



A G E N D A

SOUTHERN NEVADA WATER AUTHORITY BOARD OF DIRECTORS

REGULAR MEETING
9:00 A.M. – MAY 15, 2014

Board of Directors
Mary Beth Scow, Chair
Sam Bateman, Vice Chair
Susan Brager
Bob Coffin
Duncan McCoy
Steve Sisolak
Anita Wood

SOUTHERN NEVADA
WATER AUTHORITY

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

John J. Entsminger,
General Manager

Date Posted: 05/08/2014

The Southern Nevada Water Authority makes reasonable efforts to assist and accommodate persons with physical disabilities who desire to attend the meeting. For assistance, call Katie Horn at (702) 870-2011 at least 24 hours prior to the meeting.

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

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

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

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

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

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

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

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

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

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

CALL TO ORDER

COMMENTS BY THE GENERAL PUBLIC

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

ITEM NO.

1. *For Possible Action:* Approve agenda with the inclusion of tabled and/or reconsidered items, emergency items and/or deletion of items, and approve the minutes of the regular meeting of March 20, 2014, and the special meeting of April 7, 2014.
2. *For Possible Action:* Conduct a Public Hearing on the Tentative Budget for the Authority and subsequently adopt a Final Budget for fiscal year 2014/2015.

CONSENT AGENDA Items 3-4 are routine and can be taken in one motion unless a Director requests that an item be taken separately

3. *For Possible Action:* Approve an interlocal agreement between the Clark County Water Reclamation District and the Authority for Las Vegas Valley shallow groundwater quality data gathering, storage, and gap analysis, and accept funds for the Authority's participation costs.
4. *For Possible Action:* Approve an interlocal agreement among the City of Henderson, the City of Las Vegas, the City of North Las Vegas, Clark County, the Clark County Regional Flood Control District, the Clark County Water Reclamation District, and the Authority to establish funding allocations and the budget for Las Vegas Wash activities in fiscal year 2014/2015.

BUSINESS AGENDA

5. *For Possible Action:* Approve an agreement between Carollo Engineers and the Authority for a Texas Water Development Board study, “Testing Water Quality in a Municipal Wastewater Effluent Treated to Drinking Water Standards,” and accept funds for the Authority’s participation costs.
6. *For Possible Action:* Authorize the General Manager to extend existing leases for a period of two years on shares in the Muddy Valley Irrigation Company, the Bunkerville Irrigation Company, and the Mesquite Irrigation Company, execute ministerial documents to effectuate the transactions, and pay the associated administrative costs of the irrigation companies.
7. *For Possible Action:* Authorize the Authority’s intervention in Nevada Power Company’s General Rate Case.
8. *For Possible Action:* Adopt the Authority’s Water Conservation Plan.
9. *For Information Only:* Receive an update from staff on water resources including, but not limited to, drought conditions in the Colorado River Basin, the results of the implementation of the Authority’s Water Resource and Conservation Plans, activities on the Colorado River, the development of in-state water resources, and the status of the third intake project.

COMMENTS BY THE GENERAL PUBLIC

NO ACTION MAY BE TAKEN: At this time, the Board of Directors will hear general comments from the public on matters under the jurisdiction of the Southern Nevada Water Authority. Please limit your comments to three minutes or less and refrain from making comments that are repetitious, offensive, or amounting to personal attacks. No action may be taken upon a matter not listed on the posted agenda.

Visit our website at www.snwa.com/apps/agenda/snwa/index.cfm
for Southern Nevada Water Authority Agenda Postings and Approved Minutes

**SOUTHERN NEVADA WATER AUTHORITY
BOARD OF DIRECTORS
REGULAR MEETING
MARCH 20, 2014
MINUTES**

CALL TO ORDER 9:03 a.m., SNWA Board Chambers, Southern Nevada Water Authority
100 City Parkway, Seventh Floor, Las Vegas, Nevada

BOARD MEMBERS PRESENT Mary Beth Scow, Chair
Bob Coffin
Duncan McCoy
Steve Sisolak
Anita Wood

BOARD MEMBERS ABSENT Sam Bateman, Vice Chair
Susan Brager

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

OTHERS PRESENT Tom Minwegen, Clark County Water Reclamation District; Guy Hobbs,
Hobbs, Ong & Associates

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

COMMENTS BY THE GENERAL PUBLIC

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

Ed Uehling, Las Vegas, clarified his statement made at a previous meeting for the minutes, and spoke about agenda item number 9 and requested his written comments be included with the minutes.

1. For Possible Action: Approval of Agenda & Minutes

FINAL ACTION: A motion was made by Director Brager to approve the agenda for this meeting, and the meeting minutes of January 16, 2014. The motion was approved.

2. For Possible Action: Receive a presentation from the SNWA Youth Advisory Council and direct staff accordingly.

NO ACTION TAKEN

3. For Possible Action: Receive a report from General Counsel as to the results of the arbitration between the Authority and the Insurers on Lake Mead Intake No. 3.

Greg Walch, General Counsel, gave a presentation on the results of the arbitration. A copy of his presentation is attached to these minutes. Director Sisolak asked about the fees that were incurred as a result of the arbitration; Mr. Walch noted that the SNWA incurred approximately \$1 million in legal fees, which were not included in this arbitration award. Director Sisolak asked if the intake's existing insurance policy has been extended and if we plan to extend it again. Mr. Walch confirmed that it had been extended once, and he anticipates the need for an additional extension. Director Sisolak asked if there was any concern we would not be able to pursue an extension; Mr. Walch explained that the intake's insurer is among the only companies in the world who insure these types of projects and that the SNWA has maintained an amicable relationship with them.

NO ACTION NECESSARY

CONSENT AGENDA Items 4 - 6 are routine and can be taken in one motion unless a Director requests that an item be taken separately.

4. For Possible Action: Approve the First Amendment to Contract No. 14581A, Intergovernmental Agreement for a Joint Study on Nitrosamines, between Denver Water and the Authority to extend the date of completion of work from November 30, 2013, to September 30, 2014.

5. ***For Possible Action: Approve Amendment No. 1 to the existing agreement between FTI Consulting, Inc., and the Authority for forensic accounting services.***
6. ***For Possible Action: Approve Amendment No. 4 to the existing agreement between Woods & Aitken and the Authority to provide specialized legal services regarding complex construction issues.***

FINAL ACTION: A motion was made by Director Sisolak to follow staff's recommendation. The motion was approved.

BUSINESS AGENDA

7. ***For Possible Action: Approve an agreement between Carollo Engineers and the Authority for Water Research Foundation Study #4494, "Evaluation of Current and Alternative Strategies for Managing CECs in Water," and accept funds in the amount of \$35,000 for the Authority's participation costs.***

Director Coffin asked for an update on treatment processes as a result of water quality and pharmaceuticals. Dave Johnson, Deputy General Manager of Engineering and Operations, noted the community's benefit of a good water source, the Colorado River. He noted the SNWA's involvement in a number of research projects to detect small concentrations of constituents. Tom Minwegen, General Manager of the Clark County Water Reclamation District, also discussed local wastewater purveyor efforts to treat and remove constituents from the wastewater.

FINAL ACTION: A motion was made by Director Coffin to follow staff's recommendation. The motion was approved.

8. ***For Possible Action: Adopt the 2014 Las Vegas Wash Capital Improvements Plan.***

FINAL ACTION: A motion was made by Director Sisolak to follow staff's recommendations. The motion was approved.

9. ***For Possible Action: Approve a professional services agreement with Hobbs, Ong and Associates for services related to future issues presented to the Authority's Integrated Resource Planning Advisory Committee and for other general financial and debt management related services associated with the Authority's overall operations.***

Director Coffin asked Mr. Hobbs to clarify his relationship with the SNWA. Mr. Hobbs discussed the advisement his firm offers including the sale of bonds for capital projects and clarified that his firm does not create the need for financing, but structures bond sales to achieve the best result in the marketplace. His firm also supports a number of special projects including citizen advisory committees and rate studies. Director Wood asked how Mr. Hobbs and his associates separate his financing responsibilities from other special projects, including acting as a resource to citizen advisory committees. Mr. Hobbs stated that he and his firm have no involvement in the determination of the need to fund projects.

FINAL ACTION: A motion was made by Director Coffin to follow staff's recommendations, with Director Sisolak abstaining. The motion was approved.

10. ***For Possible Action: Approve a new Sales Tax Allocation Resolution and Cooperative Agreement among the Authority and the wastewater agencies of the City of Henderson, the City of Las Vegas, the City of North Las Vegas, and the Clark County Water Reclamation District.***

FINAL ACTION: A motion was made by Director Sisolak to follow staff's recommendation. The motion was approved.

11. ***For Possible Action:*** Make an appointment to fill a vacancy on the Integrated Resource Planning Advisory Committee.

Julie Wilcox, Deputy General Manager for Administration, noted that John Guedry was identified as a replacement by an outgoing member to fill a vacancy on the committee.

FINAL ACTION: A motion was made by Director Wood to appoint the individual noted by Ms. Wilcox. The motion was approved.

12. ***For Information Only:*** Receive an update from staff on water resources including, but not limited to, drought conditions in the Colorado River Basin, the results of the implementation of the Authority's Water Resource and Conservation Plans, activities on the Colorado River, the development of in-state water resources, and the status of the third intake project.

Mr. Entsminger gave a presentation, which is attached to these minutes. Marc Jensen, director of SNWA Engineering, provided a brief update on Lake Mead Intake No. 3, which is also attached to these minutes.

NO ACTION NECESSARY.

Public Comment

Ed Uehling, Las Vegas, presented a letter he drafted for the Attorney General regarding his concerns about the Open Meeting Law and the Integrated Resource Planning Advisory Committee process. A copy of his letter is attached to the minutes.

Adjournment

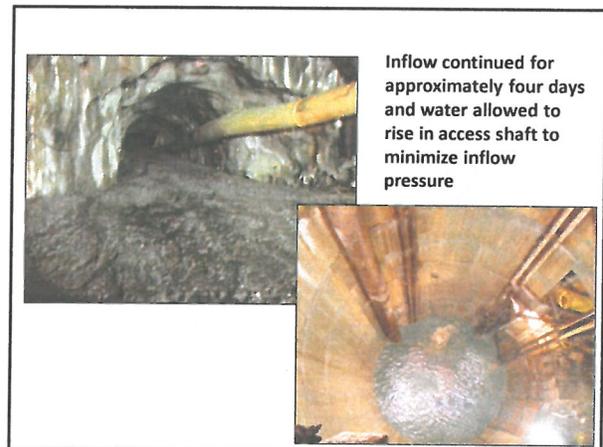
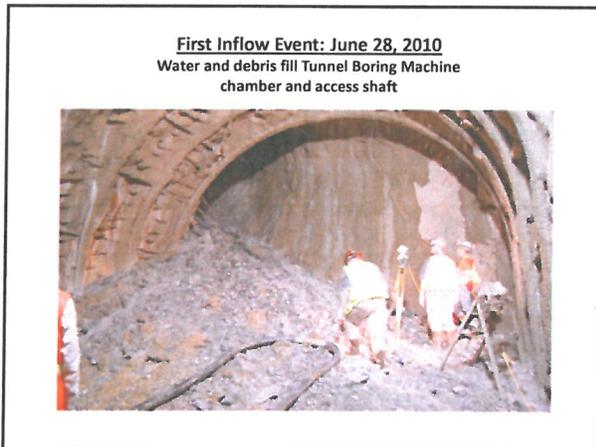
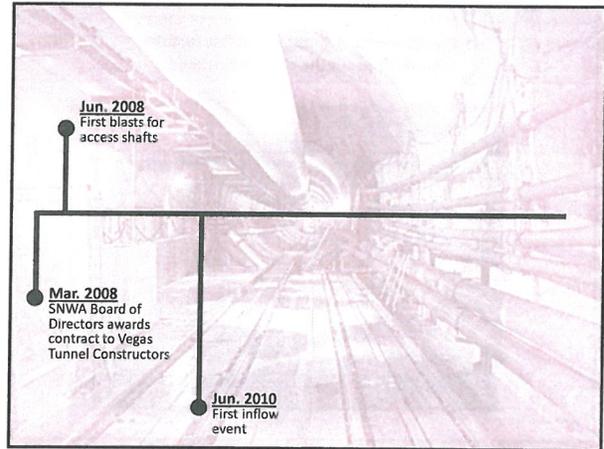
There being no further business to come before the board, the meeting adjourned at 10:20 a.m.

APPROVED:

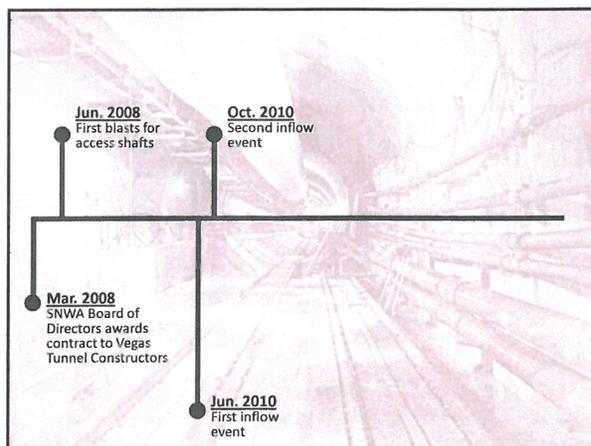
Mary Beth Scow, Chair

John J. Entsminger, General Manager

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



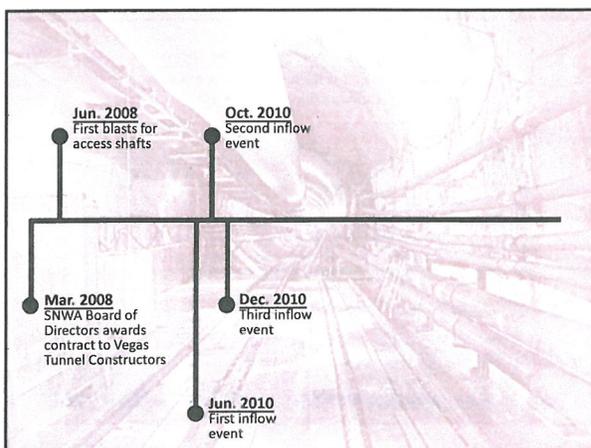
The contractor spent the next few months working to get the tunnel reinstated.



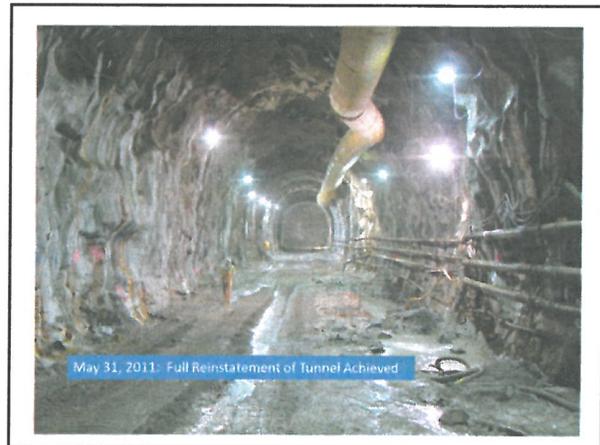
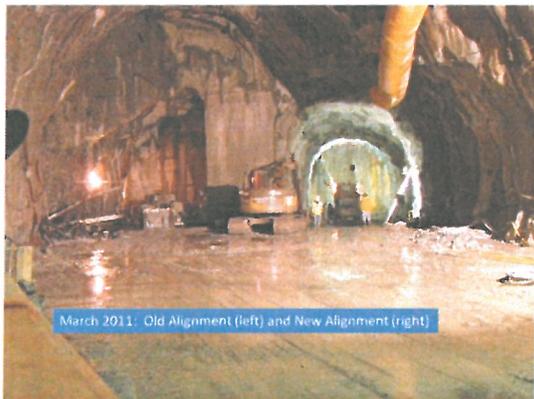
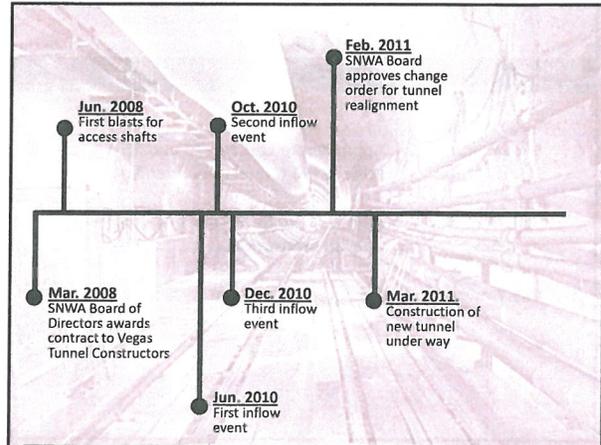
Second Inflow Event: October 27, 2010
400 cubic yards of material and significant water flow into tunnel



525 m Fall Out in Starter Tunnel
Buried excavator machine, October 2010



Third Inflow Event: December 31, 2010
Rock and debris causes material and water to flow into tunnel



The Dispute	
<i>By the numbers</i>	
\$46 million:	Approximate cost to VTC and SNWA to achieve full tunnel reinstatement
\$14.27 million:	Amount paid by builder's risk insurers prior to arbitration
\$31.7 million:	The disputed amount

ARBITRATION PROCESS	
<i>Stated Basis for Insurers' Rejection of Claim</i>	
<ul style="list-style-type: none"> • Change Order #16 was a cap on recovery (limiting exposure by several \$million) • SNWA could only recover costs to repair old alignment, OR costs to construct replacement alignment, but not both • Access shaft was not damaged (implicating a coverage limit that would have reduced exposure by several \$million) • Differing site conditions were not covered • Certain construction actions taken during realignment were a betterment not covered by the policy • (On any amount owing) – SNWA was using the incorrect interest rate for pre-judgment interest 	

ARBITRATION PROCESS	
<i>By the numbers</i>	
<ul style="list-style-type: none"> • 8+ months of discovery • Deposed 18 witnesses, including 9 experts • 33,500 documents exchanged • 10 days of arbitration hearings <i>(Mar. 18, 2013, through Apr. 3, 2013)</i> • 9+ months (and several hundred pages) of post hearing briefing 	

ARBITRATION PROCESS	
<i>Final Award – January 24, 2014</i>	
On the Principal Claim	\$30,482,273.0 <small>(of the \$31.7 million claimed)</small>
Prejudgment interest	\$3,899,241.78
Costs and expert fees	\$680,618.00
Post-Award interest	\$24,471.30
Pre-Arbitration insurance payments	\$14,266,487.83
TOTAL RECOVERY:	\$49,353,091.91

SOUTHERN NEVADA WATER AUTHORITY

Update on Drought Conditions and Water Use

March 20, 2014

Seasonal Drought Outlook

(Valid February – May, 2014)

KEY:

- Drought persists or intensifies
- Drought remains but improves
- Drought removal likely
- Drought development likely

Author: Adam Algood, Climate Prediction Center, NOAA
Site: www.cpc.ncep.noaa.gov/products/assessment/season_drought.html

No Drought (Not Reported)

Source: National Oceanic Atmospheric Administration and the U.S. Department of Commerce

Colorado River Basin Conditions

Seasonal Precipitation, October 2013 - February 2014

- February inflow to Lake Powell: 84% of average
- Snow Pack: 113% of average
- Water Year 2014 Precipitation: 103% of average
- Forecasted Water Year 2014 Inflow to Lake Powell: 105% of average

Prepared by: Colorado River Board
Colorado River Board
1000 N. Industrial Parkway
Las Vegas, NV 89102
www.crb.gov

Upper Colorado River Basin Snow Accumulation

Upper Colorado River Basin Snotel Tracking
Aggregate of 116 Snotel Sites above Lake Powell

As of 01/13/2014 with 112 of 116 sites reporting, the basin-wide SWE is 114 percent of median.

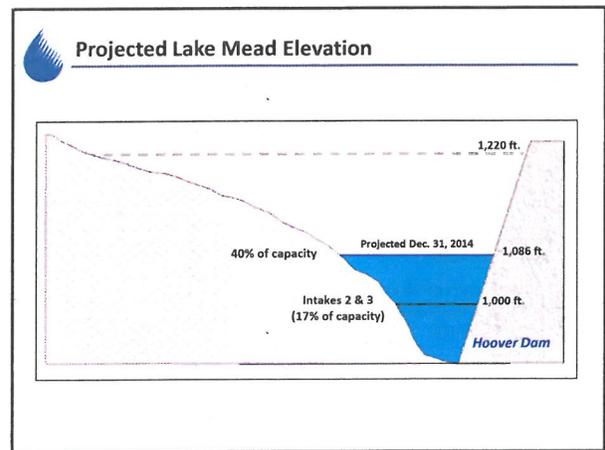
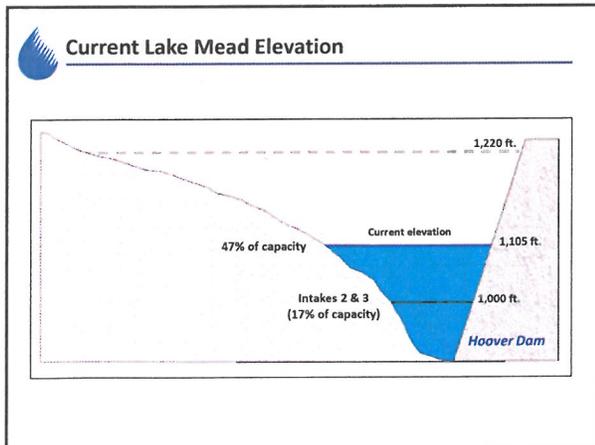
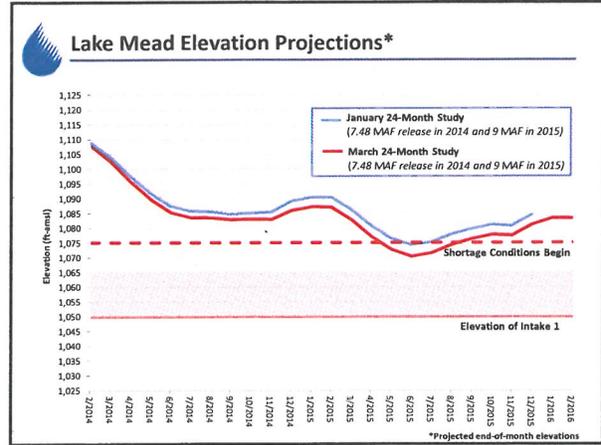
— 30 Year Median Index — Current Year Index WY2014 — Comparison Year Index WY2013

Data Provided by the National Natural Resources Conservation Service

Precipitation and Inflow Forecast – Lake Powell

2013 Water Year			2014 Water Year		
Month	Actual Precipitation	Inflows Forecast	Actual Precipitation	Inflows Forecast	
Jan	72%	61%	96%	93%	
Feb	78%	54%	102%	96%	
Mar	76%	49%	103%	105%	
Apr	78%	42%			
May	80%	45%			
Jun	77%	44%			
Jul	80%	41%			
Aug	81%	40%			
Sept	90%	46%			
Actual	91%	47%			

Source: Bureau of Reclamation, Lower Colorado Water Supply Reports



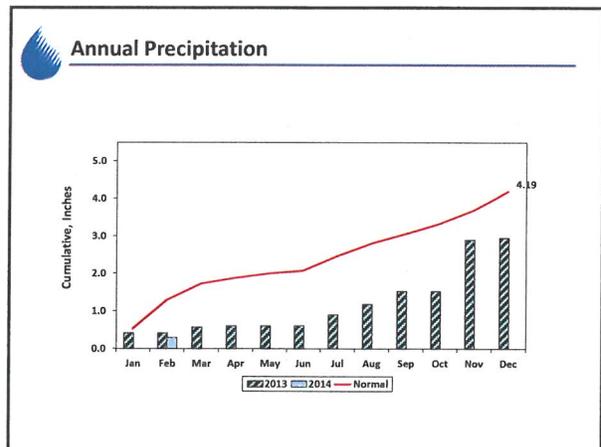
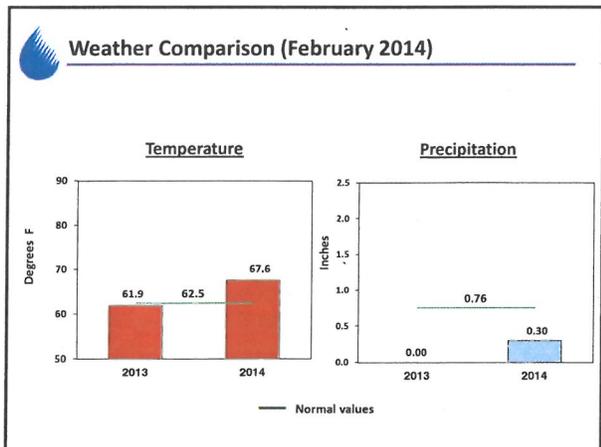
SNWA Water Use

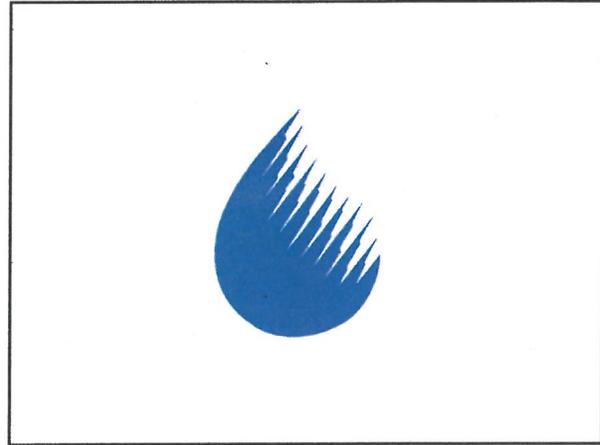
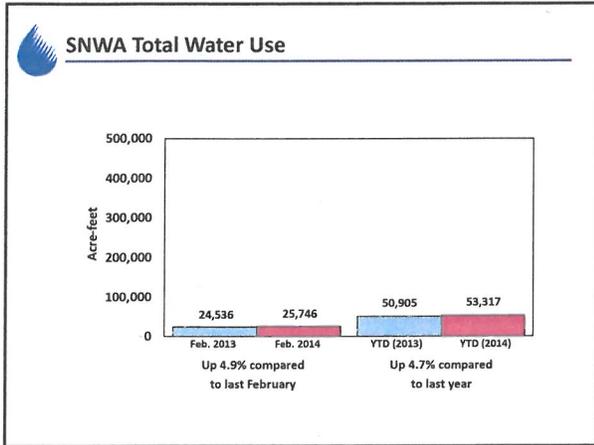
Winter 2013-14: Warmest Ever in Las Vegas

Average Temperature for the meteorological winter (Dec. 1 – Feb 28) was **52.3 degrees**.

Broke previous record for warmest meteorological winter. (52 degrees, set in winter of 1980-81).

Official records for Las Vegas date back to January 1937.

