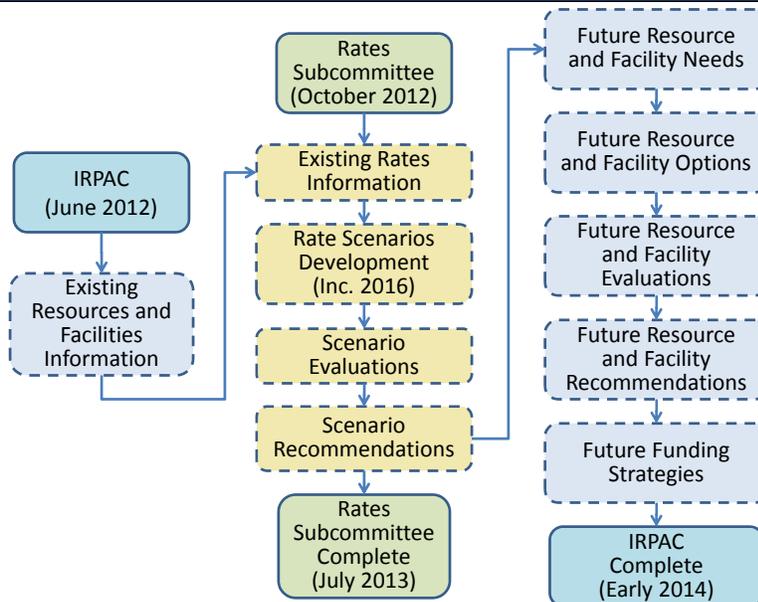


Ground Rules

1. **Attend and participate** in all meetings.
2. **Be prepared** to discuss the issues on the agenda, as well as information distributed by staff in advance of meetings.
3. **Be willing** to explore goals, constraints and multiple options.
4. **Listen** attentively and with an open mind.
5. **Respect** the ideas and perspectives of others. Give everyone a chance to speak. Avoid side discussions. Don't interrupt.
6. **Maintain focus** on the topic currently under discussion. Avoid repeating issues that have already been raised or recorded.
7. Achieve **consensus**.

Integrated IRPAC/Rates Subcommittee Process



Integrated Resource Planning Advisory Committee

October 24, 2012



Financial Structure Overview



Agenda

This presentation is intended as the first in a two-part series, intended to discuss the unique roles of the wholesale and retail water agencies.

Regional Water System

The Southern Nevada Water Authority is the *regional* water provider in Southern Nevada.

It treats and delivers wholesale Colorado River water to our customers, which are:

- Boulder City
- City of North Las Vegas
- City of Henderson
- Las Vegas Valley Water District
- Nellis Air Force Base

The SNWA is a not-for-profit, public agency – revenues are collected to fund operations and capital expenses.

The SNWA does not directly serve residents or businesses.

Regional Water System

The SNWA manages water treatment, deliveries and processes regionally, for the benefit of the entire Southern Nevada water system.

Local purveyors manage water treatment, deliveries and processes on a *local* scale, for the benefit of their retail customers.

Regional Responsibilities

The SNWA is responsible for managing water systems and implementing programs for Southern Nevada as a whole:



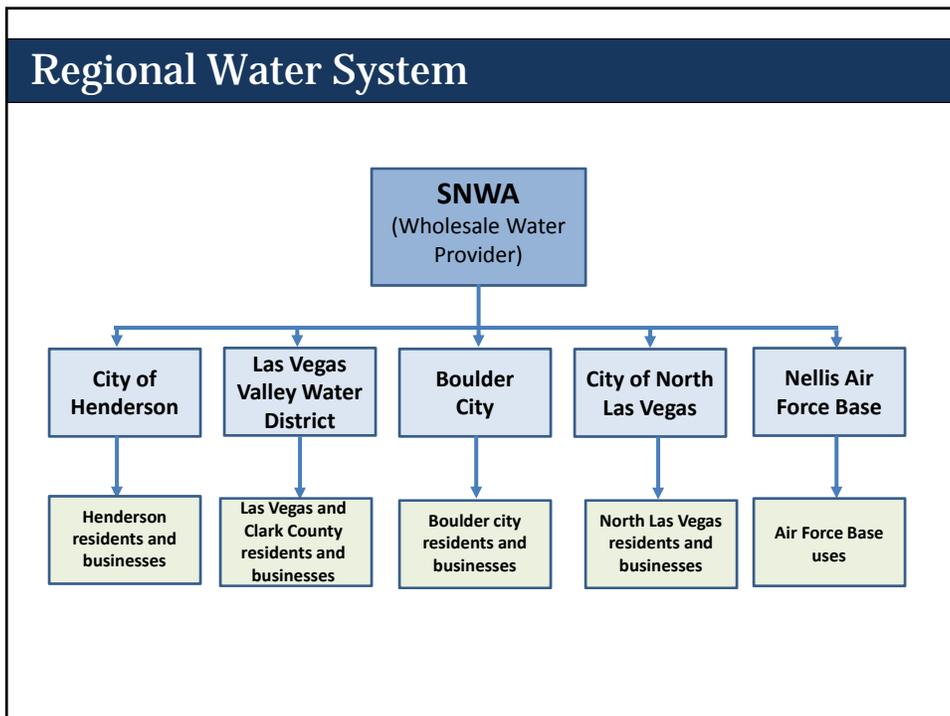
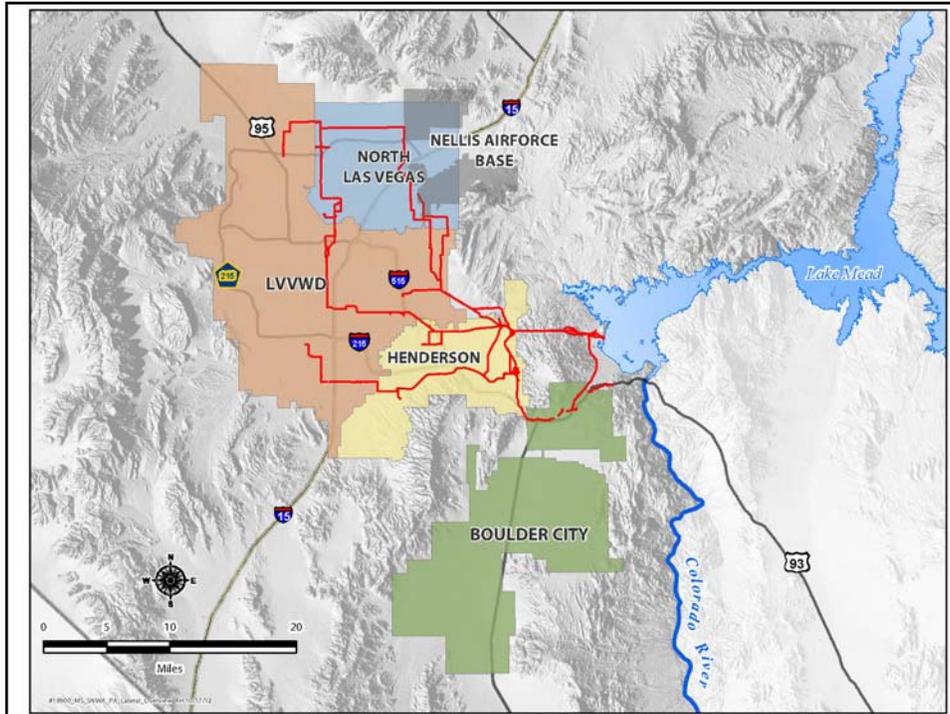
- Manage existing resources
- Develop and secure new supplies
- Protect existing water rights
- Protect and manage environmental resources
- Secure power supplies
- Develop regional conservation programs
- Construct regional facilities
- Enter into state and national resource-sharing agreements
- Asset management
- Work with federal partners to develop treatment guidelines

