

- Established the Customer Service telephone line for water quality concerns.
- Worked directly with the City of Henderson to solve distribution water quality issues.
- Assisted the LVVWD in developing a water quality monitoring plan for the Sloan Army Reserve Center.

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

2015-16 Performance Objectives

- Continued to model Lake Mead using the three dimensional model developed by Flow Sciences Inc., for nutrient flux from sediments in low oxygen conditions and water quality changes in Lake Mead due to temperature changes in the water entering from Lake Powell due to climate change.
- Evaluate and measurably reduce the impact of laboratory operations to the local environment.

2014-15 Major Accomplishments

- Continued to host the Lake Mead Ecosystem Monitoring Workgroup to bring federal, state, and local agencies together to discuss findings from an ecosystem perspective.

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

2015-16 Performance Objectives

- Continue support of various ongoing research projects, including extensive lake and sources monitoring, complex storage/distribution system TTHM monitoring, as well as ad-hoc water quality monitoring requests.
- Initiate research on blending requirements for water from direct potable reuse treatment facilities, simultaneous removal of multiple chemical contaminants using Biofiltration, GAC control of regulated and emerging DBPs of health concern, and major sources of nitrosamine precursors from raw waters and distribution systems.
- The Laboratory division is collaborating with the R&D division to determine efficiency of different treatment techniques for pathogenic free living amoeba species inactivation.

2014-15 Major Accomplishments

- Research to minimize bromate formation using various ozone mass transfer methods.
- Development of analytical methodologies for the detection and characterization of nanoparticles in water.
- Research on formation of nitrosamines and perfluorochemicals during ozonation.
- The Laboratory division supported a number of exploratory and funded projects in the R&D division by providing analytical services.

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

2015-16 Performance Objectives

- Provide timely, accurate and comprehensive sampling schedules.
- Ensure all water quality monitoring requests are responded to in a timely and professional manner.
- Ensure all compliance sampling is scheduled for the member agencies of the SNWA and follows the Water Quality Monitoring Plans, including the start of UCMR3.

2014-15 Major Accomplishments

- Re-negotiated chemical contracts and pricing to lower costs.
- Acquired \$1,336,407 of external funding for water quality research.
- Commenced with a thorough review of maintenance practices.

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

2015-16 Performance Objectives

- Reassess current maintenance scheduling strategy to find and eliminate inefficiencies.
- Develop strategies to address the retirement of staff at the rank of Laboratory Scientist II and instruments approaching obsolescence.
- Restructure the BBWD personnel duties to provide better and more cost efficient customer service.

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- Strengthen the Laboratory Division's manual and automated business processes such that all sampling and analytical requirements for compliance with the State of Nevada drinking water regulations are met.
- Initiate a Treatment Operator intern program with the College of Southern Nevada and initiate an apprenticeship program for the Treatment Operator position.

2014-15 Major Accomplishments

- Prevented more than 2000 lbs. of plastic being dumped in landfills by recycling plastic sampling containers.
- Began efforts to accomplish the President's Award for Water Treatment through a Partnership for Safe Water with the American Water Works Association.
- Developed an Operating Plan for the BBWD to optimally manage the distribution system to comply with the newly implemented EPA Stage II Disinfection Byproducts Rule.
- The RMWTF laboratory sample receiving area was remodeled. The floor plan was modified and space was added to accommodate the receipt of large quantities of samples, ensuring the integrity of each sample is maintained throughout the process.
- Initiated a training program for the Treatment Operator position.

SECTION 6

CAPITAL PLANS



SOUTHERN NEVADA WATER AUTHORITY®

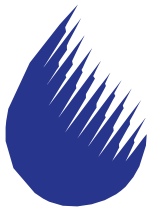
FISCAL YEAR 2015-16

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The following two capital plans include: The 2015 SNWA Major Construction and Capital Plan, which was approved by the SNWA Board of Directors in May 2015, and an abbreviated version of the 2014 Las Vegas Wash Capital Improvements Plan.

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SOUTHERN NEVADA
WATER AUTHORITY

Southern Nevada Water Authority Major Construction and Capital Plan May 2015





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Cover — Project No. 070F 01—Lake Mead Intake No. 3. Tunnel boring machine having arrived on target in the Intake Structure, 350 feet under the surface of Lake Mead, after excavating three miles through difficult and varied geology at water pressures over 200 pounds per square inch.



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Chapter 1—Introduction

Background

The Southern Nevada Water Authority (SNWA) was established in 1991 by cooperative agreement among its members to cooperatively address Southern Nevada's unique water needs on a regional basis. SNWA's mission is to manage the region's water resources and develop solutions that will ensure adequate future water supplies for Southern Nevada.

The members of SNWA are comprised of the following agencies having significant responsibility for regional water resources:

- Big Bend Water District
- City of Boulder City
- City of Henderson
- City of Las Vegas
- City of North Las Vegas
- Clark County Water Reclamation District
- Las Vegas Valley Water District

Efforts to manage Southern Nevada's water resources in a cooperative manner began in the middle of the 20th century when local municipalities, the State of Nevada, and the federal government together began exploring alternatives to deliver Colorado River water to the Las Vegas Valley on an extensive scale. These efforts resulted in a plan for staged financing and construction of the Southern Nevada Water Project. Under the direction of the United States Bureau of Reclamation and the Colorado River Commission of Nevada, the first stage of facilities for pumping, treating and conveying up to 200 million gallons per day of Colorado River water from Lake Mead to the Las Vegas Valley and Boulder City was completed in 1971. An expansion of these facilities to a capacity of 400 mgd was accomplished in 1982. These facilities collectively became known as the Southern Nevada Water System (SNWS).

Ongoing growth in Southern Nevada and increasing demands on the SNWS prompted SNWA to engage community stakeholders in developing a **Capital Improvements Plan (CIP)** to expand the SNWS to a regional capacity of 900 mgd. By 1996, all the projects initiated by the Colorado River Commission over the previous three years and all of the projects identified through the SNWA's integrated planning process had been consolidated into a single CIP. These projects included a second water intake in Lake Mead, a new water treatment facility, and a substantial contingent of water pipeline, pumping, and power supply facilities.

As the progress of the CIP began to approach the goal of a total SNWS capacity of 900 mgd, SNWA recognized that a new capital plan was needed that would provide for accomplishment of capital endeavors that were not directly related to the 900 mgd system capacity goal. Such endeavors could include acquisition of additional water resources, including non-Colorado River resources, system repairs and replacements, water quality enhancements, construction of facilities for increased reliability, and acquisition of energy resources. To identify and authorize these endeavors, in 2002, SNWA created a new capital plan called the **Major Construction and Capital Plan (MCCP)**.

The MCCP has been updated regularly and modified in size and scope since 2002 to appropriately meet the changing water needs of the community. In 2010, given that the original purpose of the CIP had been achieved and given the MCCP's greater role as the dynamic document that defines the future major capi-



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tal initiatives of SNWA, the few remaining projects of the CIP were integrated into the MCCP and the MCCP became the single capital plan combining all authorized capital projects and initiatives into a unified document¹. It reports on the costs of all completed projects of the SNWA. It defines all authorized projects and initiatives for new facilities, acquisition of assets such as water and energy resources, and all other capital related activities. It also identifies estimated costs and schedules for all approved projects and initiatives.

Projects of the MCCP are funded by the Wholesale Delivery Charge and the Regional Funding Plan, or a combination of both. The Regional Funding Plan includes the Regional Connection Charge, Regional Commodity Charge, Regional Reliability Surcharge, State Sales Tax, Southern Nevada Public Land Management Act funds, Regional Infrastructure Surcharge, and SNWA Bond proceeds.

Organization of the MCCP

The MCCP includes a wide variety of projects, acquisitions, and initiatives addressing various objectives. To facilitate clarity and order, projects, acquisitions and initiatives are organized by chapters corresponding to their general purpose or other distinguishing characteristics. Chapters may be added or phased out in future amendments according to current needs and conditions.

The chapters of this issue of the MCCP defining the projects, acquisitions, and initiatives currently approved for implementation are organized as follows:

Chapter 2 - Water Resources. Projects, acquisitions or initiatives defined in this chapter require capital funding but may not involve the construction of SNWA facilities. Examples include planning for and study of future facilities, purchasing water resources, funding for permanent water conservation achievements and participation in resource initiatives that allow Southern Nevada to share in Colorado River storage and efficiency improvements.

Chapter 3 - Power Supplies and Energy Resources. Projects, acquisitions or initiatives described in this chapter are associated with procuring, generating, or transmitting electrical power for the energy requirements of the SNWS.

Chapter 4 - General System Improvements. Projects, acquisitions or initiatives defined in this chapter include construction of new facilities; upgrades; repairs and replacement of existing facilities or equipment to maintain or improve system reliability; and studies or engineering efforts related to the mission of the SNWA.

Chapter 5 - Intake No. 3. The projects defined in this chapter are associated with the establishment of an additional water intake in Lake Mead to preserve the ability of SNWA to deliver water from Lake Mead under drought conditions.

The chapters include brief descriptions of each project, acquisition or initiative. For simplicity, every approved project, acquisition, or initiative described in each chapter is referred to as a “project”. Tables in each chapter provide pertinent information as follows:

¹The Las Vegas Wash Capital Improvements Plan defines projects and initiatives under an authorization and funding program separate from the MCCP. The Las Vegas Wash Capital Improvements Plan is not a part of the MCCP.



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- The expected year of completion for each project, with projects grouped together by expected year of completion.
- Project numbers and titles that are used to facilitate identification and management of project activities and costs.
- Estimated costs to complete each project that include administration, design, construction, and contingency, as appropriate.

Some projects in the tables are indicated to be deferred in response to current economic conditions. The tables include estimated costs to complete deferred projects, but those costs are given in 2009 dollars since that was the last year the costs were estimated before being placed on the deferred list.

In the appendices are found identification of candidate projects, abbreviations and notes, projected future cash flow, cost variances from the previous MCCP amendment, and completed projects.

The MCCP will be periodically revised in response to future reliability, water quality, system capacity, and water resource needs and in accordance with the SNWS Facilities and Operations Agreement. Updates to the MCCP will summarize the current state of the MCCP, highlight changes from the previous published MCCP, and contain revised tables which indicate the current costs and forward direction of the MCCP.

Overview of Current Status

Since the last amendment of the MCCP, five projects with a total cost of \$98.4 million have been completed. Nine previously deferred projects have been reactivated to aid in ensuring the reliability of the SNWS. Three projects have been closed, canceled, or replaced by another related project; most notably the Intake No. 3 Pumping Station project which has been replaced by the new Intake No. 3 Low Lake Level Pumping Station. The cancelation of the previously estimated \$208 million for the Intake No. 3 Pumping Station project substantially offsets the \$650 million cost estimate for the new Low Lake Level Pumping Station. Overall, with the decrease in the estimated costs for other projects and accounting for the costs of completed projects, the estimated total cost of the projects in this MCCP amendment has decreased from the last amendment.

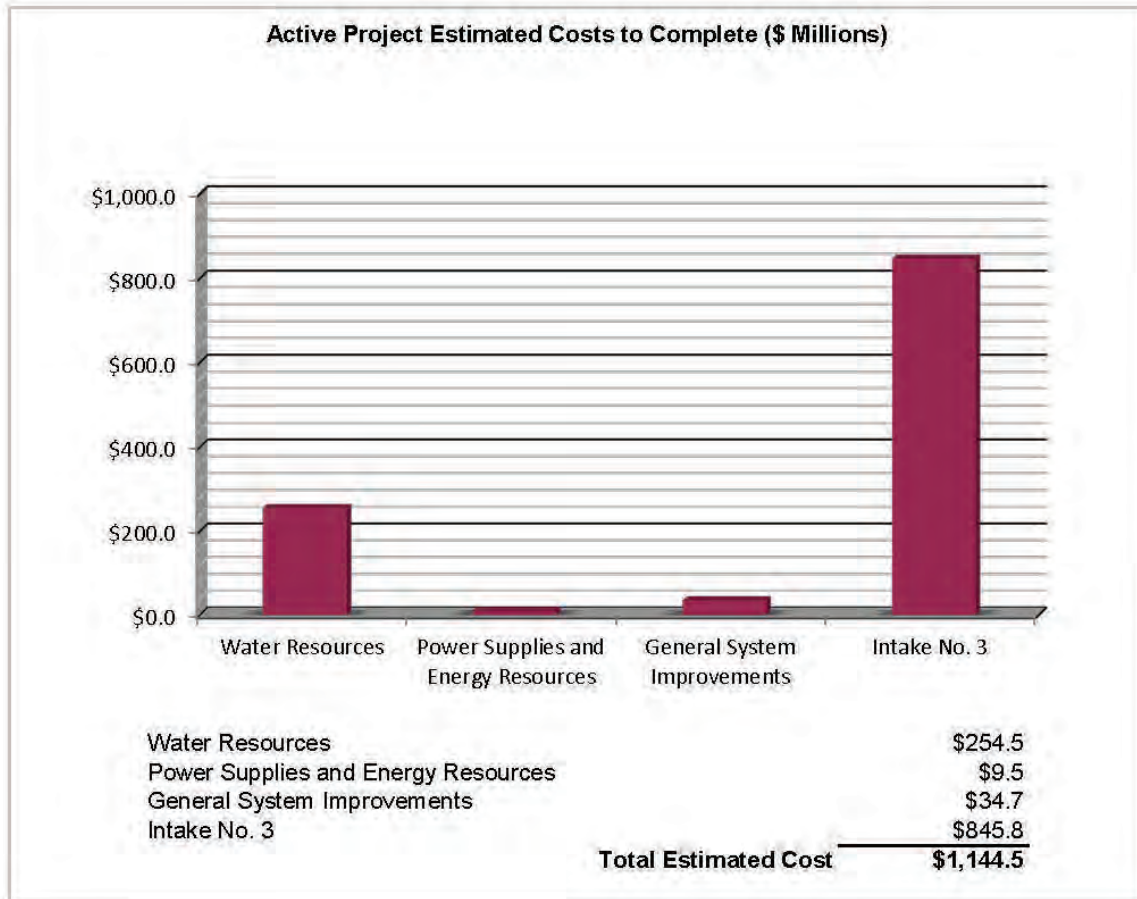
A total of 52 projects are defined by this amendment of the MCCP, not including the completed/closed projects. The current estimated total cost of these projects is \$2,552.4 million. However, 25 projects are deferred to reduce cash flow requirements consistent with current economic conditions. Deferred projects will be in stasis until economic conditions improve or necessity demands that a deferred project be reactivated. The nine projects moved in this amendment from deferred status to active status have an estimated total cost of \$123.5 million. The total estimated savings from the remaining deferred projects is \$112.4 million. The estimated future expenditures for the remaining active projects is \$1,144.5 million.

The 27 active projects identified in this MCCP are in various stages of progress. Water resources and Intake No. 3 projects comprise 96% of all active project costs.

Of these active projects, approximately \$1,289.6 million has already been spent. The following chart shows the estimated costs to complete the combined active projects of the MCCP.



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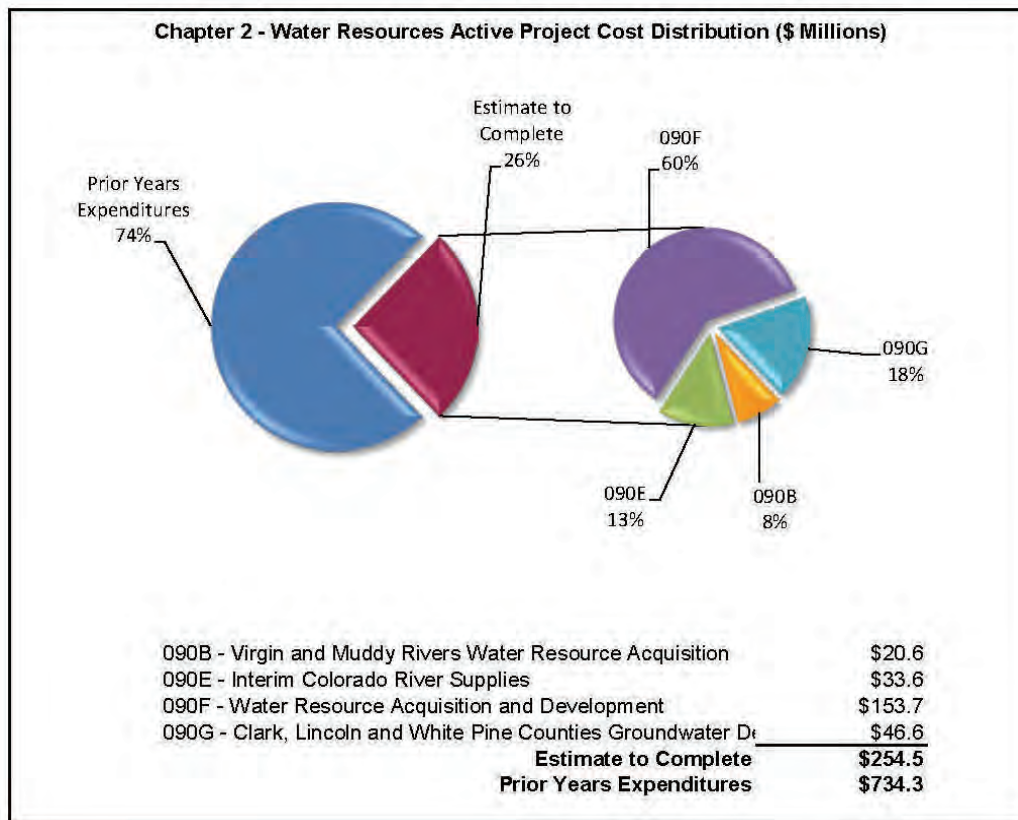
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Chapter 2—Water Resources

Water resource projects require capital funding but may not involve the construction of SNWA facilities. Examples include planning for and study of future facilities to access and convey new water resources, purchasing new water resources, funding for the Water Smart Landscapes Rebate program, and resource initiatives such as Arizona Groundwater Banking. These water resources are more thoroughly defined in the SNWA Water Resource Plan.

The estimated total cost of the active water resources projects is \$988.8 million of which \$734.3 million has been spent and \$254.5 million is the estimated cost to completion as shown in the following chart.





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The summary table below groups the approved projects by the expected year of completion; however, many of these projects are of such a long-term, ongoing character that the identified completion year should be considered as very approximate.

Water Resources

| Project Number and Title | Estimated Cost to Complete (Millions) |
|---|---------------------------------------|
| 2020 Completion Year | |
| 090B Virgin and Muddy Rivers Water Resources Acquisition | \$20.6 |
| 090E Interim Colorado River Supplies | \$33.6 |
| 090F Water Resource Acquisition and Development | \$153.7 |
| 090G Clark, Lincoln and White Pine Counties Groundwater Development | \$46.6 |
| Total Number of Projects = 4 | Total \$254.5 |

Deferred Projects

| Project Number and Title | Estimated Cost to Complete (Millions) |
|---|---------------------------------------|
| 090F06 Water Resource Acquisition and Development—Future Desalination Development | \$27.5 |
| Total Number of Projects = 1 | TOTAL \$27.5 |

Project Descriptions

090B – Virgin and Muddy Rivers Water Resources Acquisition

These costs represent acquisition of water shares in the Muddy Valley Irrigation Company and other water rights on the Muddy River and Virgin River.

090E – Interim Colorado River Supplies

This project includes funding for temporary water supplies: Colorado River system conservation projects, interstate water banking, and SNWA activities with Colorado River basin states that alleviate impacts of the ongoing drought. Colorado River system conservation and drought-related activities develop water resources to bolster Lake Mead water elevation and protect short-term water supplies, water quality, and operation of SNWA intakes. To date, SNWA has banked approximately 600,000 acre-feet of water in Arizona .

Additionally, the Brock Reservoir, completed in 2010, stores water to improve efficiency of the Colorado River system and reduce system losses. Water that would otherwise be delivered to Mexico in excess of treaty obligations is captured for future use in the U.S. By funding this reservoir, the Authority obtained the rights to 400,000 acre-feet of additional Colorado River water. Other expenditures include participation in the Minute 319 pilot project with Mexico whereby U.S. water users invested in infrastructure in Mexico in exchange for a portion of the water saved.



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090F – Water Resource Acquisition and Development

Funding is provided to acquire water rights and develop water resources to meet the needs of the Southern Nevada community. These water resources include the Colorado River, Nevada groundwater, and the Muddy and Virgin Rivers. Funding is also used to manage certain SNWA properties, such as the Warm Springs Natural Area and northern Nevada ranches, for environmental values and sustainability of future water development projects. Additionally, funding is provided for preliminary augmentation activities and studies to help meet long-term future needs, such as desalination and weather modification. This project includes the ongoing costs of the Water Smart Landscapes Rebate program, which permanently removes high water use turf from residences and businesses in favor of low water use landscaping.

090F06 – Water Resource Acquisition and Development – Future Desalination Development

Funding for this project is associated with development of brackish and ocean desalination facilities to help meet the long-term needs of the Southern Nevada community.