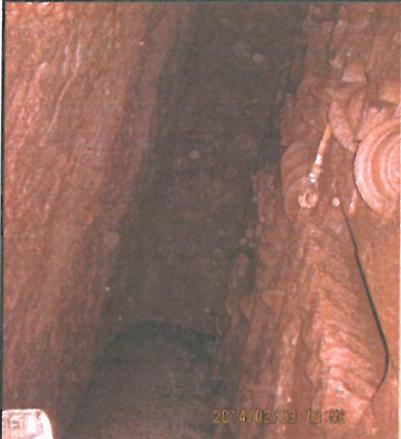
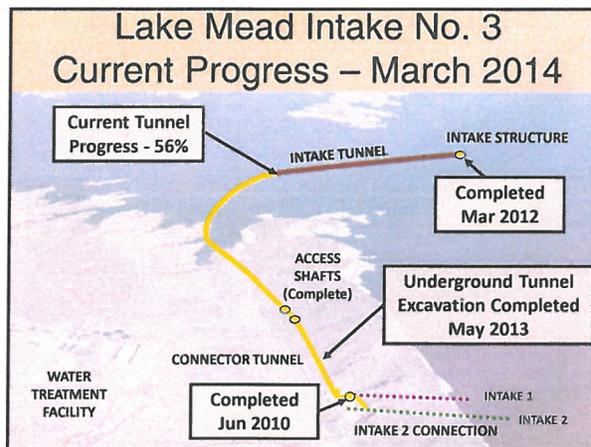




**LAKE MEAD
INTAKE NO. 3**



SNWA Board of Directors
Progress Report
20 March 2014



Jan 16
TBM Main
Bearing
Seal
Leakage
Identified

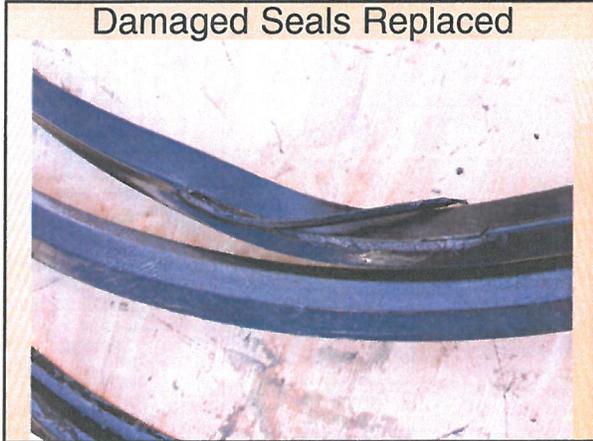
Feb 4
Niche
Excavated

Cutter Head Moved Forward 4 Ft

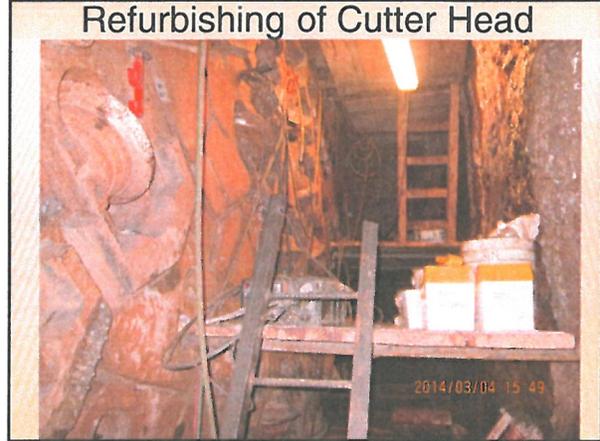


2014/02/18 10:13

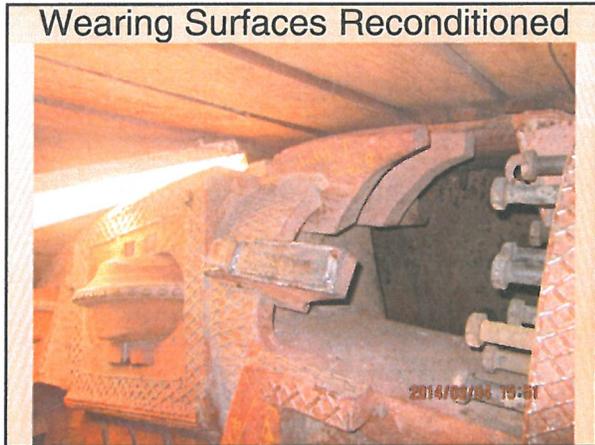
Damaged Seals Replaced



Refurbishing of Cutter Head



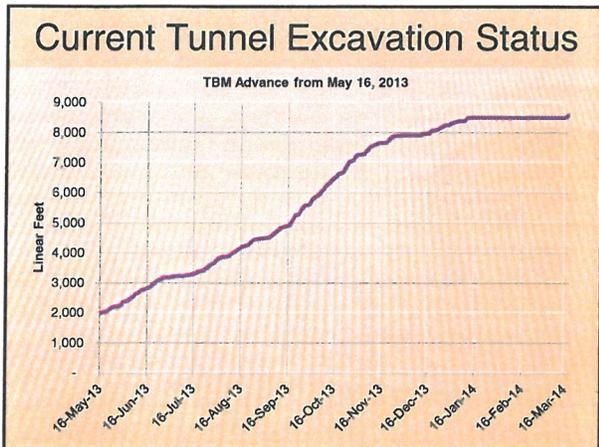
Wearing Surfaces Reconditioned



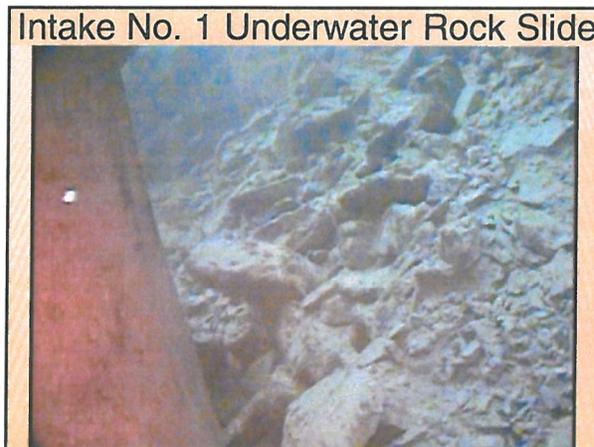
New Cutter Disks Installed



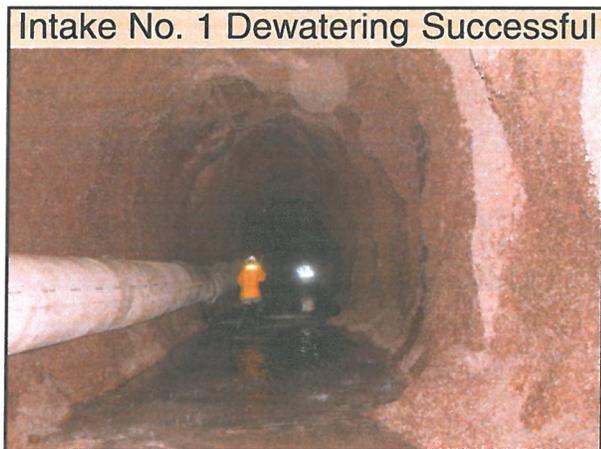
Current Tunnel Excavation Status



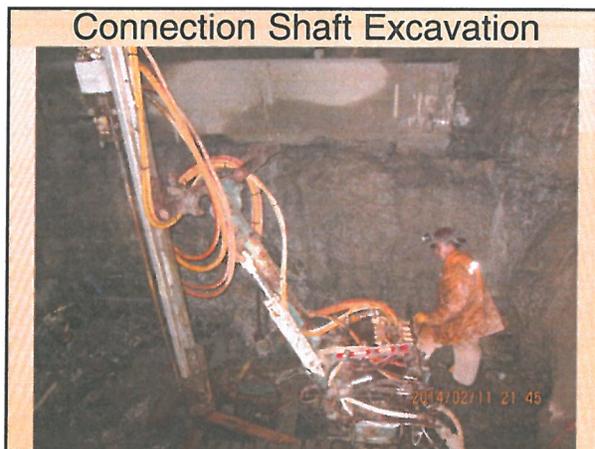
Intake No. 1 Underwater Rock Slide

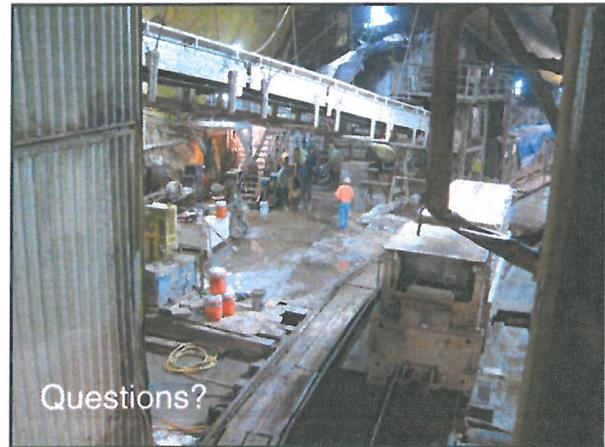
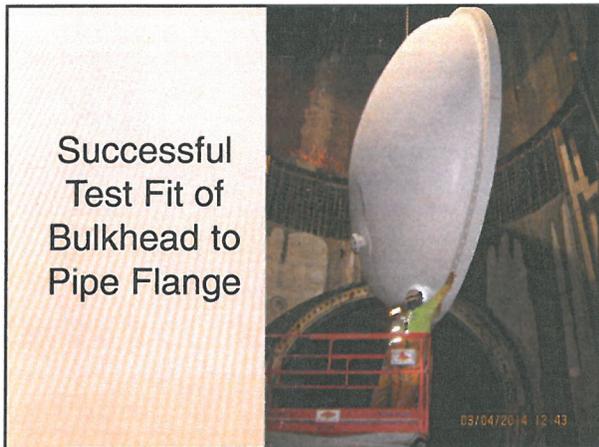
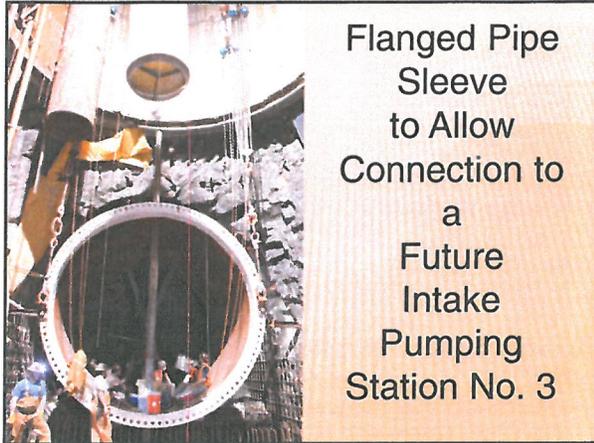


Intake No. 1 Dewatering Successful



Connection Shaft Excavation





March 20, 2014

Catherine Cortez Masto, Attorney General
State of Nevada
Carson City, Nevada

Re: Repetitive violations by Southern Nevada Water Authority of NRS 241.020
(Meetings to be open and public)

Dear Attorney General Masto:

Obviously my pleas to Southern Nevada Water Authority to provide backup information for the meetings of its Integrated Resource Planning Advisory Committee (IRPAC) have fallen on deaf ears. The "Notice of Meeting" for March 26, 2014 (attached) states, "There are no backup materials for this meeting".

Without question, SNWA possesses backup materials for three of the four agenda items: #1 (Meeting summaries for September 4, 2013 and February 26, 2014) and #2 (agreements and contracts that govern the Colorado River). It is likely that for Item 3 (activities taken by Basin States in response to drought) will be presented in a power point; certainly this information is already known by SNWA. The whole purpose of NRS 241.020 is to provide timely and complete information to the public. Subsection 8 of NRS 241.020 prescribes only one valid reason for failing to providing backup information to a person requesting notice by electronic mail: "inability... as a result of technical problems". I request notice by electronic mail, yet invariably find no backup materials.

I understand the self interest of SNWA to control the IRPAC, which is composed of hand-picked (by SNWA) citizen volunteers, and would guess that the excuse, which SNWA will provide to anyone inquiring about this gap in "openness", will be as follows: backup materials are withheld from IRPAC members themselves until their actual meeting, as permitted by subsections (5) and (6) and can also be withheld from the public until then or, per subsection 7, up to 24 hours after the meeting.

This modus operandi of SNWA makes it impossible for anyone to prepare for IRPAC meetings and misleads its members and the public. Even worse, the SNWA moderator coerces IRPAC members into making snap decisions based on highly complex issues with slanted information. For example, in a discussion lasting fewer than 10 minutes last year, the moderator, together with SNWA's consultant, who was contracted by SNWA for the specific purpose of gaining consensus for a rate increase of \$106,000,000, maneuvered the members of IRPAC into 1) accepting the existing rates by which low-income customers subsidize wealthy customers, 2) ratifying the previous year's rate increase of \$78,000,000, wherein one percent of SNWA customers were targeted with an increase 33 times that of resort hotels, golf courses, etc., and 3) continuing a policy of charging users, who recycle water, more than those consumers who consume or waste water the first time they use it. This

pair not only failed to draw attention to any of these anomalies (all of which contradict SNWA's stated code of ethical behavior), but they intentionally withheld information about alternatives and provided no backup materials prior to the meeting. Worse, SNWA has, since that time and cynically, ascribed BOTH increases (2012 and 2013) to "the Citizens' Committee"!

Even though the members of IRPAC were handpicked by SNWA for their propensity to say, "YES", to anything proposed by SNWA, not all of the members of the Committee qualify as skills for SNWA. That belief, combined with the extremely high intelligence level of the group, convinces me that, had they received advance information of the subject matter (i.e., supporting materials), a more robust discussion with a different decision may have ensued.

Finally, it is important to note that SNWA covers up its failure to provide backup materials by posting, after the fact, the materials that were actually presented at the meeting. These can be found under the column "Supporting Materials" for prior meetings on the SNWA website. Contrary to the impression created, none of the materials were made available to IRPAC members or the public prior to the meeting—EVEN THOUGH THESE MATERIALS WERE CLEARLY PREPARED BEFORE THE MEETING. NRS requires that backup materials be posted concurrently with the agenda itself.

I request that you:

1. Point out to SNWA the spirit and intent of NRS 241.020 that backup materials be provided to the IRPAC members and the public at the time the meetings of the former are posted.
2. Require proper notice (i.e., with backup materials) for the March 26 IRPAC meeting.
3. Require all future meeting notices of SNWA and SNWA-related activities include posting of backup materials at the time of meeting notification as encouraged by NRS 241.020 (5 and 6).

By making these changes you will 1) ensure more consideration of the weighty decisions, which IRPAC is expected to make, 2) prevent use of IRPAC by SNWA as a rubber stamp, 3) promote more accurate input from the public, 4) improve the standing of SNWA in the eyes of the public. Your attention to this matter is greatly appreciated.

Sincerely,

Ed Uehling

Email evu2@cox.net

Cell 702-808-6000

CC: Members of the Board of Directors of SNWA and members of IRPAC

NOTICE OF MEETING

Southern Nevada Water Authority
Integrated Resource Planning Advisory Committee



Wednesday, March 26, 2014

4:00 p.m.

Colorado River Conference Rooms, Southern Nevada Water Authority
100 City Parkway, Seventh Floor, Las Vegas, Nevada

There are no backup materials for this meeting.

March 20, 2014

Mary Beth Scow, Chair
Southern Nevada Water Authority
Las Vegas, NV

Re: Request for correction of Minutes of January 26, 2014 meeting

Dear Chairwoman Scow:

As you heard me state earlier this month at the meeting of the Las Vegas Valley Water District, over which you also preside, I appreciate the conscientious attempt of the new administration to make a clear description in the minutes of the comments by persons, such as myself, who may disagree with the direction of the SNWA and LVVWD. I just want to point out a slight misinterpretation of my comments at the January SNWA meeting:

The minutes, as written, state that I proposed appointing as new General Manager (Item #10) an "individual" from an agency, such as the City of North Las Vegas. In fact, I suggested that SNWA contract with the City of North Las Vegas itself to run SNWA. I further elaborated, as reasons for this suggestion, the fact that water operations of the City of North Las Vegas have contributed \$200 million to the City general fund, while SNWA has received billions in charges to customers and spent every penny on itself (while borrowing additional billions). In my comments I attributed this contrast in performance and results to the fact that NLV pays only 20% of its revenues for employee costs versus the 40% that SNWA pays.

I further specified in my comments a possible contributory example of SNWA's profligacy in personnel spending, citing the fact that this relatively tiny agency employs one-third of all the public information officers of ALL the public agencies in the entire state of Nevada and its 17 counties and countless local agencies combined!

This brings me to my second request, that SNWA adhere more strictly to the requirements of NRS 241.035 (1)(d) that the "written minutes include the substance of remarks made by any member of the general public who addresses the public body...".

Thanking you in advance for making this correction to the minutes and requesting that you attach this letter to the minutes of this meeting, I am

Sincerely yours,

Ed Uehling
Email evu2@cox.net
Cell 808-6000

**SOUTHERN NEVADA WATER AUTHORITY
BOARD OF DIRECTORS
SPECIAL METING
APRIL 17, 2014
MINUTES**

CALL TO ORDER 9:01 a.m., Colorado River Conference Rooms, Southern Nevada Water Authority; 100 City Parkway, Seventh Floor, Las Vegas, Nevada

BOARD MEMBERS PRESENT Mary Beth Scow, Chair
Sam Bateman, Vice Chair
Susan Brager (via phone)
Bob Coffin
Duncan McCoy
Steve Sisolak

BOARD MEMBERS ABSENT Anita Wood

STAFF PRESENT John Entsminger, Greg Walch, Phil Speight, Dave Johnson, Julie Wilcox, David Wright

OTHERS PRESENT Guy Hobbs, Hobbs, Ong & Associates

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

COMMENTS BY THE GENERAL PUBLIC

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

There were no persons wishing to speak.

1. For Possible Action: Approval of Agenda

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

2. For Information Only: Receive an overview and discuss the Fiscal Year 2014/2015 Tentative Budget.

John Entsminger, General Manager; Dave Johnson, Deputy General Manager of Engineering and Operations; and David Wright, Chief Financial Officer, gave an overview of the Authority's tentative budget. The presentation is included with these minutes. Throughout the presentation, Board members asked clarifying questions. Director Sisolak noted that he would like to ensure that the Authority's Integrated Resource Planning Advisory Committee is receiving the same information and requested future, recurring updates on rate collections, specifically as they relate to the IRPAC's recommendations and projections.

NO ACTION TAKEN

Public Comment

Ed Uehling, Las Vegas, stated his concerns about recent budget cuts, staff reductions and employee salaries.

Brian McAnallen, Las Vegas Metro Chamber of Commerce, thanked staff and the Board for their efforts in realigning the organization and efforts taken and underway to implement IRPAC recommendations. He also noted a recent trip to Washington D.C. to discuss federal funding opportunities for drought relief.

Adjournment

There being no further business to come before the board, the meeting adjourned at 10:00 a.m.

APPROVED:

Mary Beth Scow, Chair

John J. Entsminger, General Manager



SOUTHERN NEVADA WATER AUTHORITY*

2014/15 Fiscal Year
Budget Workshop
April 17, 2014

Fiscal Year 2014-15 Budget

- Implement the new strategic plan
- Review overall operations as the economy in Las Vegas continues to evolve to relative stability and modest growth
- Increase efficiency and eliminate less effective efforts
- Clear that current budget trajectory cannot be maintained given fiscal constraints
- The executive team and directors consulted and developed recommendations for placing our organization on a sustainable path into the future



2

Economic Environment

- The U.S. entered a recession in 2007
- Between 2007 and 2010, Southern Nevada's unemployment rate tripled
 - Unemployment rate exceeded 15%
 - 120,000 jobs lost
- Visitor volume dropped in Las Vegas
- Las Vegas became the center of home foreclosures
- Since hitting bottom in 2010, the local economy has improved, but slowly



3

Recession Impacts

- The business environment changed
- SNWA Connection Charges – used to pay for most of the community's water infrastructure – declined from \$188.5 million in 2006 to \$3.2 million in 2010, slightly rebounding to \$19 million in 2013.
- Water sales and sales tax revenue decreased
- Population growth slowed dramatically
- Third Intake Project and other large capital projects still required significant labor and capital expenses even during the recession



4

Response to Economic Conditions

- **The SNWA implemented a number of interim measures to survive the worst of the economic downturn since 2008**
 - Laid off contingent and contractor staff
 - Left vacant or unfunded open positions
 - Implemented an early retirement program
 - Developed the Voluntary Furlough option
 - Eliminated longevity pay for employees hired after 2010
 - No Cost-of-Living Adjustment (COLA) in 2009 and 2010
 - Revised the Water Smart Landscape Program



5

Response to Economic Conditions

- Deferred SNWA capital project spending
- Deferred asset management efforts
- Reduced operating and capital costs
- Negotiated fixed rates for power
- Negotiated lower property and casualty insurance rates
- Refinanced debt
- Renegotiated leases for Virgin and Muddy River water for 2012-2014, saving \$4.73 million
- Amended the Arizona Water Bank agreement, relieving SNWA of a \$217.3 million obligation from 2015 to 2024, retaining the ability to bank additional water on a pay-as-you-go basis



6

Current Environment

- **Current level of deferred projects is not sustainable from an infrastructure system maintenance management perspective**
- **SNWA is transitioning its primary focus from system expansion to operations, asset management and increased service to the community**
- **Established new strategic goals to guide the organization**



7

Organizational Direction

- **The SNWA Board of Directors has provided direction:**
 - Streamline the organization to address current and future community needs
 - Make operational efficiency and service to purveyors and customers ultimately the hallmarks of the realigned organization
 - Begin to focus on long-term asset management
 - Provide rate stability



8

Strategic Plan Development

- In 2012, the organization began the strategic planning process
 - Reflects changing business environment
 - Shifts focus from expansion to system maintenance and management
- Realigns organizational goals to new focus:
 - Maintain and enhance service levels
 - Respond to changing community needs
 - Focus on asset management



9

Strategic Plan Development

- Executive Team worked with employees across departments and at all levels to develop strategies and tactics to achieve the strategic goals
- The plan addresses fiscal realities of the organization's current environment while maintaining core assets in critical areas



10

Strategic Plan - 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



11

Organizational Structure

- Reorganization reflects a more streamlined, efficient organization and helps realign with new goals
- Recent changes include:
 - Combined the SNWA and LVVWD Engineering Departments to maximize efficiency of engineering design and construction given the shift in focus to operations and maintenance
 - Combined the SNWA and LVVWD Facilities Divisions to increase operational efficiency and to support work to evaluate and standardize our service levels
 - Created an Infrastructure Management Department to provide specific asset management and operational engineering focus for our new strategic plan



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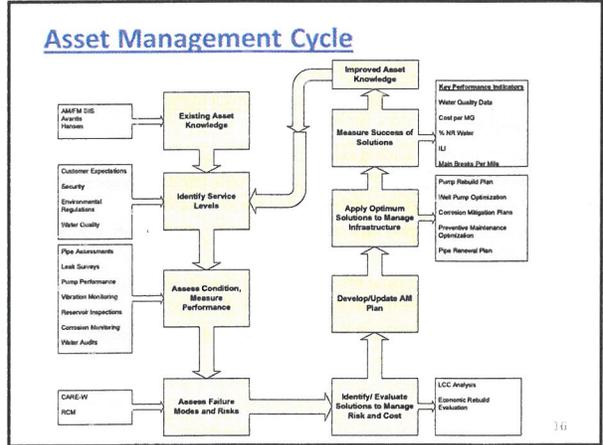


What is Asset Management

- Reduce life-cycle costs while meeting water quality standards and reliability goals by:
 - Developing maintenance and repair strategies that extend infrastructure life and prevent failures
 - Assessing condition of critical assets to prioritize short-term renewal requirements
 - Planning for long-term expenditures required to maintain high quality service levels
 - Keeping costs to a minimum over the long run by maximizing asset life

SNWA Asset Management Plan

- Development of plan:
 - Review the state of assets
 - Establish service levels
 - Identify assets critical to sustain those service levels
 - Develop optimal capital and O&M strategies
- The Asset Management Cycle is used by SNWA to routinely evaluate, measure and define our infrastructure needs



Asset Management: Existing Infrastructure

- **Gross book value of all SNWA water facilities: \$3 billion**
 - Subject to depreciation
 - Current replacement value is much higher
- **Includes facilities constructed by the Colorado River Commission (CRC) and Bureau of Reclamation (BOR)**
 - Construction beginning in 1968
 - Intake No. 1 construction completed in 1971
 - SNWA construction beginning in 1995
- **CRC and BOR facilities transferred to SNWA in 1996**



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Asset Management: Major Components

Existing infrastructure includes facilities inherited from the Colorado River Commission and Bureau of Reclamation



Lake Mead Intake 1
Completed: 1971



Alfred Merritt Smith
Water Treatment Facility
Phase 1 Completed: 1971

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Asset Management: Major Components

Two additional intakes were needed



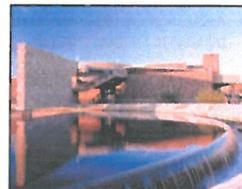
Lake Mead Intake 2
Completed: 2002



Lake Mead Intake 3
Expected Completion: 2015

19

Asset Management: Major Components



River Mountains Water Treatment Facility
Completed: 2002

An additional treatment facility was required to meet production demands and increase system reliability

20

Asset Management: Major Components

Water Quality Laboratory



Water Quality Laboratory / Applied Research and Development Center
Completed: 2007

21

Asset Management: Major Components

Pumping Stations and Reservoirs



28 Pumping Stations

Shown: Decatur Pump Station



38 Reservoirs

Shown: Horizon Ridge Reservoir Construction

22

Asset Management: Major Components

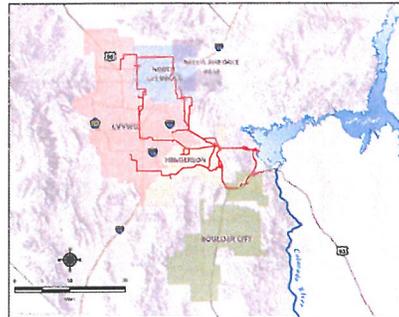


Laterals

- Approximately 163 miles of lateral pipeline in Southern Nevada
- Lateral pipeline ranges between 16 inches and 12 feet in diameter
- Up to 43 years old

23

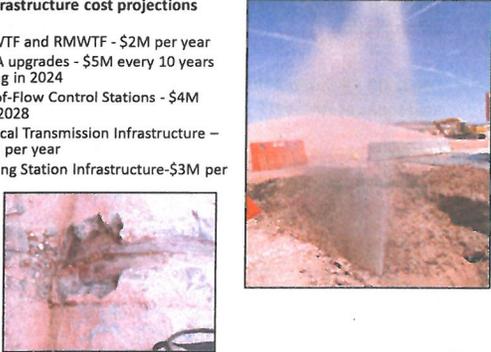
Asset Management: System Layout



24

Asset Management: Renewal Needs

- Major infrastructure cost projections include:
 - AMSWTF and RMWTF - \$2M per year
 - SCADA upgrades - \$5M every 10 years starting in 2024
 - Rate-of-Flow Control Stations - \$4M 2026-2028
 - Electrical Transmission Infrastructure - \$1.6M per year
 - Pumping Station Infrastructure - \$3M per year



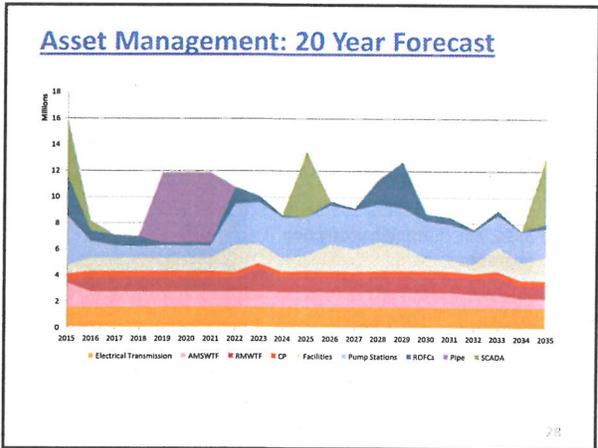
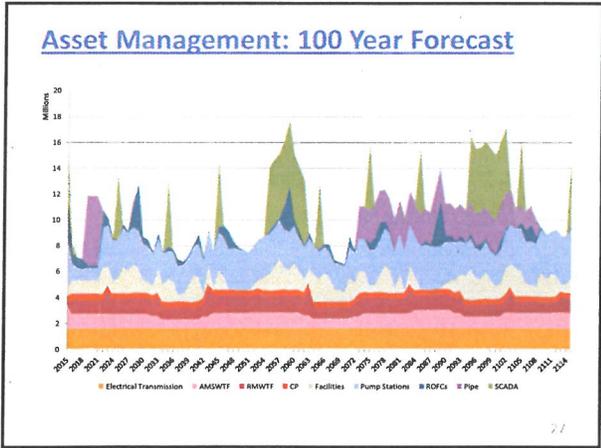
25

Asset Management: Definitions

- SCADA: Supervisory Control and Data Acquisition**
 - Computer system for gathering and analyzing real-time data
 - Allows remote monitoring and control of facilities
 - SCADA gathers information, such as level of a reservoir, and transfers it to a central site
 - SCADA operators can remotely respond to the information
- Nessie Curve: An infrastructure asset management tool that graphically depicts annual replacement needs**
 - Based on when the assets were installed and how long they are expected to last



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Asset Management

Infrastructure	Short Term (2015 to 2021)	Long Term (Avg Annual Cost)	Every 10 Years	Every 20 to 30 Years	More Than 30 Years Out
Electrical Transmission System		\$ 1,600,000			
AMSWTF	\$ 8,708,815	\$ 1,125,863			
RMWTF	\$ 6,494,000	\$ 1,129,192			
Cathodic Protection	\$ 3,500,000	\$ 381,167			
Facilities	\$ 6,813,392	\$ 1,230,189			
Pump Stations	\$ 9,795,980	\$ 3,067,419			
Rate of Flow Control Stations	\$ 6,084,402	\$ 454,472			
Pipe	\$ 16,136,863	\$ 0	\$ 0	\$ 0	\$ 2,500,000
SCADA	\$ 5,150,000		\$ 5,000,000	\$ 40,000,000	
TOTAL	\$ 62,683,452	\$ 8,988,301	\$ 5,000,000	\$ 40,000,000	\$ 2,500,000

Asset Management: Short-Term Needs

- \$600,000 - Ozone generator rehabilitation
- \$400,000 - Rebuild 2 fluorosilicic acid tanks at AMSWTF
- \$300,000 - Hitachi motor replacements
- \$150,000 - Refurbish 2 sodium hypochlorite generators



Asset Management: Short-Term Needs

- \$3.05 Million - Replace Stage II Valves and Venturi Meters
- \$700,000 - Pumping station 1B and 2B isolation valves
- \$500,000 - Cathodic protection upgrades
- \$300,000 - Pumping station roof repairs





SOUTHERN NEVADA WATER AUTHORITY®

BUDGET

Overall Financial Goals

- Incorporate new Strategic Plan
- Provide high level of service to customers
- Maintain payroll at sustainable levels
- Increase asset management efforts
- Improve long-term financial forecasting
- Develop long-term projections of Wholesale Delivery Charge
- Monitor IRPAC Recommendations



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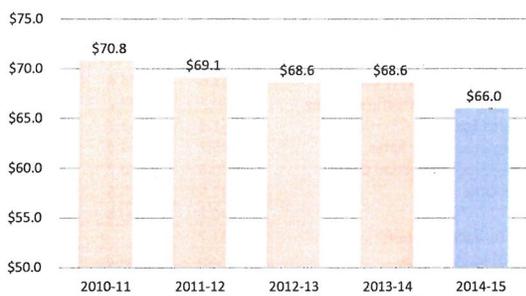
Financial Results – Sustainable Staffing

- Reviewed staffing needs based on the new Strategic Plan
- Projected FY 2014-15 labor budget would have been \$72 million
- Reduced labor budget to \$66 million
 - Eliminated 49 FTEs for FY 2014-15
- \$6 million reduction in anticipated staffing costs



31

SNWA Payroll History



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Budget Process: Key Dates

- April 15** Tentative Fiscal Year 2014-15 budget submitted to State
- April 17** SNWA Budget Workshop
- May 15** SNWA Public Hearing
- June 1** Deadline to file approved Fiscal Year 2014-15 budget with State



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Financial Forecasting

- IRPAC created financial forecasts for New Expansion Debt Service Sub Fund which require annual comparisons to actual
- Obtained detailed long-range financial forecasting model
- Transferring IRPAC projections to model, including all SNWA sub funds
- Allows for improved budgeting, reporting, debt timing, rate setting, projecting Wholesale Delivery Charge, etc.
- SNWA has adequate bond proceeds to cover FY 2014-15 projects



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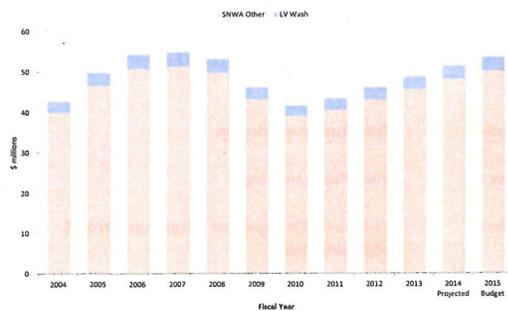
FY 2013-14 vs. 2014-15 Budget Highlights

- Sources of Funds to increase by \$36 million
 - \$20 million from IRPAC recommended rate adjustments
 - \$18 million from Connection Charges due to growth
 - Sales tax revenues steadily improving
- Uses of Funds to increase by \$10 million
 - Debt Service to increase \$20 million as “debt spike” begins
 - Payroll to decrease by \$2.6 million, but \$6 million lower than originally projected in tentative budget
 - Asset management to increase by \$6 million for multi-year deferrals
 - Construction expenditures decreased by \$17 million
- IRPAC
 - On track to meet IRPAC recommended New Expansion Debt Service fund balance target of \$280 million plus adequate funding to pay debt service through 2021



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SNWA Sales Tax



Net of distributions to Blue Diamond, Boulder City, Kyle Canyon, Laughlin, Big Bend, Moapa Valley, Searchlight, Jean, Virgin Valley, Clark County Water Reclamation District, City of Las Vegas, and City of Henderson