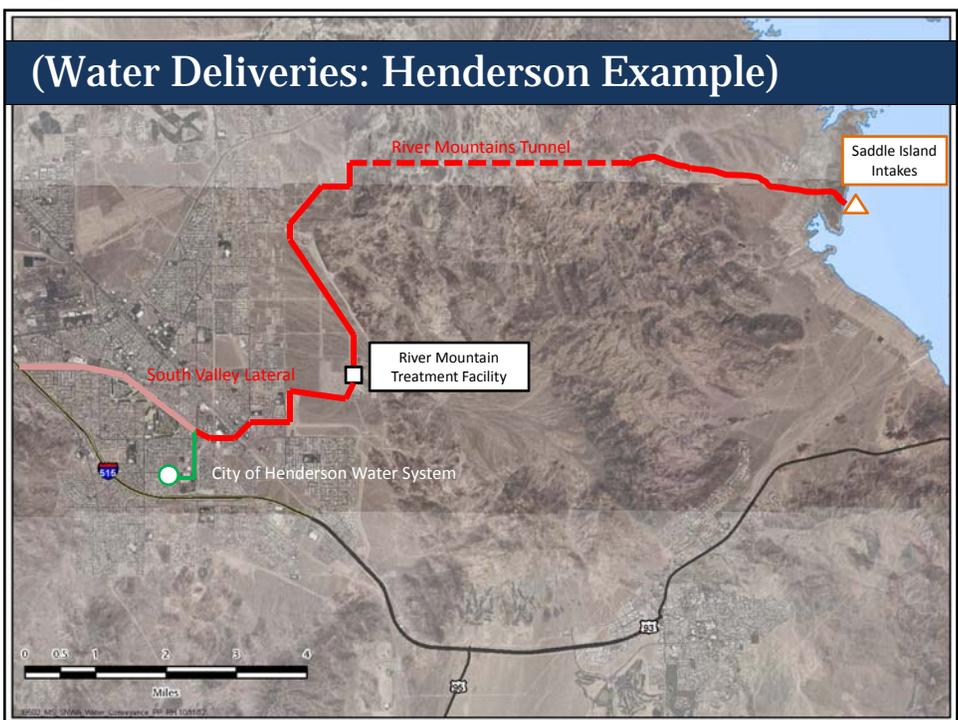
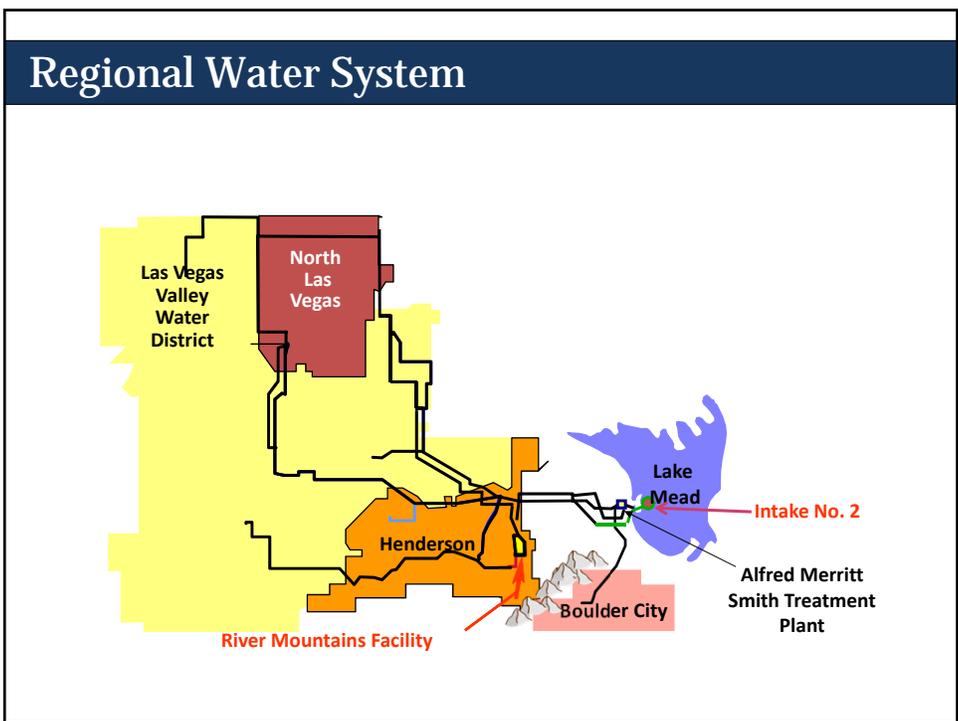
Local Responsibilities

Municipal water purveyors work directly with residents and businesses to provide water service.