090G – Clark, Lincoln and White Pine Counties Groundwater Development

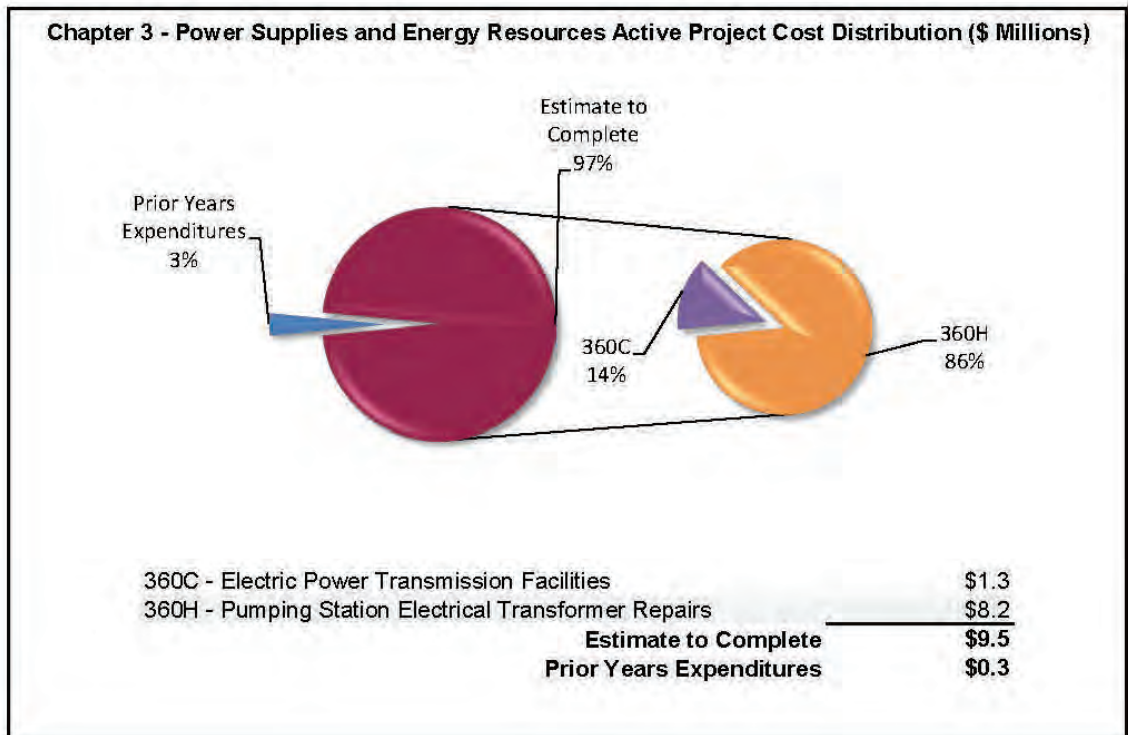
Activities for this project include hydrologic studies, drilling of wells, preliminary facility planning and design, environmental analysis required to secure permits and federal approvals, and other activities to maintain right-of-way grants and water rights for development of groundwater resources in Clark, Lincoln, and White Pine counties. Identified funding for this project does not include design and construction of facilities.



Chapter 3 - Power Supplies and Energy Resources

Projects in this chapter are associated with procuring, generating, or transmitting electrical power for the energy requirements of the SNWS. One project is listed as “deferred” in response to current economic conditions as projects are prioritized according to need and available funding.

The estimated total cost of the active power supplies and energy resources projects is \$9.8 million of which \$.03 million has been spent and \$9.5 million is the estimated cost to completion as shown in the following chart.



Active Projects

| Project Number and Title | Estimated Cost to Complete (Millions) |
|--|---------------------------------------|
| 2017 Completion Year | |
| 360C Electric Power Transmission Facilities | \$1.3 |
| 2018 Completion Year | |
| 360H Pumping Station Electrical Transformer Repairs | \$8.2 |
| Total Number of Projects = 2 | TOTAL \$9.5 |



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Deferred Projects

| Project Number and Title | Estimated Cost to Complete (Millions) |
|--|---------------------------------------|
| 360L Arrow Canyon Energy Recovery Hydroturbine | \$3.7 |
| Total Number of Projects = 1 | TOTAL \$3.7 |

Project Descriptions

360C – Electric Power Transmission Facilities

Plan, design and permit electric power transmission facilities to deliver electric power from generating resources and other power-purchase locations to water pumping and other identified loads.

360H – Pumping Station Electrical Transformer Repairs

Recondition or replace substation transformers and associated switching components at existing pumping stations.

360L – Arrow Canyon Energy Recovery Hydroturbine

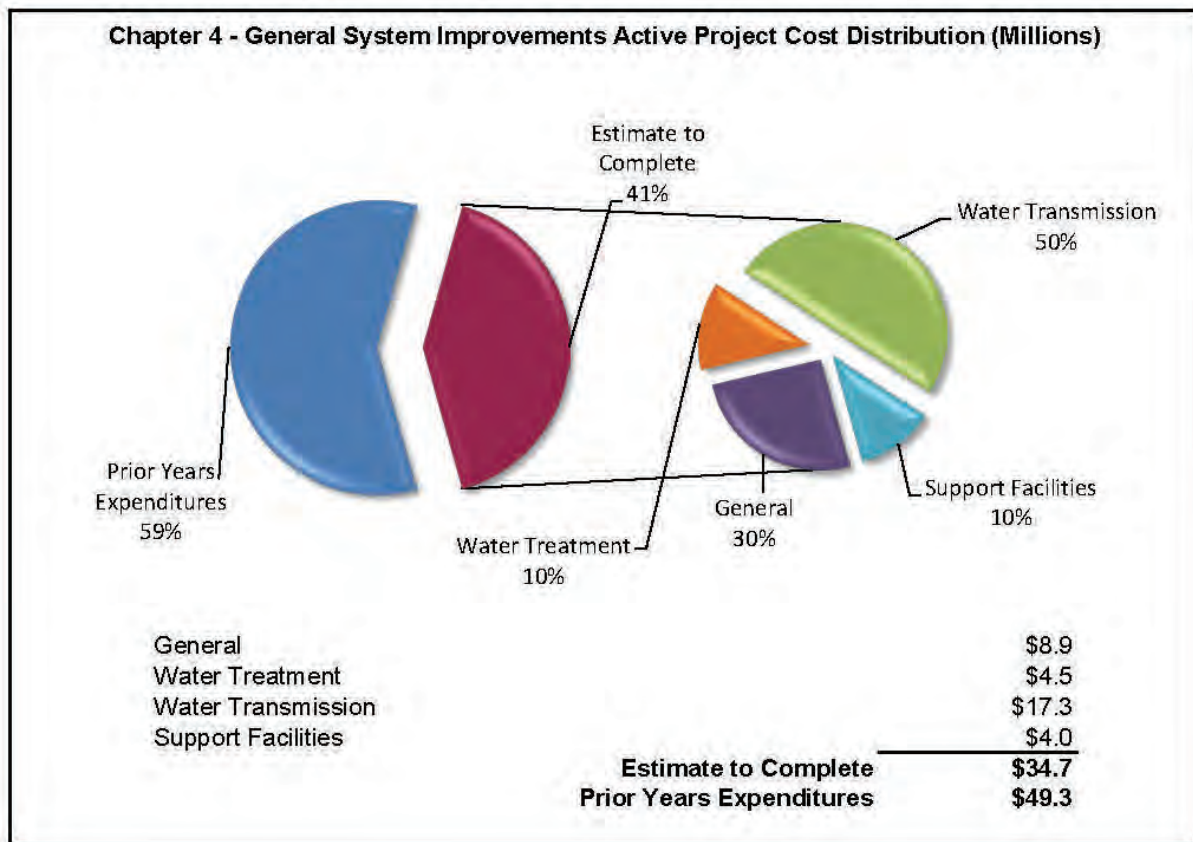
Construct an energy recovery facility on the Coyote Spring Valley to Moapa Valley Transmission Pipeline along with electrical transmission conductors to convey the energy to the power grid. Right-of-Way for this project has been granted by the Bureau of Land Management and a license has been issued by the Federal Energy Regulatory Commission.



Chapter 4 - General System Improvements

Projects, acquisitions or initiatives defined in this chapter include construction of new facilities; upgrades; repairs and replacement of existing facilities or equipment to maintain or improve system reliability; and studies or engineering efforts related to the mission of the SNWA. Some projects are shown to be “deferred” in response to current economic conditions as projects are prioritized according to need and available funding. Completion dates for deferred projects will be evaluated and defined in future M CCP amendments.

The estimated total cost of the active general system improvements projects is \$84.0 million of which \$49.3 million has been spent and \$34.7 million is the estimated cost to completion as shown in the following chart.



Active Projects

| Project Number and Title | Estimated Cost to Complete (Millions) |
|---|---------------------------------------|
| 2015 Completion Year | |
| Water Treatment | |
| 320B Remodel Former AMSWTF Laboratory Spaces | \$0.2 |

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Active Projects — Continued

| Project Number and Title | Estimated Cost to Complete (Millions) |
|---|---------------------------------------|
| 2016 Completion Year—continued | |
| General | |
| 300H Facilities PLC Upgrades | \$0.6 |
| 300M AMSWTF Miscellaneous Facilities Improvements | \$0.3 |
| Water Transmission | |
| 341A Pumping Station 6 Forebay Relining—Phase 2 | \$0.7 |
| 340B PS1A, 2A, 1B, 2B Pump Repairs | \$0.8 |
| 2017 Completion Year | |
| General | |
| 300E Control System Improvements | \$8.0 |
| Water Treatment | |
| 320O AMSWTF Filter Improvements Demonstration | \$4.2 |
| 320P AMSWTF Chlorine Building I Rehabilitation | \$0.1 |
| 340C Hitachi Motor Retrofit | \$2.2 |
| 340T Sloan Pumping Station Foundation Repairs | \$0.1 |
| Water Transmission | |
| 340D PS1C, 2C, BPS1A, BPS2, Sloan and Lamb, Variable Frequency Drive Enhancements | \$2.1 |
| 2018 Completion Year | |
| Water Transmission | |
| 340E Sleeve Valve Installation at Galleria, Simmons and Carlton ROFC Stations | \$2.2 |
| 340V Sleeve and Miscellaneous Valve Repairs | \$4.2 |

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Active Projects — Continued

| Project Number and Title | Estimated Cost to Complete (Millions) |
|--|---------------------------------------|
| 2019 Completion Year — Continued | |
| Water Transmission | |
| 13010H Disinfection Facilities—Horizon/Parkway/Bermuda | \$4.2 |
| 2020 Completion Year | |
| Water Transmission | |
| 340X Simmons ROFCS Pipeline Repairs | \$0.8 |
| Support Facilities | |
| 370Q Machine Shop Equipment | \$4.0 |
| Total Number of Projects = 16 | TOTAL \$34.7 |



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Deferred Projects

| Project Number and Title | Estimated Cost to Complete (Millions) |
|--------------------------------------|---|
| General | |
| 300A | PS6 - Valley View Regulating Tank Security and Offsite Improvements \$0.5 |
| 300K | AMSWTF Flocculation Channel Concrete Repairs \$0.3 |
| 300L | Regulating Tank 6 Onsite and Offsite Improvements \$1.0 |
| Water Supply | |
| 310B | Three Lakes Valley Groundwater Development \$1.6 |
| 310G | Las Vegas Wash Flow Measurement Facility \$0.4 |
| Water Treatment | |
| 320I | AMSWTF Pilot Plant \$0.8 |
| 320Q | AMSWTF Process Drainage Improvements \$0.9 |
| 320T | Water Quality Testing Equipment \$0.8 |
| Water Transmission | |
| 19010D | Bermuda ROFCS Modifications \$0.8 |
| 20010A | Sloan 2160 PS Expansion \$12.9 |
| 20010B | Lamb 2350 PS Expansion \$8.1 |
| 20010C | Decatur 2538 PS Expansion \$8.1 |
| 20010D | Decatur 2350 Reservoir Expansion \$10.0 |
| 340J | Ductile Iron Pump Inspection and Evaluation \$0.3 |
| 340N | Stage II ROFC Isolation Valve Replacements \$1.6 |
| 340Q | Transmission Pipelines Discharge Modifications \$16.8 |
| 340S | South Valley Lateral Isolation Valves - Phase 1 \$10.2 |
| 340U | Valve Operator Access Upgrades \$0.7 |
| 340W | BIF Venturi Flow Control Valve Unit Replacements \$1.3 |
| Support Facility | |
| 370A | Production Group Satellite Facility \$0.2 |
| 370I | Evaporative Cooler Upgrades \$2.8 |
| 370M | AMSWTF Machine Shop HVAC Unit Replacement \$0.1 |
| 370R | RMWTF Fire Alarm System Replacement \$1.1 |
| Total Number of Projects = 23 | TOTAL \$81.3 |



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Project Descriptions – General

300A – PS6 - Valley View Regulating Tank Security and Offsite Improvements

Construct security and off-site improvements, including walls, gates, sidewalks, curbs and gutters, lighting and landscaping at Pumping Station No. 6 and at the Valley View Regulating Tank.

300E – Control System Improvements

Phase 1 of this project defined requirements, evaluated potential systems and developed project criteria for a new Supervisory Control and Data Acquisition System (SCADA) for the entire Southern Nevada Water System. The Phase 2 effort is for design of the recommended system components and initial implementation of the SCADA system replacement.

300H – Facilities PLC Upgrades

Upgrade the programmable logic controllers at the pumping stations and rate-of-flow control stations of the SNWS.

300K – AMSWTF Flocculation Channel Concrete Repairs

Repair deteriorated concrete and access hatches in the area of the flocculation channels at the Alfred Merritt Smith Water Treatment Facility.

300L – Regulating Tank 6 Onsite and Offsite Improvements

Connect the regulating tank overflow pipeline to the Stewart Reservoir overflow system, construct a perimeter wall, and landscape the site.

300M – AMSWTF Miscellaneous Facilities Improvements

Accomplish a range of miscellaneous small improvement projects involving grading, drainage, piping, building, and mechanical and electrical systems.

Project Descriptions – Water Supply

310B – Three Lakes Valley Groundwater Development

Construct approximately 130,000 LF of 30-inch pipeline, up to 9 wells, required treatment facilities, a rate of flow control and hydroturbine facility, monitoring wells, power supply system and related appurtenances.

310G – Las Vegas Wash Flow Measurement Facility

Develop concepts for and construct a flow measurement facility in the Las Vegas Wash downstream of Lake Las Vegas to accurately measure base and flood flows from all sources of the Las Vegas Valley.

Project Descriptions – Water Treatment

320B – Remodel Former AMSWTF Laboratory Spaces

Remodel spaces at the AMSWTF, to include space for group assembly areas, Engineering Support, Emergency Ops, CMMS along with areas for computer servers including SCADA equipment.



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320I – AMSWTF Pilot Plant

Construct a 10,000 square-foot, 10-gpm pilot plant for evaluation and optimization of treatment processes specific to the water quality characteristics at the AMSWTF.

320O – AMSWTF Filter Improvements Demonstration

Rehabilitate filter #1 and #2 at the AMSWTF. This will include the full replacement of the filter media, installation of a new under-drain and rebuild of the associated valves and piping. This project will serve as a pilot for later phases of the overall AMSWTF filter rehabilitations.

320P – AMSWTF Chlorine Building I Rehabilitation

Recalibrate tanker scales, test chlorine piping, and repaint the building.

320Q – AMSWTF Process Drainage Improvements

Incorporate improvements to allow hydraulic components and structures of the Alfred Merritt Smith Water Treatment Facility to be drained more quickly.

320T – Water Quality Testing Equipment

Procure new and replacement equipment for testing water quality characteristics.

Project Descriptions – Water Transmission

13010H – Disinfection Facilities: Horizon/Parkway/Bermuda

The project consists of the mass excavation and structural backfill, construction of three concrete and CMU block chlorination buildings including sodium hypochlorite storage tanks, chemical metering pumps, sampling and control systems, dilution water makeup systems, HVAC electrical, site paving and grading at the three locations. The design capacities differ at each location. Parkway-1 mgd, Bermuda-23 mgd, and Horizon Ridge-14 mgd.

19010D – Bermuda ROFCS Modifications

This project increases the capacity of the Bermuda ROFC Station from 80 mgd to 115 mgd.

20010A – Sloan 2160 PS Expansion

This project increases the capacity of the Sloan Pumping Station from 111 mgd to 175 mgd.

20010B – Lamb 2350 PS Expansion

This project increases the capacity of the Lamb Pumping Station from 111 mgd to 175 mgd.

20010C – Decatur 2538 PS Expansion

This project increases the capacity of the Decatur Pumping Station from 81 mgd to 105 mgd.

20010D – Decatur 2350 Reservoir Expansion

This project increases the capacity of the Decatur Reservoir from 20 MG to 30 MG.



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340B – PS1A, 2A, 1B, 2B Pump Repairs

Repair or replace impellers, shafts, seal rings, bearings, and casings on up to 28 pumps at Pumping Stations 1A, 2A, 1B, and 2B.

340C – Hitachi Motor Retrofit

Procure engineered rotating excitation assemblies to replace failing synchronization modules that are no longer manufactured or repairable. Install the new rotating assemblies in place of the old modules.

340D – PS1C, 2C, BPS1A, BPS2, Sloan and Lamb, Variable Frequency Drive Enhancements

Enhance variable frequency drive capability by installing additional electrical gear for alternate constant speed operation in Pumping Stations 1C, 2C, BPS1A, BPS2, Sloan and Lamb.

340E – Sleeve Valve Installation at Galleria, Simmons and Carlton ROFC Stations

Install sleeve valves to replace existing ball valves at the Galleria, Gibson, Simmons, and Carlton Rate-of-Flow Control Stations.

340J – Ductile Iron Pump Inspection and Evaluation

Inspect and evaluate ductile iron pumps within the Southern Nevada Water System to assess corrosion effects and corrosion protection systems.

340N – Stage II ROFC Isolation Valve Replacements

Replace isolation valves in the Stage II rate-of-flow control stations.

340Q – Transmission Pipelines Discharge Modifications

Modify various discharge facilities on transmission pipelines to improve pipeline drain times and reduce potential impacts from water discharges.

340S – South Valley Lateral Isolation Valves - Phase 1

Construct two isolation valves on the South Valley Lateral proximate to the College, Black Mountain, and Horizon Ridge Rate-of-Flow Control Stations.

340T – Sloan Pumping Station Foundation Repairs

Perform an engineering study to identify best method to make repairs to address differential settlement in structural foundations.

340U – Valve Operator Access Upgrades

Modify valve vault structures, modify valve actuators, and install ladders at facilities on the South Valley Lateral and at the Foothills facilities site to improve operator access to system water valves.

340V – Sleeve and Miscellaneous Valve Repairs

Procure and install replacement valves at selected facilities.

340W – BIF Venturi Flow Control Valve Unit Replacements

Replace 12 existing BIF Venturi flow control valve units with new units.



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340X – Simmons ROFCS Pipeline Repairs

Evaluate and make appropriate repairs to buried pipeline couplings associated with the rate-of-flow control station at the Simmons Pumping Station.

341A – Pumping Station 6 Forebay Relining—Phase 2

Reline the tank, remove precast concrete fascia panels, and evaluate fascia panel bolts for replacement.

Project Descriptions – Support Facilities

370A – Production Group Satellite Facility

Evaluate alternatives for establishing a satellite maintenance facility in the Las Vegas Valley for the SNWS Production Group.

370I – Evaporative Cooler Upgrades

Replace the evaporative coolers at fourteen different pumping stations with more efficient evaporative coolers.

370M – AMSWTF Machine Shop HVAC Unit Replacement

Replace the heating, ventilating, and air conditioning unit in the machine shop at the Alfred Merritt Smith Water Treatment Facility.

370Q – Machine Shop Equipment

To procure special machinery, tools and equipment required to perform maintenance and repairs on the vertical turbine pumps and horizontal split case pumps within the system.

370R – RMWTF Fire Alarm System Replacement

Replace the current fire detection and alarm system at the River Mountains Water Treatment Facility, along with installation of fiber optic communication cables.