Sources of Funds

Tentative Filed vs. Proposed Budget

	Projected Actual 2013-14	Tentative Budget 2014-15	Proposed Budget 2014-15
Wholesale Delivery Charge	\$ 119.6	\$ 123.4	\$ 123.4
Regional Infrastructure Charge	80.7	87.2	87.2
Sales Tax	51.3	53.7	53.7
Regional Water Rates	45.7	54.3	54.3
Regional Connection Charge	20.6	30.7	30.7
All Other	22.9	15.5	15.5
	<u>340.8</u>	<u>364.8</u>	<u>364.8</u>
Insurance Proceeds	31.7		
TOTAL SOURCES	<u>\$ 372.5</u>	<u>\$ 364.8</u>	<u>\$ 364.8</u>

millions

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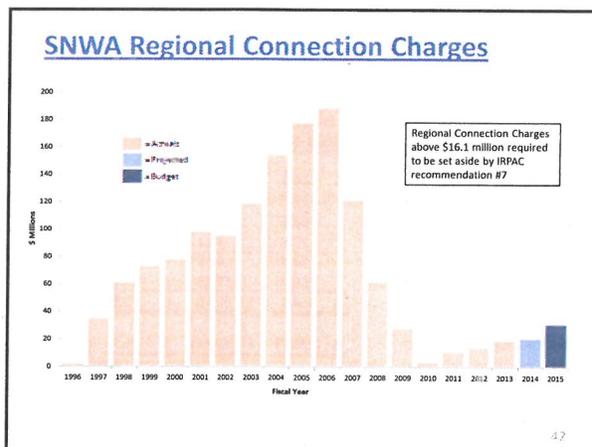
Uses of Funds

Tentative Filed vs. Proposed Budget

	Projected Actual 2013-14	Tentative Budget 2014-15	Proposed Budget 2014-15
Energy	\$ 43.9	\$ 45.8	\$ 45.8
Payroll	66.3	72.0	66.0
Operating Expenses	30.2	30.2	30.2
Capitalized Expenses	35.2	34.6	40.6
Construction Expenditures	87.3	110.5	110.5
Debt Service	150.7	170.5	170.5
TOTAL USES	\$ 413.6	\$ 463.6	\$ 463.6
NET USE	\$ (41.1)	\$ (98.8)	\$ (98.8)

millions

41



SNWA Regional Connection Charges

2012-13 Actual		\$ 19.0
	<u>Budget</u>	<u>Projected</u>
2013-14	\$ 13.1	\$ 20.6
2014-15	\$ 30.7	\$ 30.7
2014 Hobbs-Ong base year		\$ 16.1

millions

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Sources of Funds

FY 2013-14 Budget vs. FY 2014-15 Budget

	Budget 2013-14	Budget 2014-15	Difference	
			\$	%
Wholesale Delivery Charge	\$ 122.0	\$ 123.4	\$ 1.4	1.1%
Infrastructure Charge	77.4	87.2	9.8	12.7%
Connection Charges	13.1	30.7	17.6	134.4%
Regional Water Rates	44.0	54.3	10.3	23.4%
Sales Tax	51.3	53.7	2.4	4.7%
All Other	20.6	15.5	(5.1)	-25.0%
TOTAL SOURCES	\$ 328.4	\$ 364.8	\$ 36.4	11.1%

millions

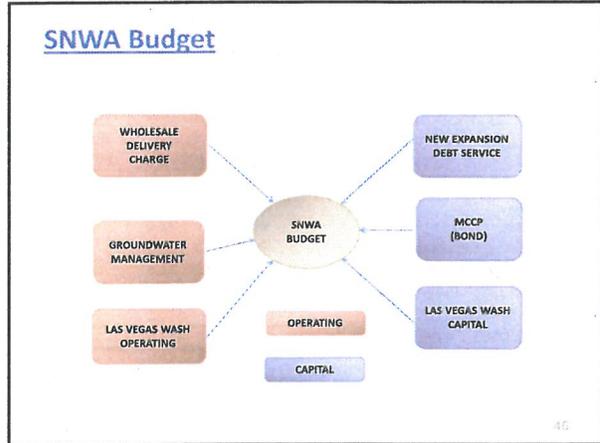
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Uses of Funds

FY 2013-14 Budget vs. FY 2014-15 Budget

	Budget		Difference	
	2013-14	2014-15	\$	%
Power	\$ 44.3	\$ 45.8	\$ 1.5	3.4%
Construction Expenditures	127.7	110.5	(17.2)	-13.5%
Payroll	68.6	66.0	(2.6)	-3.8%
Operating Expenses	27.9	30.2	2.3	8.2%
Capital Expenses	34.9	40.6	5.7	16.3%
Debt Service	150.7	170.5	19.8	13.1%
TOTAL USES	\$ 454.1	\$ 463.6	\$ 9.5	2.1%
NET ACTIVITY	\$ (125.7)	\$ (98.8)	\$ 26.9	-21.4%

millions



Sources of Funds

New Expansion Debt Service Sub Fund

	Projected	Budget	Difference	
	2013-14	2014-15	\$	%
Regional Infrastructure Chrg	\$ 80.7	\$ 87.2	\$ 6.5	8.1%
Sales Tax	48.0	50.2	2.2	4.6%
Regional Water Rates	45.7	54.3	8.6	18.8%
Regional Connection Charge	20.6	30.7	10.1	49.0%
Other Revenues	4.6	3.2	(1.4)	-30.4%
Interfund Loan	(5.1)	(6.6)	(1.5)	29.4%
TOTAL SOURCES	\$ 194.5	\$ 219.0	\$ 24.5	12.6%
TOTAL WITHOUT INTERFUND	\$ 199.6	\$ 225.6	\$ 26.0	13.0%

millions

Uses of Funds

New Expansion Debt Service Sub Fund

	Projected	Budget	Difference	
	2013-14	2014-15	\$	%
Debt Service Payments	\$ 137.0	\$ 157.6	\$ 20.6	15.0%
Labor	23.1	20.9	(2.2)	-9.5%
Capitalized Expenses	10.6	9.5	(1.1)	-10.4%
TOTAL USES	\$ 170.7	\$ 188.0	\$ 17.3	10.1%
Beginning Fund Balance	\$ 316.9	\$ 340.7		millions
Ending Fund Balance	\$ 340.7	\$ 371.7		

IRPAC Recommendation No. 6

- IRPAC modeled that \$20.9 million would be collected from phased-in rates during FY 2013-14 and FY 2014-15. Those funds being set aside in fund balance to pay future debt service.
- Budget forecasts currently show revenues are on target with IRPAC phased-in rate projections.

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IRPAC Recommendations No. 7 and No. 8

- No. 7 – Connection Charges over 2014 base year of \$16.1 million; and
- No. 8 – Fund balance above \$280 million (not including funds identified to pay debt service) only used to:
 - Redeem outstanding bonds, thereby reducing outstanding debt and future debt service requirements
 - Acquire capital assets that would otherwise need to be funded with borrowed money, thus avoiding additional debt and debt service
 - Moderate further the impact of future rate increases
 - Reduce water rates

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IRPAC Recommendations No. 7 and No. 8

- FY 2014-15 Budget Projections:

	Proposed June 30, 2015
Excess Connection Charges (#7)	\$ 19.1
Funds in Excess of Target Balance (#8)	<u>3.1</u>
	\$ 22.2
	(millions)

- At June 30, 2015, Fund Balance in excess of IRPAC projection of appx. \$22 Million will be available for the options recommended by IRPAC

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Wholesale Delivery Operations Sub Fund

	Projected 2013-14	Budget 2014-15	Difference	
			\$	%
Wholesale Delivery Charge	\$ 119.6	\$ 123.4	\$ 3.8	3.2%
Other Revenues	0.6	0.3	(0.3)	-50.0%
TOTAL SOURCES	<u>\$ 120.2</u>	<u>\$ 123.7</u>	<u>\$ 3.5</u>	<u>2.9%</u>
Energy	\$ 41.1	\$ 44.4	\$ 3.3	8.0%
Labor	36.1	37.0	0.9	2.5%
Operating Expenses	25.5	28.7	3.2	12.5%
Debt Service Payments	13.7	13.0	(0.7)	-5.1%
TOTAL USES	<u>\$ 116.4</u>	<u>\$ 123.1</u>	<u>\$ 6.7</u>	<u>5.8%</u>
Beginning Fund Balance	\$ 24.9	\$ 28.7	millions	
Ending Fund Balance	<u>\$ 28.7</u>	<u>\$ 29.3</u>		

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Wholesale Delivery Charge

- No anticipated increase in Wholesale Delivery Charge in Fiscal Years 2014-15 or 2015-16
- Energy costs appear stable for the next five years
- Additional long-term financial forecasting will help project necessary charges and timing

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Budget Summary

	Wholesale Delivery Operations	New Expansion Debt Service	MCCP Construction	Other Water Programs	Las Vegas Water	Total
Beginning Balance (July 1, 2014)	\$ 26.7	\$ 140.7	\$ 156.7	\$ 1.7	\$ -	\$ 426.8
Source of Funds:						
Wholesale Delivery Charge	239.2	-	-	-	-	239.2
Other Sources	3.3	3.4	9.1	-	-	15.8
Regional Construction Charge	-	30.3	-	-	-	30.3
Regional Infrastructure Charge	-	17.2	-	-	-	17.2
Regional Connectivity Charge	-	28.2	-	-	-	28.2
Reliability Surcharge	-	2.9	-	-	-	2.9
State Fee	-	166.2	-	-	0.5	166.7
Interconnection Program Fees	-	-	-	0.9	-	0.9
LV Water Program Fees	(1.7)	-	-	-	2.0	0.3
Non-Fund Loans	-	(6.6)	-	-	-	(6.6)
Water Assets Proceeds	-	-	-	-	-	-
Asset Proceeds	0.2	0.9	-	-	1.7	2.8
Interest Expense	0.1	1.1	0.2	0.0	-	1.4
Total Source of Funds	237.6	219.5	9.4	0.9	2.0	469.4
Uses of Funds:						
Energy	42.4	-	1.2	-	-	43.6
Payroll	17.0	20.4	6.6	0.5	1.5	46.0
Operating Expenses	20.7	-	-	0.7	-	21.4
Construction Expenses	-	9.5	81.1	-	-	90.6
Capital Expenditures	-	-	92.7	-	16.3	109.0
Debt Service	18.0	(17.1)	-	-	-	0.9
Total Uses of Funds	118.1	122.8	181.6	1.2	16.8	430.5
Fiscal Year Net Change	0.6	91.7	(172.2)	(0.3)	0.2	(70.0)
Ending Balance (June 30, 2015)	\$ 27.3	\$ 152.4	\$ 15.5	\$ 1.4	\$ 0.2	\$ 346.8

Amounts may be slightly off due to rounding

Fiscal Year 2014-15 Budget

- Is responsible to customers and operations
- Enhances SNWA's implementation of the new Strategic Plan
- Continues to provide high level service to purveyors and customers
- Maintains payroll costs at sustainable levels which are below 2009-10 expenses
- Increases funding of asset management efforts
- Tracks IRPAC recommended balance levels



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SOUTHERN NEVADA WATER AUTHORITY®

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

May 15, 2014

Subject: Conduct Public Hearing	Director's Backup
Petitioner: David H. Wright, Chief Financial Officer	
Recommendations: That the Board of Directors conduct a Public Hearing on the Tentative Budget for the Authority and subsequently adopt a Final Budget for fiscal year 2014/2015.	

Fiscal Impact:

The approval of a Final Budget will establish revenue and expenditure levels for the Authority for fiscal year 2014/2015.

Background:

Pursuant to Chapter 354 of the Nevada Revised Statutes, the Authority filed a Tentative Budget with the State Department of Taxation on or before April 15, 2014. On April 17, 2014, the Board of Directors conducted a budget workshop that was open to the public. The Tentative Budget has been reviewed by the Department of Taxation for compliance with state law, regulations, and guidelines. A delineation of budget components was provided to the Board in the General Manager's Information Report No. 36.

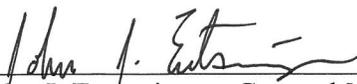
NRS Chapter 354 requires that the Authority conduct a Public Hearing on the Tentative Budget on the third Thursday in May (May 15, 2014). Notice of this hearing has been published in the *Las Vegas Sun* and the *Las Vegas Review-Journal* in accordance with the law.

Subsequent to conducting the Public Hearing, the Board may adopt a Final Budget for the Authority. The Final Budget for fiscal year 2014/2015 must be sent to the Nevada Department of Taxation no later than June 1, 2014.

The Board is being asked to conduct a Public Hearing on the Authority's Tentative Budget and, after the Public Hearing is closed, adopt a Final Budget for fiscal year 2014/2015.

This action is authorized pursuant to NRS Chapter 354 and Section 22 of the SNWA 1995 Amended Cooperative Agreement. The office of the General Counsel has reviewed and approved this agenda item.

Respectfully submitted:



John J. Entsminger, General Manager
JJE:PDS:DHW:kah
Attachment

AGENDA
ITEM #

2

SOUTHERN NEVADA WATER AUTHORITY GENERAL MANAGER'S INFORMATION REPORT

DATE: April 16, 2014

No. 36

SUBJECT: SOUTHERN NEVADA WATER AUTHORITY PROPOSED OPERATING
AND CAPITAL BUDGET FOR FISCAL YEAR 2014/2015

The Tentative Operating and Capital Budget of the Southern Nevada Water Authority (SNWA) for fiscal year 2014/2015 was submitted by April 15, 2014 to the State of Nevada Department of Taxation. Attached for your review is the General Manager's Information Report, which has some adjustments identified and revisions subsequent to filing with the state.

EXECUTIVE SUMMARY

Water resource management and financial stabilization have been top priorities for the past several years, which have been marked with drought and economic uncertainty. While the drought persists, initiatives to safeguard current water resources and diversify the water supply have been largely successful. Financially, efforts to manage and secure resources through increased rates and charges to pay debt and fund necessary capital projects, coupled with a slowly recovering economy, have helped to ensure that necessary funding will be available for critical water infrastructure and system maintenance moving into the future.

Nearly 2 million residents and 40 million annual visitors depend on the SNWA to effectively and efficiently provide a safe and reliable water supply, regardless of economic hurdles or uncertainty on the Colorado River. Over the past decade, Southern Nevada has transitioned from one of the fastest-growing communities in the nation to one of the hardest hit and slowest to recover. While the economic outlook is better than in years past, the 2014/2015 fiscal year budget reflects the Authority's emphasis on fiscal responsibility and water resource and infrastructure management to ensure that a safe and reliable water supply for Southern Nevada is maintained with minimal customer impact.

To ensure the SNWA adapts to the changing economic environment and community needs, the organization will direct its efforts on the following for the 2014/2015 fiscal year:

- Increase focus on asset management
- Restructure organization to realign the agency with new strategic plan
- Reduction of staff by 49 FTEs, saving \$6 million in anticipated payroll costs in 2014/2015
- Accumulate reserves to meet debt obligations
- Continue collaboration on regional, national and international water resource projects to protect Southern Nevada from the impact of drought
- Continue and complete Phase II of the Integrated Resource Planning Advisory Committee public process
- Continue construction of Intake No. 3

Economic Environment and Organization Response

The United States entered into a recession in 2007 and the myth that Southern Nevada's economy was recession-proof was soon shattered. Between 2007 and 2010, the Southern Nevada unemployment rate tripled, exceeding 15 percent in 2010. During this period, Southern Nevada total employment declined by more than 120,000 jobs and nearly every sector of the economy experienced significant job losses.

Since hitting bottom in 2010, the local economy has improved incrementally. The recession impacts included a change in the community's economic environment, decrease in water sales and sales tax revenue, and a significant decrease in SNWA connection charges, which have been used to pay for most of the community's water infrastructure. Connection charges declined from \$188.5 million in 2006 to \$3.2 million in 2010. Income from these charges has slowly rebounded in 2013 when \$19 million was collected. Despite the reduction in revenue, the debt service obligation on the \$3 billion water treatment and distribution system remains.

The organization implemented a number of interim measures to survive the worst of the economic downturn over the past six years, while assessing the new needs and priorities of the community:

- From 2009 through 2013, the SNWA has reduced workforce expenditures by \$26 million (25 percent).
- Implemented a Voluntary Furlough Program, allowing employees to contribute hours to the organization by taking leave-without-pay.
- Introduced an early retirement option in 2010.
- Eliminated longevity pay for new employees hired after January 1, 2011.
- Did not provide Cost-of-Living Adjustments in 2009 and 2010.
- Deferred more than \$395 million in new SNWA capital projects.
- Reduced contracts for consultants.
- Deferred fleet and technology infrastructure purchases.
- Reduced travel, training and professional dues budgets.
- Renegotiated leases for Virgin and Muddy River water for years 2012-2014 at a price 40 percent lower than the existing lease prices, saving \$4.73 million.
- Amended the Arizona Water Bank agreement, relieving SNWA of a \$217.3 million obligation from 2015 to 2024, retaining the ability to bank additional water on a pay-as-you-go basis.

While these measures helped the SNWA weather the worst of the economic downturn, they are not sustainable from an infrastructure management and operational perspective. As the organization transitions from system expansion to asset management, operations, and increased service to the community, it must adapt to the new business environment under which it operates.

Strategic Plan and Realignment

The organization underwent a strategic planning process that culminated in the agency's realignment with Southern Nevada's new economic realities. The strategic plan introduces goals that set a roadmap for the next three to five years and realigns the organization's goals to focus on enhancing service levels, responding to changing community needs and transitioning from expansion to asset management. The strategic plan included direction provided by the Board of Directors over the preceding several years.

The Executive Team worked with employees across departments and at all levels to develop strategies and tactics to achieve the new strategic goals. The plan addresses fiscal realities of the current environment while maintaining core assets in critical areas.

Leadership Transition

SNWA General Manager Pat Mulroy retired on February 6, 2014 after 21 years at the helm of the organization. Through an interlocal contract with the Las Vegas Valley Water District (LVVWD), the SNWA Board authorized John Entsminger to serve as the SNWA's General Manager. While Mr. Entsminger's appointment comes at a time when organizational focus is shifting from system expansion to asset management and operations, and increased service levels, the organization's commitment to meeting those objectives in a fiscally responsible manner will remain unchanged.

Organizational Structure

In order to streamline its operations and ensure it is positioned to achieve the new strategic goals, a realignment of the organization is underway. Recent changes to optimize organizational efficiency include the creation of a new Infrastructure Management Department, which uses existing staff and will help significantly improve asset management. The SNWA also merged its Engineering Department with the LVVWD Engineering Department to maximize the efficiency of engineering design and construction given the organization's shift in focus to asset management and operations. The SNWA and LVVWD Facilities Divisions also were combined to create operational efficiency and to support work to evaluate and standardize the organization's service levels.

Drought and Water Resources

The Colorado River provides 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. Water year 2013 was considered the fourth-driest year in the past half century, with inflows to Lake Powell totaling only 47 percent of average. As of January 2014, Colorado River system storage has decreased by 16 percent compared to January 2012 due to low inflows to the river. As a result, Lake Mead water levels are approximately 107 feet lower than water levels recorded in January 2000. Despite a normal year expected on the river in 2014, Lake Mead is expected to drop an additional 19 feet this year. Because decreasing lake levels may impact water quality and create water shortage declarations, the organization continues to lead efforts to develop and diversify water resources through water banking, water supply augmentation and watershed management.

Integrated Resource Planning Advisory Committee

Faced with the need to maintain a reliable funding source for Southern Nevada's water treatment and delivery system, the SNWA Board convened the Integrated Resource Planning Advisory Committee (IRPAC) in 2012. The committee's first assignment was to identify the most equitable way to service debt associated with past system improvements. After more than a year and a half of regular meetings, the committee presented nine recommendations, including rate adjustments to pay for essential water infrastructure. The IRPAC recommendations to the Board of Directors included an increase of both the SNWA Infrastructure Charge and Commodity Charge to meet revenue and debt service requirements in 2017. The citizens' committee also recommended reducing the maximum rate in 2014, 2015 and 2016 to provide the community time to adjust to the new rates. Local water purveyors voted to implement the recommended SNWA rate increase, effective on January 1, 2014. When rates are fully implemented in 2017, the increase is estimated to generate approximately \$42 million in additional funds each year.

For the second phase of the IRPAC process, the committee is meeting regularly throughout 2014 to develop recommendations regarding long-term water resource needs, water quality, facilities and conservation for Board consideration.

Nevada Center of Excellence

SNWA values existing relationships with state, federal and international partners to advance and promote water-related technology development and innovative water resource solutions. In March 2013, the state Board of Examiners approved \$4 million in funding for Nevada's first Center of Excellence. The Center of Excellence is a public-private venture between the Desert Research Institute, IBM, the Governor's Office of Economic Development and SNWA. The center will be a global resource in water development research, commercialization of water development technologies and water management.

Colorado River Basin Supply and Demand Study

The U.S. Bureau of Reclamation released the Colorado River Basin Water Supply and Demand Study in December 2012, identifying current and future imbalances within the Colorado River system. The study also predicted the impact climate change will have on available resources and evaluated strategies to tackle these issues. In May 2013, the Secretary of the Interior met with the Basin States to discuss a "Next Steps" process, which will include the efforts of individual workgroups among the Bureau of Reclamation, Basin States, Tribes and non-governmental organizations to study municipal and industrial conservation and reuse, agricultural conservation and transfers, and healthy flows. These workgroups will publish their findings in the summer of 2014. The Authority is contributing in-kind resources and research to this process and will continue to lend support to these efforts.

Water Banking

Through local and interstate arrangements, the Authority has acquired a number of banked resources that 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 Authority amended its agreement with Arizona for interstate water banking, relieving the organization of a \$217.3 million obligation from 2015 to 2024 for additional storage and retaining the ability to bank additional water in Arizona on a pay-as-you go basis in the future. Arizona has stored approximately 600,000 acre-feet for the Authority, which may be utilized at a maximum annual rate of 40,000 consumptive use acre-feet per year during normal water supply conditions.

The Authority also has a banking agreement in place with the Metropolitan Water District of Southern California (MWD). In 2013, the Authority directed 75,000 acre-feet of water to MWD to establish additional banked storage credits. Approximately 160,000 acre-feet of water has been stored in MWD's bank for the Authority, which may use; up to 30,000 acre-feet per year (afy) is available during normal and shortage water supply conditions.

In addition to its interstate banking agreements, the Authority has partnered with the LVVWD to store 360,000 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 Authority is approximately 340,000 acre-feet, with a maximum annual withdrawal rate of 20,000 afy.

Groundwater Development Project

In December 2013, the Seventh Judicial District Court remanded the Nevada State Engineer's rulings concerning the SNWA water rights in Spring Valley, Cave Valley, Dry Lake Valley and Delamar Valley. The court asked the State Engineer to gather additional data before rights are granted and water is developed. The Nevada State Engineer and SNWA have appealed this decision.

Awards

The Department of Interior in 2014 recognized the SNWA, the Nature Conservancy, Environmental Defense Fund and other Colorado River basin states for the collaboration and cooperation in completing Minute 319. The organizations received the *Partners in Conservation Award* for the Mexico Minute 319. Signed in November 2012, Minute 319 is an agreement between the United States and Mexico as part of the 1944 Water Treaty between the two countries. Minute 319 provides interim approaches, lasting through 2017, to resolving shared Colorado River issues, including managing shortages in the Colorado River system, encouraging water conservation and binational water development projects, providing operational flexibility and storage in the U.S. reservoirs for Mexico's Colorado River supply, and providing for environmental benefits in the Colorado River delta region of Mexico.

For the fifteenth year, the Alfred Merritt Smith Water Treatment Facility earned the Environmental Protection Agency's (EPA) highest award for water quality, joining only a handful of water utilities in the nation to earn such a distinction. The treatment facility received an EPA Directors Award from the Partnership for Safe Water by consistently sustaining high water-quality standards. The organization also received the Environmental Project of the Year Award from the American Public Works Association for the Homestead and Lower Narrows weirs projects, built to protect the Las Vegas Wash from erosion.

Conservation

As the Colorado River remains unstable and Lake Mead levels continue to drop, water use efficiency via conservation remains a critical staple within SNWA's resource portfolio. Through the implementation of aggressive and successful water management initiatives, SNWA has become a world leader in water conservation.

Southern Nevada achieved a net consumptive use of 124 gallons per capita per day (GPCD) in 2013 and total system GPCD of 212. "Net" GPCD includes all customer sectors but refers only to the portion of water that is consumptively used since direct and indirect reuse allows the water to be used more than once. "Total system" GPCD includes all sources of water and does not reflect the effect of indoor water recycling. The community continues to make progress toward additional savings. In 2013, Southern Nevada's water consumption was approximately 32 billion gallons less than a decade ago, despite the addition of more than 480,000 residents during that span. Community participation in the Water Smart Landscapes Rebate Program continues, with more than 167 million square feet of grass converted to water-smart landscaping since the program's inception in 1999.

Financial Considerations/Capital Funding

Key initiatives for fiscal year 2014/2015 include the continuation of Major Construction and Capital Plan (MCCP) projects and water resource management efforts. The Intake No. 3 project represents the majority of SNWA's capital commitment for the upcoming fiscal year. Intake No. 3 will help protect Southern Nevada's access to Colorado River resources, as well as provide access to better water quality as Lake Mead water levels continue to decline as the drought persists. Other projects, including water resource acquisition and development, represent a smaller portion of SNWA's overall budget but are still critical to ensuring the community's water supply needs are met.

Intake No. 3

Progress continues on the Intake No. 3 project, which is more than 50 percent complete. A connector tunnel, linking Intake No. 3 to Intake Pumping Station No. 2, was completed in 2013. To increase the reliability of the intake system and provide additional protection against declining lake levels, SNWA initiated emergency work to connect this smaller tunnel to Intake Pumping Station No. 1 as well. The intake project is currently scheduled for completion in summer of 2015.

Fiscal Year 2014/2015 Objectives

- The organization will continue to refocus its work to meet the new strategic plan.
- SNWA will continue its collaboration with Colorado River stakeholders in the U.S. and Mexico to implement the Minute 319 agreement, which is allowing the two nations to share river resources in times of surplus as well as in times of shortage.
- Planning and environmental compliance activities for the SNWA's Clark, Lincoln and White Pine Counties Groundwater Development Project are continuing through 2014. In March 2012, the State Engineer ruled on SNWA's applications for groundwater rights in east-central Nevada,

granting a total of 83,988 acre-feet per year. In December 2013, a District Court judge ordered that the State Engineer reconsider several factors associated with the water rights ruling. While that decision is currently under appeal, the Board has directed staff to complete the permitting and environmental process for the Groundwater Development Project.

- Phase II of the IRPAC process will take place throughout 2014 and focus on developing recommendations on water resources, facilities, conservation and water quality. It is anticipated that recommendations for this phase of the process will be presented early in 2015.
- The Water Quality Laboratory will continue to monitor currently unregulated contaminants as part of the new Environmental Protection Agency (EPA) Unregulated Contaminant Monitoring Rule 3 (UCMR). The UCMR is designed to determine if specific unregulated chemicals and/or pathogens exist in treatment plants and distribution systems at levels that would require a primary drinking water standard to protect human health.
- In its efforts to attain the maximum life from the SNWA water infrastructure assets at the lowest overall cost, the organization is developing strategies for infrastructure maintenance and repair that extend the life of facilities and prevent unplanned failures, assessing the condition of critical assets to prioritize short-term renewal requirements, and planning for long-term infrastructure renewal expenditures that will be required to maintain acceptable service levels. Short and long-term renewal needs include:
 - \$56.2 million in infrastructure renewals and enhancements have been identified between 2013 and 2020.
 - Average estimated major infrastructure cost projections for long-term infrastructure renewal costs are:
 - \$2 million per year for Alfred Merritt Smith and River Mountains water treatment facility infrastructure
 - \$5 million every 10 years for major upgrades to the supervisory control and data acquisition system (SCADA)
 - \$1.6 million per year for electrical transmission infrastructure
 - \$100,000 per year for corrosion control system infrastructure
 - \$3 million per year for pumping station infrastructure
 - \$4 million between 2026 and 2028 for Rate of Flow Control Station infrastructure

The current economic climate has contributed to the decline in many of the organization's key funding sources. Sales tax collections, which peaked in calendar year 2006, declined 23 percent in the three subsequent years. Since 2009, collections have slowly rebounded with incremental increases in each subsequent year. Collections for calendar year 2013 are 19 percent more than for calendar year 2009, when sales tax collections were at their lowest level, and 6 percent higher than the previous year.

SNWA regional connection charges, which plummeted 98 percent from more than \$188 million in fiscal year 2006, slightly recovered to \$19 million in fiscal year 2013. Annual revenue from the Southern Nevada Public Land Management Act (SNPLMA), which had been as high as \$135 million in fiscal year 2006/2007, produced \$366,679 so far in fiscal year 2013/2014. SNWA does not anticipate any additional SNPLMA funds in this fiscal year.

Fortunately, during the years prior to the economic downturn, the SNWA was able to build a fund balance that has provided operating revenue for the organization during these trying times. Proper management of these funds significantly contributed to the SNWA being able to maintain its strong financial rating during difficult financial times. IRPAC-recommended rate adjustments have helped supplement the reserves to pay for increased debt service requirements.

To maintain financial and operational integrity, the SNWA implemented significant budget reductions and cost-saving measures. Because regional economic indicators continue to lag slightly behind national trends, the SNWA will continue its conservative approach in planning, forecasting and budgeting, as demonstrated in the 2014/2015 fiscal year budget.

WHOLESALE DELIVERY OPERATIONS

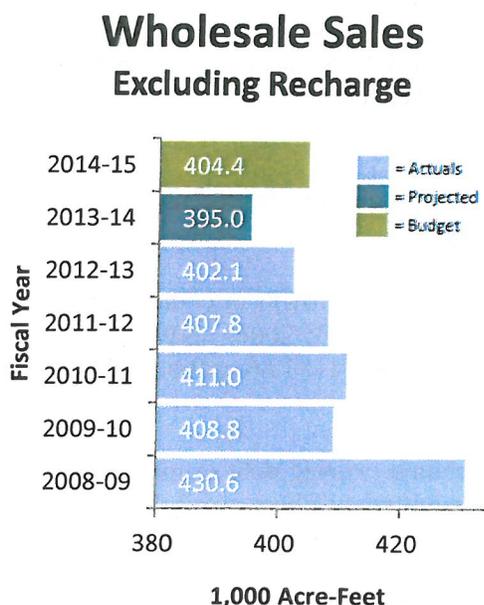
The Wholesale Delivery Operations sub-fund is projected to have an opening balance of \$53.6 million forecast for the beginning of fiscal 2014/2015. This is the amount remaining from previous years' collection of wholesale delivery charges less expenses incurred in those years. The 2014/2015 budget projects that operational revenues will cover the year's expenses, plus improve the Wholesale Delivery Operations balance by \$0.6 million by fiscal year end.