- Maintain thousands of customer accounts
- Delivers water to homes and businesses
- Turn on/off service
- Provide customer service
- Enforce water waste ordinances
- Install and read water meters
- Review construction plans for future development within jurisdiction
- Manage individual groundwater rights
- Manage power costs
- Local water and wastewater treatment
- Meet water quality regulations





Regional Water System

Between 1995 and 2010, the SNWA completed a \$2.4 billion Capital Improvements Program, which added major components to the regional water system.

Regional Water System

The regional system includes the facilities inherited from the Colorado River Commission and Bureau of Reclamation.



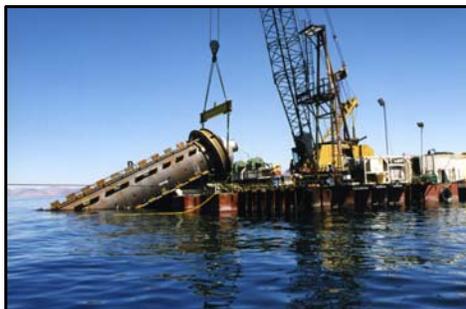
Lake Mead Intake 1
Completed: 1971
Approximate Construction Cost: \$81 million
plus another \$40 million in expansion and upgrades



**Alfred Merritt Smith
Water Treatment Facility**
Phase 1 Completed: 1971
The SNWA has invested more than \$200 million
in expansion and upgrades

Regional Water System

Two additional intakes were needed.

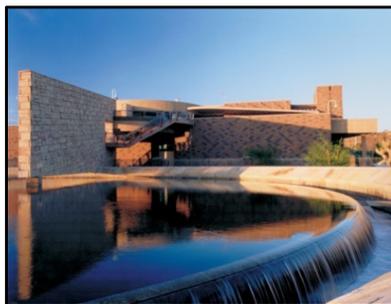


Lake Mead Intake 2
Completed: 2002
More than \$400 million spent for design,
construction and expansion



Lake Mead Intake 3
Expected Completion: 2014
Total Budgeted Cost: \$816 million

Regional Water System



River Mountains Water Treatment Facility
Completed: 2002
More than \$450 million spent in design,
construction and expansion

**An additional treatment facility
was required to meet production
demands.**

Regional Water System

Water Quality Laboratory



Water Quality Laboratory / Applied Research and Development Center
Completed in 2007
Cost: \$42 million

Regional Water System

Pumping Stations and Reservoirs



28 Pumping Stations
Approximate Cost: \$30 million each
Shown: Decatur Pump Station



38 Reservoirs
Approximate Cost: \$25 million each
Shown: Horizon Ridge Reservoir Construction

Regional Water System



Laterals

- Approximately 163 miles of lateral pipeline in Southern Nevada
- Lateral pipeline ranges between 16 inches and 12 feet in diameter

East Valley Lateral: \$111 million

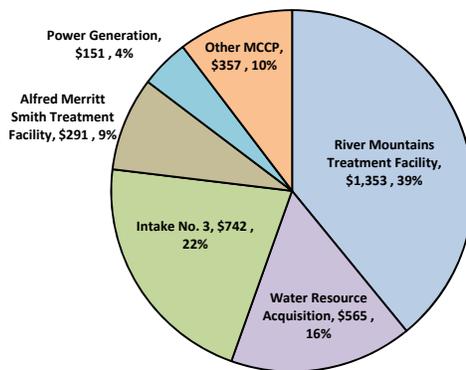
South Valley Lateral: \$160 million

West Valley Lateral: \$40 million

North Valley Lateral: \$91 million

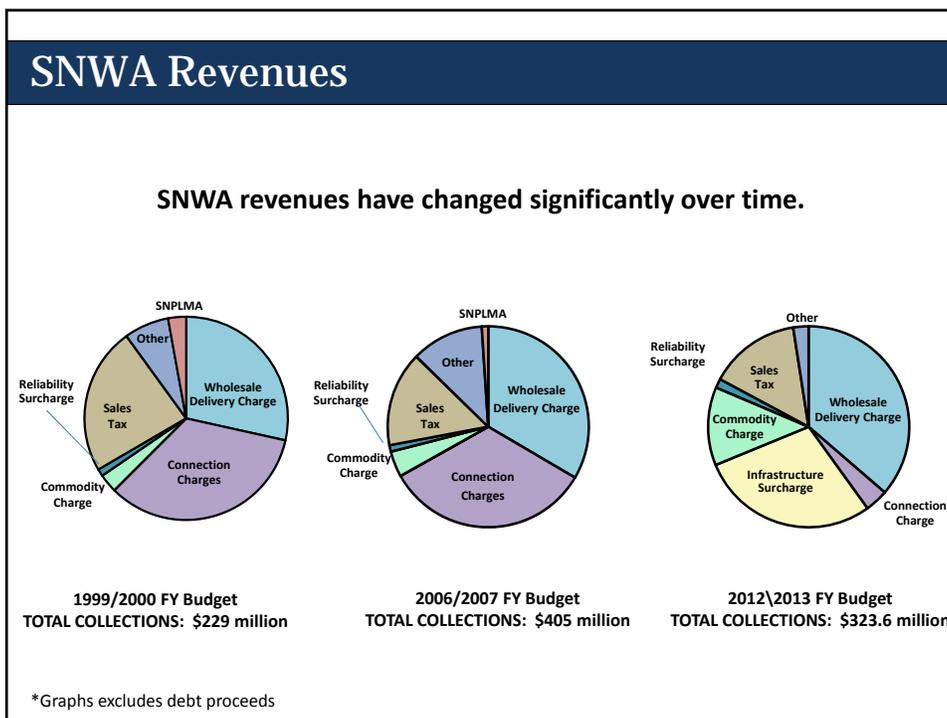
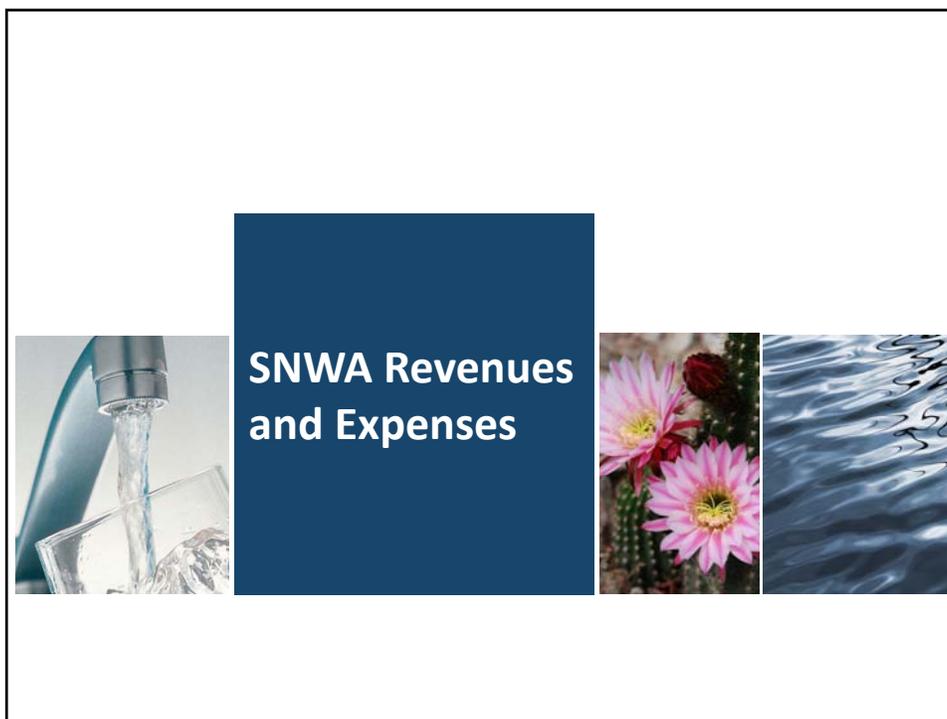
SNWA Debt