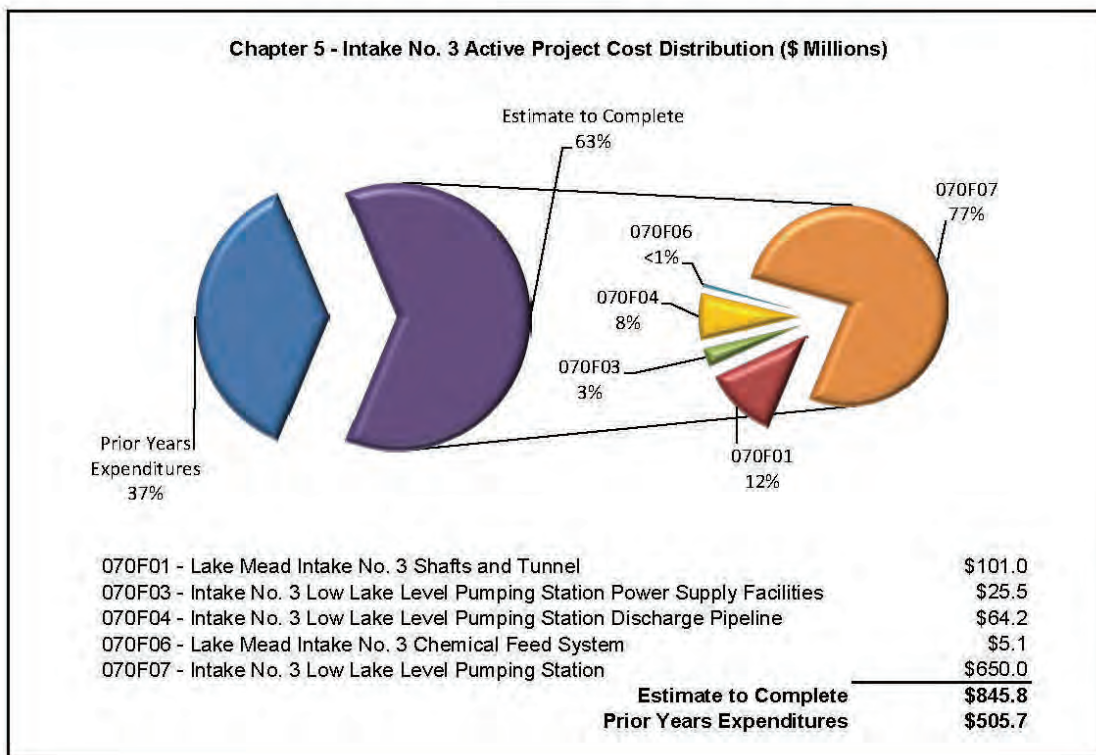
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Chapter 5 - Intake No. 3

The projects defined in this chapter are associated with the establishment of an additional water intake in Lake Mead to preserve the ability of SNWA to deliver water from Lake Mead under drought conditions. Some project components of Intake No. 3 were previously deferred in response to economic conditions, while continuing work on components needed to meet the critical objectives of Intake No. 3 in the near term. By 2015, the deeper intake structure and main conveyance tunnels for Intake No. 3 were near completion. But, with the drought still threatening to drop Lake Mead water levels below the minimum operating levels of the existing pumping stations, in 2014, the Integrated Resource Planning Advisory Committee and the SNWA Board of Directors agreed that construction of a new pumping station for Intake No. 3 should proceed on the swiftest feasible time frame. The previously deferred pumping station and related components have been re-activated, although with greater capacities than previously contemplated to provide better protection from the most severe drought impacts. As a result, costs for the re-activated pumping station are substantially higher than previously forecast.

The estimated total cost of the active Intake No. 3 projects is \$1,351.5 million of which \$505.7 million has been spent and \$845.8 million is the estimated cost to completion as shown in the following chart.



Active Projects

| Project Number and Title | Estimated Cost to Complete (Millions) |
|--|---------------------------------------|
| 2015 Completion Year | |
| Water Supply | |
| 070F01 Lake Mead Intake No. 3 Shafts and Tunnel | \$101.0 |

Continues on next page



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Active Projects — Continued

| Project Number and Title | Estimated Cost to Complete (Millions) |
|--|---------------------------------------|
| 2015 Completion Year—continued | |
| Water Supply | |
| 070F06 Lake Mead Intake No. 3 Chemical Feed System | \$5.1 |
| 2018 Completion Year | |
| Water Supply | |
| 070F03 Intake No. 3 Low Lake Level Pumping Station Power Supply Facilities | \$25.5 |
| 2020 Completion Year | |
| Water Supply | |
| 070F04 Intake No. 3 Low Lake Level Pumping Station Discharge Pipelines | \$64.2 |
| 070F07 Intake No. 3 Low Lake Level Pumping Station | \$650.0 |
| Total Number of Projects = 5 | Total \$849.3 |

Project Description

070F01 - Lake Mead Intake No. 3 Shafts and Tunnel

Construct a submerged water intake shaft or riser structure on the lake bottom with an intake elevation of 860 feet, along with approximately 3 miles of 20-foot diameter tunnel under the lake from the new intake shaft to a new access shaft at the shoreline of Lake Mead near the Alfred Merritt Smith Water Treatment Facility. This intake and tunnel will replace the at-risk capacity of the existing intakes, provide access to the better quality water deeper in the lake, and allow for operation of the future Intake No. 3 Low Lake Level Pumping Station.

070F03 - Intake No. 3 Low Lake Level Pumping Station Power Supply Facilities

Construct new power transmission lines and a power substation to supply electric power for the new pumping station.

070F04 - Intake No. 3 Low Lake Level Pumping Station Discharge Pipelines

Construct pipelines to convey water from the new pumping station to the Alfred Merritt Smith Water Treatment Facility and the River Mountains Water Treatment Facility.

070F06 - Lake Mead Intake No. 3 Chemical Feed System

Construct the chemical feed systems required to control quagga mussels in the water intake systems. The work of this project includes evaluation of alternatives, preliminary design, design and construction in two phases. The first phase will provide chemical feed facilities for existing intakes and the second phase will provide the chemical feed system for Intake No. 3.



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070F07 - Intake No. 3 Low Lake Level Pumping Station

Construct a 900 million gallon per day pumping station to convey water from the new Intake No. 3 to the existing treatment facilities, 600 mgd to the Alfred Merritt Smith Water Treatment Facility and 300 mgd to the River Mountains Water Treatment Facility. This pumping station 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.



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Appendix A - Candidate Projects

The following projects are candidates for potential future approval. These candidate projects are conceptual, with uncertain schedule and cost projections that are subject to change. As more definitive information about the possible scope and schedule of these projects becomes available, they may become active projects in future amendments of this document or they may be dropped from further consideration. Estimated costs are not part of the total cost of the MCCP.

| Project Title | Estimated Cost (Millions) |
|--|---------------------------|
| City of Henderson Rate-of-Flow Control Station | \$10.0 |
| Losee Rate-of-Flow Control Station | \$10.0 |



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Appendix B - Abbreviations and Notes

Abbreviations

| | | |
|-------|---|---------------------------------|
| AMS | - | Alfred Merritt Smith |
| AWBA | - | Arizona Water Banking Authority |
| AFY | - | Acre Feet per Year |
| BPS | - | Booster Pumping Station |
| CRC | - | Colorado River Commission |
| EVL | - | East Valley Lateral |
| GAC | - | Granular Activated Carbon |
| GWD | - | Groundwater Development |
| HWL | - | High Water Level |
| IPS | - | Intake Pumping Station |
| ISWR | - | In-state Water Resources |
| MG | - | Million Gallons |
| mgd | - | Million Gallons per Day |
| NVL | - | North Valley Lateral |
| PS | - | Pumping Station |
| RM | - | River Mountains |
| ROFCS | - | Rate of Flow Control Station |
| SNWA | - | Southern Nevada Water Authority |
| SNWS | - | Southern Nevada Water System |
| SVL | - | South Valley Lateral |
| WTF | - | Water Treatment Facility |

Notes

Category Descriptions

General category projects include control systems, security and building improvements and upgrades, and other work that does not fall under categories listed below.

Water Supply projects relate to new water or water supply, groundwater facility planning and development, and construction and installation of equipment and facilities.

Water Treatment projects in this category include water treatment studies, pilot plant construction, repair of existing treatment system components, equipment purchase and installation to improve water quality.

Water Transmission projects in this category relate to the development of new water transmission facilities, pipeline repair, and equipment purchase and installation to improve or maintain water transmission capabilities.

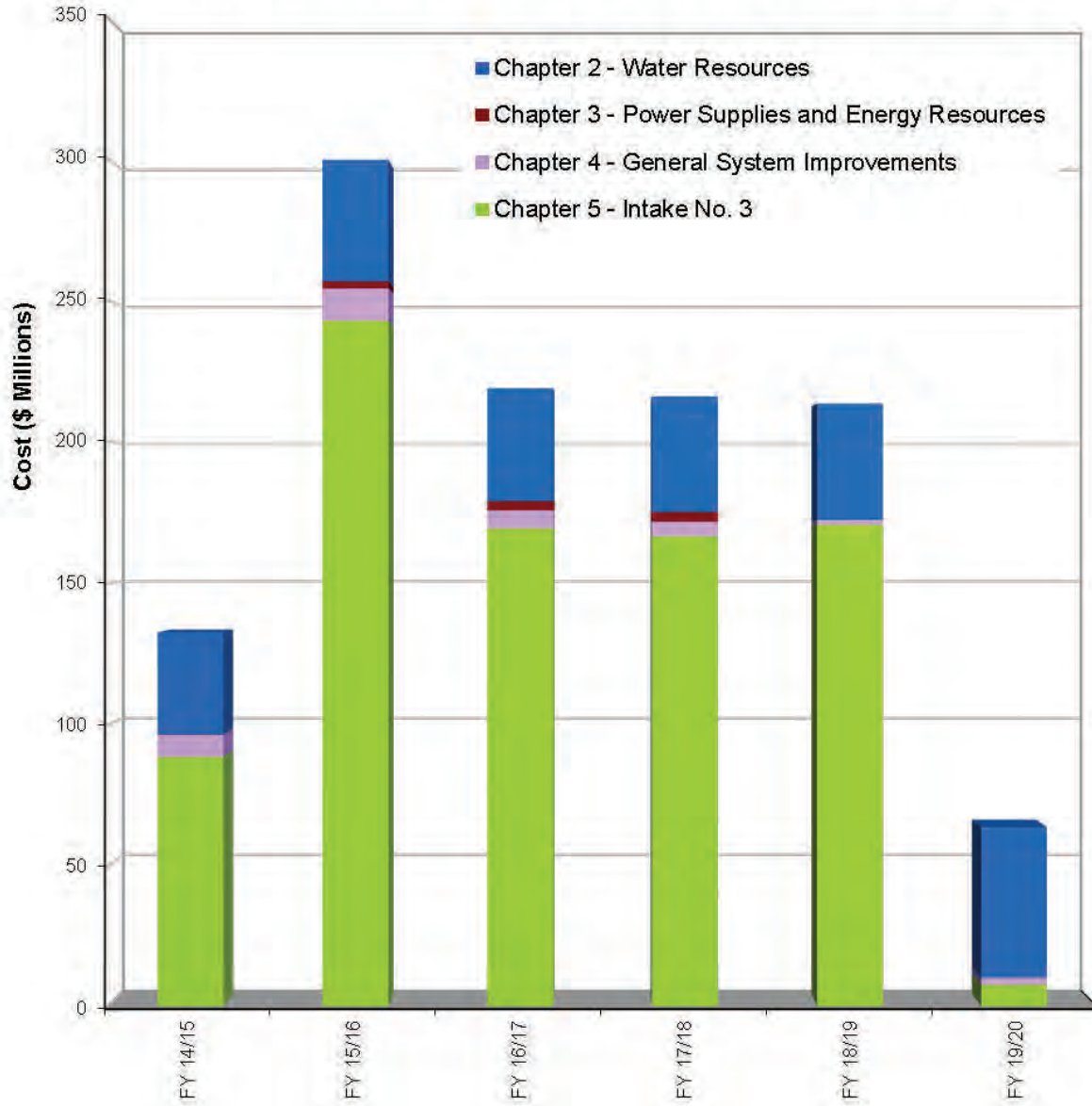
Support Facilities includes projects that are required to support and maintain the operation of the regional water delivery system.



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Appendix C - Cash Flow

Projected Cash Flow (active projects as of June 30, 2014)



| | FY 14/15 | FY 15/16 | FY 16/17 | FY 17/18 | FY 18/19 | FY 19/20 | Total |
|---|--------------|--------------|--------------|--------------|--------------|-------------|----------------|
| Chapter 2 - Water Resources | 36.0 | 43.0 | 39.9 | 40.9 | 41.2 | 53.5 | 254.5 |
| Chapter 3 - Power Supplies and Energy Resources | 0.2 | 2.5 | 3.3 | 3.5 | - | - | 9.5 |
| Chapter 4 - General System Improvements | 7.7 | 11.5 | 6.2 | 5.0 | 1.7 | 2.6 | 34.7 |
| Chapter 5 - Intake No. 3 | 88.7 | 242.8 | 169.5 | 166.7 | 170.6 | 7.5 | 845.8 |
| Total | 132.6 | 299.8 | 218.9 | 216.1 | 213.5 | 63.6 | 1,144.5 |



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Appendix D - Variance Report

Active and Completed Projects

| Project No. | Project Title | Cost (\$ Millions) ¹ | | | | | |
|--|--|---------------------------------|----------------------------|---------------|--------------|--------------------------------|----------------------|
| | | Est. Project Cost Feb 2011 MCCC | Est. Project Cost May 2015 | Adjustment | New Projects | Actual Costs thru Jun 30, 2014 | Estimate to Complete |
| Chapter 2 - Water Resources | | | | | | | |
| 090B | Virgin and Muddy Rivers Water Resource Acquisition | 134.8 | 137.2 | 2.4 | | 116.6 | 20.6 |
| 090E | Interim Colorado River Supplies | 527.9 | 271.2 | -256.7 | | 237.6 | 33.6 |
| 090F | Water Resource Acquisition and Development | 389.4 | 345.4 | -44.0 | | 191.7 | 153.7 |
| 090G | Clark, Lincoln and White Pine Counties Groundwater Development | 254.8 | 235.0 | -19.8 | | 188.4 | 46.6 |
| | | 1,306.9 | 988.8 | -318.1 | 0.0 | 734.3 | 254.5 |
| Chapter 3 - Power Supplies and Energy Resources | | | | | | | |
| 360C | Electric Power Transmission Facilities | 6.4 | 1.6 | -4.8 | | 0.3 | 1.3 |
| 360H | Pumping Station Electrical Transformer Repairs ⁴ | 0.9 | 8.2 | 7.3 | | 0.0 | 8.2 |
| 360M | Renewable Energy Project Development ⁷ | 6.5 | 3.4 | -3.1 | | 3.4 | 0.0 |
| | | 13.8 | 13.2 | -0.6 | 0.0 | 3.7 | 9.5 |
| Chapter 4 - General System Improvements | | | | | | | |
| 13010H | Disinfection Facilities - Horizon/Parkway/Bermuda ⁴ | 3.6 | 4.5 | 0.9 | | 0.3 | 4.2 |
| 300E | Control System Improvements | 33.6 | 37.6 | 4.0 | | 29.6 | 8.0 |
| 300H | Facilities PLC Upgrades | 4.9 | 5.4 | 0.5 | | 4.8 | 0.6 |
| 300M | AMSWTF Miscellaneous Facilities Improvements | 0.6 | 0.5 | -0.1 | | 0.2 | 0.3 |
| 320B | Remodel Former AMSWTF Laboratory Spaces ⁴ | 2.0 | 0.8 | -1.2 | | 0.6 | 0.2 |
| 320F | AMSWTF Filtration System Valve Repairs ⁷ | 1.9 | 0.1 | -1.8 | | 0.1 | 0.0 |
| 320N | AMSWTF A & B Clearwells Slide Gate Actuators ² | 0.4 | 0.3 | -0.1 | | 0.3 | 0.0 |
| 320O | AMSWTF Filter Improvements Demonstration ⁴ | 0.8 | 4.2 | 3.4 | | 0.0 | 4.2 |
| 320P | AMSWTF Chlorine Building 1 Rehabilitation | 0.3 | 0.1 | -0.2 | | 0.0 | 0.1 |
| 340B | PS 1A, 2A, 1B and 2B Pump Repairs | 0.6 | 1.6 | 1.0 | | 0.8 | 0.8 |
| 340C | Hitachi Motor Retrofit ⁴ | 9.4 | 10.5 | 1.1 | | 8.3 | 2.2 |
| 340D | PS 1C, 2C, Sloan, Lamb, BPS1A, & BPS2 Variable Frequency Drive Enhancements | 2.3 | 4.3 | 2.0 | | 2.2 | 2.1 |
| 340E | Sleeve Valve Installation at Galleria, Simmons and Carlton ROFC Stations | 0.6 | 2.5 | 1.9 | | 0.3 | 2.2 |
| 340R | Transmission Pipelines Cathodic Corrosion Protection System Repairs - Phase 2 ² | 9.8 | 7.7 | -2.1 | | 7.7 | 0.0 |
| 340T | Sloan Pumping Station Foundation Repairs ⁴ | 0.2 | 0.1 | -0.1 | | 0.0 | 0.1 |
| 340V | Sleeve and Miscellaneous Valve Repairs | 2.2 | 6.3 | 4.1 | | 2.1 | 4.2 |
| 340X | Simmons ROFCS Pipeline Repairs | 1.8 | 0.9 | -0.9 | | 0.1 | 0.8 |
| 341A | Pumping Station 6 Forebay Relining - Phase 2 | 0.0 | 0.7 | 0.7 | 0.7 | 0.0 | 0.7 |
| 370O | AMSWTF Utility Building Air Handler Replacement ² | 0.3 | 0.3 | 0.0 | | 0.3 | 0.0 |
| 370Q | Machine Shop Equipment ⁴ | 2.7 | 4.0 | 1.3 | | 0.0 | 4.0 |
| 370S | Mold Abatement at River Mountains Water Treatment Facility ² | 0.3 | 0.3 | 0.0 | | 0.3 | 0.0 |
| | | 78.3 | 92.7 | 14.4 | 0.7 | 58.0 | 34.7 |
| Chapter 5 - Intake No. 3 | | | | | | | |
| 070F01 | Lake Mead Intake No. 3 Shafts and Tunnel | 686.0 | 602.8 | -83.2 | | 501.8 | 101.0 |
| 070F02C2 | Intake No. 3 - Connector Tunnel ² | 88.2 | 89.8 | 1.6 | | 89.8 | 0.0 |
| 070F03 | Intake No. 3 Low Lake Level Pumping Station Power Supply Facilities ⁴ | 9.0 | 25.5 | 16.5 | | 0.0 | 25.5 |
| 070F04 | Intake No. 3 Low Lake Level Pumping Station Discharge Pipeline ⁴ | 29.3 | 65.7 | 36.4 | | 1.5 | 64.2 |
| 070F06 | Lake Mead Intake No. 3 Chemical Feed System | 3.8 | 7.5 | 3.7 | | 2.4 | 5.1 |
| 070F07 | Intake No. 3 Low Lake Level Pumping Station | 0.0 | 650.0 | 650.0 | 650.0 | 0.0 | 650.0 |
| | | 816.3 | 1,441.3 | 625.0 | 650.0 | 595.5 | 845.8 |
| Active and Completed Projects Total | | 2,215.3 | 2,536.0 | 320.7 | 650.7 | 1,391.5 | 1,144.5 |



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Appendix D - Variance Report — Continued

Deferred Projects ³

| Project No. | Project Title | Cost (\$ Millions) | | | | | |
|--|--|----------------------------|----------------------------|---------------|--------------|--------------------------------|----------------------|
| | | Est. Project Cost Feb 2011 | Est. Project Cost May 2015 | Adjustment | New Projects | Actual Costs thru Jun 30, 2014 | Estimate to Complete |
| Chapter 2 - Water Resources | | | | | | | |
| 090F06 | Water Resource Acquisition and Development - Future Desalination Development | 54.3 | 27.5 | -26.8 | | 0.0 | 27.5 |
| | | 54.3 | 27.5 | -26.8 | 0.0 | 0.0 | 27.5 |
| Chapter 3 - Power Supplies and Energy Resources | | | | | | | |
| 360L | Arrow Canyon Energy Recovery Hydroturbine ⁶ | 3.7 | 3.7 | 0.0 | | 0.1 | 3.6 |
| | | 3.7 | 3.7 | 0.0 | 0.0 | 0.1 | 3.6 |
| Chapter 4 - General System Improvements | | | | | | | |
| 19010D | Bermuda ROFCs Modifications | 0.8 | 0.8 | 0.0 | | 0.0 | 0.8 |
| 20010A | Sloan 2160 PS Expansion (64 mgd/175 mgd total) | 12.9 | 12.9 | 0.0 | | 0.0 | 12.9 |
| 20010B | Lamb 2350 PS Expansion (64 mgd/175 mgd total) | 8.1 | 8.1 | 0.0 | | 0.0 | 8.1 |
| 20010C | Decatur 2538 PS Expansion (24 mgd/78 mgd total) | 8.1 | 8.1 | 0.0 | | 0.0 | 8.1 |
| 20010D | Decatur 2350 Reservoir Expansion (10 MG/30 MG total) | 10.0 | 10.0 | 0.0 | | 0.0 | 10.0 |
| 300A | PS6 - Valley View Regulating Tank Security and Offsite Improvements | 1.2 | 1.2 | 0.0 | | 0.7 | 0.5 |
| 300K | AMSWTF Flocculation Channel Concrete Repairs | 0.3 | 0.3 | 0.0 | | 0.0 | 0.3 |
| 300L | Regulating Tank 6 Onsite and Offsite Improvements | 1.0 | 1.0 | 0.0 | | 0.0 | 1.0 |
| 310B | Three Lakes Valley Groundwater Development | 4.1 | 4.1 | 0.0 | | 2.5 | 1.6 |
| 310G | Las Vegas Wash Flow Measurement Facility | 0.4 | 0.4 | 0.0 | | 0.0 | 0.4 |
| 320I | AMSWTF Pilot Plant | 1.3 | 1.3 | 0.0 | | 0.5 | 0.8 |
| 320Q | AMSWTF Process Drainage Improvements | 1.1 | 1.1 | 0.0 | | 0.2 | 0.9 |
| 320T | Water Quality Testing Equipment | 0.8 | 0.8 | 0.0 | | 0.0 | 0.8 |
| 340J | Ductile Iron Pump Inspection and Evaluation | 0.3 | 0.3 | 0.0 | | 0.0 | 0.3 |
| 340N | Stage II ROFC Isolation Valve Replacements | 3.5 | 2.0 | -1.5 | | 0.4 | 1.6 |
| 340Q | Transmission Pipelines Discharge Modifications | 17.9 | 18.3 | 0.4 | | 1.5 | 16.8 |
| 340S | South Valley Lateral Isolation Valves - Phase 1 | 10.4 | 10.2 | -0.2 | | 0.0 | 10.2 |
| 340U | Valve Operator Access Upgrades | 0.7 | 0.7 | 0.0 | | 0.0 | 0.7 |
| 340W | BIF Venturi Flow Control Valve Unit Replacements | 2.8 | 1.3 | -1.5 | | 0.0 | 1.3 |
| 370A | Production Group Satellite Facility | 0.2 | 0.2 | 0.0 | | 0.0 | 0.2 |
| 370I | Evaporative Cooler Upgrades | 2.8 | 2.8 | 0.0 | | 0.0 | 2.8 |
| 370M | AMSWTF Machine Shop HVAC Unit Replacement | 0.1 | 0.1 | 0.0 | | 0.0 | 0.1 |
| 370R | RMWTF Fire Alarm System Replacement | 1.1 | 1.1 | 0.0 | | 0.0 | 1.1 |
| | | 89.9 | 87.1 | -2.8 | 0.0 | 5.8 | 81.3 |
| Chapter 5 - Intake No. 3 | | | | | | | |
| 070F02C1 | Intake No. 3 Pumping Station ^{5,7} | 229.9 | 21.9 | -208.0 | | 21.9 | 0.0 |
| | | 229.9 | 21.9 | -208.0 | 0.0 | 21.9 | 0.0 |
| Deferred Projects Total | | 377.8 | 140.2 | -237.6 | 0.0 | 27.8 | 112.4 |
| All Projects Total | | 2,593.1 | 2,676.2 | 83.1 | 650.7 | 1,419.3 | 1,256.9 |