Wholesale Delivery Charge

The Financial Work Group (FWG) of SNWA met on February 13, 2014, to review projections of revenues and expenses for a five-year period. After considering current fund balance projections of water sales and expenses over the next five years, the FWG is recommending no increase in the wholesale delivery charge for fiscal year 2014/2015. It is not currently anticipated that any increase will be required in fiscal year 2015/2016 either.

Water Deliveries

Estimated sales of 404,400 acre-feet for fiscal year 2014/2015 are 9,400 acre-feet (2.4 percent) higher than the projected consumption for 2013/2014.



The budgeted amount assumes that no in-valley recharge additions will be made in fiscal year 2014/2015. If deliveries do not allow the SNWA to use its full 300,000 acre-foot annual allocation of Colorado River water during this year, the SNWA will use all other means possible to store the unused water for future use.

Energy

Energy continues to be the single largest expense in the wholesale delivery charge. The energy program used by the SNWA provides a stable energy price that reduces price volatility. The SNWA's "model clearing price" program established a price of \$63/megawatt hour (MWh) as the average price the SNWA will pay for energy. The \$63 rate, which has been in place since 2004, is reviewed periodically for relevance and adequacy. The rate covers actual power costs,

including interest on debt service for the partial acquisition of the Silverhawk Power Station, the Pioneer energy portfolio, and other renewable generation assets. In addition, the rate pays for operating expenses of the SNWA Energy Management Department.

The SNWA has a 25-percent interest in the Silverhawk Power Station (managed by NV Energy on behalf of the SNWA) which provides the SNWA with 125 megawatts (MW) of firm delivered on-peak power and 25 MW of off-peak power through December 31, 2018, further stabilizing long-term prices. The SNWA also utilizes approximately 20 MW of Nevada's Colorado River hydropower rights at a fully-loaded cost of about \$35/MWh through the Colorado River Commission.

Fiscal 2014/2015's power costs are expected to increase \$3.3 million (8.0 percent) when compared to fiscal year 2013/2014. SNWA has saved approximately \$58 million in energy costs as a result of procuring its energy needs on the open market.

The SNWA is committed to incorporating renewable energy resources into its power portfolio whenever feasible and continues to investigate renewable energy projects using wind, solar, biodiesel and geothermal resources to meet longer-term energy needs.

Operating Expenses and Debt Service

Operating expenses include labor, chemicals, fees to the Colorado River Commission and Bureau of Reclamation, supplies needed for the repair and maintenance of the pumping and distribution system and other sundry items. These costs are expected to increase \$4.0 million (6.4 percent). This increase comes primarily from increases in power and administrative expenses. Debt service is expected to decrease \$0.7 million (-5.1 percent).

NEW EXPANSION DEBT SERVICE

Revenue for the New Expansion Debt Service sub-fund comes from the SNWA Regional Connection Charge, SNWA Infrastructure Charge, SNWA Commodity Charge, SNWA Reliability Surcharge, and sales tax proceeds.

The SNWA New Expansion Debt Service sub-fund is projected to have a beginning balance of \$340.7 million. The fund balance provides the SNWA with the capacity to meet existing debt service requirements and maintain a debt coverage ratio consistent with bond covenants.

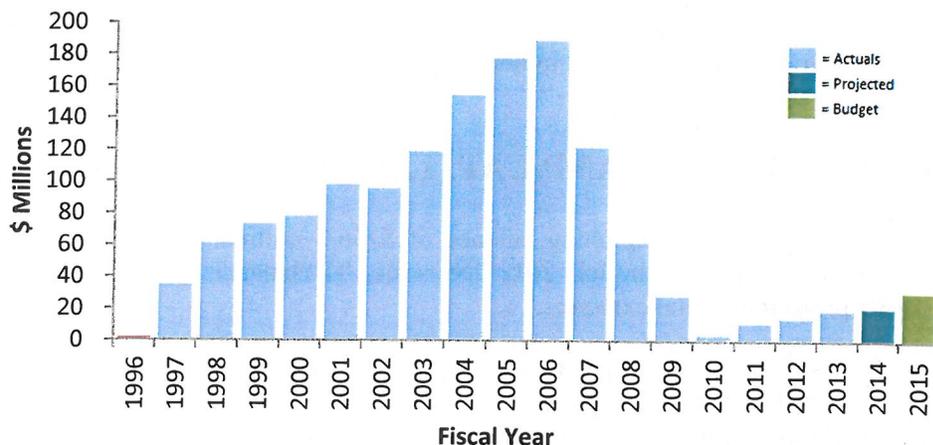
SNWA Regional Connection Charge

Net collections of the SNWA Regional Connection Charge have stabilized in recent years but are significantly below peak collections as shown on the following page.

The projection for fiscal 2014/2015 continues the current trend of stable growth in connection charges though they are much lower than peak collections of \$188.5 million in 2005/2006. SNWA Connection Charge revenues are budgeted at \$30.7 million for fiscal 2014/2015 which is \$17.6 million (134 percent) higher than fiscal 2013/2014's budgeted amount.

Funds in excess of \$16.1 million will be used to prepay or pre-refund existing debt or make a one-time capital expenditure, or modify or reduce water rates. IRPAC committee members noted the volatility in connection charge revenue and recommended reserving excess funds to reduce the volatility.

Regional Connection Charges



SNWA Infrastructure Charge

The SNWA Board approved a fixed-rate SNWA Infrastructure Charge on February 29, 2012, and approved a credit for non-residential fire lines on July 19, 2012. The Infrastructure Charge provides needed financial relief for the significant decline in SNWA connection charge collections, and allows for an equitable method to service debt associated with the construction of Southern Nevada's water infrastructure.

On September 26, 2013, IRPAC recommended to the SNWA Board of Directors an increase to the Infrastructure Charge and Commodity Charge to pay for essential water infrastructure in Southern Nevada. The board adopted the recommended rates, which went into effect on January 1, 2014. The projected collections of SNWA Infrastructure Charge for fiscal 2014/2015 are \$87.2 million. This amount is \$9.8 million (12.7 percent) higher than amounts budgeted in fiscal 2013/2014.

SNWA Regional Commodity Charge & SNWA Reliability Surcharge

Collection of SNWA Regional Commodity Charges improved in recent years. The fiscal 2014/2015 budget projects SNWA Commodity Charge collections to be \$49.4 million. This amount is \$10.1 million (25.7 percent) higher than 2013/2014 projections due in part to the IRPAC-recommended increase effective January 1, 2014.

The SNWA Reliability Surcharge is based on 0.25 percent of a residential customer's total water bill and 2.5 percent of a non-residential customer's bill. In fiscal 2014/2015 this source of revenue is projected to be relatively flat at \$4.9 million, reflecting continued lower unit sales per customer and limited growth in the number of customer accounts.

Sales Tax Collections

Sales tax revenues are improving but are still less than peak amounts. While this trend is encouraging, the SNWA still takes a conservative approach in forecasting future revenue from sales tax. The fiscal 2014/2015 budget projects \$50.2 million in sales tax collections for the New Expansion Debt Service Fund. This amount is \$2.2 million higher than fiscal 2013/2014 budget projections and reflects the current collection trend.

Labor and Capitalized Expenses

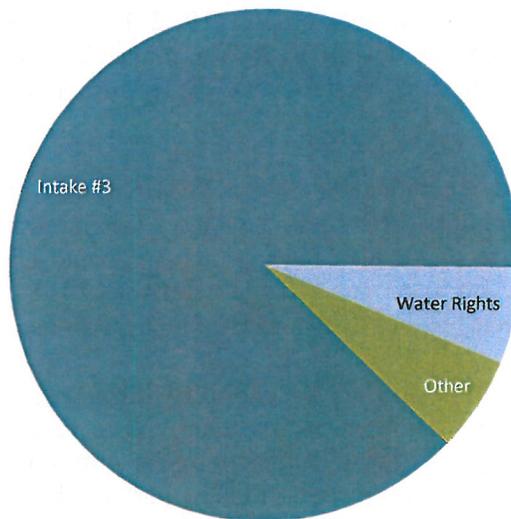
Beginning with the fiscal 2012/2013 budget, SNWA began paying for capitalized labor through the New Expansion Debt Service sub-fund. The only exception to this will be SNWA's Engineering Department which will still have its labor paid by bond proceeds. This revised approach capitalizes non-engineering labor on major capital projects from operating revenues rather than bond proceeds.

MAJOR CONSTRUCTION AND CAPITAL PLAN (MCCP)

The MCCP sub-fund is projected to have a beginning balance of \$156.2 million. The fund balance consists entirely of unused bond proceeds from the July 2012 debt issue. The balance will be sufficient to cover all of fiscal 2014/2015's projected capital expenses.

Construction and related expenditures for the MCCP in fiscal year 2014/2015 are projected to be \$126.2 million. For fiscal year 2014/2015, the SNWA will continue construction of Intake No. 3 and dedicate funds for securing additional water resources for future use. The following chart shows the major projects that will be funded by the MCCP sub fund in fiscal year 2014/2015.

SNWA MCCP Commitments of \$145 million



LAS VEGAS VALLEY GROUNDWATER MANAGEMENT PROGRAM

The Las Vegas Valley Groundwater Management Program sub-fund is projected to have a beginning fund balance of \$1.7 million. This is the amount remaining from collection of groundwater fees, less expenses incurred in previous years. During the 2014/2015 fiscal year, it is estimated that the beginning balance and fee collections will be sufficient to support the annual projects and expenses of the Groundwater Management Program, projected at \$1.2 million. It is anticipated that the sub-fund will have an ending fund balance of \$1.4 million.

LAS VEGAS WASH

The Las Vegas Wash sub-fund will not have a beginning balance. During the fiscal year, the fund is projected to receive \$3.5 million in sales tax proceeds and \$8.7 million from various grants. These monies will be used to partially fund \$18.3 million in capital projects in the Las Vegas Wash. An additional \$6.6 million will be available through a temporary interfund loan from the New Expansion Debt Service Fund. Also, \$2.0 million in Las Vegas Wash program fees are projected to be received during the fiscal year. These fees and the existing fund balance will be used to pay the projected \$2.4 million in net operating expenses.

FINANCIAL SUMMARY

The chart below shows beginning and ending balances, and summarizes sources and uses of funds of the SNWA by activity for fiscal year 2014/2015.

SOUTHERN NEVADA WATER AUTHORITY Budget Summary Fiscal Year 2014/2015 In Million Dollars

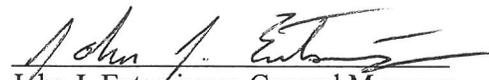
	Wholesale Delivery Operations	New Expansion Debt Service	MCCP Construction	Groundwater Program	Las Vegas Wash	Total
Beginning Balance (July 1, 2014)	\$ 28.7	\$ 340.7	\$ 156.2	\$ 1.7	\$ -	\$ 527.3
Sources of Funds						
Wholesale Delivery Charge	123.4	-	-	-	-	123.4
Other Revenues	1.3	1.4	0.1	-	-	2.8
Regional Connection Charge	-	30.7	-	-	-	30.7
Regional Infrastructure Charge	-	87.2	-	-	-	87.2
Regional Commodity Charge	-	49.4	-	-	-	49.4
Reliability Surcharge	-	4.9	-	-	-	4.9
Sales Tax	-	50.2	-	-	3.5	53.7
Groundwater Program Fees	-	-	-	0.9	-	0.9
LV Wash Program Fees	(1.2)	-	-	-	2.0	0.7
Intra Fund Loans	-	(6.6)	-	-	6.6	-
Debt Issuance Proceeds	-	-	-	-	-	-
Grant Proceeds	0.2	0.7	-	-	8.7	9.5
Interest Income	0.1	1.1	0.3	0.0	-	1.5
Total Sources of Funds	123.6	219.1	0.4	0.9	20.7	364.8
Uses of Funds						
Energy	44.4	-	1.4	-	-	45.8
Payroll	37.0	20.4	6.6	0.5	1.5	66.0
Operating Expenses	28.7	-	-	0.7	0.8	30.2
Capitalized Expenses	-	9.5	31.1	-	-	40.6
Cap/Const Expenditures	-	-	92.2	-	18.3	110.5
Debt Service	13.0	157.6	-	-	-	170.5
Total Uses of Funds	123.0	187.4	131.4	1.2	20.6	463.6
Fiscal Year Net Change	0.6	31.7	(131.0)	(0.3)	0.1	(98.9)
Ending Balance (June 30, 2015)	\$ 29.3	\$ 372.4	\$ 25.2	\$ 1.4	\$ 0.1	\$ 428.4

Amounts may be slightly off due to rounding

Budgeted reductions and deferrals described previously, as well as the addition of IRPAC recommended rate adjustments, are helping the New Expansion Debt Service sub-fund reserves to remain sufficient. Healthy reserves are crucial in maintaining a favorable bond rating, which contributes to lower overall debt costs and future funding can be procured to construct essential projects.

APPROVAL

The public hearing for this budget is scheduled for 9:00 a.m., Thursday, May 15, 2014, in the Colorado River Conference Rooms, 100 City Parkway, Seventh Floor, Las Vegas, Nevada.


John J. Entsminger, General Manager

SOUTHERN NEVADA WATER AUTHORITY
2014/2015 BUDGET
COMPARISON WITH 2012/2013 BUDGET
In Million Dollars

	Budget	Budget	Difference	
	2013-14	2014-15	\$	%
Wholesale Delivery Charge	\$ 122.0	\$ 123.4	\$ 1.4	1.1%
Infrastructure Charge	77.4	87.2	9.8	12.7%
Connection Charges	13.1	30.7	17.6	134.4%
Regional Water Rates	44.0	54.3	10.3	23.4%
Sales Tax	51.3	53.7	2.4	4.7%
All Other	20.6	15.5	(5.1)	-25.0%
TOTAL SOURCES	\$ 328.4	\$ 364.8	\$ 36.4	11.1%
	Budget	Budget	Difference	
	2013-14	2014-15	\$	%
Power	\$ 44.3	\$ 45.8	\$ 1.5	3.4%
Construction Expenditures	127.7	110.5	(17.2)	-13.5%
Payroll	68.6	66.0	(2.6)	-3.8%
Operating Expenses	27.9	30.2	2.3	8.2%
Capital Expenses	34.9	40.6	5.7	16.3%
Debt Service	150.7	170.5	19.8	13.1%
TOTAL USES	\$ 454.1	\$ 463.6	\$ 9.5	2.1%
NET ACTIVITY	\$ (125.7)	\$ (98.8)	\$ 26.9	-21.4%

Amounts may be slightly off due to rounding



STATE OF NEVADA
DEPARTMENT OF TAXATION

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Phone: (775) 687-9999
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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, 2015

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 \$ 275,504,949

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 David H. Wright
(Printed Name)
Chief Financial Officer
(Title)

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

Signed David H. Wright

Dated: 4/10/14

APPROVED BY THE GOVERNING BOARD

Mary Beth Scow, Chairwoman

Sam Bateman, Vice Chairman

Susan Brager

Bob Coffin

Duncan McCoy

Steve Sisolak

Anita Wood

SCHEDULED PUBLIC HEARING:

Date and Time May 19, 2014 9:00 AM

Publication Date May 9, 2014

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

FULL TIME EQUIVALENT EMPLOYEES BY FUNCTION

	ACTUAL PRIOR YEAR ENDING 06/30/13	ESTIMATED CURRENT YEAR ENDING 06/30/14	BUDGET YEAR ENDING 06/30/15
General Government			
Judicial			
Public Safety			
Public Works			
Sanitation			
Health			
Welfare			
Culture and Recreation			
Community Support			
TOTAL GENERAL GOVERNMENT	476.30	475.37	474.27
Utilities			
Hospitals			
Transit Systems			
Airports			
Other			
TOTAL	476.30	475.37	474.27

POPULATION (AS OF JULY 1)	2,031,000	2,061,000	2,085,000
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

PROPRIETARY FUND	(1)	(2)	(3) BUDGET YEAR ENDING 06/30/15	
	ACTUAL PRIOR YEAR ENDING 6/30/2013	ESTIMATED CURRENT YEAR ENDING 6/30/2014	TENTATIVE APPROVED	FINAL APPROVED
OPERATING REVENUE				
Wholesale Delivery Charge	\$117,534,578	\$121,958,169	\$123,370,688	
Groundwater Program Revenue	863,417	913,345	892,964	
Purveyor Administration Cost Billings	383,443	1,013,138	1,275,442	
Las Vegas Wash Revenues	397,708	705,482	727,398	
Other Operating Revenue	3,525,867	1,102,305	1,506,993	
Total Operating Revenue	\$122,705,013	\$125,692,439	\$127,773,485	
OPERATING EXPENSE				
Personnel and Related	\$43,880,414	\$43,868,607	\$46,857,311	
Energy	36,347,165	41,484,548	44,367,515	
Other	27,943,415	37,866,920	39,695,148	
Depreciation/Amortization	74,943,316	80,000,000	80,000,000	
Total Operating Expense	\$183,114,310	\$203,220,075	\$210,919,974	
Operating Income or (Loss)	(\$60,409,297)	(\$77,527,636)	(\$83,146,489)	
NONOPERATING REVENUES				
Interest Earned	\$740,407	\$714,982	\$1,190,499	
Property Taxes				
Subsidies				
Consolidated Tax				
Capital Contributions	205,919,057	201,691,955	235,518,357	
other	63,295		-	
Total Nonoperating Revenues	\$206,722,759	\$202,406,937	\$236,708,856	
NONOPERATING EXPENSES				
Interest Expense	\$53,694,055	\$60,068,183	\$64,584,975	
Amortization of Refunding Costs	2,926,272	-	-	
Other Bond Costs	2,314,430	-	-	
Total Nonoperating Expenses	\$58,934,757	\$60,068,183	\$64,584,975	
Net Income before Operating Transfers	\$87,378,705	\$64,811,119	\$88,977,392	
Operating Transfers (Schedule T)				
In				
Out				
Net Operating Transfers	\$0	\$0	\$0	
NET INCOME	\$87,378,705	\$64,811,119	\$88,977,392	

Southern Nevada Water Authority
(Local Government)

SCHEDULE F-1 REVENUES, EXPENSES AND NET INCOME

FUND Enterprise

PROPRIETARY FUND	(1)	(2)	(3) BUDGET YEAR ENDING 06/30/15	
	ACTUAL PRIOR YEAR ENDING 6/30/2013	ESTIMATED CURRENT YEAR ENDING 6/30/2014	TENTATIVE APPROVED	FINAL APPROVED
A. CASH FLOWS FROM OPERATING ACTIVITIES:				
General and Administrative/Resources Charges	\$1,629,728	\$1,013,138	\$1,275,442	
Groundwater Management Fees	863,417	913,345	892,964	
Las Vegas Wash Revenues	397,708	705,482	727,398	
Wholesale Delivery Charges	120,996,382	121,958,169	123,370,688	
Other Revenues	2,273,173	1,102,305	1,506,993	
Cash Payments to Suppliers of Goods and Services	(95,395,415)	(123,220,075)	(130,919,974)	
a. Net cash provided by (or used for) operating activities	\$30,764,993	\$2,472,364	(\$3,146,489)	
B. CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES:				
b. Net cash provided by (or used for) noncapital financing activities	\$0	\$0	\$0	
C. CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:				
Purchase or Construction of Capital Assets	(\$125,231,706)	(\$142,538,596)	(\$126,246,165)	
Proceeds from Disposal of Property and Equipment	66,212	-	-	
Proceeds of Debt Issuance	360,000,000	-	-	
Principal Paid on Debt	(15,130,824)	(16,872,459)	(24,290,584)	
Interest Paid on Debt	(124,023,036)	(133,841,761)	(146,219,097)	
Capital Contributions	190,995,018	201,691,955	235,518,357	
Credit Payment Income	10,394,293	10,867,008	10,867,008	
c. Net cash provided by (or used for) capital and related financing activities	\$297,069,957	(\$80,693,853)	(\$50,370,481)	
D. CASH FLOWS FROM INVESTING ACTIVITIES:				
Purchases of Investment Securities	(\$1,011,501,617)	(165,000,000)	(\$375,000,000)	
Proceeds from Sales or Maturities of Investment Securities	685,963,512	235,850,641	427,326,471	
Investment Earnings	4,349,088	714,982	1,190,499	
d. Net cash provided by (or used in) investing activities	(\$321,189,017)	\$71,565,623	\$53,516,970	
NET INCREASE (DECREASE) in cash and cash equivalents (a+b+c+d)	\$6,645,933	(\$6,655,866)	\$0	
CASH AND CASH EQUIVALENTS AT JULY 1, 20xx	90,009,933	96,655,866	90,000,000	
CASH AND CASH EQUIVALENTS AT JUNE 30, 20xx	\$96,655,866	\$90,000,000	\$90,000,000	

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 7/1/2014	(9) INTEREST PAYABLE	(10) PRINCIPAL PAYABLE	(11) TOTAL (9)+(10)
State Revolving fund Loan 1	2	20 Years	\$12,269,695	12/30/99	2/1/20	3.61%	\$4,637,991	\$161,121	\$705,542	\$866,663
State Revolving Fund Loan 2	2	20 Years	\$10,000,000	6/29/01	8/1/21	3.46%	\$4,569,376	\$153,439	\$543,502	\$696,941
LVVWD 2005F Refunding Bonds	2	22 Years	\$249,365,000	5/1/05	12/1/26	5.00%	\$173,520,000	\$8,676,000	\$0	\$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	\$0	\$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	\$0	\$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	\$0	\$9,806,469
CRC 2006D Refunding Bonds	2	18 Years	\$111,840,000	7/15/06	7/1/24	4.94%	\$66,200,000	\$3,270,763	\$0	\$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	\$0	\$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	\$0	\$5,623,931
SNWA 2008 Bonds	2	30 Years	\$400,000,000	7/2/08	6/1/38	5.00%	\$362,155,000	\$18,107,750	\$0	\$18,107,750
SNWA 2008 Clean Energy	2	14 Years	\$6,900,000	7/30/08	12/15/22	1.17%	\$4,140,000	\$45,747	\$460,000	\$505,747
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	\$0	\$4,153,500
LVVWD 2009B Bonds	2	23 Years	\$10,000,000	8/10/09	6/1/32	4.73%	\$9,650,000	\$459,313	\$365,000	\$824,313
SNWA 2009 Refunding	2	20 Years	\$50,000,000	11/10/09	6/1/30	5.00%	\$46,355,000	\$2,317,750	\$1,960,000	\$4,277,750
SNWA 2009 Water Rev Bond	4	21 Years	\$2,214,457	11/10/09	7/1/30	0.00%	\$1,961,376	\$0	\$126,540	\$126,540
LVVWD 2009C Bonds	2	30 Years	\$348,115,000	12/23/09	6/1/39	7.08%	\$348,115,000	\$16,028,085	\$0	\$16,028,085
LVVWD 2009D Bonds	2	21 Years	\$71,965,000	12/23/09	6/1/30	4.99%	\$66,265,000	\$3,307,738	\$3,070,000	\$6,377,738
CRC 2010B Bonds	2	10 Years	\$7,405,000	6/24/10	6/1/20	3.63%	\$6,460,000	\$238,697	\$980,000	\$1,218,697
LVVWD 2011A Bonds	2	15 Years	\$58,110,000	5/20/11	6/1/26	4.66%	\$58,110,000	\$2,705,755	\$100,000	\$2,805,755
LVVWD 2011B Bonds	2	26 Years	\$129,650,000	10/19/11	6/1/37	5.56%	\$129,650,000	\$5,277,078	\$0	\$5,277,078
LVVWD 2011C Bonds	2	19 Years	\$267,815,000	10/19/11	6/1/38	4.92%	\$249,995,000	\$12,292,663	\$9,385,000	\$21,677,663
SNWA 2012A Refunding	2	20 Years	\$85,015,000	6/26/12	6/1/32	4.07%	\$85,015,000	\$3,455,600	\$0	\$3,455,600
LVVWD 2012B	2	30 Years	\$360,000,000	7/31/12	6/1/42	4.73%	\$360,000,000	\$17,015,050	\$6,595,000	\$23,610,050
State 2013A Refunding	2	15 Years	\$21,720,000	2/20/13	8/1/27	3.00%	\$21,720,000	\$651,600	\$0	\$651,600
TOTAL ALL DEBT SERVICE			\$3,812,554,152				\$3,427,458,743	\$146,219,097	\$424,290,584	\$570,509,681

SCHEDULE C-1 - INDEBTEDNESS

Southern Nevada Water Authority
(Local Government)
Budget Fiscal Year 2014-2015

**Schedule of Existing Contracts
Budget Year 2014-2015**

Local Government: Southern Nevada Water Authority
 Contact: David H. Wright
 E-mail Address: dave.wright@lvvwd.com
 Daytime Telephone: (702) 258-3106

65

Total Number of Existing Contracts

Line	Vendor	Effective Date of Contract	Termination Date of Contract	Proposed Expenditure FY 2014-15	Proposed Expenditure FY 2015-16	Reason or need for contract:
1	Utility Resources	05/15/97	upon notice	\$ 300,000.00	\$ 300,000.00	PUC Consultant
2	Eureka Vet Service	02/01/08	12/31/14	\$ 35,000.00	\$ -	Veterinarian services
3	R&R Partners	11/05/09	10/31/15	\$ 2,300,000.00	\$ 766,666.00	Professional services for water conservation promotion
4	Hispana Comunicacion	02/16/10	01/31/15	\$ 266,200.00	\$ -	SNWA Hispanic oriented advertising and marketing services
5	Piercy Bowler Taylor & Kern	03/02/10	06/03/15	\$ 124,000.00	\$ -	Auditing Services
6	Lewis & Roca	03/22/10	upon notice	\$ 100,000.00	\$ 100,000.00	Legal Services
7	Kay Brothers	05/05/10	upon notice	\$ 100,000.00	\$ 100,000.00	Consulting services on water issues
8	Stratus Consulting	11/17/10	09/30/17	\$ 15,000.00	\$ 15,000.00	Support for WUCA workshop and whitepaper
9	Atkins North America Inc.	07/28/11	upon notice	\$ 50,000.00	\$ 50,000.00	Surveying services
10	PhycoTech Inc.	10/25/11	upon notice	\$ 50,000.00	\$ 50,000.00	Water Quality Analysis for Phytoplankton
11	C. Joseph Guild III	01/31/12	upon notice	\$ 64,000.00	\$ 64,000.00	Ranch and Agricultural Consulting
12	Spring Valley Associates	04/12/07	12/31/15	\$ 850,000.00	\$ 425,000.00	Ranch Operations and Maintenance Services
13	C. Joseph Guild III	01/02/12	upon notice	\$ 92,000.00	\$ 92,000.00	Natural Resource and Water Issues Consulting
14	R&R Public Affairs	01/22/12	01/21/17	\$ 75,000.00	\$ 75,000.00	Consulting services for state and federal natural resource issues
15	Hobbs, Ong and Associates	04/19/12	upon notice	\$ 150,000.00	\$ 150,000.00	Financial advisory services
16	Nevada Conservation Corps	11/20/12	11/20/18	\$ 24,500.00	\$ 24,500.00	Reduce streamside vegetation in Warm Springs Natural Area
17	Tri County Weed Control	01/09/13	12/31/17	\$ 45,000.00	\$ 45,000.00	Weed control in Warm Springs Nat Area
18	Laguna Productions	02/21/13	02/20/19	\$ 145,000.00	\$ 145,000.00	Production assistance
19	CDM Smith, Inc.	01/16/14	12/31/14	\$ 125,000.00	\$ -	Facilitation services
20	Simplex Grinnell LP	06/13/12	06/30/17	\$ 50,077.00	\$ 50,077.00	Fire systems maintenance
21	Safe Electronics, Inc.	06/13/12	06/30/17	\$ 42,000.00	\$ 42,000.00	Fire systems maintenance
22	G&G Systems	06/13/12	06/30/17	\$ 38,484.00	\$ 38,484.00	Fire systems maintenance
23	ABC Fire & Cylinder	06/13/12	06/30/17	\$ 17,800.00	\$ 17,800.00	Fire systems maintenance
24	Michael J Brennan	08/23/12	07/01/18	\$ 100,000.00	\$ 100,000.00	Environmental compliance consulting
25	Holland & Hart	08/23/12	08/23/20	\$ 100,000.00	\$ 100,000.00	Nevada Power integrated resource plan litigation
26	Warren Turkett	06/25/12	upon notice	\$ 81,680.00	\$ 81,680.00	Lower Colorado River water quality database
27	Holland & Hart	05/22/12	05/22/19	\$ 100,000.00	\$ 100,000.00	Litigation related services
28	Snell & Wilmer, LLP	04/11/12	04/11/20	\$ 100,000.00	\$ 100,000.00	Glen Canyon Dam environmental compliance
29	Utility Resources, Inc.	03/17/05	upon notice	\$ 530,000.00	\$ 530,000.00	Public utility commission regulatory hearings
30	Institute for Executive Development	08/29/13	08/28/20	\$ 90,000.00	\$ 90,000.00	Development of organizational initiatives
31	Eurofins Eaton Analytical (formerly MWH Laboratories)	08/01/13	07/31/14	\$ 18,743.75	\$ -	BPO for ARC for water sampling analysis
32	High Sierra Waterlab	12/01/13	11/30/14	\$ 40,833.33	\$ -	Chemical analysis of water samples
33	Phycotech, Inc.	12/01/13	11/30/14	\$ 29,166.62	\$ -	Analysis of phytoplankton samples in Lake Mead
34	A-I Mechanical	03/01/13	02/28/14	\$ 144,000.00	\$ -	HVAC services and repairs.
35	ABC Fire & Cylinder	07/01/13	06/30/14	\$ 18,690.00	\$ -	Fire safety inspections
36	BSA Environmental	07/01/13	06/30/14	\$ 35,000.00	\$ -	Zooplankton Analysis
37	Desert Research Institute	12/12/12	08/31/14	\$ 2,000.00	\$ -	Leaf Clip Study
38	G&G Systems	07/01/13	06/30/14	\$ 40,395.39	\$ -	Fire safety inspections
39	Total Pest Management	09/01/13	08/31/14	\$ 1,666.66	\$ -	Pest control services at AMS
40	US Dept. of the Interior/US Geo. Sur.	10/01/13	09/30/14	\$ 48,749.99	\$ -	Water quality monitoring platforms in Lake Mead
41	Analytical Instrumentation	09/01/13	08/31/14	\$ 2,535.83	\$ -	Service agreement for lab equipment
42	Beckman Coulter	01/01/14	12/31/14	\$ 5,240.50	\$ -	Service agreement for lab equipment

**Schedule of Existing Contracts
Budget Year 2014-2015**

Local Government: Southern Nevada Water Authority
Contact: David H. Wright
E-mail Address: dave.wright@lvvwd.com
Daytime Telephone: (702) 258-3106

65

Total Number of Existing Contracts

43	Mansci	12/30/13	12/29/14	\$ 2,535.00	\$ -	Service agreement for lab equipment
44	Millipore Corp.	08/01/13	07/31/14	\$ 585.59	\$ -	Service agreement for lab equipment
45	Perkin Elmer	08/01/13	07/31/14	\$ 952.92	\$ -	Service agreement for lab equipment
46	Qiagen	11/05/13	11/04/14	\$ 16,000.00	\$ -	Service agreement for lab equipment
47	Shimadzu Scientific	10/02/13	10/01/14	\$ 3,305.75	\$ -	Service agreement for lab equipment
48	Thermo Electron	09/08/13	09/07/14	\$ 1,591.16	\$ -	Service agreement for lab equipment
49	Western Commercial Services	11/01/13	10/31/14	\$ 723.00	\$ -	Service agreement for lab equipment
50	Faiss Foley Warren	08/01/13	07/31/19	\$ 900,000.00	\$ 900,000.00	Integrated communications and support services for SNWA
51	R&R Public Affairs	02/16/12	01/21/19	\$ 75,000.00	\$ 75,000.00	Professional services related to statewide and federal natural resources issues
52	Rogich Communications	06/17/13	06/30/17	\$ 75,000.00	\$ 75,000.00	Communication support for SNWA community outreach programs
53	Market Decision Corporation	03/04/13	03/04/17	\$ 100,000.00	\$ 100,000.00	Data collection services
54	Tri County Weed Control	12/30/13	12/30/18	\$ 50,000.00	\$ 50,000.00	Noxious invasive weed control
55	Best Best & Krieger LLP	12/19/13	12/19/14	\$ 100,000.00	\$ -	Federal environmental compliance
56	Colorado Water Conservation	11/20/13	11/20/14	\$ 23,000.00	\$ -	Cloud seeding project
57	Global Water Technologies LTD	07/25/13	upon notice	\$ 70,000.00	\$ 70,000.00	Innovation development assistance
58	Digital Mapping	07/02/13	06/30/16	\$ 98,950.00	\$ 98,950.00	Muddy and Virgin rivers imagery project
59	Desert Research Institute	04/02/13	upon notice	\$ 69,878.00	\$ 69,878.00	Monthly evaporation analysis
60	Vogue Linen Service	05/01/13	05/01/17	\$ 1,000.00	\$ 1,000.00	Uniform cleaning services for Wahoo Ranch
61	B&W Trucking	02/01/08	12/31/14	\$ 1,000.00	\$ -	Truck transportation services
62	Rhithron Biological Association	01/20/10	01/20/15	\$ 4,000.00	\$ -	Water sample analysis
63	Greenberg Taurig, LLP	06/19/12	upon notice	\$ 100,000.00	\$ 100,000.00	Bond counsel
64	D & G Scales	07/01/11	06/30/14	\$ 2,000.00	\$ -	Maintenance and inspection of truck scales
65	Conservation District of So. Nevada	07/31/12	07/31/17	\$ 85,000.00	\$ 50,000.00	Warm Springs Nat Area property management

Total Proposed Expenditures

\$ 8,328,284.49 \$ 5,242,035.00

**Schedule of Privatization Contracts
Budget Year 2014-2015**

Local Government: Southern Nevada Water Authority
Contact: David H. Wright
E-mail Address: dave.wright@lvvwd.com
Daytime Telephone: (702) 258-3106

Total Number of Privatization Contracts: 0 _____

Line	Vendor	Effective Date of Contract	Termination Date of Contract	Duration (Months/ Years)	Proposed Expenditure FY 2013-14	Proposed Expenditure FY 2014-15	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										
11	Total									

Attach additional sheets if necessary.