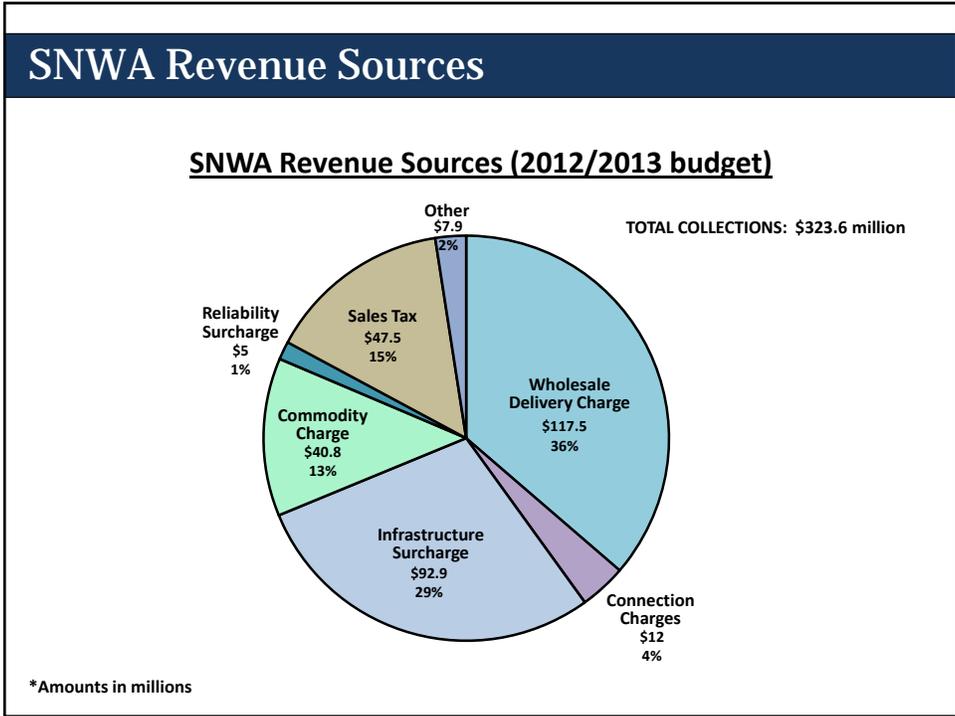
To complete the infrastructure needed for the community, the SNWA incurred debt.



Total Debt: \$3,459,000,000

Amount in millions





SNWA Revenue Sources

SNWA Sub-funds

Las Vegas Wash	Groundwater Management	Wholesale Delivery Operations	Major Construction and Capital	New Expansion Debt Service
----------------	------------------------	-------------------------------	--------------------------------	----------------------------

The SNWA maintains a complex funding structure to permit flexibility among the SNWA’s member agencies to fund only the infrastructure that benefits that local area.

SNWA Sub-funds

Las Vegas Wash Sub-fund

Las Vegas Wash	Groundwater Management	Wholesale Delivery Operations	Major Construction and Capital	New Expansion Debt Service
----------------	------------------------	-------------------------------	--------------------------------	----------------------------

ABOUT:

The Las Vegas Wash sub-fund collects revenue and funds projects exclusively for the Las Vegas Wash.

SOURCES OF FUNDS:

- Sales Tax
- LV Wash Program fees
- Grants, etc.

USES OF FUNDS:

- LV Wash projects

SNWA Sub-funds

Groundwater Management Program

Las Vegas Wash	Groundwater Management	Wholesale Delivery Operations	Major Construction and Capital	New Expansion Debt Service
----------------	------------------------	-------------------------------	--------------------------------	----------------------------

ABOUT:

The Groundwater Management Program sub-fund collects revenue from Las Vegas Valley well users to fund Groundwater Management Program activities.

SOURCES OF FUNDS:

- Groundwater Management Program Fees (paid by well users)

USES OF FUNDS:

- Groundwater Management Program expenses

SNWA Sub-funds

Wholesale Delivery Operations



ABOUT:

The Wholesale Delivery Operations sub-fund funds SNWA operations (labor, materials, treatment, chemicals, etc.).