¹ Administrative costs have been proportionately distributed into project costs beginning with the 2010 amendment
² Final costs for projects completed since the last amendment are subject to adjustments where expenditures may be incurred after June 30, 2014
³ Deferred projects - estimate amounts are in 2009 dollars and do not include allowances for inflation
⁴ 070F03, 070F04, 13010H, 360H, 320B, 320Q, 340C, 340T, and 370Q were moved from Deferred to Active status
⁵ Concept has evolved. Replaced by 070F07 Intake No. 3 Low Lake Level Pumping Station approved by the SNWA Board of Directors in December 2014
⁶ Active Projects moved to Deferred List
⁷ Projects that have been closed, cancelled, or replaced by another related project



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Appendix E - Completed Projects

| Project Number | Project Title | Completion Year | Actual Cost ¹ (\$ Millions) |
|-----------------|--|-----------------|--|
| . | Planning/Environmental for 1995 CIP Administrative | | 41.2 |
| . | Operational Decision Support System | 1997 | 1.3 |
| B01 | Batch Plant at AMSWTF | 1997 | 1.8 |
| C11 | Communications | 1997 | 1.3 |
| D01 | Scrubber Prepurchase at AMSWTF | 1997 | 0.0 |
| D11 | Disinfection Facilities Upgrades at AMSWTF | 1997 | 4.1 |
| F11 | Filter Additions at AMSWTF | 1997 | 11.1 |
| H01 | Hacienda Pumps Prepurchase | 1997 | 0.0 |
| L11 | Low Lift Pump Station | 1997 | 0.0 |
| M11 | Gibson Lateral (48" - 2.0 miles) | 1997 | 5.4 |
| P11 | Plant Improvements at AMSWTF | 1997 | 9.2 |
| P12 | Plant Mass Excavation at AMSWTF | 1997 | 0.6 |
| R11 | RM Tank (46 MG) | 1997 | 15.9 |
| R12 | RM Tank Mass Excavation | 1997 | 1.9 |
| S11 | Simmons Pumping Station (71 mgd) | 1997 | 9.0 |
| T01 | Valve Prepurchase | 1997 | 1.0 |
| T11 | RM Tunnel (144" - 4.0 miles) | 1997 | 20.5 |
| T12 | RM Tunnel Portal Connection | 1997 | 13.7 |
| T13 | RM Regulating Tank Mass Excavation | 1997 | 1.4 |
| W11A | West Valley Lateral (60" - 3.3 miles) - Section A | 1997 | 17.4 |
| W11B | West Valley Lateral (60" - 2.9 miles) - Section B | 1997 | 15.4 |
| 07010A | Lake Mead Intake No. 2 (100 mgd) | 2002 | 104.7 |
| 07010B | Raw Water Pumping System (108" - 2.0 miles 100 mgd) | 2002 | 143.3 |
| 07010C | RM Aqueduct (108" - 3.2 miles) | 2002 | 18.1 |
| 07010D | Low Lift PS Improvements (Phase I) | 2003 | 3.7 |
| 07010E | BVVC Pipeline Relocation | 2002 | 0.6 |
| 07011B | Raw Water Pumping System - Warranty | 2009 | 1.7 |
| 07012B | Flowserve Pump Replacement at BPS-1A & BPS2 | 2009 | 1.5 |
| 070F02C1 | Intake No. 3 Pumping Station ³ | 2014 | 21.9 |
| 070F02C2 | Intake No. 3 - Connector Tunnel ² | 2014 | 89.8 |
| 070F05 | Lake Mead Intake No. 2 Connection and Modifications | 2010 | 40.4 |
| 07210A | Raw Water Pumping System Expansion (200 mgd RMWTF + 160 mgd AMSWTF 460 mgd total) | 2007 | 68.0 |
| 07210B | Low Lift PS Improvements (Phase II) | 2003 | 3.0 |
| 07210C | Intake No. 2 to AMSWTF By-pass Pipeline | 2006 | 17.7 |
| 08010A | RMWTF direct Filtration (150 mgd); Ozone at RMWTF (150 mgd); Clearwell Exp. 25 MG/50 MG total) | 2002 | 266.8 |
| 08010B | Prepurchase Oxygen/Ozone Equipment (AMSWTF & RMWTF) | 2003 | 19.5 |
| 08010C | Ozone Addition to AMSWTF (Pre-design) | 2000 | 0.6 |
| 08010D | Site Preparation for Ozone Addition to AMSWTF | 2000 | 4.2 |
| 08010ER | Ozone Addition to AMSWTF (600 mgd) | 2003 | 96.0 |
| 08010F | AMSWTF Process Improvements | 2007 | 71.4 |
| 08010H | AMSWTF Modulating Weirs | 2002 | 0.4 |
| 08010J | Intake System and RMWTF Communications | 2002 | 2.6 |
| 08010K | East C-1 Detention Basin | 1999 | 7.7 |
| 08010L | Chemical Containment System at AMSWTF | 1999 | 1.8 |
| 08010M | Magic Way RMWTF Entrance Improvements | 2002 | 3.6 |
| 08010N | RMWTF Temporary Fluoridation | 2002 | 1.3 |
| 08010T | Intake System and RMWTF Controls | 2003 | 4.3 |
| 08010V | Ozone Training and Start-up Services | 2004 | 1.0 |
| 08010W | AMSWTF Ozone Controls | 2003 | 0.6 |
| 08210A | RMWTF Expansion (150 mgd/300 mgd total) | 2006 | 76.8 |
| 08210B | RMWTF Prepurchase Ozone Equipment (150 mgd/300 mgd total) | 2005 | 6.7 |
| 090A | Water Resource (Coyote Spring Valley) | 2000 | 31.6 |
| 090S | Virgin and Muddy Rivers Surface Water Development | 2007 | 8.8 |
| 10010C | Substation Mass Excavation | 1997 | 6.9 |
| 10010M | NPC Connections to Sloan PS and Lamb PS | 2000 | 1.4 |
| 10010P | NPC Connection to Decatur 2538 PS | 2004 | 0.0 |
| 10010Q | CRC RM PS Expansion Power Supply | 2004 | 1.9 |
| 10010Z | CRC Power Development (Phase I) | 1999 | 46.2 |
| 10020A | CRC Power Development Project (Phase II) | 2001 | 11.8 |
| 10020B | CRC Power Development Project (Phase III) | 2001 | 14.3 |
| 100D | SNWS Power System Upgrades - Equipment Prepurchase | 2003 | 6.4 |
| 100E | SNWS Power System Upgrades - Equipment Installation | 2003 | 16.9 |
| 100F | CRC Power System Upgrades | 2003 | 5.0 |
| 100G | SNWS Power System Upgrades - Material Prepurchase | 2003 | 1.0 |
| 100T | SNWS Power System Upgrades - Remote Terminal Units | 2003 | 0.5 |



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Appendix E - Completed Projects, Continued

| Project Number | Project Title | Completion Year | Actual Cost ¹ (\$ Millions) |
|----------------|---|-----------------|---|
| 10510A | NPC - Leased Fiber Optic systems - Phase I | 2002 | 0.7 |
| 10510B | NPC - Leased Fiber Optic Systems - Phase II | 2003 | 1.7 |
| 11010A | RM Lateral (72" - 3.8 miles) | 1999 | 9.6 |
| 11010B | SVL - Major Crossings | 1999 | 6.1 |
| 11010C | SVL (108" - 9.8 miles) | 1999 | 24.6 |
| 11010D | Foothills 2210 PS (140 mgd) | 1999 | 20.1 |
| 11010E | RM 2530 PS (140 mgd) | 1999 | 24.6 |
| 11010G | Horizon Ridge 2375 Resv (10 MG), SV Regul Resv (4 MG) | 1999 | 13.5 |
| 11010H | SVL (90" - 5.0 miles, 54" - 0.2 miles) | 1999 | 14.6 |
| 11010I | SVL - MacDonald Ranch (108" - 1.1 miles) | 1999 | 5.8 |
| 11010J | SVL Communications | 1999 | 2.9 |
| 11010K | SVL (84" - 6.8 miles) | 1999 | 20.9 |
| 11010L | Burkholder 2210 Regulating Reservoir (25 MG) | 1999 | 14.9 |
| 11010M | ROFCS | 1999 | 8.0 |
| 11010P | Pipe Prepurchase (108") | 1999 | 27.0 |
| 11010Q | Pipe Prepurchase - 11010H Phase I (90") | 1999 | 1.8 |
| 11010R | SVL Regul Resv Inlet/Outlet Pipeline (90" - 0.6 miles, 54" - 0.2 miles) | 1999 | 2.6 |
| 11010S | SVL - MacDonald Ranch Extension (108" - 0.4 miles) | 1999 | 2.0 |
| 11010T | SVL Controls | 1999 | 1.0 |
| 11010W | SLV - Disinfection (Complete) | 1999 | 0.5 |
| 11010X | Black Mountain ROFCS (25 MG) | 1999 | 3.0 |
| 11010Z | R-8 Lateral (24" - 0.8 miles) | 1999 | 1.0 |
| 12010A | SNWS Phase II Mass Excavation | 1999 | 2.4 |
| 12010B | SNWS Phase II System "C" (225 mgd) (27 MG) | 1999 | 75.5 |
| 13010A | EVL - Hollywood/DI to Sloan PS (78" - 2.7 miles) | 2000 | 22.4 |
| 13010B | EVL - Sloan PS to Las Vegas Bldg. (78" - 5.7 miles) | 2000 | 22.8 |
| 13010C | EVL - Las Vegas Blvd. To Lamb PS (78" - 4.5 miles) | 2000 | 22.7 |
| 13010D | Sloan 2160 PS (20 mgd)/Structure (175 mgd) | 2000 | 32.2 |
| 13010E | Lamb 2350 PS (20 mgd)/Structure (175 mgd) | 2000 | 26.4 |
| 13010F | Grand Teton 2330 Reservoir (10 MG) | 2000 | 12.5 |
| 13010I | Disinfection Facilities: Carlton Square/Twin Lakes | 2000 | 3.3 |
| 13010J | EVL Communications | 2000 | 2.4 |
| 13010K | EVL Interconnections | 2005 | 6.5 |
| 13010T | EVL Controls | 2000 | 0.5 |
| 13010W | EVL Disinfection | 2000 | 0.3 |
| 13510A | Boulder City Water Delivery Improvements (30" - 7.0 miles, 10 mgd) | 2002 | 24.3 |
| 14010A | NVL - Washburn Rd to Decatur 2350 Res. (24" to 72" - 6.0 miles) | 2002 | 12.0 |
| 14010B | Carlton Sq. Lateral, Cole Ave to Washburn Rd (42" - 3.9 miles) | 2002 | 10.6 |
| 14010C | Gowan 2350 PS (24 mgd) | 2002 | 8.7 |
| 14010D | Decatur 2350 Reservoir (20 MG) | 2002 | 12.7 |
| 14010E | Deer Springs ROFCS (80 mgd) | 2002 | 4.3 |
| 14010F | Foothills PS Turbine Project | 2003 | 2.8 |
| 14010G | College ROFCS (25 mgd) | 2002 | 3.8 |
| 14010J | NVL - Communications | 2002 | 2.2 |
| 14010T | NVL - Controls | 2002 | 0.5 |
| 15010A | RM 2530 PS Expansion - Equestrian Addition (7 mgd/14 mgd total) | 2007 | 0.9 |
| 16010A | RM PS B (175 mgd/315 mgd total), and Cleanwell Expansion C (25 MG/75 MG total) | 2004 | 44.0 |
| 17010A | EVL - River Mtns. Res. To Desert Inn Rd. (78" - 8.2 miles) | 2005 | 49.8 |
| 17010B | NVL - Grad Teton 2330 Res. To Valley Drive (72" - 7.0 miles) | 2004 | 22.4 |
| 17010C | NVL - Grand Teton Drive to Beltway (60" - 2.4 miles) | 2003 | 9.8 |
| 17010D | Sloan 2160 (91 mgd/111 mgd total) and Lamb 2350 (91 mgd/111 mgd total) PS Expansion | 2004 | 15.1 |
| 17010F | Decatur 2538/2430 PS (54 mgd-2538, 27 mgd-2430/Structure 105 mgd) | 2004 | 31.1 |
| 17010G | NVL - Beltway Crossing (60" - 0.4 miles) | 2003 | 3.0 |
| 17010H | NVL - Decatur 2538/2430 PS to Grand Teton Drive (60" - 2.5 miles) | 2003 | 6.6 |
| 17010J | EVL and NVL Communications Improvements | 2004 | 0.4 |
| 17010K | Valley Drive Isolation Valve | 2004 | 0.6 |
| 17010L | In-Valley Isolation Valves | 2007 | 4.4 |
| 19010A | Horizon Ridge 2375 Reservoir Expansion (10 MG/20 MG total) | 2005 | 11.9 |
| 19010B | Duck Creek Isolation Valve | 2009 | 4.2 |
| 19010C | Magic ROFCs (15 MGD) | 2009 | 5.9 |
| 300B | Radio Communication System Upgrades | 2008 | 0.6 |
| 300C | Overhead Crane Upgrades | 2008 | 0.2 |
| 300D | Roofing Replacements | 2009 | 0.9 |
| 300G | RMWTF Operators Video Display Upgrade | 2007 | 0.2 |
| 300I | AMSWTF Asbestos Removal | 2008 | 0.0 |
| 300J | Warm Springs ROFCS Offsite Improvements | 2009 | 0.0 |



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Appendix E - Completed Projects, Continued

| Project Number | Project Title | Completion Year | Actual Cost ¹ (\$ Millions) |
|-------------------------------|--|-----------------|--|
| 310C | IPS-1 Pump and Motor Replacements | 2008 | 28.7 |
| 310D | EBROFC Valve Replacements | 2009 | 2.6 |
| 310E | North I-15 Treatment and Transmission Facilities Planning - Phase I | 2009 | 0.9 |
| 310F | IPS-2 Test Pump Procurement and Installation | 2011 | 40.3 |
| 320A | RMWTF Water Quality Laboratory and Pilot Plant | 2008 | 42.1 |
| 320C | Disinfection By-Products Control Strategy | 2004 | 0.2 |
| 320D | AMSWTF Filter Media and Underdrain Improvements Study | 2004 | 0.2 |
| 320E | AMSWTF Cathodic Corrosion Protection System Repairs and Upgrades | 2008 | 1.5 |
| 320F | AMSWTF Filtration System Valve Repairs ³ | 2014 | 0.1 |
| 320G | Lake Mead Intake No. 1 Modifications | 2004 | 7.4 |
| 320H | Pumping Plant 6 Rechlorination Station | 2004 | 0.0 |
| 320J | Disinfection By-Products Studies | 2009 | 0.3 |
| 320K | Surface Water Treatment Pilot Studies | 2009 | 1.9 |
| 320L | AMSWTF Electrical Disconnect Switch Replacements | 2008 | 0.2 |
| 320M | Spare Filter Backwash Control Valve | 2008 | 0.1 |
| 320N | AMS Clearwell Slide Gates² | 2012 | 0.3 |
| 320R | Water Quality Sampling and Testing Equipment | 2008 | 1.0 |
| 320S | Quagga Mussel Evaluation and Control Facilities | 2010 | 0.4 |
| 340A | Coyote Spring Valley Well and Moapa Transmission System | 2010 | 52.6 |
| 340F | Transmission Pipeline Cathodic Protection System Repairs | 2005 | 1.1 |
| 340G | Transmission Pipelines Discharge Modifications Study | 2007 | 0.4 |
| 340H | Pumping Plant No. 7 Upgrades | 2009 | 0.6 |
| 340I | South Valley Facilities Expansion - Phase I | 2009 | 13.4 |
| 340K | Reservoir Vent Modifications | 2008 | 0.4 |
| 340L | Hemenway ROFC Improvements | 2009 | 0.5 |
| 340M | Air Vacuum and Relief Valve Piping Adjustments | 2008 | 0.1 |
| 340O | Pumping Station 6 Forebay Relining ³ | 2009 | 0.1 |
| 340P | Charleston Heights Lateral Repair and Valve Installation | 2009 | 1.9 |
| 340R | Transmission Pipelines Cathodic Corrosion Protections System Repairs - Phase 2 ² | 2014 | 7.7 |
| 360A | Equity Purchase of Electric Power Generation Facilities - Silverhawk Project | 2004 | 120.0 |
| 360B | Equity Purchase of Electric Power Generation Facilities | 2003 | 55.3 |
| 360D | Energy Supplier Conversion | 2008 | 0.1 |
| 360E | Feasibility Study of Intermountain Project Unit 3 | 2005 | 0.5 |
| 360F | ROFC Energy Recovery | 2008 | 8.1 |
| 360G | Intermountain Power Project Unit 3 - Predevelopment | 2008 | 0.6 |
| 360I | Hacienda Pumping Station Electrical Substation Upgrades | 2008 | 1.8 |
| 360J | AMSWTF & RMWTF Solar Photovoltaic Electric | 2008 | 0.1 |
| 360K | High Concentrating Solar Photovoltaic Demonstration and Research | 2009 | 2.3 |
| 360N | Solar Photovoltaic Panels at AMSWTF Filters & Flocculation Basins | 2009 | 0.1 |
| 360M | Renewable Energy Project Development ³ | 2015 | 3.4 |
| 370B | Security System Upgrades | 2010 | 2.0 |
| 370C | RMWTF Fleet Maintenance & Electrical Maintenance Facility | 2009 | 4.0 |
| 370D | Fiber-Optic Network Improvements | 2007 | 1.3 |
| 370E | AMSWTF Mechanic Maintenance Shop Addition | 2009 | 13.0 |
| 370F | AMSWTF Utility Building Chiller Replacement | 2005 | 0.0 |
| 370G | AMSWTF Computer Room HVAC Replacement | 2007 | 0.0 |
| 370H | Flame Detection Equipment for High Pressure Hydraulic System | 2006 | 0.2 |
| 370J | SNWA Office Tenant Improvements | 2008 | 42.5 |
| 370K | AMSWTF Warehouse Storage System Improvements | 2008 | 0.0 |
| 370L | SCADA Communications Upgrades | 2009 | 0.4 |
| 370N | AMSWTF Standby Generator Replacement | 2009 | 0.3 |
| 370O | AMSWTF Utility Building Air Handler Replacement ² | 2011 | 0.3 |
| 370P | Purchase SNWA Office Space | 2008 | 36.5 |
| 370S | Mold Abatement at River Mountains Water Treatment Facility ² | 2011 | 0.3 |
| 185 Completed Projects | | TOTAL | 2,635.4 |

¹ Administrative costs have been proportionately distributed into project costs beginning with the 2010 amendment

² Final costs for projects completed since the last published amendment are subject to adjustments where expenditures may be incurred after June 30, 2014

³ Projects that have been closed, cancelled, or replaced by another project

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Southern Nevada Water Authority
Major Construction and Capital Plan
May 2015

100 City Parkway, Suite 700
Las Vegas, NV 89106

Mailing Address:
P.O. Box 99956
Las Vegas, NV 89193

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Las Vegas Wash
Capital Improvements Plan

March 2014

Las Vegas Wash

Capital Improvements Plan

Introduction

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 among the many environmental and water resource issues facing Southern Nevada today. This 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.