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

May 15, 2014

Subject: Agreement	Director's Backup
Petitioner: David L. Johnson, Deputy General Manager, Engineering/Operations	
Recommendations: That the Board of Directors approve an interlocal agreement between the Clark County Water Reclamation District and the Authority for Las Vegas Valley shallow groundwater quality data gathering, storage, and gap analysis, and accept funds in the amount of \$200,000 for the Authority's participation costs.	

Fiscal Impact:

If the above recommendation is approved, funds in the amount of \$200,000 will be accepted by the Authority.

Background:

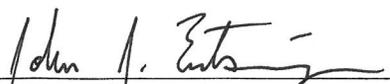
The increased urbanization of the Las Vegas Valley has contributed not only to the rise of the shallow groundwater table, but also to the mobilization of compounds, such as salts and associated minerals, into stormwater channels within the valley. This rise in the shallow groundwater table is primarily due to the overwatering of landscaping and leakage from septic tanks. The shallow groundwater and associated compounds found in that water are primarily transported through tributaries to the Las Vegas Wash (Wash). Tributaries to the Wash include the Las Vegas and Duck creeks, the Pittman and Flamingo washes, the Whitney Drainage and the Monson and C-1 channels.

The Nevada Division of Environmental Protection has categorized these tributaries as impaired due to nitrates from septic tank leakage, and resurfacing groundwater and dewatering discharges into the tributaries. Additional study of mineral concentrations in the shallow aquifer is needed to understand the source of the compounds. Numerous agencies have individually collected and tracked groundwater monitoring data; however, the data is not compiled into a single source. Water quality reports on the shallow aquifer have not been assembled.

This interlocal agreement would provide funding to the Authority for the compilation of existing monitoring data and publications from those agencies into the Authority's Lower Colorado River Water Quality Database (Database), a review of the existing data, and recommendations for additional data needs. Once data needs have been identified, water quality samples will be collected by the Authority, analyzed at the Clark County Water Reclamation District (Reclamation District) laboratory, and entered into the Database. The newly compiled data would then be available to the Authority, the Reclamation District, and other agencies within the Las Vegas Valley. The Reclamation District's Board of Trustees approved this interlocal agreement on April 15, 2014.

This interlocal agreement is being entered into pursuant to NRS 277.180 and Section 6(j) of the SNWA 1995 Amended Cooperative Agreement. The office of the General Counsel has reviewed and approved the agreement.

Respectfully submitted:



 John J. Entsminger, General Manager
 JJE:PDS:DLJ:PAR:rss
 Attachment

AGENDA ITEM #	3
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Agreement No. _____

**INTERLOCAL AGREEMENT FOR LAS VEGAS VALLEY SHALLOW
GROUNDWATER DATA GATHERING, STORAGE, AND DATA GAP ANALYSIS
AGREEMENT**

This Agreement, made and entered into this _____ day of _____, 2014, by and between the SOUTHERN NEVADA WATER AUTHORITY, a political subdivision of the State of Nevada, hereinafter called the "AUTHORITY," and the CLARK COUNTY WATER RECLAMATION DISTRICT, a political subdivision of the State of Nevada, hereinafter called "DISTRICT." Each referred individually as the "Party" and collectively as the "Parties."

WITNESSETH:

WHEREAS, the parties are authorized to enter into Agreements pursuant to Nevada Revised Statute (NRS) 277.180;

WHEREAS, Section 208 Plans are required by the Federal Clean Water Act and these plans promote efficient and comprehensive programs for controlling water pollution, and CLARK COUNTY, hereinafter called "COUNTY" is responsible for 208 Planning in the Las Vegas Valley;

WHEREAS, pursuant to an Interlocal Agreement between the DISTRICT and COUNTY, the DISTRICT receives funding from the COUNTY to fund staffing, enforcement, and planning for the COUNTY's 208 obligations;

WHEREAS, the DISTRICT has an interest in the monitoring of the shallow groundwater quality due to dewatering activities associated with DISTRICT construction;

WHEREAS, the DISTRICT, as agent for the COUNTY, has an interest in the monitoring of the shallow groundwater quality related to septic tank leaching;

WHEREAS, the DISTRICT, as agent for the COUNTY, has an interest in the monitoring of the shallow groundwater and surface water quality related to storm water, wet weather events;

WHEREAS, the DISTRICT, as agent for the COUNTY, has an interest in the monitoring of the shallow groundwater and surface water quality related to dry weather, runoff flows;

WHEREAS, AUTHORITY, the COUNTY and the DISTRICT have the desire to understand the shallow groundwater system in the Las Vegas valley due to concerns about

Nevada Division of Environmental Protection's listing of tributaries in the Las Vegas valley as impaired water bodies;

WHEREAS, AUTHORITY has staff capable of gathering the shallow groundwater data from the Las Vegas valley, a database able to store these data, and staff qualified to analyze these data for data gaps; and

WHEREAS, the proposed study will provide information to AUTHORITY, the COUNTY and the DISTRICT and will also be useful to other agencies in the Las Vegas valley.

NOW, THEREFORE, in consideration of the mutual promises in this Agreement, the Parties agree as follows:

ARTICLE I – COSTS:

1. On or before June 30, 2014 the DISTRICT as funded by the COUNTY shall pay the lump sum of One hundred thousand dollars (\$100,000.00) to AUTHORITY to cover the costs of this study in accordance with the proposal, attached and incorporated as Phase I in Exhibit A, and have access to AUTHORITY's existing shallow groundwater data and database . An invoice will be submitted to DISTRICT for the lump sum amount.
2. On or before June 30, 2015 DISTRICT shall pay the lump sum of One hundred thousand dollars (\$100,000.00) to AUTHORITY to cover the costs of this study in accordance with the proposal, attached and incorporated as Phase II in Exhibit A. An invoice will be submitted to DISTRICT for the lump sum amount.

ARTICLE II – DISTRICT AGREES TO:

1. Collect additional attribute data to facilitate the County's 208 Plan responsibilities.
2. Analyze shallow groundwater samples collected by AUTHORITY.
3. Provide the results of the analysis to AUTHORITY for inclusion in the Lower Colorado River Water Quality Database.

ARTICLE III – AUTHORITY AGREES TO:

PHASE I

1. Retrieve Shallow Groundwater Data from all available sources, and maintain its shallow groundwater database

2. Enter data collected or make data available to the Lower Colorado River Water Quality Database.
3. Conduct literature search for reports on shallow groundwater quality and add to library in the Lower Colorado River Water Quality Database.
4. Evaluate and qualify the collected data.
5. Analyze shallow groundwater data to identify data gaps.
6. Write a shallow groundwater data summary report.
7. Begin collecting water quality samples from existing shallow groundwater wells. Begin identifying latitude, longitude, and parcel number for each sample location.
8. Collect certain samples on or near DISTRICT construction sites as requested by the DISTRICT for the purpose of monitoring dewatering activities.

PHASE II

1. Continue and finish collecting water quality samples from existing shallow groundwater wells. Continue and finish identifying latitude, longitude, and parcel number for each sample location.
2. Enter data from the wastewater septic tank report including location by parcel number, and latitude and longitude, shallow groundwater wells water quality sampling, and sample site identification by parcel number and by latitude and longitude into the constructed database.
3. Prepare data so that it can be used for future groundwater modeling.
4. Upon written request of the DISTRICT, provide data specific to DISTRICT dewatering activities.

ARTICLE IV – IT IS MUTUALLY AGREED:

1. This Agreement shall not become effective until and unless approved by appropriate official action of the governing body of each Party.
2. The term of this Agreement shall be from the date first written above through and including June 30, 2015.
3. This Agreement may be terminated by either Party without cause, upon 30 days written notice. Should the parties terminate the agreement early, the lump sum payment shall be prorated by the number of months of work performed.

The Parties expressly agree that this Agreement shall be terminated upon written notification if for any reason Federal, State, AUTHORITY, COUNTY or DISTRICT funding ability to satisfy this Agreement is withdrawn, limited or impaired.

4. All notices or other communications required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been duly given if delivered personally in hand, by telephonic facsimile with simultaneous regular mail, or mailed certified mail, return receipt requested, postage prepaid on the date posted, and addressed to the other Party at the address set forth below:

If to AUTHORITY: Peggy Roefer, Regional Water Quality Program Manager
PO Box 99954
Las Vegas, NV 89193-9954
702-856-5041
E-mail: peggy.roefer@snwa.com

If to DISTRICT: Richard Donahue, Assistant General Manager
5857 E. Flamingo Road
Las Vegas, NV 89122
702-668-8261
E-mail: rdonahue@cleanwaterteam.com

or such other persons or addresses as the parties may designate in writing.

5. Parties will be responsible for any loss, damage, liability, cost or expense, except those exempted by law, caused by the actions or inactions of its officers or employees. Neither AUTHORITY nor DISTRICT waive the conditions and limitations of NRS Chapter 41.
6. This Agreement shall not be deemed to be for the benefit of any entity or person who is not a party hereto, and is not a commitment for water service, and neither this Agreement, nor any interest herein, may be assigned without the prior written consent of the non-assigning Party.
7. Should any part of this Agreement be rendered void, invalid or unenforceable by any court of law, for any reason, such determination shall not render void, invalid or unenforceable, any other part of this Agreement.
8. The laws of the State of Nevada will govern as to the interpretation, validity, and effect of this Agreement.

9. Each Party shall not discriminate against employees or applicants based on race, color, religion, sex, sexual orientation, age or national origin, and shall ensure that applicants are employed and employees are treated without regard to the above-mentioned factors and agrees to post in a conspicuous places for employees and applicants' notices provided by the Equal Employment Opportunity Commission setting forth these provisions. Each Party further agrees that solicitation for employees shall state that qualified applicants will receive consideration without regard to the above-mentioned factors and will send to labor unions or collectives with which he/it has an agreement a notice of the commitments required herein and each Party will comply with all local, State and Federal laws prohibiting discrimination in hiring or employment opportunities.
10. The Parties are associated with each other only for the purposes and to the extent set forth in this Agreement. Each Party is and shall be a public agency separate and distinct from the other Party and shall have the right to supervise, manage, operate, control, and direct performance of the details incident to its duties under this Agreement. Nothing contained in this Agreement shall be deemed or construed to create a partnership or joint venture, to create relationships of an employer-employee or principal-agent, or to otherwise create any liability for one agency whatsoever with respect to the indebtedness, liabilities, and obligations of the other agency or any other Party.
11. Neither Party shall assign, transfer or delegate any rights, obligations or duties under this Agreement without the prior written consent of the other Party.
12. This Agreement constitutes the entire agreement of the Parties and such is intended as a complete and exclusive statement of the promises, representations, negotiations, discussions, and other agreements that may have been made in connection with the subject matter hereof. Unless an integrated attachment to this Agreement specifically displays a mutual intent to amend a particular part of this Agreement, general conflicts in language between any such attachment and this Agreement shall be construed consistent with the terms of this Agreement. Unless otherwise expressly authorized by the terms of this Agreement, no modification or amendment to this Agreement shall be binding upon the Parties unless the same is in writing and signed by the respective Parties hereto.

IN WITNESS WHEREOF, the parties have executed this Agreement on the day and year first above written.

CLARK COUNTY WATER RECLAMATION DISTRICT

SOUTHERN NEVADA WATER AUTHORITY

LAWRENCE L. BROWN, III
Chairman, Board of Trustees

MARY BETH SCOW
Chairwoman, Board of Directors

Attest:

Attest:

DIANA ALBA
County Clerk

JOHN J. ENTSMINGER
Secretary, Southern Nevada Water Authority

Approved as to Form:

Approved as to Form:

CAROLYN CAMPBELL
Deputy District Attorney



GREGORY J. WALCH
General Counsel

IN WITNESS WHEREOF, the parties have executed this Agreement on the day and year first above written.

CLARK COUNTY WATER RECLAMATION DISTRICT

SOUTHERN NEVADA WATER AUTHORITY


LAWRENCE L. BROWN, III
Chairman, Board of Trustees

MARY BETH SCOW
President, Board of Directors

Attest:

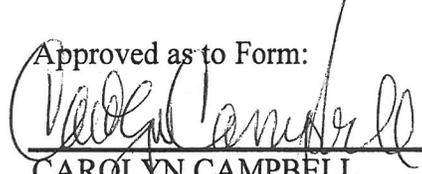
Attest:


DIANA ALBA
County Clerk

JOHN ENTSMINGER
Secretary, Southern Nevada Water Authority

Approved as to Form:

Approved as to Form:


CAROLYN CAMPBELL
Deputy District Attorney

GREG J. WALCH
General Counsel

Exhibit A

Proposal

LAS VEGAS VALLEY SHALLOW GROUNDWATER DATA GATHERING, STORAGE, AND DATA GAP ANALYSIS

BACKGROUND

The increased urbanization of the Las Vegas valley has contributed to not only the rise of the shallow groundwater table but also the mobilization of salts and associated minerals into the storm water channels in the valley. This increase in the shallow groundwater table is mainly due to overwatering of lawns and septic tanks. The shallow groundwater, and the compounds found in the water, are primarily transported in tributaries to Las Vegas Wash. Tributaries to Las Vegas Wash include the Las Vegas Creek, Flamingo Wash, Monson Channel, Duck Creek, Pittman Wash, Whitney Drainage and the C-1 Channel.

The tributaries to the Las Vegas Wash mentioned above are categorized as impaired by the Nevada Division of Environmental Protection. This is due to resurfacing groundwater and the numerous dewatering discharges into the tributaries. Septic tanks also can contribute nitrates to the tributaries. Additional study is required to determine specific sources.

PURPOSE

In order to study the mineral concentrations in the shallow aquifer in the future, it is necessary to understand the sources. Groundwater monitoring data has been collected by numerous agencies, but these data have not been compiled into one location for review. Water quality reports on the shallow aquifer water quality have also not been assembled. This effort will bring together the existing data and publications into the AUTHORITY'S Lower Colorado River Water Quality Database (Database), provide a review of the existing data and make recommendations of data needs. Once the data gaps have been identified, water quality samples will be collected by the AUTHORITY and analyzed at the DISTRICT'S laboratory. The data will then be entered into the Database.

SCOPE OF WORK

AUTHORITY shall perform the following tasks:

PHASE I

Task 1: Retrieve Shallow Groundwater Data

Data will be obtained from the various sources and potential suppliers of data.

Task 2: Enter Data into Database.

These data will need to be entered into or made available to the Database with the correct coordinates and water level information.

Task 3: Literature Search of Shallow Groundwater Reports

A literature search will be conducted of shallow groundwater reports. These reports will be saved in the Database library and the data from the reports will be entered into the Database if not previously entered.

Task 4: Data Evaluation and Qualification

The data collected will be evaluated for quality. Only data that has met standards will be used in the data analysis phase.

Task 5: Analyze Data and Identify Data Gaps

The data will be analyzed by a qualified Hydrologist to determine information about the shallow groundwater in the Las Vegas valley.

Task 6: Write Shallow Groundwater Summary Report

A report will be written summarizing the information in the Database, the literature available on the shallow groundwater system, and an identification of data gaps. The report shall be provided to the District.

Task 7: Begin Collecting Shallow Groundwater Water Quality Samples

Based on the data gap analysis, samples within Unincorporated Clark County will be collected from existing wells and analyzed at the DISTRICT'S laboratory. Latitude, longitude, and parcel number for each sample location will be identified.

PHASE II

Task 1: Continue and Finish Collecting Shallow Groundwater Water Quality Samples

Based on the data gap analysis, samples within Unincorporated Clark County will be collected from existing wells and analyzed at the DISTRICT'S laboratory. Latitude, longitude, and parcel number for each sample location will be identified.

Task 2: Enter Data into Database

These data (shallow groundwater wells sample analysis results and sample site location identifiers) as well as data from the septic tank report will need to be entered in the Database.

Task 3: Prepare Data

All data collected and entered will be prepared for possible future groundwater modeling.

Task 4: Provide Data Specific to District Dewatering Activities

The data collected and entered will be referenced for specifically known District project dewatering interests.

SCHEDULE

The schedule in Table 1 will be used.

Table 1: Proposed Project Schedule

Task	Description	Duration (months)
PHASE I		
1	Retrieve Shallow Groundwater Data	1
2	Enter Data into Database.	2
3	Literature Search of Shallow Groundwater Reports	1
4	Data Evaluation and Qualification	2
5	Analyze Data and Identify Data Gaps	4
6	Write Shallow Groundwater Summary Report	3
7	Begin Collecting Shallow Groundwater Water Quality Samples	15
PHASE II		
1	Continue and Finish Collecting Shallow Groundwater Water Quality Samples	15 (cont.)
2	Enter Data into Database	15
3	Prepare Data	4
4	Provide District specific data	

BUDGET

The total proposed budget for the AUTHORITY is \$100,000 for Article III, Phase I. A summary of the task budget can be found in Table 2.

Table 2: Article III, Phase I Budget Summary

Task	Description	Budget
1	Retrieve Shallow Groundwater Data	\$10,000
2	Enter Data into Database.	\$25,000
3	Literature Search of Shallow Groundwater Reports	\$5,000
4	Data Evaluation and Qualification	\$5,000
5	Analyze Data and Identify Data Gaps	\$20,000
6	Write Shallow Groundwater Summary Report	\$30,000
7	Begin to Collect Shallow Groundwater WQ Samples	\$5,000

The total proposed budget for the AUTHORITY is \$200,000 for Article III, Phase II. A summary of the task budget can be found in Table 2.

Table 2: Article III, Phase II Budget Summary

Task	Description	Budget
1	Continue and Finish Collecting Shallow Groundwater WQ Samples	\$100,000
2	Enter Data into Database.	
3	Prepare Data	
4	Provide District-specific data	

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

May 15, 2014

Subject: Interlocal Agreement	Director's Backup
Petitioner: David L. Johnson, Deputy General Manager, Engineering/Operations	
Recommendations: That the Board of Directors approve an interlocal agreement among the City of Henderson, the City of Las Vegas, the City of North Las Vegas, Clark County, the Clark County Regional Flood Control District, the Clark County Water Reclamation District, and the Authority to establish funding allocations and the budget for Las Vegas Wash activities in fiscal year 2014/2015.	

Fiscal Impact:

The required \$269,719 is available in the Authority's Operating Budget.

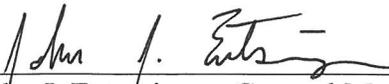
Background:

On May 16, 2013, the Board of Directors approved an interlocal agreement that established funding allocations and the budget for the Las Vegas Wash (Wash) activities in fiscal year 2013/2014. To continue the stabilization and enhancement of the Wash, the Authority has completed a budget for capital construction and operation activities for fiscal year 2014/2015. Approval of this agreement will allocate the monetary resources necessary for the Wash operating expenses among the signatories to the agreement. Funding for Wash capital projects will come from monies generated through four percent of gross revenue from the quarter-cent sales tax, federal partners, and other available sources.

The total fiscal year 2014/2015 Wash operating budget is \$1,119,297. It is anticipated that there will be grant funding available in the amount of \$445,000, leaving the local share of the Wash operating budget at \$674,297. If the attached agreement is approved, 40 percent of the local share (\$269,719) will be paid by the Authority from its operating budget utilizing revenues derived from the water wholesale delivery charges paid to the Authority by the Las Vegas Valley Water District, the City of Henderson, and the City of North Las Vegas. The remaining \$404,578 of the Wash operating budget will be paid as follows: City of Henderson, \$33,175; Clark County Water Reclamation District, \$146,996; City of Las Vegas, \$64,193; City of North Las Vegas, \$25,354; Clark County, \$67,430; and Clark County Regional Flood Control District, \$67,430.

This agreement is being entered into pursuant to NRS 277.180 and Section 6(j) of the SNWA 1995 Amended Cooperative Agreement. The office of the General Counsel has reviewed and approved the agreement.

Respectfully submitted:



 John J. Entsminger, General Manager
 JJE:PDS:DLJ:ZLM:LL:KKC:SAS:pe:nh
 Attachments

AGENDA ITEM #	4
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INTERLOCAL AGREEMENT AMONG THE CITY OF HENDERSON, CITY OF LAS VEGAS, CITY OF NORTH LAS VEGAS, CLARK COUNTY, CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT, CLARK COUNTY WATER RECLAMATION DISTRICT, AND THE SOUTHERN NEVADA WATER AUTHORITY TO ESTABLISH FUNDING ALLOCATIONS AND THE BUDGET FOR LAS VEGAS WASH ACTIVITIES IN FISCAL YEAR 2014/2015

This Interlocal Agreement is entered into by the City of Henderson; the City of Las Vegas; the City of North Las Vegas; Clark County; the Clark County Regional Flood Control District; the Clark County Water Reclamation District; and, the Southern Nevada Water Authority (“Authority”) comprised of Authority “Purveyor Members” (City of Henderson, City of North Las Vegas and the Las Vegas Valley Water District), and the Authority “Wastewater Discharge Members” (City of Henderson, City of Las Vegas, City of North Las Vegas and the Clark County Water Reclamation District) this _____ day of _____, 2014.

WHEREAS, Lake Mead and the Colorado River are the primary source of water for over 1.8 million residents of the metropolitan Las Vegas Valley and Laughlin, Nevada; and

WHEREAS, Lake Mead and the Colorado River are a significant source of water for millions of other residents in the Lower Colorado River Basin, including citizens of Arizona, California, and Mexico as well as members of several Native American Tribes; and

WHEREAS, the Las Vegas Wash is comprised of highly treated wastewater flows, urban runoff, shallow ground water, storm water flows, and other flows, all of which run through the single tributary from the urban Las Vegas Valley into Lake Mead; and

WHEREAS, concerns over erosion, water quality, the loss of wetlands, and other issues have made managing the Las Vegas Wash one of the highest environmental priorities for Southern Nevada; and

WHEREAS, the undersigned parties – along with other local, state, and federal entities – embarked on a water quality process in 1997 that included participation in the Lake Mead Water Quality Forum and the formation of a citizens advisory committee which studied various issues related to water quality in the Las Vegas Wash, Las Vegas Bay, and Lake Mead; and

WHEREAS, the citizens advisory committee developed a series of recommendations for protecting and improving water quality, one of which was to develop a comprehensive adaptive management plan for the Las Vegas Wash; and

WHEREAS, following the presentation of the citizen recommendations to the Lake Mead Water Quality Forum and their acceptance by the Authority Board of Directors in 1998, the undersigned parties participated in the Las Vegas Wash Coordination Committee (“LVWCC”), a committee comprised of 29 local, state, federal, environmental, and public representatives; and

WHEREAS, the LVWCC, over a 10-month period and with the support of over 100 staff from participating agencies, developed 44 recommended actions in nine study areas related to the Las Vegas Wash; and

WHEREAS, the LVWCC compiled these recommended actions into the Las Vegas Wash Comprehensive Adaptive Management Plan ("LVWCAMP"), a document that was subsequently approved by the LVWCC in December 1999 and by the Authority Board of Directors in January 2000; and

WHEREAS, in July of 2000, a Sales Tax Allocation Cooperative Agreement was entered into by the Authority and the Wastewater Discharge Agencies represented by the City of Henderson, the City of Las Vegas and the Clark County Water Reclamation District; and

WHEREAS, that Sales Tax Allocation Cooperative Agreement provided that four percent (4%) of the gross revenue from the ¼ cent sales tax provided for by NRS Chapter 377B would be allocated to capital improvements and infrastructure needs in the Las Vegas Wash, and

WHEREAS, in June of 2002, the parties to this agreement entered into a Cooperative Agreement which recognized the Las Vegas Wash Comprehensive Adaptive Management Plan and established a basic understanding of the parties concerning implementation of the plan and their respective roles in that implementation through the Management Advisory Committee (MAC); and

WHEREAS, in November 2007, the parties to this agreement, along with the Clean Water Coalition, entered into an agreement that established the Las Vegas Valley Watershed Advisory Committee (LVVWAC). The LVVWAC assumed the responsibilities of the MAC and provided that the LVVWAC would continue implementation of the Las Vegas Wash Comprehensive Adaptive Management Plan, along with establishing a cohesive direction and integrated approach to addressing water quality issues in the Las Vegas Valley and Lake Mead; and

WHEREAS, the Authority has been designated as the lead agency to implement the LVWCAMP and has established a staff team to coordinate this effort; and

WHEREAS, a Workplan and estimated budget for the Las Vegas Wash construction and operation has been established by the Authority for fiscal year 2014/2015; and

WHEREAS, Authority Purveyor members will pay 40% of the total operating budget (or \$269,719) to be paid from the revenues derived from the water wholesale delivery charge; and

WHEREAS, it is the desire of all parties to this agreement to allocate the monetary responsibility for contribution to said capital and infrastructure budget as well as the parties' respective monetary contributions to the estimated Las Vegas Wash operating budget.

WHEREAS, pursuant to NRS 277.180, a political subdivision may enter into a interlocal agreement with any one or more other public agencies to perform any governmental service,

activity or undertaking which any of the individual governmental entities are authorized by law to perform.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the Southern Nevada Water Authority, City of Henderson, Clark County Water Reclamation District, City of Las Vegas, City of North Las Vegas, Clark County, and the Clark County Regional Flood Control District agree as follows:

Section 1: Capital Improvements Budget

It is agreed that the budget for capital improvements and associated activities for 2014/2015 are included in the 2014/2015 Project Work Plan of the Amended Las Vegas Wash Capital Improvements Plan. The 2014/2015 Project Work Plan shows a total funding of \$28,728,828 for calendar years 2014 and 2015. The 2014/2015 Project Work Plan includes funding for design activities at four channel stabilization dam sites, construction activities for four channel stabilization dams, revegetation of five disturbed construction sites, flood repair, construction equipment rental, and construction materials transportation.

Funding for capital projects will come from monies generated from 4% of gross revenue from the ¼ cent sales tax, federal partners, and other available sources.

The Authority will require its contractors to indemnify, defend and hold harmless the Parties to this Agreement against any and all claims, causes of action, judgments, and/or fees arising out of the contractor's acts and/or omissions related to its performance of any contract for the Authority.

The Authority will also require its contractors to name each party to this Agreement as an additional insured on the contractor's insurance policy.