SOURCES OF FUNDS:

- Wholesale Delivery Charges

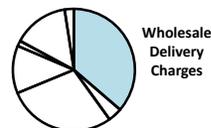
USES OF FUNDS:

- Primarily funds day-to-day operations

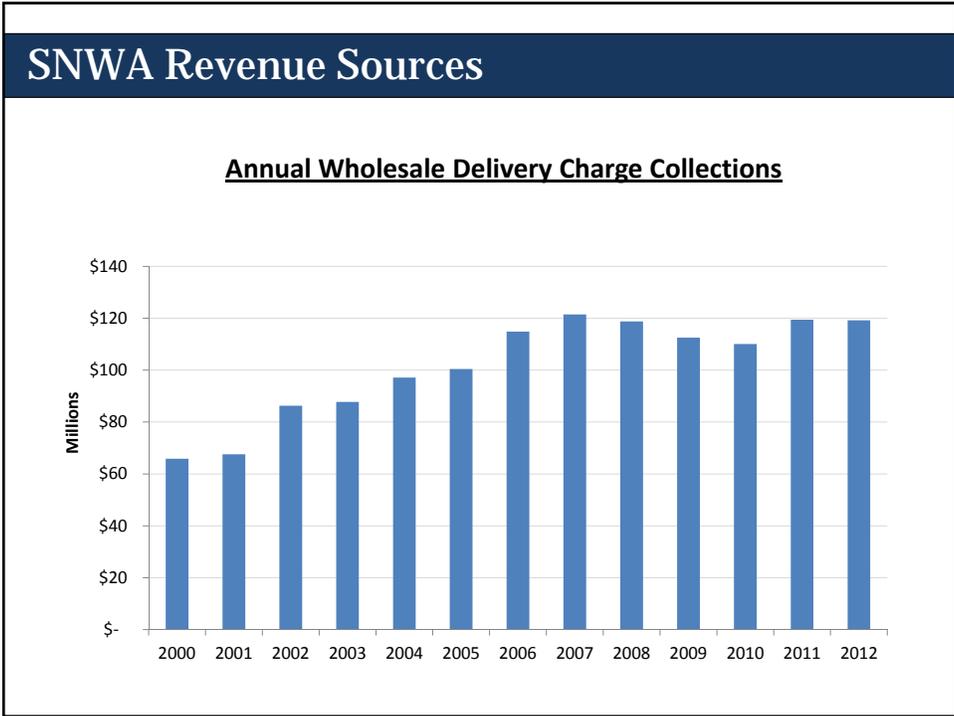
SNWA Revenue Sources

Wholesale Delivery Charge

Charge for Colorado River water that is delivered by the SNWA to its purveyor members.



- Enacted in 1995
- Primarily funds operating costs
- Current charge: \$293 per acre-foot of treated water (\$.0009 per gallon)
- Paid for by customers through local water rates



SNWA Revenue Sources

Boulder City

The SNWA maintains two key agreements with Boulder City that provide for the funding of facilities that benefits their community:

- Intake No. 2
- Intake No. 3

SNWA Sub-funds

Major Construction and Capital Plan

Las Vegas Wash	Groundwater Management	Wholesale Delivery Operations	Major Construction and Capital Plan	New Expansion Debt Service
----------------	------------------------	-------------------------------	--	----------------------------

ABOUT:

The Major Construction and Capital Plan sub-fund provides funding for the projects outlined in the SNWA's MCCP.

SOURCES OF FUNDS:

- Debt issuance proceeds

USES OF FUNDS:

- Building SNWA infrastructure
- Securing water resources
- Securing power resources

SNWA Sub-funds

New Expansion Debt Service

Las Vegas Wash	Groundwater Management	Wholesale Delivery Operations	Major Construction and Capital Plan	New Expansion Debt Service
----------------	------------------------	-------------------------------	-------------------------------------	-----------------------------------

ABOUT:

The New Expansion Debt Service sub-fund maintains SNWA's debt.

SOURCES OF FUNDS:

- SNPLMA (when available)
- Connection Charges
- Commodity Charges
- Reliability Charges
- Sales Tax
- Infrastructure Surcharges

USES OF FUNDS:

- Paying off debt
- Portion of administrative costs

SNWA Revenue Sources

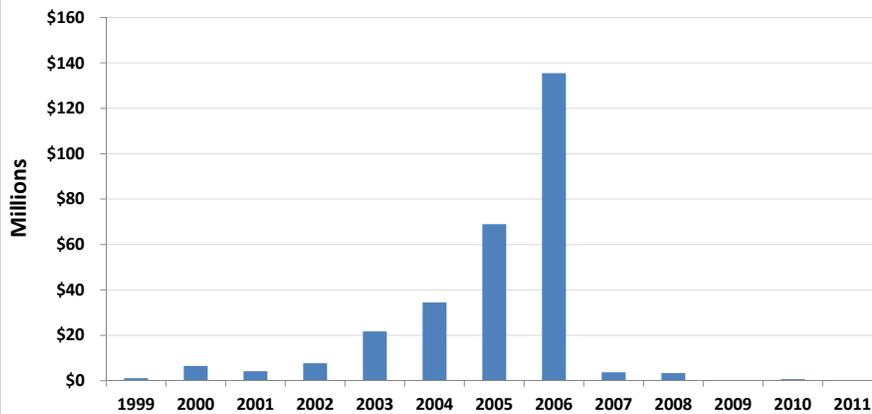
Southern Nevada Public Lands Management Act (SNPLMA)

The SNWA receives 10 percent of proceeds from all federal land sales in Southern Nevada.

- Volatile funding source
- Not recognized as a revenue source in budget

SNWA Revenue Sources

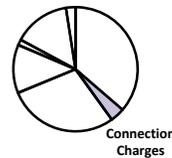
Annual SNPLMA Collections



SNWA Revenue Sources

Connection Charge

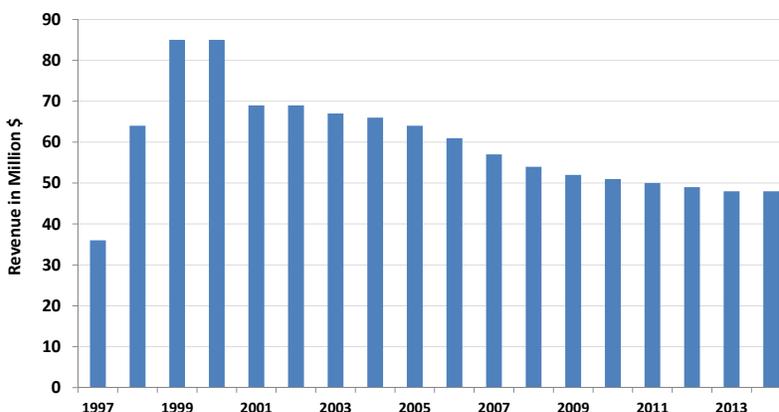
Charge assessed for new connections to the regional water system