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 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

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Plan Scope

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 facilitating the management and enhancement of the Wash. Project elements included in this Wash CIP include:

- Channel bed and bank stabilization
- Re-vegetation
- 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, 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 re-vegetation of stream banks, where appropriate.

Re-vegetation 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. Re-vegetation activities may include wetlands or dry land re-vegetation, 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.

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

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- A list of SNWA operated and maintained facilities.

Organization

General information regarding the background, scope, approval process, current revenues, anticipated expenditures, prioritization, and funded Project Work Plan are presented in the 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 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 re-vegetation 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.

Plan Implementation

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

established 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.

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.

Funding Approval.

As appropriate, SNWA prepares and submits Wash CIP funding agreements to the LVVWAC for review. Funding agreements prepared and submitted by

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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.

Funding and Expenditures

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), for current and future projects.

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 Sub Fund.

Funding and funding sources to-date are shown in the following table.

Expenditures-To-Date.

From 1999 through December 2014, Wash CIP total expenditures have been as shown in the following table. 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 \$4,700,000; 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; and US Bureau of Reclamation construction activities.

Expenditures include repayment with interest, of funds borrowed from the New Expansion Debt Service Sub Fund.

Capital construction expenditures to-date are shown in the following table.

Future Expenditures.

Current projections of future capital expenditures for the Wash CIP are detailed in the appendix. Projected expenditures are shown in both current

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dollars and projected expenses, accelerated to future construction mid-point dollar is cost, based upon an estimated current three percent 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 the table on the following page.

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**Funding-to-Date
 1999-2014**

| Funding Source | Estimated Funding-to-Date | % |
|---|------------------------------|--------------|
| Sales Tax & Interest (Includes Estimated figures through December 2013) | \$ 47,894,246 | 34.9 |
| US Bureau of Reclamation Grants | 5,979,224 | 4.4 |
| SNPLMA Funding | 39,764,927 | 29.0 |
| Miscellaneous State and Federal Grants | 445,500 | 0.3 |
| Other Local Agency Funding | 14,460,000 | 10.5 |
| Interfund Borrowings | 28,768,611 | 21.0 |
| Total: | \$ 137,312,508 | 100.0 |

**Total Expenditures-to-Date
 1999-2014**

| Program | Total Expenditures-to-Date | % |
|---|-------------------------------|--------------|
| Channel Stabilization | \$ 103,496,882 | 74.7 |
| Revegetation | 1,918,018 | 1.4 |
| Comprehensive Programs | 8,302,997 | 6.0 |
| Interfund Borrowing Repayments | 24,019,308 | 17.3 |
| Interfund Borrowing Interest Repayments | 852,575 | 0.6 |
| Total: | \$ 138,589,780 | 100.0 |

**Projected Expenditures
 2016-2019**

| Wash CIP Component | Projected Expenditures | % |
|--------------------------------------|---------------------------|--------------|
| Channel Stabilization | \$ 12,790,903 | 88.5 |
| Revegetation Programs | 1,490,920 | 10.3 |
| Comprehensive Programs | 172,000 | 1.2 |
| Total Projected Expenditures: | \$ 14,453,823 | 100.0 |

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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 the appendix 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. Re-vegetation investments normally follow channel bed and bank stabilization, where practical. Unless otherwise noted, re-vegetation projects are planned for implementation following channel stabilization projects and are not shown in a separate priority evaluation within this Capital Improvements Plan.

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

Descriptions of these criteria are found in the appendix 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 LVWCC. Project activity is then scheduled, as much as practical, to follow priority rankings described in the appendix. 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 LVVWCC 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

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and SNWA Board of Directors for review and action.

2014-15 Project Work Plan

The Work Plan presents projects scheduled for activity during the next two years for which funding sources have been or expected to be identified. Approximately thirty two percent (32 percent) of the Project Work Plan will be funded through SNPLMA. The remaining 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 presented in the appendix.

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.

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, re-vegetated areas, and other facilities when deemed appropriate by the SNWA and Clark County.

Operations and Maintenance

In accordance with the Amended Agreement, SNWA operates and maintains Wash facilities, including channel stabilization projects and re-vegetated 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.

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Appendices

Appendix A -- Work Plan Project Descriptions with Costs to Complete

Appendix B – Ratings Criteria Scoring

Appendix C – Sales Tax Received and Distributed

Appendix D – Clark County Water and Wastewater Infrastructure (Quarter Cent) Sales Tax Actual /
Forecast

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Appendix A

Work Plan Project Descriptions
With Costs to Complete

| Project # | Project Title | Description | Budget Fiscal Years 2015-16 to 2018-19 | Scheduled Completion Date |
|-----------|---------------------------------|---|--|---------------------------|
| 810C | Historic Lateral Weir Expansion | This 518 foot long, 9 foot high rock riprap structure provides channel bed stabilization upstream to the Pabco Road Erosion Control structure. | \$4,373,703 | March-17 |
| 810S | Tropicana Outfall Weir | This facility (9 feet tall and 200 feet long) will be located immediately downstream of the confluence of the Tropicana Channel outfall and the Wash. | \$4,264,562 | August-19 |
| 810W | Sunrise Mountain Weir | This 350 foot long facility located 0.4 mile upstream from the Pabco Road Erosion Control structure will stabilize approximately five feet of potential channel | \$4,152,638 | March-17 |
| 860P | Flood Repair Allocation | This project will allow the emergency construction repair of stabilization facilities following major flood events. | \$50,000 | January-17 |
| 860V | BOR Materials & Equipment | This project allows SNWA to install bank protection and other maintenance of the Wash in partnership with the U.S. Bureau of Reclamation who provides additional funding for the project. | \$122,000 | March-16 |
| 880C | Historic Lateral Weir Expansion | This project is intended to replace wetlands and other vegetation removed during weir construction, stabilize the stream banks, provide erosion control and habitat | \$128,334 | August-19 |

Continued

Southern Nevada Water Authority
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Appendix A

**Work Plan Project Descriptions (Continued)
 With Costs to Complete**

| Project # | Project Title | Description | Budget Fiscal Years 2015-16 to 2018-19 | Scheduled Completion Date |
|-----------|--|--|--|---------------------------------|
| 880G | Duck Creek Confluence, Upper Narrows, & DU Wetlands No. 1 Weir Sites Revegetation | This project is intended to replace wetlands and other vegetation removed during weir construction, stabilize the stream banks, provide erosion control and habitat | \$236,558 | December-15 |
| 880K | Three Kids Weir | This project is intended to replace wetlands and other vegetation removed during weir construction, stabilize the stream banks, provide erosion control and habitat | \$476,078 | August-17 |
| 880U | Silver Bowl Weir Revegetation | This project is intended to replace wetlands and other vegetation removed during weir construction, stabilize the stream banks, provide erosion control and habitat | \$258,738 | August-17 |
| 880W | Sunrise Mountain Weir Revegetation | This project is intended to replace wetlands and other vegetation removed during weir construction, stabilize the stream banks, provide erosion control and habitat | \$132,474 | August-19 |
| 880Z | Archery Weir Revegetation | This project is intended to replace wetlands and other vegetation removed during weir construction, stabilize the stream banks, provide erosion control and habitat | \$258,738 | August-17 |

GRAND TOTAL TO COMPLETE

\$14,453,823

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Appendix B

2014-15 Capital Improvements Plan
Ranking Criteria Scoring
Channel Bed Stabilization

| Factor | Criteria | Score |
|----------------------------|---|-------|
| Upstream Stability | Active headcutting risking upstream channel, structures, or banks | 5 |
| | Moderate headcutting in silty or sandy channel bed, some bank stability threat | 3 |
| | Slow headcutting in caliche or bedrock, little bank stability threat | 1 |
| System Relationship | Provides important foundation or stability support for other facilities | 5 |
| | Provides moderate foundation or stability support to other Wash features | 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 |
| | 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 |
| | Provides minor volume of sediment capture or 3 or more acres potential wetlands area | 3 |
| | Provides little or no volume for sediment capture or less than 1 acre of potential wetlands area | 1 |
| Ecosystem Enhancement | Provides platform for ecosystem enhancement covering greater than 5 acres | 5 |
| | Provides platform for ecosystem enhancement covering greater than 3 acres | 3 |
| | Provides platform for ecosystem enhancement covering 1 acre or more | 1 |
| Recreational Opportunities | Directly reduces threat to recreational features | 5 |
| | Provides possible threat reduction to recreational features | 3 |
| | Provides little or no threat reduction to recreational features | 1 |
| Public Safety | Is strongly beneficial to public safety associated with activities in the Wash | 5 |
| | Provides some improvement to public safety associated with activities in the Wash | 3 |
| | Provides little improvement to public safety associated with activities in the Wash | 1 |
| Permitting | Relatively minor permitting issues to be resolved | 5 |
| | Wetlands, WQ, Wildlife, or Archeological issues exist and clearance required | 3 |
| | A sensitive site requiring mitigation or high level of protection | 1 |
| ROW & Access | Local Government Ownership, relatively easy acquisition | 5 |
| | Federal Ownership, requiring federal review and approval | 3 |
| | Private Ownership requiring extended negotiations | 1 |
| Other Funding | other local, state, or federal funding assistance for > 50% of project cost | 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 |

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Appendix C

Southern Nevada Water Authority
Sale Tax Received and Distributed

| Calendar Year | Receipts | Distributions | | | |
|---------------|-------------------------|-----------------------|----------------------|-----------------------|-----------------------|
| | Gross Amount | Clark Co. Rural Areas | LV Wash | Wastewater Agencies | SNWA Water |
| 1999 | \$ 38,237,577 | \$ 1,608,923 | \$ 1,529,503 | \$ - | \$ 35,099,151 |
| 2000 | 54,039,307.42 | 2,273,811.94 | 2,161,572.30 | - | 49,603,923.18 |
| 2001 | 55,861,310.46 | 2,350,476.36 | 2,234,452.42 | 14,755,654.01 | 36,520,727.67 |
| 2002 | 58,363,364.48 | 2,455,755.30 | 2,334,534.58 | 20,357,768.34 | 33,215,306.26 |
| 2003 | 64,023,754.11 | 2,493,184.02 | 2,560,950.16 | 22,433,528.30 | 36,536,091.63 |
| 2004 | 76,005,450.54 | 2,302,436.17 | 3,040,218.02 | 26,851,862.61 | 43,810,933.74 |
| 2005 | 85,173,494.04 | 2,580,164.06 | 3,406,939.76 | 30,090,828.27 | 49,095,561.95 |
| 2006 | 89,339,751.97 | 3,275,569.54 | 3,573,590.08 | 31,380,046.89 | 51,110,545.45 |
| 2007 | 88,754,736.36 | 2,526,250.50 | 3,550,189.45 | 31,417,752.62 | 51,260,543.79 |
| 2008 | 82,165,309.94 | 2,351,402.77 | 3,286,612.40 | 29,080,372.10 | 47,446,922.65 |
| 2009 | 68,895,552.85 | 2,049,951.03 | 2,755,822.11 | 24,354,116.37 | 39,735,663.34 |
| 2010 | 68,910,755.65 | 2,219,165.16 | 2,756,430.23 | 24,295,360.88 | 39,639,799.37 |
| 2011 | 73,326,675.19 | 2,449,338.98 | 2,933,067.01 | 25,818,822.29 | 42,125,446.91 |
| 2012 | 77,317,944.00 | 2,582,659.79 | 3,092,717.75 | 27,224,175.26 | 44,418,391.20 |
| 2013 | 81,860,560.41 | 2,734,397.32 | 3,274,422.42 | 28,823,661.97 | 47,028,078.70 |
| 2014 | 88,385,740.77 | 2,952,358.63 | 3,535,429.64 | 31,121,221.96 | 50,776,730.56 |
| | <u>\$ 1,150,661,285</u> | <u>\$ 39,205,844</u> | <u>\$ 46,026,451</u> | <u>\$ 368,005,172</u> | <u>\$ 697,423,818</u> |

Amounts may be slightly off due to rounding

**Southern Nevada Water Authority
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Appendix D

**CLARK COUNTY WATER AND WASTEWATER INFRASTRUCTURE (QUARTER CENT) SALES TAX
Received by the Southern Nevada Water Authority
Actual / Forecast**

| Calendar Year | Clark Co. Population | | Gross Sales Tax Receipts | | | Clark Co | | Wastewater | SNWA | | | | |
|---------------|----------------------|----------|--------------------------|---------------|----------|----------------------|--------------|----------------------|---------------|-----------------------|--|-------------------------|--|
| | Count | % Change | Per Person | Receipts | % Change | Rural Areas | LV Wash | Agencies | CIP | | | | |
| 1999 * + | 1,321,319 | | N/A+ | \$ 38,237,577 | | \$ 1,608,923 | \$ 1,529,503 | \$ - | \$ 35,099,151 | | | | |
| 2000 * | 1,428,689 | 8.1% | 37.82 | 54,039,307 | + | 2,273,812 | 2,161,572 | - | 49,603,923 | | | | |
| 2001 * | 1,498,278 | 4.9% | 37.28 | 55,861,310 | 3.4% | 2,350,476 | 2,234,452 | 14,755,654 | 36,520,728 | | | | |
| 2002 * | 1,578,332 | 5.3% | 36.98 | 58,363,364 | 4.5% | 2,455,755 | 2,334,535 | 20,357,768 | 33,215,306 | | | | |
| 2003 * | 1,641,529 | 4.0% | 39.00 | 64,023,754 | 9.7% | 2,493,184 | 2,560,950 | 22,433,528 | 36,536,092 | | | | |
| 2004 * | 1,747,025 | 6.4% | 43.51 | 76,005,451 | 18.7% | 2,302,436 | 3,040,218 | 26,851,863 | 43,810,934 | | | | |
| 2005 * | 1,815,700 | 3.9% | 46.91 | 85,173,494 | 12.1% | 2,580,164 | 3,406,940 | 30,090,792 | 49,095,598 | | | | |
| 2006 * | 1,912,654 | 5.3% | 46.71 | 89,339,752 | 4.9% | 3,275,570 | 3,573,590 | 31,380,047 | 51,110,545 | | | | |
| 2007 * | 1,996,542 | 4.4% | 44.45 | 88,754,736 | -0.7% | 2,526,251 | 3,550,189 | 31,417,753 | 51,260,544 | | | | |
| 2008 * | 1,986,145 | -0.5% | 41.37 | 82,165,310 | -7.4% | 2,351,403 | 3,286,612 | 29,080,372 | 47,446,923 | | | | |
| 2009 * | 2,006,347 | 1.0% | 34.34 | 68,895,553 | -16.2% | 2,049,951 | 2,755,822 | 24,354,116 | 39,735,663 | | | | |
| 2010 * | 1,951,269 | -2.7% | 35.32 | 68,910,756 | 0.0% | 2,219,165 | 2,756,430 | 24,295,361 | 39,639,799 | | | | |
| 2011 * | 1,966,630 | 0.8% | 37.29 | 73,326,675 | 6.4% | 2,449,339 | 2,933,067 | 25,818,822 | 42,125,447 | | | | |
| 2012 * | 2,008,654 | 2.1% | 38.49 | 77,317,944 | 5.4% | 2,582,660 | 3,092,718 | 27,224,175 | 44,418,391 | | | | |
| 2013 | 2,031,000 | 1.1% | 40.31 | 81,860,560 | 5.9% | 2,734,397 | 3,274,422 | 28,823,662 | 47,028,079 | | | | |
| 2014 | 2,061,000 | 1.5% | 41.58 | 85,689,265 | 4.7% | 2,862,288 | 3,427,571 | 30,171,775 | 49,227,631 | | | | |
| 2015 | 2,085,000 | 1.2% | 42.89 | 89,429,159 | 4.4% | 2,987,212 | 3,577,167 | 31,488,617 | 51,376,163 | | | | |
| 2016 | 2,111,000 | 1.2% | 44.25 | 93,406,076 | 4.4% | 3,120,053 | 3,736,244 | 32,888,917 | 53,660,862 | | | | |
| 2017 | 2,138,000 | 1.3% | 45.65 | 97,589,748 | 4.5% | 3,259,801 | 3,903,591 | 34,362,016 | 56,064,340 | | | | |
| 2018 | 2,167,000 | 1.4% | 47.09 | 102,036,336 | 4.6% | 3,408,331 | 4,081,455 | 35,927,690 | 58,618,860 | | | | |
| 2019 | 2,196,000 | 1.3% | 48.57 | 106,667,006 | 4.5% | 3,563,010 | 4,266,682 | 37,558,180 | 61,279,134 | | | | |
| 2020 | 2,224,000 | 1.3% | 50.11 | 111,440,403 | 4.5% | 3,722,456 | 4,457,618 | 39,238,926 | 64,021,403 | | | | |
| 2021 | 2,253,000 | 1.3% | 51.69 | 116,459,630 | 4.5% | 3,890,114 | 4,658,387 | 41,006,230 | 66,904,899 | | | | |
| 2022 | 2,281,000 | 1.2% | 53.32 | 121,633,683 | 4.4% | 4,062,943 | 4,865,349 | 42,828,050 | 69,877,341 | | | | |
| 2023 | 2,309,000 | 1.2% | 55.01 | 127,019,053 | 4.4% | 4,242,831 | 5,080,764 | 44,724,276 | 72,971,182 | | | | |
| 2024 | 2,337,000 | 1.2% | 56.75 | 132,623,954 | 4.4% | 4,430,052 | 5,304,960 | 46,697,800 | 76,191,142 | | | | |
| 2025 | 2,365,000 | 1.2% | N/A+ | 53,730,143 | + | 1,857,267 | 2,146,619 | 18,895,978 | 30,830,278 | | | | |
| | | | <u>\$ 2,300,000,000</u> | | | <u>\$ 77,659,844</u> | | <u>\$ 91,997,429</u> | | <u>\$ 772,672,369</u> | | <u>\$ 1,357,670,358</u> | |

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SECTION 7

DEBT MANAGEMENT POLICY



SOUTHERN NEVADA WATER AUTHORITY®

FISCAL YEAR 2015-16

OPERATING AND CAPITAL BUDGET

Southern Nevada Water Authority
Operating and Capital Budget
Debt Management Policy
Fiscal Year Ending June 30, 2016

Debt Management Policy

In Accordance With
NRS 350.013



SOUTHERN NEVADA
WATER AUTHORITY

June 30, 2015

Southern Nevada Water Authority
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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 (the 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 SNWA effective January 1, 1996.

The SNWA's current debt structure is presented in appendix A. 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 Bond Bank, which then sells the State general obligation bonds. The 1997 Nevada Legislature made this option available. Standard & Poor's rates State of Nevada bonds "AA", and Moody's Investor Services 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 Bond Bank, which can then sell Clark County general obligation bonds. The 1999 Nevada Legislature made this option available. Standard & Poor's rates Clark County bonds "AA", and Moody's Investor Services rates them at "Aa1". 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 Clark County, which would result in higher interest rates. As a result, it is expected that the SNWA will continue to use the options listed above to issue debt.

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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 also called the MCCP and covered other construction and capital projects not included in the CIP. The original MCCP was first published in June 2002 and updated nine times hence. In February, 2010, the Board of Directors of SNWA (the Board) approved the merger of the two capital plans into a new MCCP presented herein. The MCCP is reviewed semi-annually and is presented to the Board as determined appropriate by the SNWS work group. The most recent update is expected to be presented to 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 March 2014. 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. 4 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. The facility improvements described by the MCCP are intended to ultimately provide a total water delivery system (including the current operating system) of 900 MGD gallons per day. 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

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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 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 country 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

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municipality may update a statement or plan required by subsection 1 more often than twice each fiscal year.

Affordability of Debt

Response to NRS 350.013 1(c):

(1) A discussion of its ability to afford existing general obligation debt, authorized future general obligation debt and proposed future general obligation debt; and

(6) A discussion of its sources of money projected to be available to pay existing general obligation debt, authorized future general obligation debt and proposed future general obligation debt

Existing, Authorized and Proposed General Obligation/Revenue Supported Bond Indebtedness 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, 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 the SNWA receives from the Clark 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

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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 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 always 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 intends to issue approximately \$520 million in new money debt in fiscal year 2015-16, primarily to fund the Low Level Pumping Station at Intake #3. In addition, 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, 2015.

Debt Service Requirements. See 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 A 4 illustrates the SNWA's historic pledged revenues and debt service coverage.

Existing, Authorized and Proposed Revenue Supported Bond Indebtedness Issued by the Southern Nevada Water Authority (Authority Revenue Bonds)

The SNWA's Revenue 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 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 members' 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 SNWA Revenue Bonds or

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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 SNWA Revenue 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 SNWA Revenue 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 SNWA Revenue 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 page sets forth the SNWA's proposed SNWA Revenue Bonds as of June 30, 2015.

Debt Service Requirements. See Appendix for the table illustrating the debt service to maturity for the existing and proposed SNWA Revenue Bonds.