Section 2: Operating Budget

It is agreed by the parties hereto that the total operating budget for the Authority's Las Vegas Wash activities for fiscal year 2014/2015 is estimated to be \$1,119,297. It is anticipated that there will be federal funding from the Bureau of Reclamation available to augment the parties' contributions. Said federal funding is estimated to be approximately \$389,000. Other grants are anticipated to augment the operating budget in the amount of \$56,000. This will leave \$674,297 of the total operating budget to be provided locally (referred to herein as the "local share"). Additionally, it is anticipated that the Authority's purveyor members will contribute \$269,719 or 40% of the local share; however, the purveyor members' contribution is not governed by this agreement. The parties hereto agree, therefore, that \$404,578 or 60% of the local share of the total operating budget must be paid by the parties hereto. Contained in Attachment A is an Operating Budget Narrative outlining the anticipated administration costs as well as programs and study costs included in the 2014/2015 operating budget.

a) Funding of Local Share:

It is hereby agreed by the parties that the following allocation ratios and funding sources are established as binding for the purpose of funding the local share or \$674,297 of the total operating budget for the Las Vegas Wash for fiscal year 2014/2015:

i) Authority Purveyor Members acknowledge that the Authority shall pay 40% (\$269,719) of the local share using revenues derived from the water wholesale delivery charges paid to the Authority by the Authority Purveyor Members.

ii) Authority "Wastewater Discharge Members" shall pay 40% (\$269,718) of the local share as follows:

The City of Henderson, as a discharger, will be responsible for payment of 12.3% of the \$269,718 or \$33,175;

The Clark County Water Reclamation District will be responsible for 54.5% of the \$269,718, or \$146,996;

The City of Las Vegas will be responsible for 23.8% of the \$269,718, or \$64,193.

The City of North Las Vegas will be responsible for 9.4% of the \$269,718, or \$25,354.

iii) Clark County will pay 10% of the local share (\$67,430).

iv) Clark County Regional Flood Control District will pay 10% of the local share (\$67,430).

Section 3: Payments

Payments will be made by the respective parties hereto as specified in Section 2 into a fund established specifically for the operations of the Las Vegas Wash projects for fiscal year 2014/2015 within 30 days of approval by all governmental bodies.

Section 4: Effective Date

This agreement becomes effective when the duplicate originals are executed and dated by all parties, realizing that each entity, by necessity, must approve and execute the subject document at different places and on different dates.

Section 5: Severability

Should any part of this agreement be rendered void, invalid, or unenforceable by any court of law for any reason, such determination shall not render void, invalid or unenforceable under any other part of this agreement.

Section 6: Governing Law

The laws of the State of Nevada will govern as to the interpretation, validity and effect of this agreement.

Section 7: Third Party Beneficiaries

This agreement is intended only to benefit the parties hereto and does not create any rights, benefits or causes of action for any other person, entity or member of the general public.

Section 8: One Time Agreement

It is specifically recognized and agreed by all parties hereto, that this agreement is not to be interpreted or constructed as establishing a precedent for any further agreement, covenant or commitment on the part of any party hereto and should be considered a stand alone document without establishing any future obligations, other than as described herein, on the part of any party hereto.

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INTERLOCAL AGREEMENT AMONG THE CITY OF HENDERSON, CITY OF LAS VEGAS, CITY OF NORTH LAS VEGAS, CLARK COUNTY, CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT, CLARK COUNTY WATER RECLAMATION DISTRICT, AND THE SOUTHERN NEVADA WATER AUTHORITY TO ESTABLISH FUNDING ALLOCATIONS AND THE BUDGET FOR LAS VEGAS WASH ACTIVITIES IN FISCAL YEAR 2014/2015

SOUTHERN NEVADA WATER AUTHORITY

Mary Beth Scow, Chair

Approved as to form:

Approved on _____, by the Board of Directors
Southern Nevada Water Authority.



Brian V. Chally, Director, Legal Services

Attest:

CITY OF LAS VEGAS

Beverly K. Bridges, MMC, City Clerk

Carolyn G. Goodman, Mayor

Approved As to Form:

Approved on _____, by the City Council
for the City of Las Vegas.

John S. Ridilla, Deputy City Attorney

INTERLOCAL AGREEMENT AMONG THE CITY OF HENDERSON, CITY OF LAS VEGAS, CITY OF NORTH LAS VEGAS, CLARK COUNTY, CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT, CLARK COUNTY WATER RECLAMATION DISTRICT, AND THE SOUTHERN NEVADA WATER AUTHORITY TO ESTABLISH FUNDING ALLOCATIONS AND THE BUDGET FOR LAS VEGAS WASH ACTIVITIES IN FISCAL YEAR 2014/2015

Attest:

CITY OF HENDERSON

Sabrina Mercadante, MMC
City Clerk

Andy Hafen, Mayor

Approved As To Form:

Approved on _____, by the City Council
for the City of Henderson.

Josh M. Reid, City Attorney

Attest:

CITY OF NORTH LAS VEGAS

Barbara Andolina, Acting City Clerk

John L. Lee, Mayor

Approved As to Form:

Approved on _____, by the City Council for the
City of North Las Vegas.

Sandra Douglass Morgan, City Attorney

INTERLOCAL AGREEMENT AMONG THE CITY OF HENDERSON, CITY OF LAS VEGAS, CITY OF NORTH LAS VEGAS, CLARK COUNTY, CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT, CLARK COUNTY WATER RECLAMATION DISTRICT, AND THE SOUTHERN NEVADA WATER AUTHORITY TO ESTABLISH FUNDING ALLOCATIONS AND THE BUDGET FOR LAS VEGAS WASH ACTIVITIES IN FISCAL YEAR 2014/2015

CLARK COUNTY WATER RECLAMATION DISTRICT

Tom Minwegen, General Manager

Approved As To Form:

Approved on _____, by the Board of Trustees for the Clark County Water Reclamation District.

Carolyn Campbell, Deputy District Attorney

Attest:

CLARK COUNTY

Diana Alba, County Clerk

Steve Sisolak, Chair

Approved As To Form:

Approved on _____, by the Board of County Commissioners for Clark County (Parks & Recreation)

Steven Sweikert, Deputy District Attorney

INTERLOCAL AGREEMENT AMONG THE CITY OF HENDERSON, CITY OF LAS VEGAS, CITY OF NORTH LAS VEGAS, CLARK COUNTY, CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT, CLARK COUNTY WATER RECLAMATION DISTRICT, AND THE SOUTHERN NEVADA WATER AUTHORITY TO ESTABLISH FUNDING ALLOCATIONS AND THE BUDGET FOR LAS VEGAS WASH ACTIVITIES IN FISCAL YEAR 2014/2015

Attest:

CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT

Flor Vivanco, Board Secretary

Lawrence L. Brown, III, Chairman

Approved As To Form:

Approved on _____, by the Board of Directors for the Clark County Regional Flood Control District.

Christopher Figgins, Clark County
Chief Deputy District Attorney

**Attachment A
Operating Budget Narrative
FY 2014/2015**

MATERIALS, SUPPLIES, EQUIPMENT – TOTAL \$53,418

Funding in the amount of \$53,418 is requested for general office support items including office supplies, printing, safety supplies, dues for professional organizations, and subscriptions/publications.

OFFICE LEASE – TOTAL \$54,740

Funding in the amount of \$54,740 is requested for the office space located at 100 City Parkway.

SALARIES AND BENEFITS – TOTAL \$556,140

Funding in the amount of \$556,140 is requested for salaries and benefits to support Las Vegas Wash Project Coordination Team staff.

RESEARCH AND STUDIES PROJECTS – TOTAL \$455,000 (LOCAL CONTRIBUTION - \$10,000)

The total research and studies budget is \$455,000. Of this, the local contribution is \$10,000, with the remaining budget anticipated to come from federal and local grants. These projects include a variety of activities and studies to meet the tasks identified in the LVWCAMP and to meet state and federal environmental compliance requirements.

Budgeted Items	Amount
Materials, Supplies, Equipment	\$53,418
Office Lease	\$54,740
Salaries and Benefits	\$556,140
Research and Studies Projects	\$455,000
TOTAL FY 14/15 BUDGET	\$1,119,297
BUREAU OF RECLAMATION CONTRIBUTION	\$389,000
OTHER CONTRIBUTION/GRANTS	\$56,000
LOCAL CONTRIBUTION	\$674,297

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

May 15, 2014

Subject: Agreement	Director's Backup
Petitioner: David L. Johnson, Deputy General Manager, Engineering/Operations	
Recommendations: That the Board of Directors approve an agreement between Carollo Engineers, Inc., and the Authority for participation in a Texas Water Development Board study, "Testing Water Quality in a Municipal Wastewater Effluent Treated to Drinking Water Standards," and accept funds in the amount of \$33,000 for the Authority's participation costs.	

Fiscal Impact:

If the above recommendation is approved, funds in the amount of \$33,000 will be accepted by the Authority.

Background:

Drought and long-term water supply needs have led several entities in the state of Texas to consider treated wastewater effluent as a potential domestic water supply. The Colorado River Municipal Water District (CRMWD) has recently begun operating a treatment facility in Big Spring, Texas, to provide water to its customers. The Raw Water Purification Facility (RWPF) in Big Spring is the first facility in Texas to directly blend a water source produced from municipal wastewater effluent into a raw water supply without an environmental buffer.

As required by the Texas Commission on Environmental Quality, the Big Spring facility is subject to continuous testing of specific indicator parameters to verify that the full-scale processes are functioning as intended. This study, "Testing Water Quality in a Municipal Wastewater Effluent Treated to Drinking Water Standards" (Project), focuses on a state-of-the art sampling and analysis process at the RWPF in Big Spring. The main goal of this Project is to demonstrate the viability of using treated wastewater effluent as a safe and viable alternative in producing potable water.

Because water suppliers are increasingly being forced to consider compromised or nontraditional water sources including domestic wastewater effluent, the research from this Project will benefit water agencies, both nationally and internationally. Carollo Engineers, Inc., (Carollo) requested that the Authority's Water Quality Research and Development Division participate in this Project to perform analytical testing (trace chemical analyses for pharmaceuticals, hormones, and other compounds of interest) of samples collected from the CRMWD's RWPF and provide a technical evaluation of results. If approved, this agreement provides for the Authority to accept funds in the amount of \$33,000 from Carollo for participation in this Project.

This agreement is being entered into pursuant to Section 6(j) of the SNWA 1995 Amended Cooperative Agreement. The office of the General Counsel has reviewed and approved the agreement.

Respectfully submitted:



 John J. Entsminger, General Manager
 JJE:PDS:DLJ:DJR:ED:jf
 Attachments

AGENDA ITEM #	
------------------	---

DISCLOSURE OF OWNERSHIP/PRINCIPALS

Business Entity Type						
<input type="checkbox"/> Sole Proprietorship	<input type="checkbox"/> Partnership	<input type="checkbox"/> Limited Liability Company	<input checked="" type="checkbox"/> Corporation	<input type="checkbox"/> Trust	<input type="checkbox"/> Non-Profit Organization	<input type="checkbox"/> Other
Business Designation Group						
<input type="checkbox"/> MBE	<input type="checkbox"/> WBE	<input type="checkbox"/> SBE	<input type="checkbox"/> PBE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Minority Business Enterprise	Women-Owned Business Enterprise	Small Business Enterprise	Physically Challenged Business Enterprise			
Corporate/Business Entity Name:		Carollo Engineers, Inc.				
(Include d.b.a., if applicable)		N/A				
Street Address:		2700 Ygnacio Valley Road, Suite 300		Website: www.carollo.com		
City, State and Zip Code:		Walnut Creek, CA 94598		POC Name and Email: Eva Steinte-Darling esd@carollo.com		
Telephone No:		(925) 932-1710		Fax No: (925) 932-0208		
Local Street Address:		376 East Warm Springs Road, Suite 250		Website: www.carollo.com		
City, State and Zip Code:		Las Vegas, NV 89119		Local Fax No: 702-792-4533		
Local Telephone No:		702-792-3711		Local POC Name Email: NA, please use POC above		
Number of Clark County, Nevada Residents Employed: 19 employees living in Las Vegas and surrounding areas						

All entities, with the exception of publicly-traded and non-profit organizations, must list the names of individuals, either directly or indirectly, holding more than five percent (5%) ownership or financial interest in the business entity appearing before the SNWA Board of Directors.

Publicly-traded entities and non-profit organizations shall list all Corporate Officers and Directors in lieu of disclosing the names of individuals with ownership or financial interest. The disclosure requirement, as applied to land-use applications, extends to the applicant and the landowner(s).

Entities include all business associations organized under or governed by Title 7 of the Nevada Revised Statutes, including but not limited to private corporations, close corporations, foreign corporations, limited liability companies, partnerships, limited partnerships, and professional corporations.

Full Name	Title	% Owned <small>(Not required for Publicly Traded Corporations/Non-profit organizations)</small>
N/A – no single shareholder holds more than 5%		
_____	_____	_____
_____	_____	_____
_____	_____	_____

This section is not required for publicly-traded corporations.

1. Are any individual members, partners, owners or principals, involved in the business entity, an SNWA full-time employee(s), or appointed/elected official(s)?

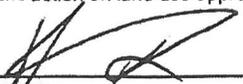
Yes No (If yes, please note that SNWA employee(s), or appointed/elected official(s) may not perform any work on professional service contracts, or other contracts, which are not subject to competitive bid.)

2. Do any individual members, partners, owners or principals have a spouse, registered domestic partner, child, parent, in-law or brother/sister, half-brother/half-sister, grandchild, grandparent, related to an SNWA full-time employee(s), or appointed/elected official(s)?

Yes No (If yes, please complete the Disclosure of Relationship form on Page 2. If no, please print N/A on Page 2.)

Carollo Engineers has in excess of 50 shareholders. While we are not aware of any consanguinity or affinity relationships as described on Page 2, we cannot at this point exclude that possibility.

I certify under penalty of perjury, that all of the information provided herein is current, complete, and accurate. I also understand that the SNWA will not take action on land-use approvals, contract approvals, land sales, leases or exchanges without the completed disclosure form.

Signature 
 Title Vice President

Print Name Hutch Musgallan
 Date 2-25-14

DISCLOSURE OF RELATIONSHIP

List any disclosures below:
(Mark N/A, if not applicable.)

NAME OF BUSINESS OWNER/PRINCIPAL	NAME OF SNWA EMPLOYEE OR OFFICIAL AND JOB TITLE	RELATIONSHIP TO SNWA EMPLOYEE OR OFFICIAL	SNWA EMPLOYEE'S/OFFICIAL'S DEPARTMENT
N/A			

"Consanguinity" is a relationship by blood. "Affinity" is a relationship by marriage.

"To the second degree of consanguinity" applies to the candidate's first and second degree of blood relatives as follows:

- Spouse – Registered Domestic Partners – Children – Parents – In-laws (first degree)
- Brothers/Sisters – Half-Brothers/Half-Sisters – Grandchildren – Grandparents – In-laws (second degree)

For SNWA Use Only:

If no Disclosure or Relationship is noted above or if the section is marked N/A, please check this box:

No Disclosure

If any Disclosure of Relationship is noted above, please complete the following:

Yes No Is the SNWA employee(s) noted above involved in the contracting/selection process for this particular agenda item?

Yes No Is the SNWA employee(s) noted above involved in any way with the business in performance of the contract?

Notes/Comments: NO LUVWD OR SNWA employees were noted.

David J. Pexing
 Signature
 David J. Pexing
 Print Name
 Authorized Department Representative

N/A

AGREEMENT FOR PROFESSIONAL SERVICES

Project No. 9360A.00

This AGREEMENT made and entered into this _____ day of _____, 20____ by and between Carollo Engineers, Inc., (hereinafter "CONTRACTOR"), and Southern Nevada Water Authority (hereinafter "SUBCONTRACTOR").

WITNESSETH:

WHEREAS, the CONTRACTOR and the SUBCONTRACTOR wish to enter into an Agreement (hereinafter "Agreement") for the furnishing of services in connection with the **Texas Water Development Board** (hereinafter "OWNER") **Contract No. 1348321632: Testing Water Quality in a Municipal Wastewater Effluent Treated to Drinking Water Standards** (hereinafter "Project"), and

WHEREAS, the SUBCONTRACTOR possesses the qualifications to perform the necessary services for the CONTRACTOR in connection with the Project, and

NOW THEREFORE, in consideration of the mutual promises and covenants of the parties hereto, it is agreed as follows:

SECTION 1 - GENERAL

- 1.1 The services herein required, shall be set forth in the attached Task Order. In performance of these services, the SUBCONTRACTOR shall provide qualified, and where required, licensed personnel. The Task Order shall include designation of a Project Manager and, if required by CONTRACTOR, a list of proposed personnel. The SUBCONTRACTOR shall promptly notify the CONTRACTOR of any changes in his initial organization.
- 1.2 It is intended that each additional Task Order sequentially numbered setting forth the SUBCONTRACTOR's Services, Time of Performance, and Payment, or any other conditions, shall become a supplement to and a part of this Agreement.

SECTION 2 - PAYMENT

- 2.1 Compensation for providing services referred to in Section 1 shall be detailed in the attached Task Order.
- 2.2 The SUBCONTRACTOR shall submit invoices to the CONTRACTOR once per month. Invoices shall be prepared in such form and supported by documentation as the CONTRACTOR may reasonably require. All such invoices shall be reviewed and approved by the CONTRACTOR before submittal to the OWNER and shall contain the CONTRACTOR's Progress Billing statement, attached to this Agreement.
- 2.3 Following receipt of reimbursement from the OWNER, payment will be made to the SUBCONTRACTOR within 15 days for the value of the partially completed services, less any amounts previously paid on account, less retainage, but only if required by the OWNER.

- 2.4 Final payment of any balance will be made upon completion of the SUBCONTRACTOR's services and acceptance by the OWNER.

SECTION 3 - TIME OF PERFORMANCE

- 3.1 The Time of Performance under this Agreement shall be defined in the attached Task Order.
- 3.2 The SUBCONTRACTOR shall report from time to time as requested by the CONTRACTOR, its progress under this Agreement. The SUBCONTRACTOR shall plan its performance of services to accomplish its timely completion, and shall promptly notify the CONTRACTOR of any anticipated delay which may affect the SUBCONTRACTOR's Time of Performance.
- 3.3 In the event the SUBCONTRACTOR falls behind schedule for an unreasonable period of time for reasons within its control, the CONTRACTOR has the option to exercise any of the following:
- a. Extend the SUBCONTRACTOR's work day or work week.
 - b. Require additional qualified staff to be assigned to the Project.
 - c. Termination of Agreement.
- 3.4 The SUBCONTRACTOR shall remain on accelerated schedule (Paragraphs a and b above), until such time as the CONTRACTOR determines the SUBCONTRACTOR's progress conforms to Time of Performance requirements. All premium costs of the accelerated schedule shall be borne solely by the SUBCONTRACTOR.

SECTION 4 - LEGAL RELATIONS

- 4.1 The SUBCONTRACTOR is for all purposes an independent contractor. In no event shall the SUBCONTRACTOR or any personnel retained by the SUBCONTRACTOR be deemed to be an agent or employee of the CONTRACTOR or engaged by the OWNER for the account of or on behalf of the CONTRACTOR. Full control of means and methods of work including provisions for required safety precautions shall be the responsibility of the SUBCONTRACTOR. The SUBCONTRACTOR will ensure that its employees and its subcontractors' employees observe and abide by the OWNER's safety requirements and all safety regulations and laws, including, but not limited to, OSHA codes incident to the work while under contract to CONTRACTOR. The SUBCONTRACTOR shall indemnify CONTRACTOR and OWNER for any damages or costs incurred by CONTRACTOR and/or OWNER for the SUBCONTRACTOR's failure to fulfill this obligation.
- 4.2 The SUBCONTRACTOR shall be responsible to the level of competency presently maintained by other practicing professional consultants performing the same or similar work in the state where the project is located.
- 4.3 CONTRACTOR and SUBCONTRACTOR shall each defend, indemnify and hold harmless the other and their respective principals, directors, officers, employees and agents from and against claims, loss, liability, suits and damages, including attorney's fees caused in whole or in part by the negligent acts, errors or omissions or willful misconduct of the CONTRACTOR or SUBCONTRACTOR, respectively,

any one directly or indirectly employed by either of them or any one for whose acts they may be liable regardless of whether or not such claim, loss, liability or damage is caused in part by the party indemnified hereunder.

In the event that both CONTRACTOR and SUBCONTRACTOR are negligent and the negligence or willful misconduct is the proximate cause of any liability or damages, then in such event, each party shall be responsible for a portion of the liability or damages resulting therefrom equal to such party's comparative share of the total negligence or willful misconduct.

- 4.4 If the SUBCONTRACTOR shall fail to complete the services as detailed in the attached Task Order, to the detriment of the CONTRACTOR, the SUBCONTRACTOR shall reimburse the CONTRACTOR for any costs incurred by CONTRACTOR because of such default of the SUBCONTRACTOR.
- 4.5 In the event of legal action brought by either party against the other to enforce any of the obligations hereunder or arising out of any dispute concerning the terms and conditions hereby created, the losing party shall pay the prevailing party such reasonable amount for fees, costs and expenses, including attorney's fees, as may be set by the court or the actual costs incurred by the prevailing party if the dispute does not reach final judgment.
- 4.6 The SUBCONTRACTOR shall not make, sublet or assign any of the services covered by this Agreement, except with the prior written approval of the CONTRACTOR and in compliance with the terms, provisions and conditions of the Agreement. The SUBCONTRACTOR shall not

separately solicit or accept any assignment from the OWNER related to the Project during the life of the Agreement without the CONTRACTOR's written approval or unless the CONTRACTOR is terminated by the OWNER under the provisions of the prime Agreement.

- 4.7 The SUBCONTRACTOR shall, upon request and without cost, provide CONTRACTOR and the OWNER all directly pertinent books, documents, papers and records including electronic data of the SUBCONTRACTOR involving transactions related to this Agreement.

SECTION 5 - INSURANCE

- 5.1 CONTRACTOR acknowledges that SUBCONTRACTOR is self-insured. If requested, SUBCONTRACTOR shall promptly furnish to CONTRACTOR evidence of self-insurance in a form satisfactory to CONTRACTOR.
- 5.2 Workers' Compensation Insurance. A current Workers' Compensation and Employer's Liability insurance certificate with limits pursuant to state law is required. CONTRACTOR acknowledges that SUBCONTRACTOR is self-insured. **SUBCONTRACTOR shall attach evidence of self-insurance in a form satisfactory to the CONTRACTOR to the signed Agreement before returning to CONTRACTOR.** This Agreement is not final and invoices cannot be paid until an insurance certificate evidencing such policy is received.

SECTION 6 - INDEPENDENT INVESTIGATIONS

- 6.1 The SUBCONTRACTOR has reviewed the services required under the Agreement and has made his own

investigation concerning services. The SUBCONTRACTOR has determined that he has sufficient information to enter into the Agreement and perform the services called for herein. The SUBCONTRACTOR agrees and acknowledges that the CONTRACTOR has made no representations or warranties concerning the services provided and that the SUBCONTRACTOR has relied solely upon his own review and investigation prior to entering into this Agreement.

SECTION 7 - TERMINATION OF AGREEMENT

- 7.1 The CONTRACTOR may terminate this Agreement at any time by giving the SUBCONTRACTOR written notice thereof. Upon said termination, the SUBCONTRACTOR will be reimbursed for that portion of the work completed prior to termination less expenses or costs incurred as a result of the SUBCONTRACTOR's default.

SECTION 8 - ENTIRE AGREEMENT

- 8.1 This Agreement including attachments incorporated herein by reference represents the entire Agreement and understanding between the parties and any negotiations, proposals or oral agreements are intended to be superseded by this written Agreement. Any supplement or amendment to this Agreement to be effective shall be in writing and signed by the parties.

SECTION 9 - REQUIRED PROVISIONS

- 9.1 The SUBCONTRACTOR shall, in the performance of this Agreement, comply with all federal, state and local laws; and all regulations and orders issued under any applicable law.

- 9.2 The terms of the Prime Agreement with OWNER as provided in Exhibit A are hereby incorporated into this agreement. Except for Section 10 of this Agreement, in the event of a conflict between the Prime Agreement and this Agreement, the Prime Agreement shall prevail. To the extent that Section 10 of this Agreement conflicts with the Funding Agency's agreement, this Agreement shall control.

SECTION 10 - GOVERNING LAW

- 10.1 This Agreement is to governed and construed in accordance with the laws of the State of Texas. However, to the extent that the laws of the State of Texas conflict with the protections afforded to the SUBCONTRACTOR by the Nevada Revised Statutes 41.0305 through 41.039, inclusive, Nevada law shall govern.
- 10.2 The venue for any dispute arising from the terms of this Agreement shall be Clark County, Nevada.
- 10.3 Except as otherwise set forth in this Agreement, the Parties shall bear their own attorneys' fees and costs incurred in resolving the claims, as well as on the preparation of this Agreement. In the event that any Party commences an action to enforce or interpret this Agreement, or for any other remedy based on or arising from this Agreement, the prevailing party therein shall be entitled to recover its reasonable and necessary attorneys' fees and costs incurred. For the purposes of this provision, the "prevailing party" shall be that party which has been successful with regard to the main issue, even if that Party did not prevail on all issues.

IN WITNESS WHEREOF, duly authorized representatives of the parties have signed in confirmation of this Agreement, with effective date the day and year first above written.

CAROLLO ENGINEERS, INC.

SOUTHERN NEVADA WATER AUTHORITY

By: 
H. Musallam
Vice President 4-25-14

By: John J. Entsminger, General Manager

100 City Parkway, Suite 700

Address

Las Vegas, NV 89106

City

State

Zip

Date _____

Phone (702) 862-3400

Fax () _____

E-mail _____

Fed Tax ID # _____

Certified

MBE, WBE

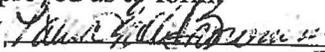
or SBE?

_____ Yes, if so which?

_____ No

Southern Nevada Water Authority

Approved as to form?

By:  Date 4-28-14

SUBCONTRACTOR BILLING INSTRUCTIONS

Note: SUBCONTRACTOR invoices come in a wide variety of formats. Very few offer job-to-date information that indicates progress of the job in relation to contract authorizations.

The attached Progress Billing cover sheet has been designed to remedy the problem and provide the needed information in a consistent manner. The SUBCONTRACTOR's invoice should be prepared in the normal manner then attached to the Progress Billing cover sheet.

When the Project is being started, the Project Manager needs to fill in some of the information on this form and provide it to the SUBCONTRACTOR for their use in preparing the monthly billing to Carollo Engineers.

Address: Do not edit the mailing address – It is the centralized address for Concur billings.

Subject: Fill in the name of the Project

Carollo Project Number: Fill in

Description: This section is for recording the amounts and hours. Sometimes breakdowns of the consultant's charges will be needed. Usually it will be derived from the Scope of Services. The Project Manager should list the names of the items to be listed separately. The breakdown of the Contract limit should be completed in the "Contract Limits" column. If no breakdown is required, type in "total contract" in the description column and fill in the Contract Limit.

TASK ORDER NO. 1

CAROLLO ENGINEERS, INC.

AND

Southern Nevada Water Authority Water Quality Laboratory
SUBCONTRACTOR

This Task Order is issued by the CONTRACTOR and accepted by the SUBCONTRACTOR pursuant to the mutual promises, covenants and conditions contained in the Agreement between the above named parties dated the _____ day of _____, 2014, in connection with:

**Texas Water Development Board Contract No. 1348321632: Testing Water Quality in a
Municipal Wastewater Effluent Treated to Drinking Water Standards**

(Project)

PURPOSE

Task Order #1 is intended to cover SUBCONTRACTOR's time and expenses to provide analytical testing of samples collected at the Colorado River Municipal Water District's Raw Water Production Facility at Big Spring, TX (Project Location), and associated technical evaluation, up to a maximum fee of \$33,000.

SUBCONTRACTOR'S SERVICES

SUBCONTRACTOR's services pertain to Task 1 of the Project (Contract No. 1348321632).

SUBCONTRACTOR will test a minimum of four samples each collected during four quarterly sampling events conducted at the Project Location. Analyses for the samples collected during the first quarterly event are listed in the Project Contract (No. 1348321632), Table B-1. Based on the results of the first sampling event, the number of samples and/or analyses per sample will be reduced for subsequent sampling events to stay within the Task Order budget.

TIME OF PERFORMANCE

Sampling for the Project is anticipated to take place between June 1, 2014 and August 1, 2015. All work on this project will be completed by December 15, 2015.

EFFECTIVE DATE

This Task Order No. 1 is effective as of the _____ day of _____, 2014.

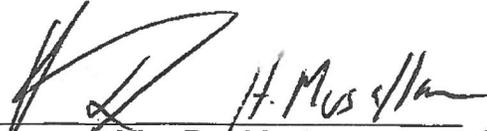
IN WITNESS WHEREOF, duly authorized representatives of the CONTRACTOR and of the SUBCONTRACTOR have executed this Task Order No.1 evidencing its issuance by ENGINEER and acceptance by SUBCONTRACTOR.

CAROLLO ENGINEERS, INC.

SUBCONTRACTOR

Accepted this _____ day of _____,
2014

By:


Vice President 4-28-14

By: _____

John J. Entsminger
General Manager

By: _____

By: _____

Officer

SUBCONSULTANT BILLING INSTRUCTIONS

Note: SUBCONSULTANT invoices come in a wide variety of formats. Very few offer job-to-date information that indicates progress of the job in relation to contract authorizations.

The attached Progress Billing cover sheet has been designed to remedy the problem and provide the needed information in a consistent manner. The SUBCONSULTANT's invoice should be prepared in the normal manner then attached to the Progress Billing cover sheet.

When the Project is being started, the Project Manager needs to fill in some of the information on this form and provide it to the SUBCONSULTANT for their use in preparing the monthly billing to Carollo Engineers.

Address:	Do not edit the mailing address – it is the centralized address for Concur billings.
Subject:	Fill in the name of the Project
Carollo Project Number:	Fill in
Description:	This section is for recording the amounts and hours. Sometimes breakdowns of the consultant's charges will be needed. Usually it will be derived from the Scope of Services. The Project Manager should list the names of the items to be listed separately. The breakdown of the Contract limit should be completed in the "Contract Limits" column. If no breakdown is required, type in "total contract" in the description column and fill in the Contract Limit.

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

May 15, 2014

Subject: Extension of Leases for Irrigation Company Shares	Director's Backup
Petitioner: David L. Johnson, Deputy General Manager, Engineering/Operations	
Recommendations: That the Board of Directors authorize the General Manager to extend existing leases for a period of two years on shares in the Muddy Valley Irrigation Company, the Bunkerville Irrigation Company, and the Mesquite Irrigation Company, execute ministerial documents to effectuate the transactions, and pay the associated administrative costs of the irrigation companies for an amount not to exceed \$3,000,000.	

Fiscal Impact:

The required \$3,000,000 is available in the Authority's Operating Capital budget.