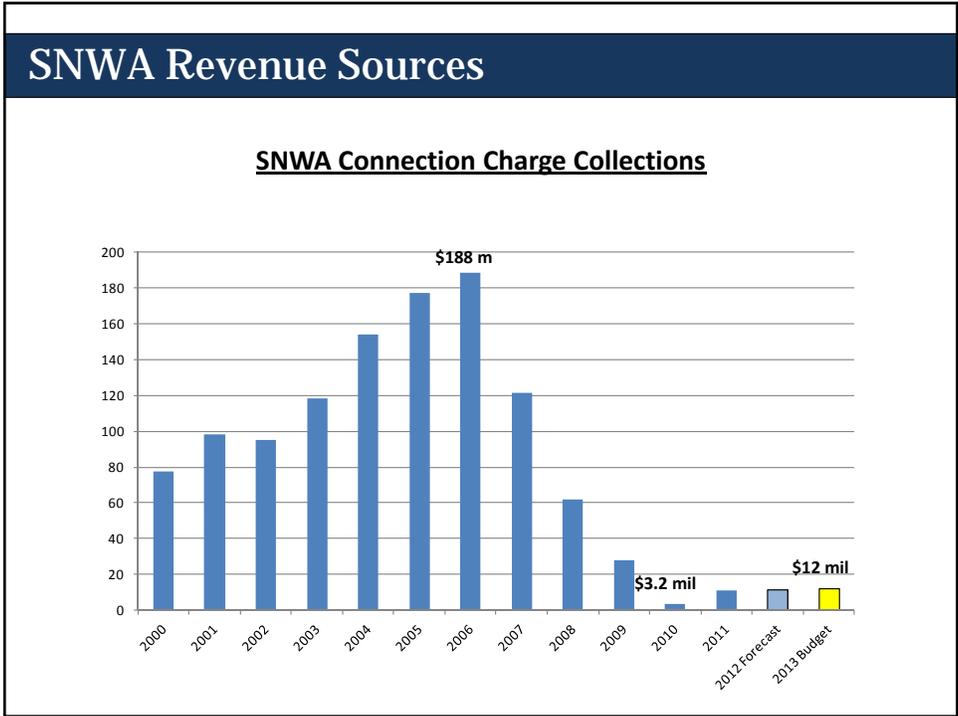


- Implemented in 1995, IRPAC recommendation to fund capital projects.
- Charge determined by meter size, land use and customer type.
- The 1994 IRPAC expected this charge to fund 57% of capital expenses.
- Residential fees went from \$1,000 (1995) to a current charge of \$4,870 per connection, charges increase with meter size.

SNWA Revenue Sources

Modeled Connection Charge Revenue
(1997 Model)





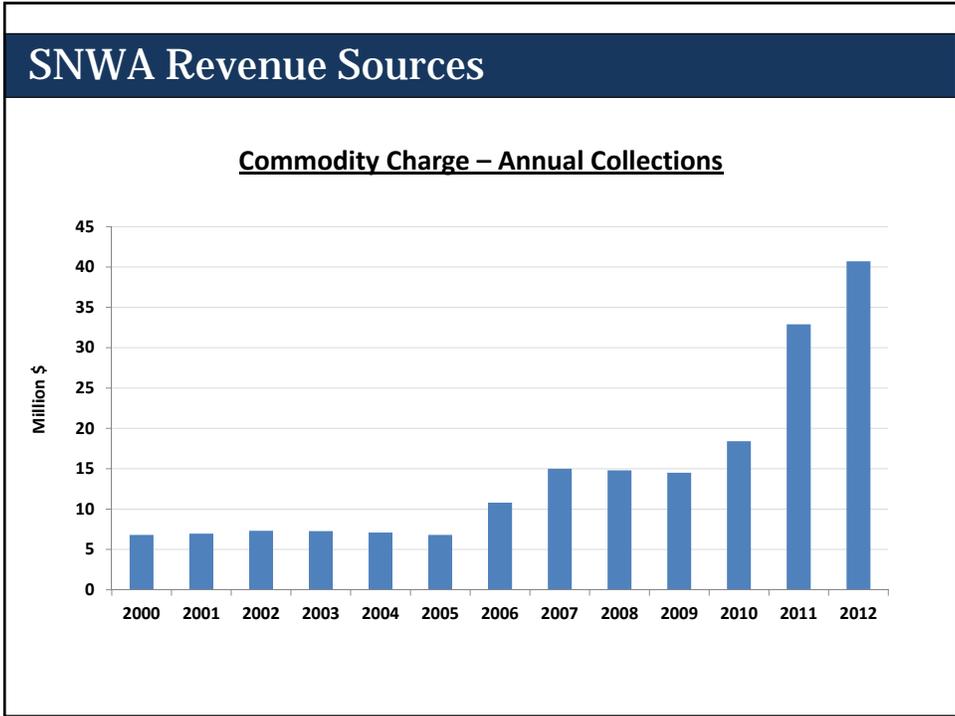
SNWA Revenue Sources

Commodity Charge

Consumptive charge

- Implemented in 1995, IRPAC Recommendation to help fund capital projects
- Rate is the same, regardless of customer class
- Collected by purveyor members, passed through to SNWA
- Uniformly assessed \$0.30 per 1,000 gallons of use
- Increased only four times since inception:
5¢ (1995); 10¢ (2006); 20¢ (2010); 30¢ (2011)