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

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**GENERAL OBLIGATION INDEBTEDNESS
LAS VEGAS VALLEY WATER DISTRICT (LVVWD) BONDS ¹
Southern Nevada Water Authority
As of June 30, 2015**

| | Original Issue Date | Original Amount | Outstanding |
|-----------------------------------|------------------------|-------------------------|-------------------------|
| LVVWD Tax-Exempt Commercial Paper | Mar-04 | \$ 400,000,000 | \$ 400,000,000 |
| LVVWD 2012 B | Jul-12 | 360,000,000 | 353,405,000 |
| LVVWD 2015 Refunding | Jan-15 | 332,405,000 | 332,405,000 |
| LVVWD 2011 C | Oct-11 | 267,815,000 | 240,610,000 |
| LVVWD 2011 B | Oct-11 | 129,650,000 | 129,650,000 |
| LVVWD 2008 B | Feb-08 | 171,720,000 | 116,335,000 |
| LVVWD 2009 A | Jul-09 | 90,000,000 | 90,000,000 |
| LVVWD 2009 D | Dec-09 | 71,965,000 | 63,195,000 |
| LVVWD 2011 A | May-11 | 58,110,000 | 58,010,000 |
| LVVWD 2009 B | Jul-09 | 10,000,000 | 9,285,000 |
| Total | | \$ 1,891,665,000 | \$ 1,792,895,000 |

¹ Issued by LVVWD and additionally secured by Southern Nevada Water Authority revenues

SOURCE: Southern Nevada Water Authority

**REVENUE SUPPORTED INDEBTEDNESS
SOUTHERN NEVADA WATER AUTHORITY REVENUE BONDS
As of June 30, 2015**

| | Original Issue Date | Original Amount | Outstanding |
|---------------------------------------|------------------------|-------------------------|-------------------------|
| SNWA 1106 Bond | Nov-06 | \$ 604,140,000 | \$ 533,020,000 |
| SNWA 2008 Bond | Jul-08 | 400,000,000 | 362,155,000 |
| SNWA 2006 Refunding Bond | Jun-06 | 242,880,000 | 210,210,000 |
| SNWA 2012A | Jun-12 | 85,015,000 | 85,015,000 |
| SNWA 2009 Refunding | Nov-09 | 50,000,000 | 44,395,000 |
| SNWA Clean Renewable Energy 2008 Bond | Jul-08 | 6,900,000 | 3,680,000 |
| Total | | \$ 1,388,935,000 | \$ 1,238,475,000 |

SOURCE: Southern Nevada Water Authority

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Existing Colorado River
Commission/Federal Repayment
Contracts/Water Revenue Bonds Issued by
the State of Nevada (“State of Nevada
Bonds”).

The SNWS was originally financed by a combination of State of Nevada, Colorado River Commission General Obligation Bonds (the CRC 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 CRC 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 CRC 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 CRC 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 CRC bonds is further secured by a lien on the net pledged revenues derived from the operation of the SNWA facilities.

Additionally, the State has issued a water revenue bond for the SNWA (SNWA Water Revenue Bond 2009). This issue allows the SNWA to draw against the value of the bond for three years and then begin paying off the borrowings over a twenty year period without interest charges.

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,

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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 Commission'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 of Nevada Bonds table sets forth the SNWA's outstanding State of Nevada Bonds as of June 30, 2015.

Debt Service Requirements. See Appendix for the table illustrating the debt service to maturity on the State of Nevada 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 Appendix for the table illustrating the SNWA's historic pledged revenues and debt service coverage.

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 dollar amount of debt limit. 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

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(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 LVVWD Water Bonds and SNWA Revenue Bonds are payable from pledged water revenues.

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**STATE OF NEVADA BONDS
Southern Nevada Water Authority
As of June 30, 2015**

| | Original Issue Date | Original Amount | Outstanding |
|---|------------------------|-----------------------|-----------------------|
| SNWA Refunding Bonds, Series 2005F | May-05 | \$ 249,365,000 | \$ 173,520,000 |
| CRC Refunding Bonds, Series 2006D | Jul-06 | 111,840,000 | 66,200,000 |
| CRC Refunding Bonds, Series 2005I | May-05 | 65,300,000 | 47,755,000 |
| CRC Refunding Bonds, Series 2005H | May-05 | 36,130,000 | 31,620,000 |
| SNWA 2013A Refunding Bonds | Feb-13 | 21,720,000 | 21,720,000 |
| CRC Refunding Bonds, Series 2010B | Jun-10 | 7,405,000 | 5,480,000 |
| State of Nevada Safe Drinking Water Loan #2 | Jun-01 | 10,000,000 | 4,025,874 |
| State of Nevada Safe Drinking Water Loan #1 | Sep-99 | 12,269,695 | 3,932,449 |
| SNWA Water Revenue Bonds 2009 | Nov-09 | 2,214,457 | 1,834,836 |
| Total | | \$ 516,244,152 | \$ 356,088,159 |

SOURCE: Southern Nevada Water Authority

Policy Statement for Sale of Debt

Response to NRS 350.013 1(c):

(5) Policy regarding the manner in which the municipality expects to sell its debt.

There are two ways bonds can be sold: competitive (public) or negotiated sale. NRS 350.105 to 350.195 sets forth the circumstances under which a local government 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 related to the requirements of the Nevada Open Meeting Law.

Competitive Sale.

In a competitive sale, all underwriter(s) are invited to submit a proposal to purchase an issue of bonds. The bonds are awarded to the underwriter(s) presenting the best bid according to stipulated criteria set forth in the notice of sale. The best bid is determined based on the lowest overall interest rate.

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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

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 owned and women owned business enterprises, have an equal opportunity to participate in the SNWA contracts.

Underwriter Selection for Negotiated Sale.

- The Director of Finance will establish a list of pre-qualified underwriters when a negotiated sale is anticipated. The list will be based on firms that have submitted, as a part of the syndicate, bids for the SNWA's competitive bond issues during the past five years.
- The request for proposal (RFP) will be sent by the Director of Finance to every underwriter on the list. The format of the RFP will be determined by the Director of Finance. Spread quotation for: (1) management fee, (2) direct expenses, (3) underwriting fee, and (4) takedown (or sales concession) will be obtained from each firm.
- The proposals will be evaluated on responsiveness, experience, and cost.
- The book-running senior manager and other members of the underwriting syndicate will be designated by the Director of Finance, and ratified by the Board of Trustees. It is the SNWA's intent, once a team is established, to provide equal opportunity for the position of book-running senior manager. The Director of Finance will rotate the book-running senior manager on a deal by deal basis (i.e., when more than one issue is being sold for the same project having different dated

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dates), to provide equal opportunity to all members of the syndicate.

- The underwriting team should be balanced with firms having institutional, retail, and regional sales strengths. Qualified minority, and/or woman owned firms, will be included in the underwriting team and will be given an equal opportunity to be senior manager.
- The size of issue will determine the number of members in the underwriting team and whether more than one senior manager is desirable.

Underwriting Spread. Before work commences on a bond issue to be sold at negotiated sale, the underwriter shall provide the Director of Finance a detailed estimate of all components of their compensation. Such estimates should be contained in the RFP or provided immediately after their designation as underwriter.

An updated estimate of the expense component of gross spread must be provided to the Director of Finance by the book-running senior manager no later than one week prior to the day of pricing.

Establishment of a Selling Group. When deemed appropriate by the Director of Finance, a selling group will also be established to assist the underwriting team in the marketing of the bond issue.

Priority of Orders. The priority of orders to be established for negotiated sales is as follows:

1. Nevada Investors
2. Group Orders
3. Designated Orders
4. Member Orders

For underwriting syndicates with three or more underwriters a three firm rule for net designated orders will be established as follows;

- The designation of takedown on net designated orders is to benefit at least three firms of the underwriting team.
- No more than 50 percent of the takedown may be designated to any one firm. No less than 10 percent of the takedown will be designated to any one firm.

Retentions. If the use of retentions is desirable, the Director of Finance will approve the percentage (up to 30 percent) of term bonds to be set aside. The amount of total retention will be allocated to each member of the underwriting team in accordance with their respective underwriting liability, which is approved by the Director of Finance.

Allocation of Bonds.

- The book-running senior manager will be responsible for ensuring that the overall allocation of bonds meets the SNWA's goals of obtaining the best price for the issue and a balanced distribution

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of the bonds.

- The Director of Finance must approve the final bond allocation process with input from the book-running senior manager.

Operation Costs and Revenue Sources for Projects in MCCP

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 (c), if those costs and revenues are expected to affect the tax rate.

As illustrated in the Net Pledged Revenues table in the Appendix of this document, operational costs are funded with water revenues. It is the 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:

- **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 refunding bonds and refunded bonds less any contribution from a reserve or debt service fund.
- **Present Value Savings** - Present value of gross savings discounted at the refunding bond yield to the closing date plus accrued interest less any contribution from a reserve or debt service fund.

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

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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:

- Present value savings are estimated to be at least 3 percent of the par amount of the refunding bonds when initially presented to the Board.
- 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.
- Current savings are acceptable when compared to savings that could be achieved by waiting for more favorable interest rates and/or call premiums.

Debt Structure.

Maturity Structures. The term of the SNWA debt issues should not extend beyond the useful life of the project or equipment financed.

When appropriate, debt issued by the SNWA should be structured to provide for either level principal or 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.

Bond Insurance. The purchase of bond insurance may be considered as part of the structure of a bond issue. A bond insurance policy may be purchased by either an issuer or by an underwriter for either an entire issue or specific maturities to guarantee the payment of principal and interest. While this security provides a higher credit rating, and thus a lower borrowing cost for an issuer, such cost savings must be measured against the premium required for such insurance. The decision to purchase insurance directly versus bidder's option is based on:

- Market volatility
- Current investor demand for insured bonds
- Level of insurance premiums
- Ability of the SNWA to purchase bond insurance from bond proceeds

Bond insurance can be purchased directly by the SNWA prior to the bond sale (direct purchase) or at the underwriter's option and expense (bidder's option). The SNWA will attempt to qualify its bond issues for insurance with bond insurance companies rated AAA by Moody's Investors Service and Standard & Poor's Corporation.

When insurance is purchased directly by the SNWA, the present value of the estimated

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debt service savings from insurance should be at least equal to or 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).

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 two or more of the following conditions are expected:

- The SNWA will benefit from the State or county's credit rating.
- The SNWA will reduce its issuance costs by combining with other participants.
- The SNWA will be able to approve the structure of the bonds.
- The utilization of the State or county program is the most cost effective source of funds.

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Director of Finance 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: Gina L. Neilson

TITLE: Acting Director of Finance

ADDRESS: 1001 South Valley View Boulevard
Las Vegas, NV 89153

TELEPHONE: (702) 862-3434

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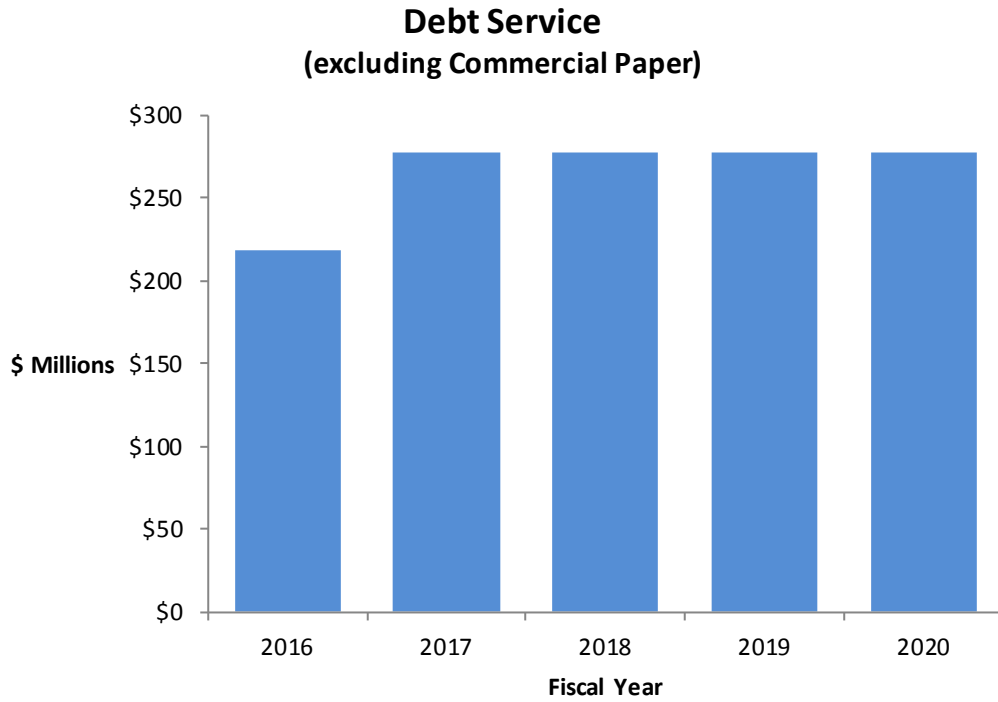
Appendix
Debt Service and Pledged Revenue Tables

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 Existing Debt Service by Issuer

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Five Year Schedule of Debt Service Requirements
 As of June 30, 2015

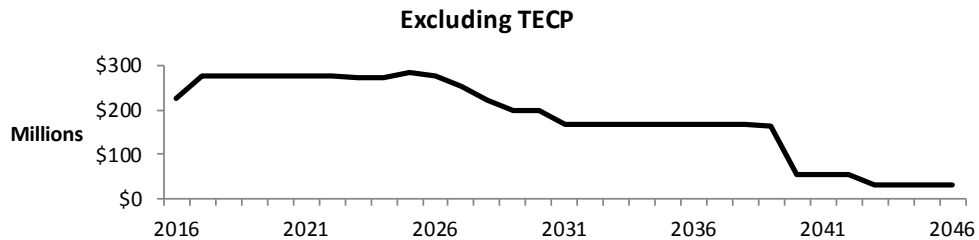
| # | Fiscal Year | Commercial Paper | Bonds | Total Debt |
|---|-------------|------------------|-------------|-------------|
| 1 | 2016 | \$405,000,000 | 218,751,702 | 623,751,702 |
| 2 | 2017 | - | 276,829,108 | 276,829,108 |
| 3 | 2018 | - | 276,815,124 | 276,815,124 |
| 4 | 2019 | - | 276,808,732 | 276,808,732 |
| 5 | 2020 | - | 276,787,364 | 276,787,364 |



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**Combined Schedule of Debt Service Requirements
As of June 30, 2015**

| Total G/O and Revenue Debt | | | |
|-----------------------------------|-------------------------|-------------------------|-------------------------|
| Fiscal Year | Principal | Interest | Total |
| 2016 | 478,025,252 | 145,726,451 | 623,751,702 |
| 2017 | 119,435,175 | 157,393,932 | 276,829,108 |
| 2018 | 124,899,243 | 151,915,881 | 276,815,124 |
| 2019 | 130,714,871 | 146,093,862 | 276,808,732 |
| 2020 | 136,847,714 | 139,939,650 | 276,787,364 |
| 2021 | 141,228,970 | 133,466,772 | 274,695,742 |
| 2022 | 147,472,991 | 126,856,263 | 274,329,254 |
| 2023 | 154,522,003 | 119,485,271 | 274,007,274 |
| 2024 | 161,526,621 | 112,065,321 | 273,591,942 |
| 2025 | 179,430,025 | 104,215,246 | 283,645,270 |
| 2026 | 179,022,964 | 95,422,467 | 274,445,430 |
| 2027 | 166,936,221 | 86,919,098 | 253,855,319 |
| 2028 | 143,995,608 | 79,527,590 | 223,523,198 |
| 2029 | 124,136,971 | 73,895,621 | 198,032,592 |
| 2030 | 130,252,918 | 68,388,279 | 198,641,196 |
| 2031 | 105,992,634 | 62,382,668 | 168,375,301 |
| 2032 | 110,570,339 | 57,512,462 | 168,082,801 |
| 2033 | 116,208,752 | 52,250,974 | 168,459,726 |
| 2034 | 121,638,903 | 46,817,611 | 168,456,513 |
| 2035 | 127,236,859 | 41,215,987 | 168,452,846 |
| 2036 | 133,053,733 | 35,405,384 | 168,459,117 |
| 2037 | 138,890,682 | 29,566,864 | 168,457,546 |
| 2038 | 144,623,910 | 23,834,743 | 168,458,653 |
| 2039 | 145,919,666 | 17,023,739 | 162,943,405 |
| 2040 | 43,434,253 | 10,269,724 | 53,703,976 |
| 2041 | 45,314,023 | 8,386,354 | 53,700,376 |
| 2042 | 47,280,384 | 6,420,893 | 53,701,276 |
| 2043 | 25,724,799 | 4,369,577 | 30,094,376 |
| 2044 | 26,753,791 | 3,340,585 | 30,094,376 |
| 2045 | 27,823,943 | 2,270,434 | 30,094,376 |
| 2046 | 28,936,900 | 1,157,476 | 30,094,376 |
| Total | <u>\$ 3,907,851,116</u> | <u>\$ 2,143,537,176</u> | <u>\$ 6,051,388,292</u> |



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**Combined Schedule of Existing and Proposed Debt Service Requirements
as of June 30, 2015**

| Fiscal Year | Existing Debt | | | Proposed | | |
|-------------|------------------|------------------|------------------|----------------|----------------|----------------|
| | Principal | Interest | Total | Principal | Interest | Total |
| 2016 | 478,025,252 | 145,726,451 | 623,751,702 | - | - | - |
| 2017 | 110,156,517 | 136,578,214 | 246,734,731 | 9,278,658 | 20,815,718 | 30,094,376 |
| 2018 | 115,249,439 | 131,471,309 | 246,720,748 | 9,649,804 | 20,444,572 | 30,094,376 |
| 2019 | 120,679,074 | 126,035,282 | 246,714,356 | 10,035,797 | 20,058,580 | 30,094,376 |
| 2020 | 126,410,486 | 120,282,502 | 246,692,988 | 10,437,228 | 19,657,148 | 30,094,376 |
| 2021 | 130,374,253 | 114,227,113 | 244,601,366 | 10,854,718 | 19,239,659 | 30,094,376 |
| 2022 | 136,184,085 | 108,050,793 | 244,234,878 | 11,288,906 | 18,805,470 | 30,094,376 |
| 2023 | 142,781,540 | 101,131,357 | 243,912,897 | 11,740,462 | 18,353,914 | 30,094,376 |
| 2024 | 149,316,540 | 94,181,025 | 243,497,566 | 12,210,081 | 17,884,295 | 30,094,376 |
| 2025 | 166,731,540 | 86,819,353 | 253,550,894 | 12,698,484 | 17,395,892 | 30,094,376 |
| 2026 | 165,816,540 | 78,534,514 | 244,351,054 | 13,206,424 | 16,887,953 | 30,094,376 |
| 2027 | 153,201,540 | 70,559,403 | 223,760,943 | 13,734,680 | 16,359,696 | 30,094,376 |
| 2028 | 129,711,540 | 63,717,281 | 193,428,822 | 14,284,068 | 15,810,309 | 30,094,376 |
| 2029 | 109,281,540 | 58,656,675 | 167,938,215 | 14,855,430 | 15,238,946 | 30,094,376 |
| 2030 | 114,803,270 | 53,743,550 | 168,546,820 | 15,449,648 | 14,644,729 | 30,094,376 |
| 2031 | 89,925,000 | 48,355,925 | 138,280,925 | 16,067,634 | 14,026,743 | 30,094,376 |
| 2032 | 93,860,000 | 44,128,425 | 137,988,425 | 16,710,339 | 13,384,037 | 30,094,376 |
| 2033 | 98,830,000 | 39,535,350 | 138,365,350 | 17,378,752 | 12,715,624 | 30,094,376 |
| 2034 | 103,565,000 | 34,797,137 | 138,362,137 | 18,073,903 | 12,020,474 | 30,094,376 |
| 2035 | 108,440,000 | 29,918,470 | 138,358,470 | 18,796,859 | 11,297,518 | 30,094,376 |
| 2036 | 113,505,000 | 24,859,741 | 138,364,741 | 19,548,733 | 10,545,643 | 30,094,376 |
| 2037 | 118,560,000 | 19,803,170 | 138,363,170 | 20,330,682 | 9,763,694 | 30,094,376 |
| 2038 | 123,480,000 | 14,884,277 | 138,364,277 | 21,143,910 | 8,950,467 | 30,094,376 |
| 2039 | 123,930,000 | 8,919,029 | 132,849,029 | 21,989,666 | 8,104,710 | 30,094,376 |
| 2040 | 20,565,000 | 3,044,600 | 23,609,600 | 22,869,253 | 7,225,124 | 30,094,376 |
| 2041 | 21,530,000 | 2,076,000 | 23,606,000 | 23,784,023 | 6,310,354 | 30,094,376 |
| 2042 | 22,545,000 | 1,061,900 | 23,606,900 | 24,735,384 | 5,358,993 | 30,094,376 |
| 2043 | | | | 25,724,799 | 4,369,577 | 30,094,376 |
| 2044 | | | | 26,753,791 | 3,340,585 | 30,094,376 |
| 2045 | | | | 27,823,943 | 2,270,434 | 30,094,376 |
| 2046 | | | | 28,936,900 | 1,157,476 | 30,094,376 |
| Totals | \$ 3,387,458,159 | \$ 1,761,098,844 | \$ 5,148,557,003 | \$ 520,392,957 | \$ 382,438,332 | \$ 902,831,289 |

| Fiscal Year | Total Existing & Proposed Debt | | |
|-------------|--------------------------------|------------------|------------------|
| | Principal | Interest | Total |
| 2016 | 478,025,252 | 145,726,451 | 623,751,702 |
| 2017 | 119,435,175 | 157,393,932 | 276,829,108 |
| 2018 | 124,899,243 | 151,915,881 | 276,815,124 |
| 2019 | 130,714,871 | 146,093,862 | 276,808,732 |
| 2020 | 136,847,714 | 139,939,650 | 276,787,364 |
| 2021 | 141,228,970 | 133,466,772 | 274,695,742 |
| 2022 | 147,472,991 | 126,856,263 | 274,329,254 |
| 2023 | 154,522,003 | 119,485,271 | 274,007,274 |
| 2024 | 161,526,621 | 112,065,321 | 273,591,942 |
| 2025 | 179,430,025 | 104,215,246 | 283,645,270 |
| 2026 | 179,022,964 | 95,422,467 | 274,445,430 |
| 2027 | 166,936,221 | 86,919,098 | 253,855,319 |
| 2028 | 143,995,608 | 79,527,590 | 223,523,198 |
| 2029 | 124,136,971 | 73,895,621 | 198,032,592 |
| 2030 | 130,252,918 | 68,388,279 | 198,641,196 |
| 2031 | 105,992,634 | 62,382,668 | 168,375,301 |
| 2032 | 110,570,339 | 57,512,462 | 168,082,801 |
| 2033 | 116,208,752 | 52,250,974 | 168,459,726 |
| 2034 | 121,638,903 | 46,817,611 | 168,456,513 |
| 2035 | 127,236,859 | 41,215,987 | 168,452,846 |
| 2036 | 133,053,733 | 35,405,384 | 168,459,117 |
| 2037 | 138,890,682 | 29,566,864 | 168,457,546 |
| 2038 | 144,623,910 | 23,834,743 | 168,458,653 |
| 2039 | 145,919,666 | 17,023,739 | 162,943,405 |
| 2040 | 43,434,253 | 10,269,724 | 53,703,976 |
| 2041 | 45,314,023 | 8,386,354 | 53,700,376 |
| 2042 | 47,280,384 | 6,420,893 | 53,701,276 |
| 2043 | 25,724,799 | 4,369,577 | 30,094,376 |
| 2044 | 26,753,791 | 3,340,585 | 30,094,376 |
| 2045 | 27,823,943 | 2,270,434 | 30,094,376 |
| 2046 | 28,936,900 | 1,157,476 | 30,094,376 |
| Totals | \$ 3,907,851,116 | \$ 2,143,537,176 | \$ 6,051,388,292 |