Background:

On April 17, 2008, the Board of Directors approved the lease of water shares in the Muddy Valley Irrigation Company (MVIC), Bunkerville Irrigation Company (Bunkerville), and Mesquite Irrigation Company (Mesquite). On April 16, 2009, and again on January 20, 2011, the Board approved extensions of existing leases on those water shares. Through those leases, as well as past purchases, the Authority currently owns and leases approximately 51 percent of the shares in MVIC, representing approximately 8,900 acre-feet per year (afy) of water rights; 91 percent of the shares in Bunkerville, representing approximately 8,800 afy of water rights; and 51 percent of the shares in Mesquite, representing approximately 6,200 afy of water rights. This water is available for direct use during shortage conditions on the Colorado River, for banking in Lake Mead when not immediately needed as Intentionally Created Surplus credits, or to increase elevations in Lake Mead.

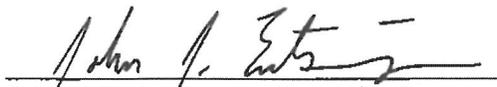
In the initial lease agreement the lease payment per share was \$1,700 per MVIC preferred share and \$155 per MVIC common share, \$2,793 per Bunkerville share, and \$2,491 per Mesquite share. This pricing level was not changed for the first extension to the agreement for years 2009-2010. In the second extension the lease payment per share was \$1,105 per MVIC preferred share and \$101 per MVIC common share, \$1,816 per Bunkerville share, and \$1,620 per Mesquite share. Under this extension, the annual lease payment per share would be \$780 per MVIC preferred share and \$71.50 per MVIC common share, \$1,203.80 per Bunkerville share, and \$933.40 per Mesquite share. The two-year lease extensions approved at this time would terminate on September 30, 2016. The Authority may seek reimbursement for a portion of these costs under the Colorado River System Conservation Agreement approved by the Board in April.

Extension
May 15, 2014
Page Two

If approved, this agenda item authorizes the Authority to present a Request for Offers for Lease Extensions to all MVIC, Bunkerville, and Mesquite shareholders who have an existing lease due to expire on September 30, 2014.

These lease extensions are authorized pursuant to Sections 5(c) and 6(a) of the SNWA 1995 Amended Cooperative Agreement. The office of the General Counsel has reviewed and approved the Request for Offers for Lease Extensions.

Respectfully submitted:



John J. Entsminger, General Manager
JJE:PDS: DLJ:ZLM:AB:JJ:lmv

SOUTHERN NEVADA WATER AUTHORITY
BOARD OF DIRECTORS
AGENDA ITEM
May 15, 2014

Subject: Intervention	Director's Backup
Petitioner: Gregory J. Walch, General Counsel	
Recommendations: That the Board of Directors authorize the Authority's intervention in Nevada Power Company's General Rate Case.	

Fiscal Impact:

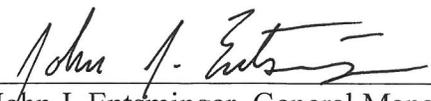
None by approval of the above recommendation. Legal and professional services fees associated with these interventions are paid under separate agreements previously approved by the Board of Directors.

Background:

Nevada Power Company (NPC), d/b/a NV Energy, has advised the Authority and the Public Utilities Commission (PUC) that NPC will shortly file a docket seeking approval to increase its annual revenue requirement for general rates charged to all classes of electric customers. As the Authority and its member agencies spend approximately \$2.9 million per annum on distribution-only service and are NPC's only distribution-only service customers, to protect its interest and that of its member agencies, the Authority will need to intervene in this PUC Docket.

This intervention is being entered into pursuant to section 6(n) of the SNWA 1995 Amended Cooperative Agreement and Nevada Administrative Code 703.580. The office of the General Counsel has reviewed and approved the intervention.

Respectfully submitted:



John J. Entsminger, General Manager
JJE:GJW:BC:CKH:llm

AGENDA ITEM #	7
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SOUTHERN NEVADA WATER AUTHORITY
BOARD OF DIRECTORS
AGENDA ITEM
May 15, 2014

Subject: Water Conservation Plan	Director's Backup
Petitioner: David L. Johnson, Deputy General Manager, Engineering/Operations	
Recommendations: That the Board of Directors adopt the Southern Nevada Water Authority Water Conservation Plan.	

Fiscal Impact:

None by approval of the above recommendation.

Background:

Nevada Revised Statutes (NRS) 540.121 through 540.151 require all suppliers of water to prepare and adopt a water conservation plan every five years. In addition, the Reclamation Reform Act of 1982 (RRA), Section 210(b), requires the Authority to maintain a five-year conservation plan with the Bureau of Reclamation. On May 21, 2009, the Authority's Water Conservation Plan for the five-year period of 2009 through 2013 was adopted by the Board of Directors. An updated plan is due this year.

The proposed Water Conservation Plan (Plan) has been developed to meet NRS and RRA requirements. The Plan describes the Authority's current conservation goal of 199 gallons per capita per day by 2035, and details strategies and tactics for continued water savings. The Plan also provides a review of Authority conservation programs and achievements since 2004.

The Plan has been made available to the public for review and comment, and has been reviewed by staff of the Authority's member agencies and the Nevada Division of Water Resources. Following consideration by the Authority's member agencies, the Plan will be submitted to the Bureau of Reclamation.

At this time, staff recommends that the Board adopt the Plan and direct staff accordingly.

This action is required pursuant to NRS 540.131 and authorized by Section 5(m) of the SNWA 1995 Amended Cooperative Agreement. The office of the General Counsel has reviewed and approved this item.

Respectfully submitted:



John J. Entsminger, General Manager
JJE:PDS:DLJ:ZLM:DBB:ls:nh
Attachments

AGENDA
ITEM #

8



DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF WATER RESOURCES

901 South Stewart Street, Suite 2002

Carson City, Nevada 89701-5250

(775) 684-2800 • Fax (775) 684-2811

(800) 992-0900 (In Nevada Only)

<http://water.nv.gov>

April 10, 2014

Zane L. Marshall, Director
Water and Environmental Resources
Southern Nevada Water Authority
P.O. Box 99956
Las Vegas, Nevada 89193-9956

Re: Southern Nevada Water Authority Water Conservation Plan (Draft)

Dear Mr. Marshall:

Thank you for submitting the Southern Nevada Water Authority Water Conservation Plan 2014-2018 on behalf of the following water systems:

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

The plan was received by the Water Planning Section of the Nevada Division of Water Resources on March 27, 2014, and has been reviewed for compliance with the applicable statutes. The plan contains the statutory elements required under Nevada Revised Statutes (NRS) chapter 540 and is hereby **approved**.

The next update to the water conservation plan will be due in 2019 as required by NRS §540.131(4)(c). If you have any questions, please contact me at (775) 684-2884 or kadavis@water.nv.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Kim A. Davis".

Kim A. Davis, P.E.
Water Planning Engineer



SOUTHERN NEVADA WATER AUTHORITY®

Water Conservation Plan

2014-2018

MAY 2014

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OVERVIEW OF THE SOUTHERN NEVADA WATER AUTHORITY

The Southern Nevada Water Authority (SNWA) was formed in 1991 by a cooperative agreement among seven water and wastewater agencies in Southern Nevada:

- 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

Collectively, these agencies provide water and wastewater services to nearly 2 million Southern Nevada residents and 40 million annual visitors.

As the wholesale water provider to Southern Nevada's municipal water agencies, the SNWA is responsible for managing the region's current and future water resources. This includes managing all water supplies available to Southern Nevada through an approved water budget; managing regional water resources and conservation programs; ensuring regional water quality meets or exceeds state and federal standards; allocating and distributing regional water resources among its member agencies; water-resource planning; presenting a unified position on water issues facing Southern Nevada; and building and operating regional facilities to provide a reliable drinking water delivery system to all member agencies.

Although the SNWA plays a critical role in managing water, it does not have the authority to regulate water use by end users or to establish customer rates. Such policies, codes and regulations are implemented through its member agencies. In terms of regulatory issues, the SNWA's role is to facilitate information sharing and collaboration. This has resulted in the creation of successful community-wide water-efficiency policies, such as permanent mandatory watering restrictions and limitations on lawn installation in new construction. Education, outreach and incentive programs are largely managed by the SNWA through committed involvement from its member agencies, community stakeholders and the public.

THE ROLE OF CONSERVATION IN RESOURCE PLANNING

Water conservation plays a critical role in water resource planning and management efforts; the ability to increase efficient water use and reduce water waste has a direct impact on the amount of resources that will be needed in the future. The more successful a community's conservation achievement becomes, the lower the community's projected demand for water (relative to levels that would have occurred in the absence of conservation).

To support its water planning and management responsibilities, the SNWA developed and maintains a Water Resource Plan. The SNWA Water Resource Plan projects demands and identifies a portfolio of existing and planned water supply options available to meet those demands over time. The plan, first developed in 1996, is reviewed annually and updated as needed. As demonstrated in past revisions, adjustments to the plan are made to account for various uncertainties such as drought, conservation

achievements, resource availability and changes in population and demand projections. The last major update to the Water Resource Plan was in 2009. SNWA is planning the next significant update of the Water Resource Plan following the Integrated Resource Planning Advisory Committee process, which should conclude in late 2014 or early 2015.

The SNWA has worked to develop and manage a flexible portfolio of diverse water resource options. This approach is commonly used in the field of resource planning and is essential in responding to future conditions that may result from drought or other conditions that may limit the availability of resources. The portfolio approach allows the SNWA to assess its overall resource options and make appropriate decisions regarding what resources to bring on-line when necessary. The SNWA Water Resource Plan includes water conservation, reclaimed water, Colorado River water, in-state water resources and groundwater in its portfolio of current and future resources that will be used to meet demands as needed.

Water conservation is a key resource in the SNWA Water Resource Plan, helping lower projected demands and extend the availability of current and future water resources. The plan projects an estimated saving of 276,000 acre-feet of water in 2035 by achieving its current water conservation goal. Gradual savings increases are estimated to occur in following years.

While conservation is an important water management tool, the more aggressive and responsive a community is to the call for conservation, the more difficult it becomes to realize additional conservation gains. This phenomenon of diminishing returns is referred to as “demand hardening.” For communities such as Southern Nevada where a majority of the water supply comes from one source, the prospect of demand hardening requires development of additional alternative water supplies regardless of conservation levels achieved.

This concept has become increasingly important in recent years. The Colorado River, which provides approximately 90 percent of Southern Nevada’s water supply, continues to experience serious and sustained drought conditions. As a result, Lake Mead’s water levels have dropped more than 100 feet since January 2000, and Lake Mead is at less than half of capacity. Mandatory water shortages and critical infrastructure outages are possible should these conditions persist. As a result, the SNWA has aggressively pursued development of non-Colorado River in-state resources, worked with the Colorado River Basin States on management strategies to offset the risk of further surface level declines, and is completing the construction of a new Lake Mead intake to preserve system capacity.

INTEGRATED RESOURCE PLANNING ADVISORY COMMITTEE

An SNWA stakeholder group comprised of nearly two dozen citizens representing a broad spectrum of community interests has been meeting since 2012 to address water resource and funding issues in Southern Nevada. The Integrated Resource Planning Advisory Committee (IRPAC) divided its work into two phases. The IRPAC met 14 times between June 2012 and September 2013 to discuss funding-related matters. The second phase, which began in February 2014, is focusing on the development of recommendations for conservation, water resources, facilities and water quality. The citizens’ advisory committee is expected to complete the second phase in late 2014 or early 2015.

When IRPAC completes its work, the committee may provide recommendations to the SNWA Board for conservation programs or goals. Because this Conservation Plan is due in spring 2014, SNWA is updating this plan based on best management practices. The SNWA Board is expected to receive the IRPAC recommendations in early 2015 and may direct staff to implement them at that time.

CONSERVATION ACHIEVEMENTS

The SNWA has developed and implemented one of the most progressive and comprehensive water conservation programs in the nation. Conservation success is measured through the achievement of regional conservation goals. Since adoption of the first goal in 1991, the SNWA has consistently exceeded all adopted conservation goals and subsequently adopted more aggressive targets.

During the mid-1990s, the SNWA purveyor members agreed to follow a series of conservation "best management practices" published by the Bureau of Reclamation. The agreement was an important first step in implementing more consistent conservation measures across the service boundaries of SNWA purveyor member agencies. The agreement was updated in 1999 and a comprehensive five-year Conservation Plan was approved by the SNWA Board of Directors. An update to the Conservation Plan was submitted to and approved by the Bureau of Reclamation in 2004 and again in 2009.

Southern Nevada made consistent progress towards its conservation goal throughout the 1990s. However, beginning in 2000, the pace of conservation began to slow. In response, the SNWA and its member agencies launched a conservation strategic planning process in 2001. In 2002, as drought conditions in the Colorado River Basin became more severe, the SNWA member agencies recognized that an immediate and actionable community response was necessary. As a result, the conservation strategic planning effort evolved to address drought conditions and ultimately set the stage for development of the SNWA Drought Plan, which was approved by the SNWA Board of Directors in February 2003 and implemented thereafter by SNWA's member agencies.

Following the implementation of the Drought Plan in 2003, conservation and drought savings rebounded with a 23.1 percent savings for that year. In 2004, Southern Nevada achieved its goal of 25 percent conservation by 2010 originally established in the mid-1990s. This is equivalent to roughly 280 GPCD.

In an effort to maintain and build upon this success, a citizens' advisory committee recommended that the SNWA pursue a strategy to decrease total water demand from 2004 levels to 250 GPCD by 2010 and to 245 GPCD by 2035. The SNWA Board of Directors adopted this goal in 2005.

The following years witnessed extraordinary conservation achievements. Participation in the SNWA's rebate programs realized significant results, including peak participation levels in almost every area. A summary of key SNWA conservation accomplishments is provided in **Appendix A**.

What is GPCD? GPCD is a metric used by some communities to measure water consumption. For the SNWA, it provides a general means of monitoring water-use trends and for tracking conservation progress. A variety of factors influence GPCD including climate, population dynamics, water-use accounting practices and economic conditions. SNWA calculates "gross" GPCD by totaling water diversions, which includes direct and indirect reuse, by its member agencies, adjusting the water use for weather variations, and then dividing the total diversion by the estimated SNWA population served by SNWA's member agencies. That number is then divided by 365 – the number of days in a year.

"Net" GPCD refers only to the portion of water that is consumptively used since direct and indirect reuse allows the water to be used more than once. The concept of consumptive use is a tenet of water law used by both the State of Nevada and U.S. Bureau of Reclamation.

When calculating population, the SNWA does not include the approximately 40 million annual visitors to the region. This visitor load is equivalent to more than 465,000 additional people supported by the water system each day.

These conservation efforts resulted in a reduction of Southern Nevada's annual water consumption by nearly 29 billion gallons (between 2002 and 2012), despite a population increase of more than 400,000 people during that span. In 2008, the SNWA achieved its 2004 conservation goal of 250 GPCD – two years ahead of schedule. While some of the reductions in water use can be attributed to the economic downturn in recent years, there is no question the community's conservation efforts played a critical role.

These past achievements provide the basis for current efforts. The following sections provide an overview of the SNWA's current conservation goal and a description of how the SNWA will make progress toward this goal during the five-year planning period. A table with discussion and analysis also is provided in **Appendix B**.

The 2014-2018 Conservation Plan will be submitted to the U.S. Bureau of Reclamation in fulfillment of the requirements for Section 210(b) of the Reclamation Reform Act of 1982 and to the State of Nevada Department of Conservation and Natural Resources, Division of Water Resources in fulfillment of the requirements for Nevada Revised Statutes Chapter 540.

CONSERVATION GOALS

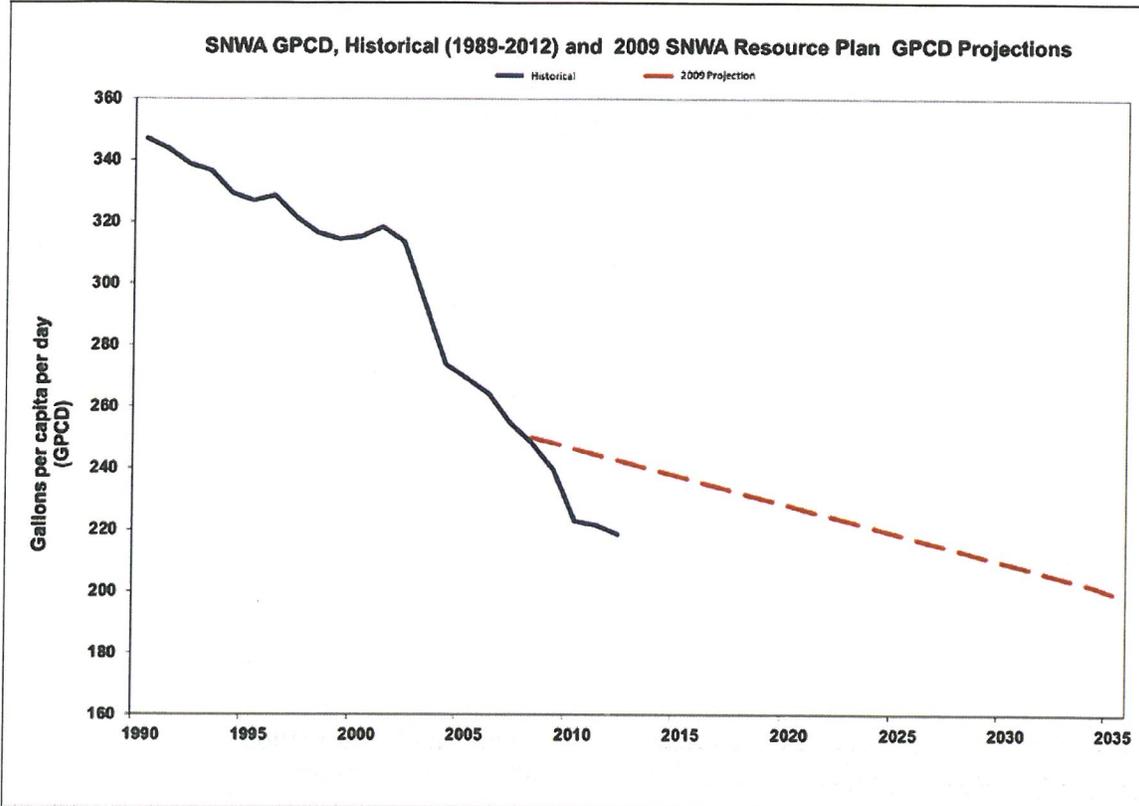
Building upon previous success, the SNWA Board of Directors in 2009 adopted a new conservation goal for the community of 199 GPCD by 2035. **Figure 1** outlines the SNWA's previous conservation achievements (described above) and provides projected achievements through the year 2035.

In 2009, SNWA and its member agencies, recognizing the ongoing drought, adopted permanently the major drought alert demand reduction measures identified in the SNWA's Drought Plan. These include landscape development restrictions limiting most turf installations in new development, watering restrictions, golf course water budgets, and increased fines for water waste. Further contingency plans for assuring reliability of supply are found in Chapter 4 of the 2009 Water Resource Plan.

The Southern Nevada community has been reducing its overall water use faster than originally anticipated in order to meet the 199 GPCD goal. For example, the 2009 SNWA Water Resource Plan projected a community GPCD of 243 in 2012, however the actual GPCD was 219 in that year.

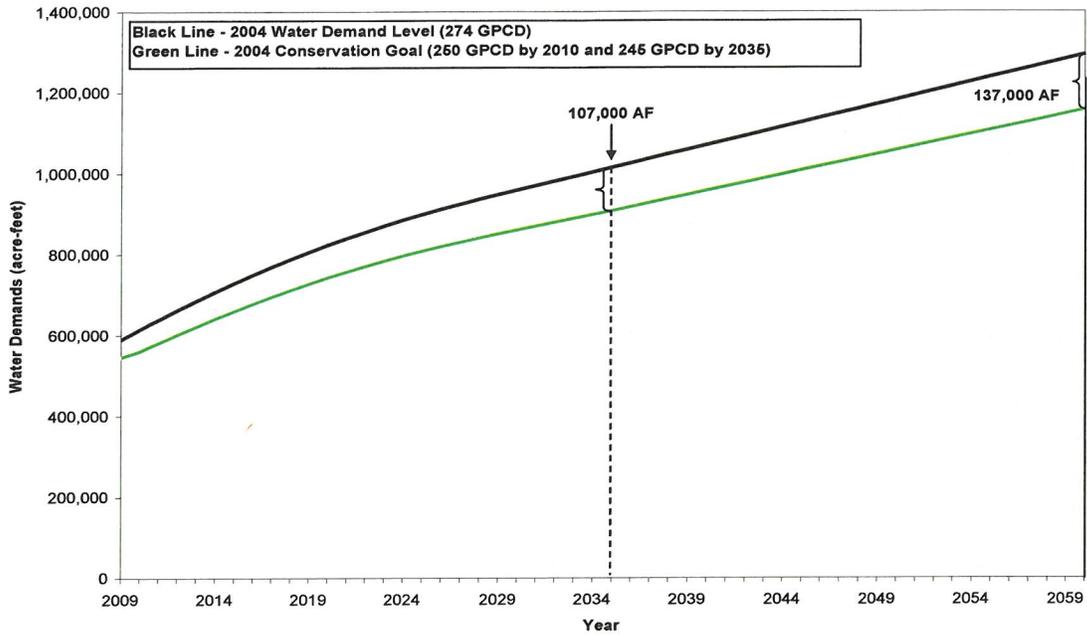
Several factors may have contributed to this rapid reduction in water use, including the impacts of a slow economy, a stabilization in population and participation in SNWA Conservation programs. Southern Nevada has successfully achieved conservation goals in the past, and the SNWA will continue to monitor and track the community's progress in achieving 199 GPCD by 2035.

Figure 1 – Conservation Achievements (1990-2012) and Projections (2008-2035)

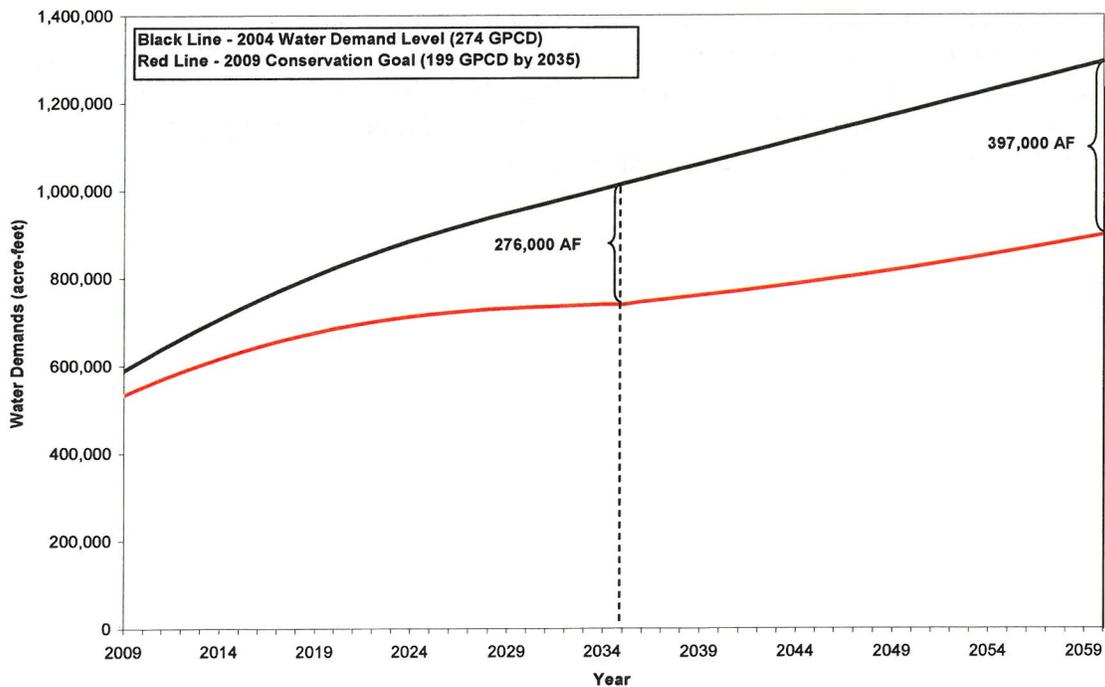


The SNWA estimates that more aggressive conservation outreach and education, and continuance of incentive programs, rate setting and regulation will yield these additional GPCD savings. **Figure 2** and **Figure 3** compare the estimated volume of water that would be saved by conservation pre- and post-adoption of the SNWA’s current conservation goal. A table with projected annual GPCD reductions for the 2014-2018 planning period is provided in **Appendix C**.

**FIGURE 2 – SNWA Water Demands and Conservation
(250 GPCD by 2010 and 245 GPCD by 2035 Conservation Goals)**



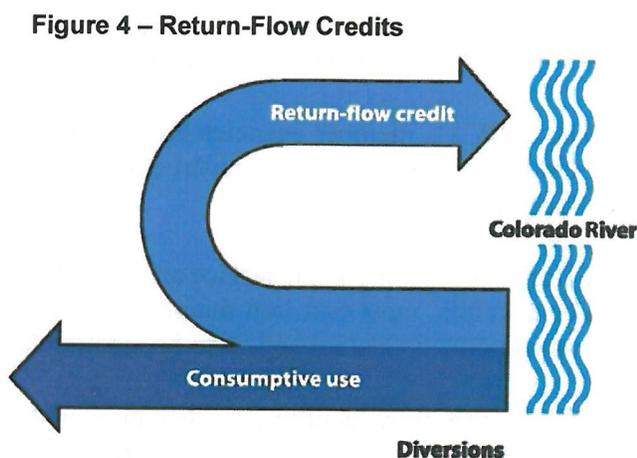
**FIGURE 3 – SNWA Water Demands and Conservation
(199 GPCD by 2035 Improved Conservation Goal)**



CONSERVATION STRATEGIES

Although the SNWA supports and promotes water conservation both indoors and outdoors, significant effort goes into promoting more efficient water use outdoors. Approximately 60 percent of the water delivered to customers is used consumptively, meaning it can be used just once. Landscape irrigation is collectively the single largest consumptive water use.

In Southern Nevada, nearly all indoor water use that reaches the sanitary sewer is reclaimed. It is either returned to the Colorado River, or delivered to other municipal uses, such as golf course irrigation or power plant use. In accordance with Bureau of Reclamation return-flow credit policy, the SNWA receives credit to withdraw one acre-foot of water from the Colorado River for every acre-foot of Colorado River water that is treated and returned (Figure 4). Since this water is already fully reused, additional reuse efforts and indoor conservation measures do not enlarge the SNWA's resource portfolio.



Throughout this plan, gross GPCD is expressed as a measure of total diversions, as defined on page 4. Since Southern Nevada directly and indirectly reuses nearly all treated wastewater effluent, the consumptive impact on the Colorado River and groundwater resources is much lower. For example, in 2012 the SNWA's gross demand was approximately 219 gallon per capita per day, but the net consumptive portion was just 129 GPCD.

The SNWA's conservation success is partly dependent upon the water management and business practices of its individual member agencies. There are three key areas related to demand management that are within the purview of the member agencies: metering, managing non-revenue water and tiered water rates. The SNWA and its member agencies will continue to use these base water management practices to sustain previous GPCD reductions and achieve future gains.

Metering – Metering is the foundation of sound demand-management programs. SNWA member agencies fully meter all customer connections for all classes of water in accordance with American Water Works Association standards.

All purveyors operate on-going meter maintenance and replacement programs. Meters are read monthly and data is classified and retrievable on the basis of customer class, meter size, land use and other relevant variables. Purveyors have the ability to identify unusual water use patterns, such as spikes in consumption due to leaks, and to notify customers of unusual account activity. In addition, the three largest purveyors, Las Vegas Valley Water District (LVVWD), City of Henderson and City of North Las Vegas have implemented automated meter reading (AMR) systems. AMR systems eliminate the need for individual manual reads, improve meter-reading efficiency and provide customers with improved billing processes.

Non-Revenue Water – All water delivery systems experience losses. In the water industry, these losses are known as non-revenue water or unaccounted-for-water. Non-revenue water losses are predominantly associated with leaks, variations in meter accuracy and theft. Compared to similar communities in the United States, the SNWA and its member agencies have a low rate of non-revenue water.

The SNWA and its member agencies have a variety of active programs to more effectively account for the total water production. While these ongoing efforts will continue to improve accounting accuracy for and minimize loss of non-revenue water, measurable GPCD savings are not attributed to this management tool. The following programs generally are conducted throughout the region:

- The SNWA’s member agencies have created and adopted the Uniform Design and Construction Standards. These detailed construction standards assure that delivery systems meet or exceed industry standards.
- Efforts are ongoing in all service areas to identify older infrastructure deemed susceptible to leaks. For example, most cast iron mains are being systematically replaced, as are polyethylene service connections that do not appear to be meeting longevity expectations.
- Prior to installing facilities, soil testing is conducted to identify potential threats to the distribution system’s integrity. For example, where testing indicates that soil chemistry will be destructive to copper piping, plastic sleeves are installed over the service line to prevent corrosion.
- Reservoirs are thoroughly inspected at regular intervals to assure their integrity; special monitoring devices beneath each reservoir detect and report leakage.
- Production meters are regularly maintained and calibrated.
- Customer meters are monitored for consumption anomalies. Small customer meters are subject to a planned replacement program based upon life expectancy and large meters are regularly maintained and calibrated.
- A substantial portion of purveyor distribution lines have permanent listening devices installed that can signal patrolling employees of leaks that fail to surface and assist in accurately determining the leak location for excavation.
- Interagency collaboration speeds leak repairs through fast-tracking line location (“call-before-you-dig”) and prompt repair. Records are kept of the estimated system loss for each leak repaired.

Water Rate Setting – All potable water purveyors will continue to use multi-tier increasing block rate structures. These pricing structures provide financial incentive for all water users to implement and participate in conservation measures.

Over the years, local purveyors have implemented major rate restructuring and increases specifically for the purpose of accelerating conservation. This restructuring involved significant price increases in the higher tiers and a compression of tier thresholds. The impact of water rates on GPCD reductions is discussed in “Water Pricing”.