Commodity Charges



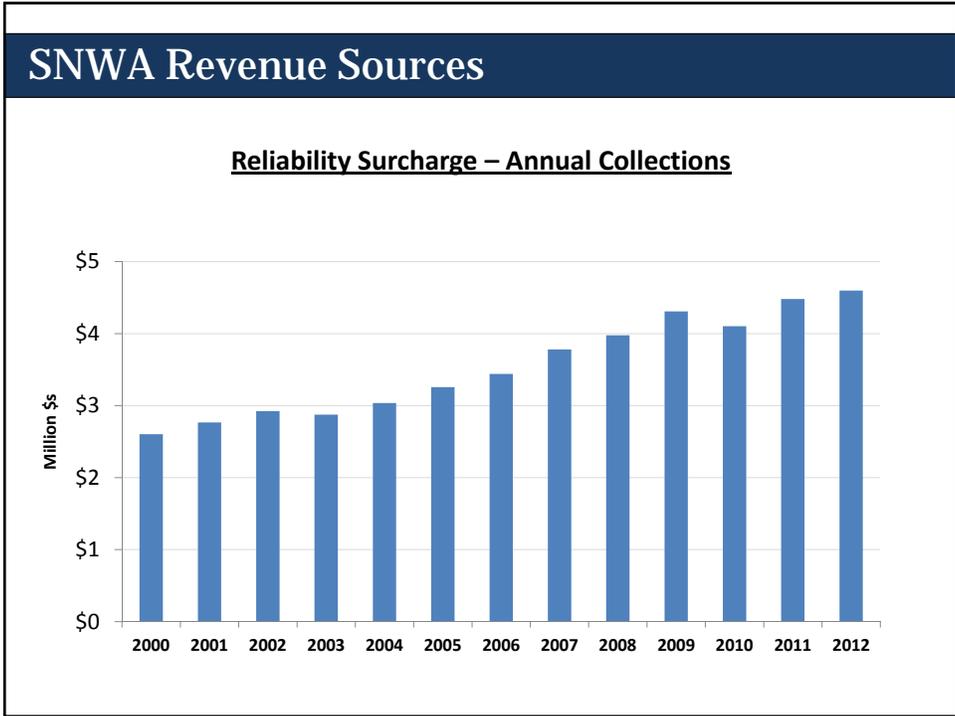
SNWA Revenue Sources

Reliability Surcharge

Surcharge based on the total water bill

- Collected by the purveyors, passed through to the SNWA
- Funds capital projects
- Implemented in 1997, rate has remained the same since that time.
- Uniformly assessed at the following rates, based on customer classes:
 - 0.25% - residential (Statutory Limit: 0.25%)
 - 2.5% - commercial (Statutory Limit: 5%)

Reliability Surcharge



SNWA Revenue Sources

Sales Tax

A quarter-penny of taxable sales in Clark County is designated for water and wastewater improvements.

- The 1994 IRPAC recommended the SNWA pursue a portion of sales tax proceeds to fund capital improvements.
- In 1998, voters overwhelmingly supported (72%) a ballot initiative to increase the sales tax to provide for water and wastewater improvements.
- The Clark County Water and Wastewater Infrastructure Sales Tax went into effect in April 1999. This increased sales tax in Clark County from 7 percent to 7.25 percent.

Sales Tax

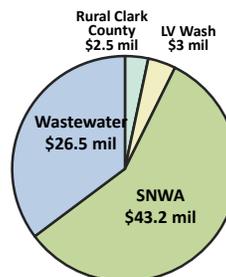
SNWA Revenue Sources

Sales Tax – Sunset Clause

- The tax is subject to sunset in 2025 or when \$2.3 billion is collected, whichever is first.
- The tax’s sunset clause could have a negative effect on SNWA’s bond rating.
 - The revenue is not considered long-term or reliable.
 - The loss of this revenue source will require other funding strategies to meet expenses.
- IWPAC (2004) recommended seeking legislation to lift the sunset clause.

SNWA Revenue Sources

- The tax is shared among the SNWA, rural counties, the Las Vegas Wash and wastewater projects in Southern Nevada:
 - 3.3% - Rural areas in county
 - 4.0% - Held in reserve to fund LV Wash capital improvements
 - 92.7% - Available to fund water and wastewater capital improvements in Clark County



SNWA Revenue Sources

Sales Tax - SB432

Prior to the 2011 Nevada State Legislature, Clark County was the only Nevada county with a state-imposed cap on its infrastructure sales tax.

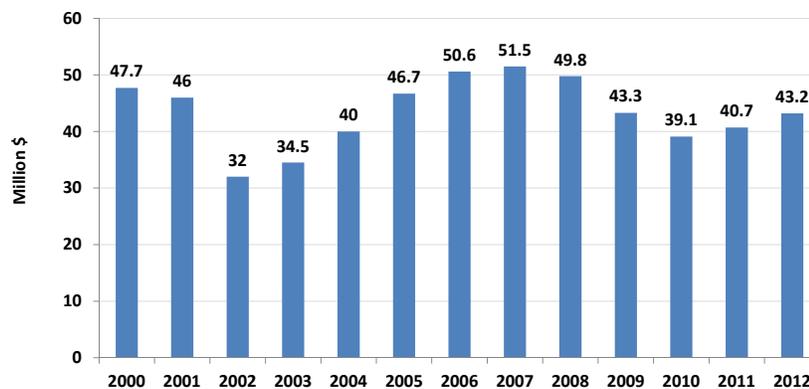
- SB432 permitted the removal of the sunset clause, but requires a 2/3 majority vote by the Board of County Commissioners.
- To date, the County Commission has not addressed removing the cap.

SB432 also permits 40-year financing on large-scale water infrastructure bonds.

Passage of the bill allows the SNWA greater flexibility in issuing bonds and spreading payments.