Southern Nevada Water Authority
Operating and Capital Budget
Debt Management Policy
Fiscal Year Ending June 30, 2016

Net Pledged Revenues
as of June 30, 2015

| Fiscal Year End | 2012 Actual | 2013 Actual | 2014 Actual | 2015 Budget | 2016 Budget |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| REVENUES | | | | | |
| Wholesale Delivery Charge | \$ 119,239,660 | \$ 117,534,578 | \$ 121,045,154 | \$ 123,370,688 | \$ 122,401,411 |
| Regional Connection Charge | 13,892,856 | 22,915,416 | 44,819,669 | 30,748,787 | 53,765,118 |
| Regional Infrastructure Surcharge | 16,193,130 | 79,114,278 | 80,244,881 | 87,233,033 | 112,462,115 |
| Regional Water Charges | 45,263,892 | 45,641,138 | 48,209,644 | 54,345,074 | 62,768,239 |
| Sales Tax | 46,222,883 | 48,847,306 | 52,308,926 | 53,711,463 | 54,448,884 |
| Groundwater Program Fees | 867,716 | 863,417 | 842,191 | 892,964 | 874,637 |
| Las Vegas Wash Program Fees | 397,408 | 397,708 | 397,408 | 727,398 | 416,715 |
| Interest Income & Capitalized Int | 1,565,109 | 1,923,641 | 2,309,538 | 1,478,268 | 1,283,700 |
| Other Revenues ^{1/} | 3,024,631 | 3,909,310 | 4,269,154 | 12,172,166 | 9,471,951 |
| Total Revenues | \$ 246,667,285 | \$ 321,146,792 | \$ 354,446,565 | \$ 364,679,841 | \$ 417,892,771 |
| OPERATING EXPENSES | | | | | |
| Personnel & Related | \$ 43,450,464 | \$ 43,880,414 | \$ 50,216,887 | \$ 65,972,117 | \$ 66,684,688 |
| Energy | 44,527,798 | 36,347,165 | 53,409,820 | 45,814,094 | 37,524,906 |
| Operations and Maintenance | 37,685,150 | 27,943,415 | 34,483,860 | 30,132,240 | 36,628,270 |
| PAYG Capital Expenses | | | | 40,548,332 | 22,197,482 |
| Interfund Bridge to Bond Fund ^{2/} | | | | | |
| Total Operating Expenses | \$ 125,663,412 | \$ 108,170,994 | \$ 138,110,567 | \$ 182,466,783 | \$ 163,035,346 |
| NET PLEDGED REVENUES | \$ 121,003,873 | \$ 212,975,798 | \$ 216,335,998 | \$ 182,213,058 | \$ 254,857,425 |
| Add Beginning Unrestricted Funds ^{3/} | 305,553,937 | 308,634,591 | 322,928,812 | 371,208,330 | 481,639,755 |
| Net Available for Debt Service | \$ 426,557,810 | \$ 521,610,389 | \$ 539,264,810 | \$ 553,421,388 | \$ 736,497,180 |
| SNWA DEBT SERVICE ^{4/} | 146,624,017 | 146,773,353 | 146,232,169 | 170,509,681 | 223,751,702 |
| DEBT COVERAGE RATIO | 2.9 | 3.6 | 3.7 | 3.2 | 3.3 |
| SNWA REVENUE AND FUNDS | | | | | |
| AVAILABLE AFTER DEBT SERVICE | \$ 279,933,793 | \$ 374,837,036 | \$ 393,032,641 | \$ 382,911,707 | \$ 512,745,478 |

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 Reclamation District).

2/ Occasionally during the process of issuing new money bonds, the bond fund will become depleted before the new issue is finalized. Unrestricted funds can be used from 60 days prior to Board approval of bond resolution to the date of bond proceeds receipt. At that time the unrestricted funds are reimbursed from the bond proceeds.

3/ Unrestricted funds include unrestricted cash and investments as shown on the Comprehensive Annual Financial Report and sales tax proceeds on hand regardless of classification.

4/ Includes the interest only amounts paid on the 2004 Commercial Paper Notes. Net of the BAB Credit received in fiscal year 2010 with respect to the 2009A Bonds and 2009C Bonds.

**Southern Nevada Water Authority
Operating and Capital Budget
Debt Management Policy
Fiscal Year Ending June 30, 2016**

| Fiscal Year | Las Vegas Valley Water District | | | Southern Nevada Water Authority (Clark County Bond Bank and other) | | |
|-------------|---------------------------------|----------------|------------------|---|----------------|------------------|
| | Principal | Interest | Total | Principal | Interest | Total |
| 2016 | 443,980,000 | 71,554,726 | 515,534,726 | 31,605,000 | 57,332,096 | 88,937,096 |
| 2017 | 43,250,000 | 64,736,545 | 107,986,545 | 43,325,000 | 55,461,996 | 98,786,996 |
| 2018 | 45,095,000 | 62,879,851 | 107,974,851 | 45,420,000 | 53,370,814 | 98,790,814 |
| 2019 | 47,135,000 | 60,845,376 | 107,980,376 | 47,610,000 | 51,177,507 | 98,787,507 |
| 2020 | 49,315,000 | 58,673,678 | 107,988,678 | 49,910,000 | 48,855,962 | 98,765,962 |
| 2021 | 51,635,000 | 56,370,935 | 108,005,935 | 52,335,000 | 46,420,968 | 98,755,968 |
| 2022 | 53,920,000 | 54,090,281 | 108,010,281 | 54,900,000 | 43,843,436 | 98,743,436 |
| 2023 | 56,520,000 | 51,505,104 | 108,025,104 | 57,905,000 | 40,855,604 | 98,760,604 |
| 2024 | 59,190,000 | 48,854,775 | 108,044,775 | 60,360,000 | 37,962,750 | 98,322,750 |
| 2025 | 62,020,000 | 46,027,910 | 108,047,910 | 63,410,000 | 34,926,213 | 98,336,213 |
| 2026 | 65,115,000 | 42,984,189 | 108,099,189 | 66,630,000 | 31,736,238 | 98,366,238 |
| 2027 | 47,760,000 | 39,744,834 | 87,504,834 | 69,700,000 | 28,689,688 | 98,389,688 |
| 2028 | 30,450,000 | 37,360,188 | 67,810,188 | 72,610,000 | 25,804,838 | 98,414,838 |
| 2029 | 31,980,000 | 35,828,150 | 67,808,150 | 75,545,000 | 22,754,900 | 98,299,900 |
| 2030 | 33,595,000 | 34,219,113 | 67,814,113 | 80,410,000 | 19,506,981 | 99,916,981 |
| 2031 | 24,380,000 | 32,527,025 | 56,907,025 | 65,545,000 | 15,828,900 | 81,373,900 |
| 2032 | 42,075,000 | 31,317,200 | 73,392,200 | 51,785,000 | 12,811,225 | 64,596,225 |
| 2033 | 57,815,000 | 29,211,500 | 87,026,500 | 41,015,000 | 10,323,850 | 51,338,850 |
| 2034 | 60,700,000 | 26,326,987 | 87,026,987 | 42,865,000 | 8,470,150 | 51,335,150 |
| 2035 | 63,685,000 | 23,337,482 | 87,022,482 | 44,755,000 | 6,580,988 | 51,335,988 |
| 2036 | 66,780,000 | 20,246,166 | 87,026,166 | 46,725,000 | 4,613,575 | 51,338,575 |
| 2037 | 70,020,000 | 17,004,608 | 87,024,608 | 48,540,000 | 2,798,563 | 51,338,563 |
| 2038 | 97,910,000 | 13,605,777 | 111,515,777 | 25,570,000 | 1,278,500 | 26,848,500 |
| 2039 | 123,930,000 | 8,919,029 | 132,849,029 | - | - | - |
| 2040 | 20,565,000 | 3,044,600 | 23,609,600 | - | - | - |
| 2041 | 21,530,000 | 2,076,000 | 23,606,000 | - | - | - |
| 2042 | 22,545,000 | 1,061,900 | 23,606,900 | - | - | - |
| Totals | \$ 1,792,895,000 | \$ 974,353,925 | \$ 2,767,248,925 | \$ 1,238,475,000 | \$ 661,405,737 | \$ 1,899,880,737 |

**Southern Nevada Water Authority
Operating and Capital Budget
Debt Management Policy
Fiscal Year Ending June 30, 2016**

Schedule of Existing Debt Service (by Issuer)

as of June 30, 2015

Page 2 of 2

| Fiscal Year | Southern Nevada Water Authority through the State Bond Bank | | | Total Debt Service | | |
|-------------|--|-----------------------|-----------------------|-------------------------|-------------------------|-------------------------|
| | Principal | Interest | Total | Principal | Interest | Total |
| 2016 | 2,440,252 | 16,839,629 | 19,279,881 | 478,025,252 | 145,726,451 | 623,751,702 |
| 2017 | 23,581,517 | 16,379,674 | 39,961,191 | 110,156,517 | 136,578,214 | 246,734,731 |
| 2018 | 24,734,439 | 15,220,645 | 39,955,084 | 115,249,439 | 131,471,309 | 246,720,748 |
| 2019 | 25,934,074 | 14,012,399 | 39,946,474 | 120,679,074 | 126,035,282 | 246,714,356 |
| 2020 | 27,185,486 | 12,752,862 | 39,938,348 | 126,410,486 | 120,282,502 | 246,692,988 |
| 2021 | 26,404,253 | 11,435,210 | 37,839,463 | 130,374,253 | 114,227,113 | 244,601,366 |
| 2022 | 27,364,085 | 10,117,076 | 37,481,161 | 136,184,085 | 108,050,793 | 244,234,878 |
| 2023 | 28,356,540 | 8,770,650 | 37,127,190 | 142,781,540 | 101,131,357 | 243,912,897 |
| 2024 | 29,766,540 | 7,363,500 | 37,130,040 | 149,316,540 | 94,181,025 | 243,497,566 |
| 2025 | 41,301,540 | 5,865,231 | 47,166,772 | 166,731,540 | 86,819,353 | 253,550,894 |
| 2026 | 34,071,540 | 3,814,088 | 37,885,628 | 165,816,540 | 78,534,514 | 244,351,054 |
| 2027 | 35,741,540 | 2,124,881 | 37,866,422 | 153,201,540 | 70,559,403 | 223,760,943 |
| 2028 | 26,651,540 | 552,256 | 27,203,797 | 129,711,540 | 63,717,281 | 193,428,822 |
| 2029 | 1,756,540 | 73,625 | 1,830,165 | 109,281,540 | 58,656,675 | 167,938,215 |
| 2030 | 798,270 | 17,456 | 815,726 | 114,803,270 | 53,743,550 | 168,546,820 |
| 2031 | - | - | - | 89,925,000 | 48,355,925 | 138,280,925 |
| 2032 | - | - | - | 93,860,000 | 44,128,425 | 137,988,425 |
| 2033 | - | - | - | 98,830,000 | 39,535,350 | 138,365,350 |
| 2034 | - | - | - | 103,565,000 | 34,797,137 | 138,362,137 |
| 2035 | - | - | - | 108,440,000 | 29,918,470 | 138,358,470 |
| 2036 | - | - | - | 113,505,000 | 24,859,741 | 138,364,741 |
| 2037 | - | - | - | 118,560,000 | 19,803,170 | 138,363,170 |
| 2038 | - | - | - | 123,480,000 | 14,884,277 | 138,364,277 |
| 2039 | - | - | - | 123,930,000 | 8,919,029 | 132,849,029 |
| 2040 | - | - | - | 20,565,000 | 3,044,600 | 23,609,600 |
| 2041 | - | - | - | 21,530,000 | 2,076,000 | 23,606,000 |
| 2042 | - | - | - | 22,545,000 | 1,061,900 | 23,606,900 |
| | <u>\$ 356,088,159</u> | <u>\$ 125,339,183</u> | <u>\$ 481,427,342</u> | <u>\$ 3,387,458,159</u> | <u>\$ 1,761,098,844</u> | <u>\$ 5,148,557,003</u> |

SECTION 8

STATISTICAL INFORMATION



SOUTHERN NEVADA WATER AUTHORITY®

FISCAL YEAR 2015-16

OPERATING AND CAPITAL BUDGET

Southern Nevada Water Authority
Operating and Capital Budget
Statistical Information
Fiscal Year Ending June 30, 2016

**Southern Nevada Water Authority
Statistical Information**

Page Description

| | |
|-----|--|
| 8-1 | Cover Page |
| 8-2 | Demographic Statistics |
| 8-3 | Top Ten Employers |
| 8-4 | Residential Real Estate |
| 8-5 | Secured Tax Roll |
| 8-6 | Temperature & Rainfall |
| 8-7 | Charts: Average Rainfall and Comparison of Lake Elevations |

**Southern Nevada Water Authority
Operating and Capital Budget
Statistical Information**

Fiscal Year Ending June 30, 2016

**Demographic Statistics
Clark County, Nevada
Calendar Years**

| Calendar Year | Population ⁽¹⁾ | Per Capita Income ⁽²⁾ | Clark County Personal Income (In Million \$) ⁽²⁾ | Median Household Income ⁽³⁾ |
|------------------|---------------------------|-------------------------------------|---|--|
| 2014 | 2,069,450 | N/A | | N/A |
| 2013 | 2,034,140 | \$ 37,424 | \$ 76,126 | \$ 52,394 |
| 2012 | 2,000,759 | 36,542 | 70,289.1 | 51,159 |
| 2011 | 1,967,926 | 35,680 | 67,738.3 | 48,927 |
| 2010 | 1,953,422 | 34,668 | 67,781.4 | 52,610 |
| 2009 | 1,939,407 | 34,950 | 74,279.8 | 55,932 |

| Calendar Year | School Enrollment ⁽⁴⁾ | Total Labor Force ⁽⁵⁾ | Unemployment Rate ⁽⁶⁾ |
|------------------|--|-------------------------------------|-------------------------------------|
| 2014 | 314,598 | 990,900 | 6.2% |
| 2013 | 311,429 | 992,000 | 10.1% |
| 2012 | 308,447 | 980,700 | 12.1% |
| 2011 | 309,893 | 992,000 | 14.4% |
| 2010 | 309,476 | 974,500 | 15.3% |
| 2009 | 311,240 | 960,700 | 13.0% |

Sources:

(1) 2010 figure from the U.S. Bureau of the Census; 2009 and 2011-14 figures from the Nevada State Demographer.

(2) U.S. Bureau of Economic Analysis as reported for the Las Vegas-Paradise MSA (which is comprised of Clark County). Updated November 20, 2014

(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, 2016**

**Top Ten Employers⁽¹⁾⁽²⁾
Clark County, Nevada**

Fiscal Year Ended June, 2013 and Fiscal Year Ended June, 2004

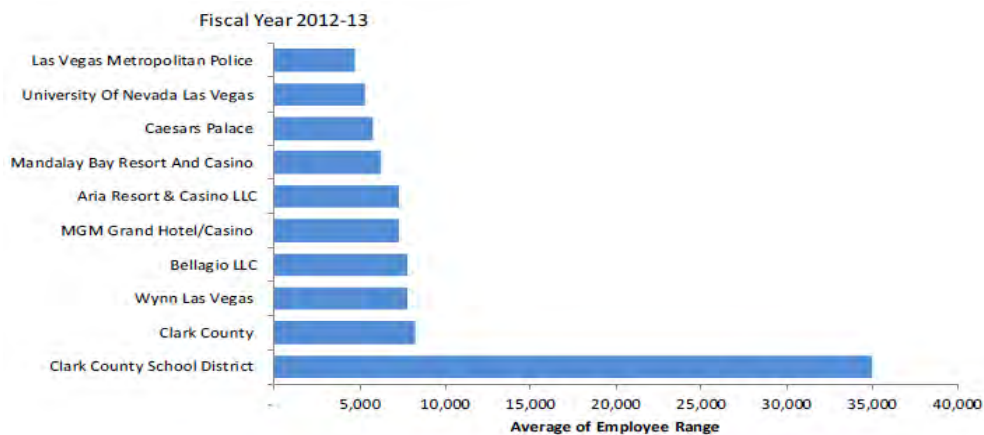
| Employer <u>Trade name</u> | FY 2012-13 | | | FY 2003-04 ⁽³⁾ | | |
|-----------------------------------|------------------|----------------|---|---------------------------|----------------|---|
| | <u>Employees</u> | <u>Ranking</u> | <u>% of Total Labor Force⁽⁴⁾</u> | <u>Employees</u> | <u>Ranking</u> | <u>% of Total Labor Force⁽⁴⁾</u> |
| Clark County School District | 30,000 to 39,999 | 1 | 3.5% | 30,000 to 39,999 | 1 | 4.2% |
| Clark County | 8,000 to 8,499 | 2 | 0.8% | 9,000 to 9,499 | 2 | 1.2% |
| Wynn Las Vegas | 7,500 to 7,999 | 3 | 0.8% | | | |
| Bellagio LLC | 7,500 to 7,999 | 4 | 0.8% | 9,000 to 9,499 | 3 | 1.1% |
| MGM Grand Hotel & Casino | 7,500 to 7,999 | 5 | 0.8% | 7,500 to 7,999 | 4 | 0.9% |
| Aria Resort & Casino LLC | 7,000 to 7,999 | 6 | 0.7% | | | |
| Mandalay Bay Resort & Casino | 6,000 to 6,499 | 7 | 0.6% | 7,000 to 7,499 | 5 | 0.9% |
| Caesars Palace | 5,500 to 5,999 | 8 | 0.6% | 4,500 to 4,999 | 9 | 0.6% |
| University of Nevada Las Vegas | 5,000 to 5,499 | 9 | 0.5% | 5,000 to 5,499 | 6 | 0.6% |
| Las Vegas Metropolitan Police | 4,500 to 4,999 | 10 | 0.5% | 4,500 to 4,999 | 10 | 0.6% |
| Mirage Hotel & Casino | | | | 5,000 to 5,499 | 7 | 0.6% |
| State of Nevada | | | | 5,000 to 5,499 | 8 | 0.6% |
| Total Labor Force | 991,597 | | | 826,022 | | |

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.

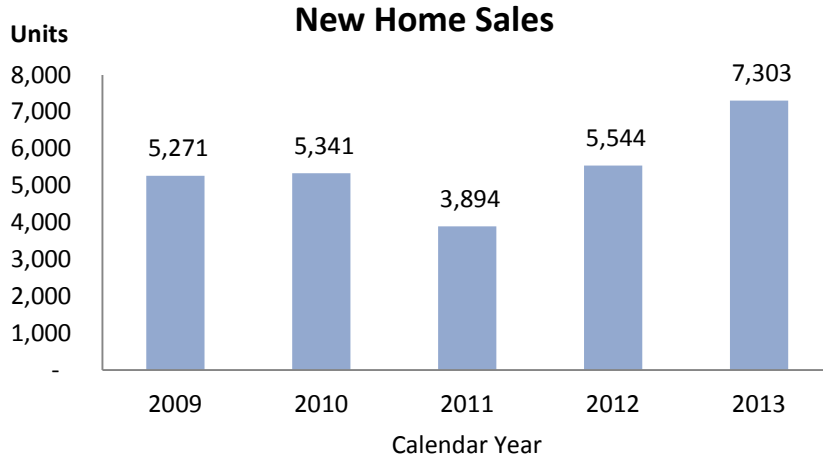
(2) Nevada law prohibits the disclosure of exact employee counts. All employee counts are shown in ranges. Calculations of total labor force per employer (column (4)) are estimates.