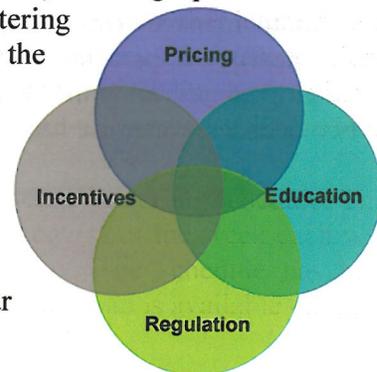
CONSERVATION MEASURES

In addition to municipal water management practices discussed in the preceding section, the SNWA and its member agencies will continue to utilize a variety of demand-management measures to promote conservation and reduce overall water use. These include a combination of the following:

- **Water Pricing:** tiered-rate structures charge higher rates as water use increases. These rate structures encourage efficiency, while ensuring the affordability of water for essential uses.
- **Incentives:** incentives are flexible tools that invite the community to participate in the conservation effort. The SNWA has a number of “water smart” programs that are critical to achieving its conservation goals.
- **Regulation:** city and county governments have adopted a variety of land-use codes and water-use ordinances to promote the efficient use of Southern Nevada’s water resources.
- **Education:** the SNWA’s public-education programs are designed to elicit buy-in from the community and help residents understand that responsible water use is a critical part of living in a desert environment.

These measures work in conjunction with one another to promote efficient water use. For example, water pricing (including water rates and water-waste fees) provides a financial signal for customers to reduce water use, which in turn, may lead some customers to improve efficiency. Through passive and active education, customers learn about regulations (such as day-of-week watering restrictions) and incentive programs, which, when acted upon, help the customer save water, and therefore reduce the impact of rates. Ideally, these measures all drive customers to higher levels of efficiency.

The complex and inter-related nature of these conservation measures makes it difficult to attribute specific GPCD reductions to any single measure. A table of the estimated GPCD reduction, and the amount of water estimated to be saved each year over the five-year planning horizon, is included in **Appendix B**.



The following sections detail how the SNWA will utilize each of these conservation measures to achieve its conservation targets throughout the five-year planning horizon.

Water Pricing

Price can be an effective instrument for reducing water demand. Research has consistently shown that water users respond in an inverse manner to changes in the price of water – in general, as the price of water increases, water use decreases. This principle, however, may only hold true for discretionary water use, the portion of a person’s water use beyond what is necessary to meet their perceived basic needs.

Economists measure the relationship between pricing and demand as Price Elasticity of Demand (PED). Water PED measures the degree of customer water demand responsiveness due to changes in water rates, holding all other factors constant. Mathematically, PED is the percent change in water demand divided by the percent change in water rates. Water is typically considered relatively inelastic; that is, the response to

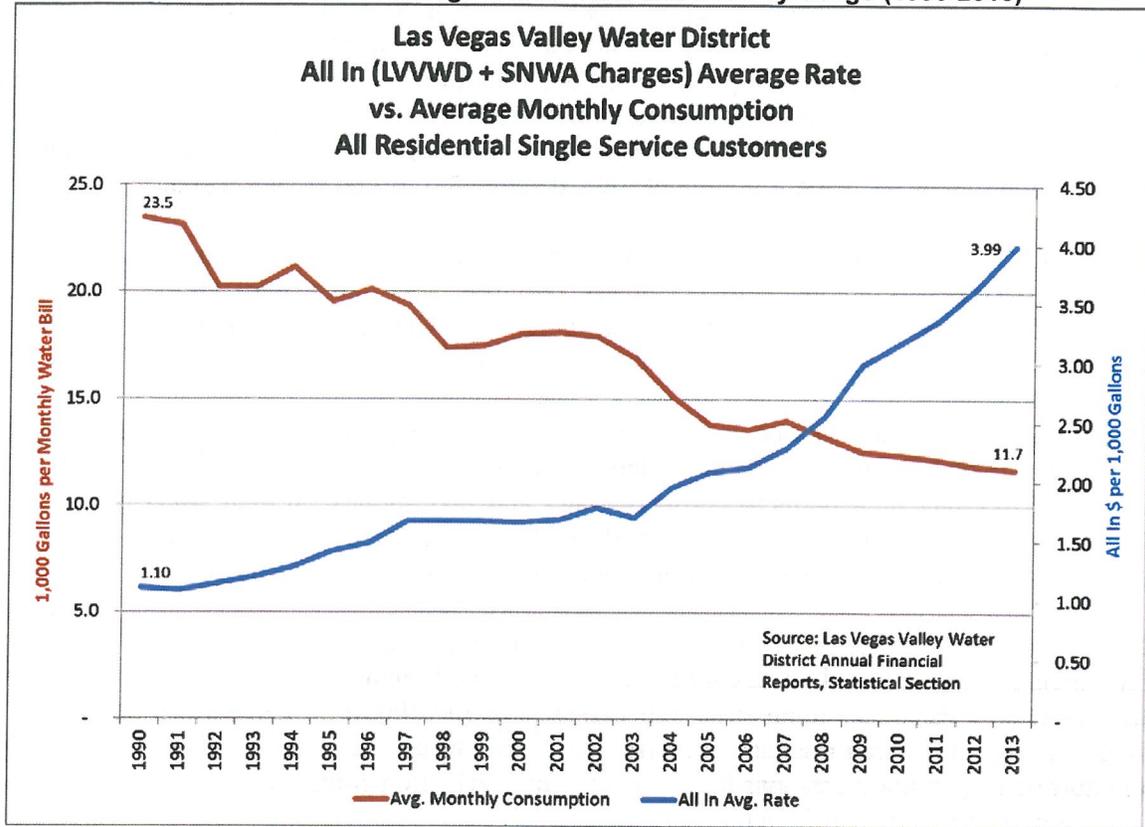
a change in price is less than the degree of the price change. PED can only be estimated in retrospect and can be substantially influenced by economic conditions in the community, including income levels and other factors.

Water users respond to changes in water rates by changing water use practices and implementing available water conservation measures. In the short-run, water users may respond by reducing car washing or their showering time. This short-run response is difficult to quantify and may not be permanent as customer water-use patterns change over time. For the longer term, water users respond to rates by taking advantage of water conservation measures. These measures may include replacing fixtures and appliances with more efficient devices or participating in incentive programs, such as the SNWA's Water Smart Landscapes Rebate Program. In fact, research shows that water bills are a principal reason for customer participation in incentive programs.

A common strategy for managing demand through pricing is the use of increasing block rates. The increasing block rates encourage water conservation by charging water users higher rates for higher volume use. Since 1995, SNWA member agencies have subscribed to a Memorandum of Understanding in which they agree to utilize progressive rate structures to manage demand. All SNWA member agencies currently use increasing block rates to encourage water conservation among high water users, while maintaining overall affordability. In 2005, the SNWA adopted the recommendations of a citizens' advisory committee to promote water rates that sustain and advance conservation achievements by ensuring water rates keep pace with inflation.

While each of the SNWA's member agencies set water rates independently, all utilize similar rate principles to manage demand. For example, the Las Vegas Valley Water District (LVVWD), which delivers nearly 70 percent of the public water supply in Southern Nevada, has a long history of encouraging conservation through water rates. **Figure 5** illustrates that as water pricing increased over the past two decades, water use has declined significantly as a result of conservation and pricing.

FIGURE 5 – LVVWD Average “All In” Rate and Monthly Usage (1990-2013)



The SNWA’s conservation goal of 199 GPCD by 2035 is predicated upon continued performance in all conservation measures. Because SNWA and its member agencies operate some of the most aggressive regulatory, education and incentive programs in the nation, these programs may approach their practical limitations over the planning period. Rates, on the other hand, have long-term potential to continue to influence demand as needed. As such, SNWA member agencies recognize the influence of pricing on water demands and will consider conservation when adjusting rates to a level necessary to meet its conservation goal.

While rates are an important conservation measure, public water agencies also have an obligation to the well-being and vitality of the communities they serve, thus pricing must be appropriate and balance the need for conservation and the community’s economic health.

Incentives

The SNWA recognizes that long-range demand management requires not only implementing progressive conservation strategies for new customers (such as landscape codes for new development), but also creating incentives for existing customers to improve water efficiency. The SNWA is nationally-renowned for its customer-incentive programs. The following incentives will continue to play a significant role over the next five years in helping the community meet its water conservation goal.

Water Smart Landscapes Rebate Program – The Water Smart Landscapes (WSL) Program offers financial incentives to residents who replace water-thirsty lawn with water-efficient landscaping. Since the majority

of Southern Nevada's water is used outdoors on landscaping, the WSL program targets the largest consumptive water uses. The current program rebate amount is \$1.50 for the first 5,000 square feet of lawn removed and \$1 for additional lawn removed, up to \$300,000 per fiscal year. The program opportunities have been enhanced by grants from the Bureau of Reclamation which has expanded the program's reach. To assure sustained results, participants must grant a conservation easement that promises the project will be sustained in perpetuity. The WSL program is projected to remain a major demand-reduction tool as the SNWA continues toward achieving its conservation goal.

Rebate Coupons – The SNWA offers a variety of instant rebate coupons for single-family, residential property owners. These coupons help customers purchase swimming pool covers, smart irrigation controllers, and rain sensors. These rebates contribute to GPCD reductions and offer customers' easy access to rebates while minimizing program management costs to SNWA.

An exposed pool can lose approximately 50 gallons of water per square foot per year to evaporation. Pool covers reduce evaporation, limit windblown debris and conserve energy. Southern Nevada pool owners are encouraged to cover their pools to conserve water and save money on their water bills. The SNWA Pool Cover Instant Rebate Coupon value is \$50 or 50 percent off the purchase price of a pool cover, whichever is less, or \$200 or 50 percent off the purchase of a permanent, mechanical pool cover.

Smart irrigation controllers can assist homeowners in watering as efficiently as possible by automatically adjusting their watering schedule according to weather and plant demands. With SNWA's Smart Irrigation Controller Rebate Coupon customers can save up to \$200 or 50 percent off the price of a smart controller. An option for commercial properties and homeowners associations exists that provides up to \$40 per valve or 50 percent off the product costs for smart irrigation controllers.

Rain sensors shut down irrigation systems during and after rain. The Rain Sensor Rebate Coupon provides up to \$25 or 50 percent off the purchase price of a rain sensor.

Water Efficient Technologies – The Water Efficient Technologies (WET) Program offers financial incentives to commercial and multi-family property owners who install water-efficient devices that save at least 250,000 gallons annually. The SNWA offers a menu of pre-approved water-saving technologies with predictable savings and a defined monetary incentive, including high-efficiency toilets, showerheads, and urinals; converting a grass sports field to an artificial surface; converting from old water cooled ice machines to air-cooled machines; and retrofitting standard cooling towers with high-efficiency drift elimination technologies. Additionally, businesses can work directly with the SNWA to implement a custom technology that meets their needs. Currently, the SNWA offers a rebate of up to \$8 per 1,000 gallons conserved annually for reducing nonconsumptive-use water or \$25 per 1,000 gallons conserved annually for reducing consumptive-use water through technology improvements.

Single-family Indoor Retrofit – SNWA provides free retrofit kits to service area homes that include a premium high-efficiency showerhead, aerators, a fixture flow tester, and toilet leak detection tablets. Retrofit items are WaterSense labeled and exceed applicable efficiency codes and standards.

Regulation

The SNWA works collaboratively with its member agencies to develop and implement regulations that promote water conservation.

Development Codes and Policies – Member agencies adopted landscape and plumbing codes in the mid-1990s to limit water use. Under the 2003 Drought Plan, all agencies adopted more stringent policies for landscape watering, vehicle washing, lawn installation, mist systems and golf course water budgets during declared drought. In 2009, based on input from a citizens’ advisory committee, SNWA and member agencies permanently adopted these drought restrictions as a way to help meet long-term resource needs for the community. These policies and previously adopted development codes, which are among the most stringent in the United States, include:

- Landscape watering: watering groups are mandatory and limit watering to one day a week in winter, three days a week in spring and fall, and prohibit watering from 11 a.m. to 7 p.m. from May through September.
- Vehicle washing: a positive shutoff nozzle is required for residential vehicle washing. Commercial vehicle washing is prohibited unless water is captured to the sanitary sewer where that water can be treated and reused.
- Lawn installation: turf installation is generally prohibited in new residential front yards and is limited to a maximum of 50 percent the landscape area in backyards. The use of turf is prohibited in non-residential development.
- Mist systems: commercial use of mist systems is limited from May through August from 12 p.m. to 12 a.m.
- Golf course water budgets: golf courses are subject to mandatory water budgets (6.3 acre feet of water per year per irrigated acre).
- Fountains and ornamental water features: the development and use of water features is restricted in all jurisdictions.
- Water waste: ordinances and service rules prohibit water waste (allowing water to leave the property or violating watering schedules). Fees double with subsequent violations.
- Plumbing fixtures: each new, remodel or replacement of plumbing fixtures in residential or commercial buildings incorporate standards for plumbing fixtures, including water-use standards for toilets, faucets, showerheads and urinals.

Education

In addition to extensive conservation and incentive programs, the SNWA continues to maintain an education and public outreach campaign to assist residents and businesses with conservation efforts. Currently, the campaign utilizes a variety of media to educate customers on the need for conservation, to provide practical tips on how to conserve, and to put customers in touch with SNWA experts who can help them reduce water use at their properties. The efforts include advertising, community events, publications, an interactive website, public-private partnerships, and demonstration gardens to inspire water-efficient landscape designs. Education is an ongoing initiative for the SNWA that will contribute to GPCD reductions during the five-year planning period.

The SNWA believes education and outreach help drive the community towards its incentive programs where specific reductions are measurable. Without education and promotion, these programs are not likely to have realized the level of conservation gains achieved to date or that are projected in future years.

The following section describes education and public outreach initiatives employed by the SNWA. While actual products and services may vary among member agencies, the SNWA expects to continue to provide this type and level of service throughout the five-year planning horizon.

Demonstration Gardens – Through the combined efforts of the SNWA and its member agencies, there is a demonstration garden in every part of the valley. The SNWA also promotes visits to the Springs Preserve, a 180-acre facility that offers hundreds of examples of water-efficient landscaping, as well as classes by master gardeners and horticulturists. Advice from the Springs Preserve staff is available seven days a week. Free tours also are available for area students.

The SNWA supports development of smaller demonstration projects throughout the Las Vegas Valley to show the public that water-smart landscaping is attractive and the most water-efficient choice for Southern Nevada. Currently, schools may apply for SNWA conservation grants of up to \$5,000 annually to develop demonstration projects for their own campuses. Grants also are available for conservation-related curriculum programs or other approved activities.

Public Outreach – The SNWA employs a variety of community outreach efforts to educate customers on the need for conservation and about available programs and services. Customers may easily access this information through the Conservation Helpline, a phone center that connects customers to rebate and conservation program information and provides free landscape publications, landscape watering schedules, and a place to report water waste. The same information is available online at snwa.com. The SNWA's website includes interactive features such as the online watering schedule application that allows customers to enter their address and receive the landscape watering schedule based on their assigned watering days. Other interactive features include online rebate program applications, water-smart landscape photo galleries, a database of drought tolerant plants, and multimedia demonstrations for setting irrigation clocks and finding and fixing leaks. In addition, the SNWA produces a variety of outreach materials to educate consumers. These include:

- **Landscape Watering Schedule:** This schedule explains mandatory watering restrictions, illustrates which day(s) of the week each watering group may water, and offers practical tips for irrigating efficiently. The schedule has been included with customer water bills, published in SNWA newsletters and is available on member agency websites.
- **Water Smart Living:** This tri-annual publication is mailed to more than 700,000 single- and multi-family homes in Southern Nevada. It includes drought updates, information on conservation programs and incentives, and tips for landscape care and using water more efficiently outdoors.
- **Sample Landscape Designs:** The SNWA teamed with the American Society of Landscape Architects to produce six sample landscape designs. The designs include a variety of water-efficient plants to help homeowners convert their existing landscape or to install the right landscape from the start. The designs are available on snwa.com.
- **Water Smart Calendar:** This annual publication enables the SNWA to provide information on water-smart plants and conservation tips, and keeps that information in front of customers year-round. The twelve-month calendar is available free of charge in all customer service lobbies of SNWA member agencies and includes landscape watering restrictions and water-smart landscape inspiration.

- **Water Ways:** This monthly television program airs on local government cable channels and includes segments focusing on water conservation. The program airs daily.
- **Videos and Multimedia:** Instructional videos are available free of charge to customers, and snwa.com features how-to multimedia demonstrations to help people learn how to find and fix leaks, convert grass to a water-efficient landscape and set their irrigation clocks.
- **Interactive Website:** The award-winning snwa.com features a wealth of information, videos, multimedia demonstrations, other features to help Southern Nevadans save water. Customers can find their watering group by typing in their address, submit a water waste report, sign up for rebate programs, print coupons, and calculate water savings by converting from grass to a water-smart landscape. The website also includes a database of nearly 1,000 drought tolerant plants with photos and information to help water users plan landscape upgrades and installations.
- **Social Media:** Through Facebook and Twitter, SNWA is engaging with customers on a daily basis with conservation tips, weather-related landscaping information and how-to photos and videos.

The SNWA also participates in a variety of community events to educate customers on conservation issues, and SNWA and member agency representatives provide valuable landscape and irrigation expertise through classes taught at several venues in Southern Nevada.

Advertising Campaigns – A long-term commitment to water conservation includes an aggressive advertising campaign utilizing television, radio and print advertisements to reach target audiences. Community advertising campaigns challenge homeowners, businesses and community associations to take conservation to the next level by taking control of their irrigation clocks and replacing more grass with water-smart landscaping.

The SNWA also created a bicultural campaign, which includes television, radio, and print ads designed specifically for the Spanish-speaking audience. This allows the SNWA to effectively communicate the need for conservation as well as inform residents of the rebate programs available to them.

Youth Education Programs – The valley’s youth play an important role in SNWA outreach efforts and the SNWA is committed to educating the next generation on the importance of water resources and conservation. The SNWA has partnered with the Springs Preserve to develop a comprehensive education program known as H2O University for teachers in the Clark County School District with lessons and activities available online at H2OU.org. One innovative component of the program is the Youth Advisory Council, which allows select high-school students to pursue an interest in water-related issues and further develop leadership skills. Previous Youth Advisory Council projects include planting a demonstration garden at a local elementary school, helping to restore wetlands in the Las Vegas Wash and creating the first water-smart home with a local homebuilder.

In addition, the SNWA offers the Water Education Institute, a continuing education program for teachers. Elementary and secondary teachers attend 15 hours of training and earn a Professional Development Education credit. The Water Education Institute workshop includes field trips and takeaway lesson plans. More than 600 teachers have participated in the program.

Local and National Partnerships – The SNWA partners with the local private sector to promote conservation efforts, and it has teamed with the Environmental Protection Agency and other forward-thinking organizations to implement the annual WaterSmart Innovations Conference.

The SNWA hosts the annual WaterSmart Innovations Conference and Exposition held in Las Vegas each year. It is the largest urban-water efficiency conference in the world. Since inception in 2008, approximately 6,400 attendees from 45 states and 27 foreign nations have participated in the conference, which provides entrepreneurs with connections to some of the most innovative water agencies and market partners in the world. Each year, new water-efficient technologies are introduced at the conference and research results are shared with the conservation community.

Local partnerships include:

- **Water Conservation Coalition (WCC):** Established in 1995, the WCC is a group of local business and community leaders who help promote water-efficient practices in the Southern Nevada business community. WCC members speak to professional and civic organizations to explain the benefits of increased water-efficient practices, encourage other businesses within their industries to participate in SNWA incentive programs and identify water conservation projects within the community to organize and sponsor. In 2012, the WCC partnered with the Southern Nevada Regional Housing Authority to help low-income residents revitalize their neighborhoods with water-efficient landscapes. The WCC Safe Village project converted approximately 230,000 square feet of grass to desert landscaping, providing an estimated water savings of more than 12 million gallons per year. The WCC has participated in several large community projects such as this one, including a conservation upgrade project for the Boys Town Nevada campus and E.W. Griffith Elementary School.
- **Water Upon Request:** The Nevada Restaurant Association, WCC and SNWA partner with local restaurants, which agree to serve water only when patrons request it. This program saves participating restaurants water, time and money by eliminating unconsumed glasses of water. For every glass of water not served, as much as 1.5 to more than 3 gallons of water is saved. There are currently more than 250 restaurants participating in the program.
- **Water Smart Contractor:** The key to preventing many water waste problems is efficient landscape design. The SNWA provides a course in water-efficient landscape and irrigation design and installation for licensed landscape contractors. Contractors who complete the course and pass an exam become authorized as Water Smart Contractors. Classes are offered in both English and Spanish. More than 75 companies providing local service are participating in the program.
- **Water Smart Home:** The SNWA has partnered with the Southern Nevada Home Builders Association to develop a program that certifies new homes as water smart. Based on research conducted, these homes save over 90,000 gallons annually versus traditional residential development. This is the nation's largest program for water efficiency in new homes, with more than 10,000 water smart homes constructed so far.

In addition, the SNWA consistently engages with the Environmental Protection Agency (EPA) in developing new national standards for WaterSense, a partnership program that provides information on products to save water and protect the environment. The SNWA's Water Smart Home program is the principal model for the WaterSense New Homes Program. In 2006, the

SNWA was the first water agency to receive the EPA's Water Efficiency Leadership Award for its comprehensive suite of progressive water efficiency programs.

- **Water Smart Car Wash:** This program encourages residents to use commercial car wash facilities instead of washing their vehicles at home by offering residents instant coupons on snwa.com for dozens of valley car washes. Water Smart Car Washes recover all of their wastewater for treatment and reuse. Water used at these facilities is either reused on site, or treated and returned to Lake Mead for return-flow credits.
- **Linen Exchange:** Nearly two dozen resorts and other leading properties participate in this voluntary program through which linens are changed only on the third day of a guest's stay, unless otherwise requested. The average savings is about 50 gallons per room each day.

RESEARCH

In addition to existing demand-management tools, ongoing research enables the SNWA to make informed decisions regarding water policy and programs. The SNWA recognizes the value and necessity for research and innovation in water conservation and has developed a number of research initiatives to foster cutting edge techniques and technologies. These research initiatives are expected to continue during the five-year planning horizon.

The following section outlines present research initiatives and their impacts to the community's water conservation efforts. A listing of completed research initiatives is included in **Appendix D**.

Current Research Initiatives

Water Use Calculator: SNWA has collected significant research on customers' usage, particularly in the largest using sector, single-family homes. Based upon a brief customer survey, this interactive web tool will estimate appropriate water use and illustrates the potential of additional conservation measures.

Innovative Conservation Program: The SNWA has partnered with Metropolitan Water District (MWD) of Southern California to sponsor the Innovative Conservation Program. This program encourages developments of new water efficiency technologies by providing grants of up to \$50,000 for research and demonstration projects. MWD, SNWA, the United States Bureau of Reclamation, and the Central Arizona Project have combined resources to provide a total of \$450,000 for such projects.

Golf Course Play Areas Study: Southern Nevada's golf industry has dramatically reduced water demand by limiting the use of turf in areas where golfers rarely play. In this study SNWA is providing golfers with GPS logging devices to identify where they actually travel on the golf course using a methodology developed by the United States Golf Association (USGA). The data provides detailed information to help distinguish functional and nonfunctional turf and aid in finding future areas for conversions.

Evaporative Suppressant Study: Open bodies of water lose significant water due to evaporation. Products are available to suppress evaporation by forming a one-molecule evaporation suppressing layer atop a water surface, called a monolayer. In this research, The Lakes Association, a vendor of a monolayer evaporative suppressant product, and SNWA have conducted research on suppression of evaporative losses at Lake Sahara with use of a suppressant. In addition to providing analyses of effectiveness, SNWA is providing water quality monitoring assistance for this research project.

CONCLUSION

The SNWA has one of the most dynamic and comprehensive water conservation programs in the nation. While the general strategies employed will continue to yield results, the SNWA constantly pursues refinement and innovation.

The 2009-2013 planning period witnessed significant conservation results that helped safeguard Southern Nevada's resources. Over the past five years, the community has lowered its GPCD from 248 in 2008 to 219 in 2012. Several factors may have contributed to this reduction in water use, including the impacts of a slow economy, a reduction in population and participation in SNWA conservation programs. Southern Nevada has successfully achieved conservation goals in the past, and the SNWA will continue to monitor and track the community's progress in achieving 199 GPCD by 2035.

To ensure Southern Nevada continues to move toward its 2035 conservation goal, the SNWA supports continuing cycles of program planning, implementation and evaluation. This on-going process allows the agency to succeed in meeting community needs under a diverse set of circumstances. These efforts are expected to yield new opportunities that may result in further improvement of this five-year plan.

As programs such as the Water Smart Landscapes Rebate peak in customer response, the SNWA will continue to consider progressive programs to ensure a strong community commitment to conservation. In addition, when the Integrated Resource Planning Advisory Committee completes its recommendations regarding water resources and conservation initiatives, the SNWA will review and integrate as appropriate recommendations into its conservation programs and long-term resource planning.

Appendix A Conservation Achievements

The SNWA has achieved substantial conservation including the following noteworthy accomplishments since inception of its major initiatives:

- The Water Smart Landscape (WSL) Rebate Program has helped the community to upgrade more than 167 million square feet of lawn to water-efficient landscaping, saving more than 68 billion gallons of water since its inception. SNWA has provided more than 189 million dollars in rebates to customers to accomplish this. In terms of accomplishments, the WSL program is the largest water efficient landscaping program in the county.
- More than 32,000 coupons for more than 1.7 million dollars have been distributed to participants in the Pool Cover Instant Rebate Coupon Program, producing estimated savings of more than 2 billion gallons of water.
- Participating businesses in the Water Efficient Technologies (WET) Program have saved more than 6.5 billion gallons of water and received over 1.9 million dollars in rebates for their efforts.
- The SNWA's WaterSmart Homes Program is the most successful water efficiency home program in the country. More than 10,000 new Water Smart homes have been built producing an estimated savings of more than 750 million gallons annually compared to traditional residential developments.
- The Water Smart Innovations Conference and Exhibition (watersmartinnovations.com) has become the world's largest water conservation focused conference. In 2013 it drew nearly 900 participants from 35 states and 11 nations and featured over 100 professional sessions and 70 exhibitors.
- SNWA achieved per person demand reductions at a rate higher than anticipated. The projected weather adjusted 2012 GPCD in the 2009 Conservation Plan was 241. The achieved GPCD was 219. While many factors contributed to the reduction, it is clear that SNWA has made significant progress towards achieving the plan goal of 199 GPCD by 2035. Figure 2 and Appendix C demonstrate SNWA's successes in reducing per capita demand.

Appendix B
2014-2018 Conservation Plan Measures,
Estimated Annual Savings and Implementation
Schedule

2014 - 2018

	Water Pricing Influence Coefficient	Water Pricing Influence GPCD	Education & Ethic Influence Coefficient	Education & Ethic Influence GPCD	Other Influence Coefficient	Other Influence GPCD	TOTAL REDUCTION (GPCD)
Water Smart Landscapes Program	40%	0.152	40%	0.152	20%	0.076	0.38
Water Efficient Technologies Program	40%	0.064	20%	0.032	40%	0.064	0.16
Coupon Programs	40%	0.016	30%	0.012	30%	0.012	0.04
Adoption of improved equipment, appliances and fixtures	25%	0.1875	25%	0.1875	50%	0.375	0.75
Landscape Development Codes	0%	0	0%	0	100%	0.35	0.35
Other	40%	0.068	40%	0.068	20%	0.034	0.17
TOTAL	N/A	0.49	N/A	0.45	N/A	0.91	1.85

Note:

Calculations assume a linear annual decrease in total GPCD consistent with achieving a 199 GPCD by 2035 conservation goal. Actual savings may be higher or lower in a given year.

As discussed on pages 9-10, these figures represent estimated savings based on SNWA demand-management measures. Water Pricing and Education & Ethic achievements are embedded in the total GPCD reduction. For the purposes of this plan, those estimated contributions have been outlined in the table above.

Appendix C
Historical and Projected SNWA Total Water Use
GPCD Estimates

YEAR	Estimated and Projected SNWA Population	SNWA Total Usage (acre-feet)	Historical SNWA GPCD	Projected SNWA GPCD
1989	708,704	276,407	348	
1990	750,621	291,760	347	
1991	790,099	304,435	344	
1992	839,295	318,650	339	
1993	886,207	334,282	337	
1994	954,106	352,107	329	
1995	1,002,411	367,244	327	
1996	1,075,331	395,908	329	
1997	1,123,316	404,626	322	
1998	1,193,489	423,182	317	
1999	1,265,475	445,853	315	
2000	1,364,248	481,798	315	
2001	1,439,973	513,580	318	
2002	1,517,885	533,154	314	
2003	1,577,737	519,376	294	
2004	1,679,845	515,025	274	
2005	1,747,536	526,995	269	
2006	1,846,561	546,516	264	
2007	1,930,414	550,955	255	
2008	1,922,069	534,776	248	
2009	1,938,407	520,624	240	248
2010	1,956,915	488,537	223	246
2011	1,901,945	472,329	222	244
2012	1,945,277	476,672	219	243
2013				241
2014				239
2015				237
2016				235
2017				233
2018				231

Note:

The SNWA considers weather adjusted water use in tracking water conservation and in long-term planning to account for variation in weather among years. Weather-adjusted GPCD for 2013 will be reported at a later date upon completion of 2013 data collection and verification process. Projected 2009-2018 SNWA GPCD corresponds with the SNWA's 2009 Water Resource Plan.

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

May 15, 2014

Subject: Update on Water Resources	Director's Backup
Petitioner: John J. Entsminger, General Manager	
Recommendations: That the Board of Directors receive an update from staff on water resources including, but not limited to, drought conditions in the Colorado River Basin, the results of the implementation of the Authority's Water Resource and Conservation Plans, activities on the Colorado River, the development of in-state water resources, and the status of the third intake project.	

Fiscal Impact:

None by approval of the above recommendation.

Background:

The Colorado River Basin has been experiencing a severe drought that began in 2000. The severity of these conditions has become increasingly evident in lake levels along the lower Colorado River Basin, where major reservoirs such as Lake Powell and Lake Mead are experiencing some of the lowest water levels in recent memory.

The nature of the drought in the Colorado River Basin has direct effects on water resources and future planning. The drought has prompted communities to launch major conservation initiatives to reduce water use among citizens and businesses, and has resulted in the development and implementation of the Authority's Water Resource and Conservation Plans.

In May 2005, the Board of Directors approved a project for design and construction of a third intake in Lake Mead with the primary objective of protecting southern Nevada's water supply from significant loss of system capacity resulting from a continuing decline in lake elevation. The project design and environmental approvals were completed by 2007. Construction began on the project in March 2008.

This agenda item provides for an update from staff on the drought, the results of the implementation of the Authority's Water Resource and Conservation Plans, activities on the Colorado River, the development of in-state water resources, and the status of the third intake project.

The office of the General Counsel has reviewed and approved this agenda item.

Respectfully submitted:



John J. Entsminger, General Manager
JJE:PDS:GJW:td

AGENDA ITEM #

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