(3) Only the top ten employers of the period are listed.

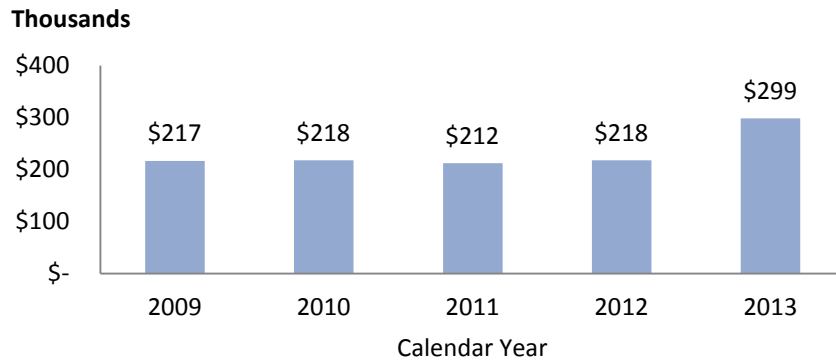


Southern Nevada Water Authority
 Operating and Capital Budget
 Statistical Information
 Fiscal Year Ending June 30, 2016

Residential Real Estate Clark County, Nevada



New Home Median Price



| Year | Units Sold | Median New Home Price |
|------|------------|-----------------------|
| 2009 | 5,271 | \$ 216,854 |
| 2010 | 5,341 | \$ 218,080 |
| 2011 | 3,894 | \$ 212,250 |
| 2012 | 5,544 | \$ 218,114 |
| 2013 | 7,303 | \$ 298,601 |

Southern Nevada Water Authority
Operating and Capital Budget
Statistical Information
Fiscal Year Ending June 30, 2016

Secured Tax Roll
Clark County, Nevada
2013 - 2014

| <u>Taxpayer</u> | <u>Taxable Assessed</u> | <u>Taxable Appraised</u> |
|--------------------------------------|-------------------------|--------------------------|
| 1. MGM Resorts International | \$ 2,749,674,055 | \$ 7,856,211,586 |
| 2. NV Energy | 1,740,335,784 | 4,972,387,954 |
| 3. Caesars Entertainment Corporation | 1,607,183,794 | 4,591,953,697 |
| 4. Las Vegas Sands Corporation | 971,098,550 | 2,774,567,286 |
| 5. Wynn Resorts Limited | 760,124,769 | 2,171,785,054 |
| 6. Station Casinos Incorporated | 516,085,960 | 1,474,531,314 |
| 7. Boyd Gaming Corporation | 289,370,372 | 826,772,491 |
| 8. Nevada Property 1 LLC | 262,486,733 | 749,962,094 |
| 9. Eldorado Energy LLC | 198,858,459 | 568,167,026 |
| 10. Howard Hughes Corporation | 183,142,575 | 523,264,500 |
| | <u>\$ 9,278,361,051</u> | <u>\$ 26,509,603,002</u> |

SOURCE: Clark County Assessor's Report Dated October 11, 2013

Southern Nevada Water Authority
 Operating and Capital Budget
 Statistical Information
 Fiscal Year Ending June 30, 2016

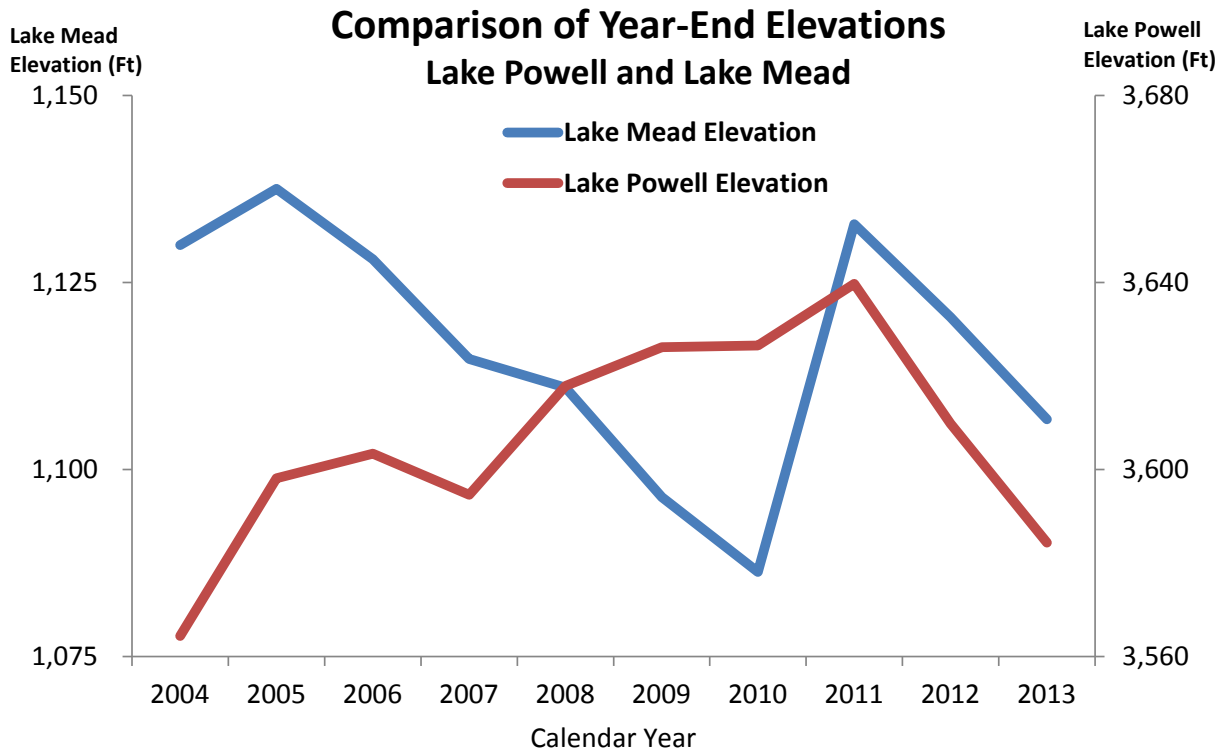
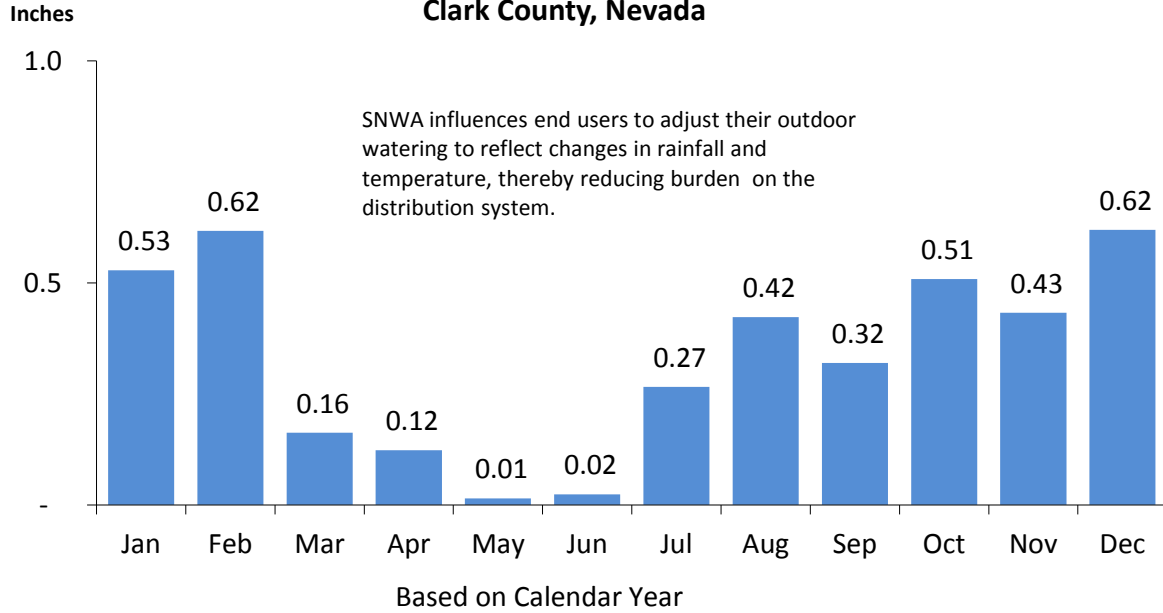
2009-14 Temperature and Rainfall
 Average Maximum and Minimum Daily Temperature
 in Degrees Fahrenheit and Monthly Rainfall in Inches

| Month | 2009 | | | 2010 | | | 2011 | | |
|---|-------------|-------------|------------|-------------|-------------|------------|-------------|-------------|------------|
| | Temperature | | | Temperature | | | Temperature | | |
| | Max. | Min. | Rainfall | Max. | Min. | Rainfall | Max. | Min. | Rainfall |
| January | 70 | 29 | 0.0 | 65 | 33 | 2.0 | 74 | 27 | 0.0 |
| February | 74 | 34 | 0.8 | 70 | 37 | 1.1 | 71 | 26 | 0.1 |
| March | 85 | 39 | 0.0 | 82 | 40 | 0.2 | 88 | 39 | 0.2 |
| April | 94 | 40 | 0.1 | 88 | 45 | 0.1 | 93 | 41 | 0.0 |
| May | 103 | 65 | 0.0 | 96 | 49 | 0.0 | 96 | 51 | 0.0 |
| June | 108 | 62 | 0.1 | 110 | 64 | 0.0 | 110 | 60 | 0.0 |
| July | 113 | 75 | 0.3 | 113 | 77 | 0.0 | 112 | 74 | 0.8 |
| August | 110 | 68 | 0.0 | 108 | 65 | 0.0 | 112 | 74 | 0.0 |
| September | 103 | 64 | 0.0 | 108 | 65 | 0.0 | 105 | 64 | 0.8 |
| October | 93 | 44 | 0.0 | 96 | 49 | 0.8 | 95 | 49 | 0.2 |
| November | 83 | 39 | 0.0 | 86 | 30 | 0.0 | 79 | 38 | 0.1 |
| December | 64 | 30 | 0.3 | 70 | 30 | 1.8 | 65 | 28 | 0.1 |
| Average Annual Temperature/ Total Rainfall | 91.7 | 49.1 | 1.6 | 91.0 | 48.7 | 5.9 | 91.7 | 47.6 | 2.3 |

| Month | 2012 | | | 2013 | | | 2014 | | |
|---|-------------|-------------|------------|-------------|-------------|------------|-------------|-------------|-------------|
| | Temperature | | | Temperature | | | Temperature | | |
| | Max. | Min. | Rainfall | Max. | Min. | Rainfall | Max. | Min. | Rainfall |
| January | 68 | 34 | 0.0 | 65 | 23 | 0.4 | 73 | 34 | 0.0 |
| February | 74 | 38 | 0.1 | 71 | 35 | 0.0 | 81 | 34 | 0.3 |
| March | 86 | 37 | 0.2 | 87 | 44 | 0.2 | 86 | 45 | 0.0 |
| April | 99 | 44 | 0.0 | 99 | 48 | 0.0 | 92 | 43 | 0.0 |
| May | 107 | 52 | 0.0 | 102 | 58 | 0.0 | 105 | 56 | 0.0 |
| June | 108 | 68 | 0.0 | 117 | 73 | 0.0 | 111 | 70 | 0.0 |
| July | 114 | 71 | 0.2 | 115 | 75 | 0.3 | 112 | 77 | 0.2 |
| August | 112 | 68 | 2.3 | 109 | 70 | 0.3 | 107 | 69 | 0.4 |
| September | 102 | 68 | 1.2 | 102 | 57 | 0.4 | 106 | 64 | 0.6 |
| October | 99 | 50 | 0.9 | 92 | 47 | 0.0 | 93 | 55 | 0.0 |
| November | 83 | 37 | 0.0 | 79 | 42 | 1.4 | 84 | 37 | 0.0 |
| December | 72 | 30 | 0.5 | 69 | 26 | 0.1 | 68 | 30 | 0.3 |
| Average Annual Temperature/ Total Rainfall | 93.7 | 49.8 | 5.3 | 92.3 | 49.8 | 3.0 | 93.2 | 51.2 | 1.81 |

Southern Nevada Water Authority
Operating and Capital Budget
Statistical Information
 Fiscal Year Ending June 30, 2016

Average Rainfall Per Month
Ten Year Span 2004 to 2013
Clark County, Nevada



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SECTION 9

FINANCIAL POLICY



SOUTHERN NEVADA WATER AUTHORITY®

FISCAL YEAR 2015-16

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 policy represents a portion of the approved operating policies of the LVVWD.

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| LAS VEGAS VALLEY WATER DISTRICT DEPARTMENT POLICY | SUBJECT: FINANCIAL POLICY | NUMBER: 1 |
| | APPROVED BY: <i>Aina 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.

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SECTION 10

GLOSSARY



SOUTHERN NEVADA WATER AUTHORITY®

FISCAL YEAR 2015-16

OPERATING AND CAPITAL BUDGET

Southern Nevada Water Authority
Operating and Capital Budget
Glossary

Fiscal Year Ending June 30, 2016

Accrual. The act of recognizing a charge incurred in one accounting period that has not been paid by the end of it.

Acre-Foot (af). A water measurement equating to 325,839 gallons. An acre foot will supply the annual water needs of approximately 2.2 families in the SNWA 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. Payment of a debit or credit by regular intervals over a specific period of time.

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 plan of revenue and expenditures over a given period of time, usually one year.

Budget Calendar. The schedule of key dates or milestones that the Authority follows in the preparation and adoption of the budget.

Budgetary Control. The control or management of a governmental unit or enterprise in accordance with an approved budget for the purpose of keeping expenditures within the limitations of available appropriations and available revenues.

Budget Document. The official written statement prepared by the Authority 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.

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Capital Contributions. For net position purposes, defined as regional connection, commodity, reliability and infrastructure surcharge revenues as well as grant receipts.

Capital Expenditure. Fixed assets to be acquired during a fiscal year, generally with a value of over \$5,000 and an estimated life of over three years.

Capitalized Expenses. 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 Improvement Program (CIP). An accountancy term that records the cost of construction work, which is not yet completed (typically, applied to capital budget items). A CIP item is not depreciated until the asset is placed in service. Normally, upon completion, a CIP item is reclassified, and the reclassified asset is capitalized and depreciated.

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 using less water in a more efficient manner. SNWA achieves the benefits of conservation through education of the end user, promoting water efficient hardware, and pricing signals.

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Construction Expenditures. Generally, construction expenses that are spent on third party vendors who build, supervise, or provide materials used in the construction of capital assets.

Debt Issuance Proceeds. Principal amount of debt issues. These proceeds are used to pay for major construction expenditures incurred by the Authority.

Debt Service Payments. Funds used to pay annual debt payments and interest expense.

Department. A basic organizational unit of the Authority that is functionally unique in its delivery of services.

Depreciation. The decrease in value of physical assets due to use and 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 use 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 2015-16 ends on June 30, 2016.

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.

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Fiscal Year Ending June 30, 2016

For example, two part-time positions working 20 hours each equal 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 the estimated cash balance in a specific subfund 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 mid-2000's and lasted 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.

Interfund 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

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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 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 Interlocal Agreement that will be used for Las Vegas Wash operating expenses. The fees are net of any anticipated grant proceeds. Participants in the Interlocal Agreement are the Authority, 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 District 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

Southern Nevada Water Authority
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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.

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.** The excess of an entity's assets over its liabilities. Net position was originally 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 Authority 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 Authority'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 Authority's treatment facilities and income from the Authority's Northern Resource holdings.

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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.

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 for the purpose of storing it 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

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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 costs if they are present in the M CCP subfund 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 salaries 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 Authority comprises seven member agencies including the city of Henderson, city of Las Vegas, city of North Las Vegas, Big Bend Water District (Laughlin), the Clark County Water Reclamation District and the Las Vegas Valley Water District. SNWA provides wholesale water treatment and delivery for the greater Las Vegas Valley and is responsible for acquiring and managing long-term water resources for Southern Nevada.

Southern Nevada Water System (SNWS). Refers to the system of distribution facilities that divers raw Colorado River water from Lake Mead and delivers potable water to

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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.

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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[About Us](#) »

SNWA Charges

In addition to addressing our region's unique water needs, the Southern Nevada Water Authority (SNWA) treats and delivers the wholesale water supply to municipal water providers. Costs related to [water treatment](#), [water resources](#), and the SNWA [distribution network](#) are covered by several SNWA surcharges.

SNWA Reliability Surcharge

This charge is based on the premise that customers have varying levels of need for water and should pay accordingly. While everyone expects water to flow when they turn on the tap, some customers—such as businesses—have a greater need for system reliability, especially during peak usage periods. The surcharge, which is applied against the total water bill with a few line-item exceptions, is 0.25 percent for residential customers and 2.5 percent for others.

SNWA Commodity Charge

A charge of \$0.44 per 1,000 gallons on each water bill pays for improvements to [water quality](#) and enhancements to the reliability of the [regional water system](#). This charge will increase by \$0.04 in 2017.

SNWA Infrastructure Charge

The Southern Nevada Water Authority's Infrastructure Charge contributes toward funding the regional water infrastructure necessary to deliver high-quality drinking water throughout the valley. Initiated in 2013 at the recommendation of SNWA's citizens' participation committee known as the [Integrated Resource Planning Advisory Committee](#), the Infrastructure Charge is being phased in over five years. Through this charge, all water customers contribute toward funding critical facilities such as [Intake No. 3](#) and the [Low Lake Level Pumping Station](#).

The SNWA Infrastructure Charge rates vary based on meter size and are calculated daily.

SNWA Daily Infrastructure Charge (Residential)

| Meter size (inches) | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| 5/8" | \$0.1667 | \$0.1880 | \$0.2120 | \$0.3196 | \$0.3906 | \$0.4306 |
| 3/4" | \$0.1667 | \$0.1880 | \$0.2120 | \$0.3196 | \$0.3906 | \$0.4306 |
| 1" | \$0.6403 | \$0.6806 | \$0.7263 | \$0.9300 | \$1.0646 | \$1.1403 |
| 1 1/2" | \$1.2803 | \$1.3610 | \$1.4520 | \$1.8599 | \$2.1287 | \$2.2803 |
| 2" | \$2.0486 | \$2.1780 | \$2.3233 | \$2.9760 | \$3.4063 | \$3.6487 |
| 3" | \$4.0966 | \$4.3553 | \$4.6460 | \$5.9510 | \$6.8120 | \$7.2966 |
| 4" | \$6.4010 | \$6.8050 | \$7.2596 | \$9.2986 | \$10.6433 | \$11.4010 |
| 6" | \$12.8016 | \$13.6096 | \$14.5190 | \$18.5973 | \$21.2863 | \$22.8011 |
| 8" | \$20.4823 | \$21.7753 | \$23.2296 | \$29.7550 | \$34.0580 | \$36.4823 |
| 10" | \$20.4823 | \$21.7753 | \$23.2296 | \$31.8850 | \$37.2487 | \$40.7333 |
| 12" | \$20.4823 | \$21.7753 | \$23.2296 | \$31.8850 | \$37.2487 | \$40.7333 |

Related Information

- [Integrated Resource Planning Advisory Committee](#)
- [Find Your Water Provider](#)
- [Water Resource Plan](#)

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SNWA Daily Infrastructure Charge (Non-Residential)

| Meter size (inches) | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| 5/8" | \$0.6350 | \$0.6563 | \$0.6803 | \$0.7879 | \$0.8589 | \$0.8989 |
| 3/4" | \$0.6350 | \$0.6563 | \$0.6803 | \$0.7879 | \$0.8589 | \$0.8989 |
| 1" | \$1.2026 | \$1.2430 | \$1.2886 | \$1.4923 | \$1.6270 | \$1.7027 |
| 1 1/2" | \$2.4053 | \$2.4860 | \$2.5770 | \$2.9849 | \$3.2537 | \$3.4053 |
| 2" | \$3.8483 | \$3.9776 | \$4.1230 | \$4.7756 | \$5.2059 | \$5.4483 |
| 3" | \$7.6966 | \$7.9553 | \$8.2460 | \$9.5510 | \$10.4120 | \$10.8966 |
| 4" | \$12.0263 | \$12.4303 | \$12.8850 | \$14.9239 | \$16.2686 | \$17.0263 |
| 6" | \$24.0523 | \$24.8603 | \$25.7696 | \$29.8480 | \$32.5370 | \$34.0523 |
| 8" | \$38.4833 | \$39.7763 | \$41.2306 | \$47.7560 | \$52.0590 | \$54.4833 |
| 10" | \$55.3196 | \$57.1783 | \$59.2690 | \$61.6503 | \$74.8350 | \$78.3196 |
| 12" | \$55.3196 | \$57.1783 | \$59.2690 | \$61.6503 | \$74.8350 | \$78.3196 |

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