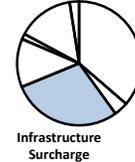
SNWA Revenue Sources

Annual Sales Tax Collections (SNWA)



SNWA Revenue Sources

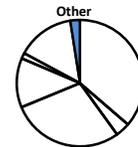
Infrastructure Surcharge



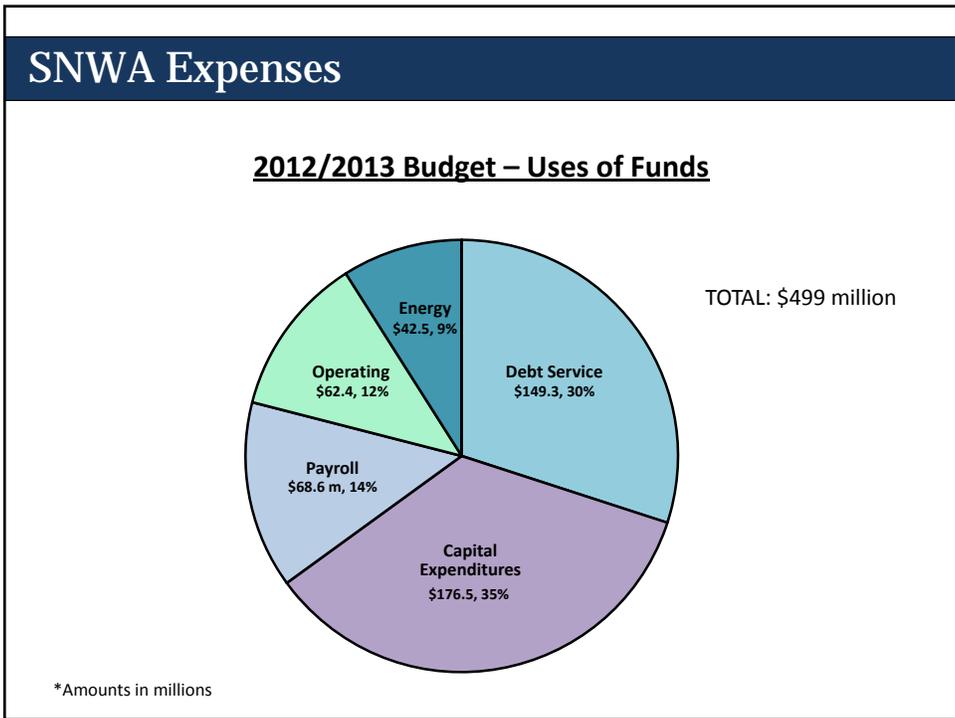
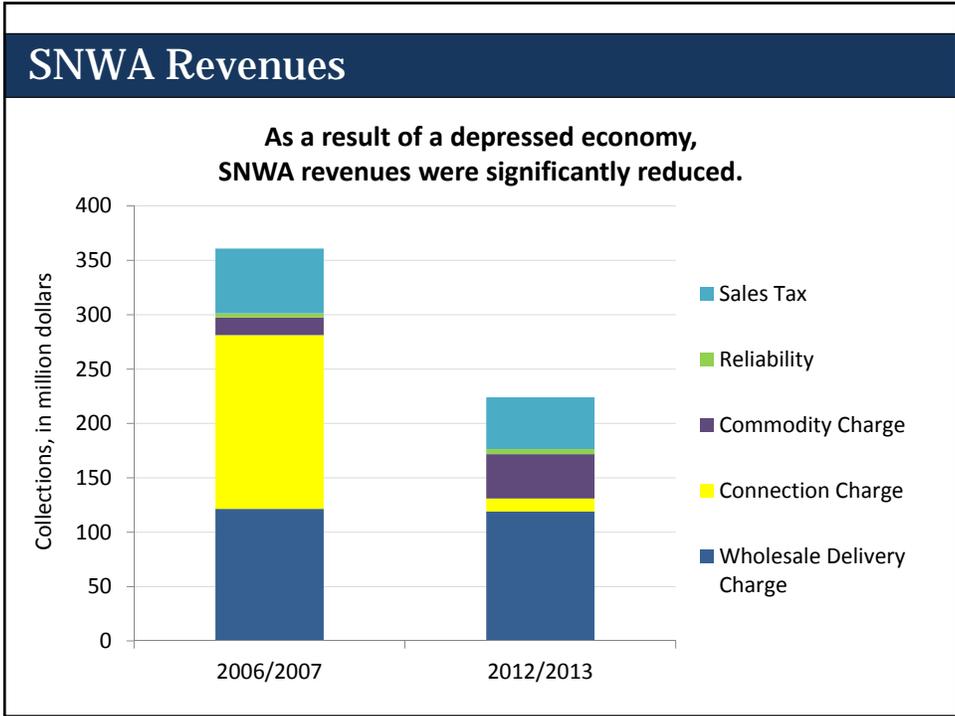
- Approved by the SNWA Board in February 2012
- Funds capital projects
- Needed to help replace lost revenues due to significant declines of Connection Charges
- Collected by purveyors, passed through to SNWA
- Uniformly assessed based on meter size and customer class
- In July 2012, the SNWA Board approved a 50 percent credit to commercial fire-lines in an effort to reduce the impacts of the charge for non-profits and small businesses.

SNWA Revenue Sources

Other Revenue Sources



- Interest Income
- Ranch income
- Grant Proceeds
- Recharge sales



SNWA Expenses

Debt Service

Pays for SNWA projects built since 1996 and capital items acquired from the Colorado River Commission.

- River Mountains Water Treatment Plant
- Alfred Merritt Smith Treatment Plant
- Water resource acquisitions
- Intake No. 3
- Power generation (Silverhawk)
- Other capital projects including pumping stations, reservoirs major laterals and Intake No. 2

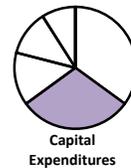


SNWA Expenses

Capital Expenditures

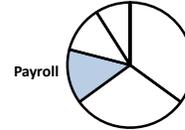
(Expended during fiscal year)

- Intake No. 3
- Upgrades, repairs and replacement of existing facilities
- Las Vegas Wash activities
- Hydrologic studies, preliminary facility planning and environmental analysis for the Groundwater Project
- Desalination studies
- Water Smart Landscaping rebates



SNWA Expenses

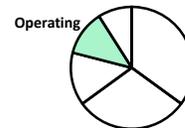
Payroll



- **The SNWA has no employees of its own.**
(The Las Vegas Valley Water District serves as the SNWA's operator)
- **Some LVVWD employees charge a percentage of time to the SNWA.**
- **Many departments such as Finance, Human Resources and Information Technology are shared among the two organizations – providing for improved economies of scale.**

SNWA Expenses

Operating



Operating costs include:

- **Water chemicals**
- **Data processing hardware and software**
- **Vehicles, water treatment equipment**
- **Conservation rebate programs (irrigation clocks, swimming pool covers, car washes)**
- **Northern resource property expenses**
- **Materials, parts and supplies**
- **Research and studies**
- **Security**

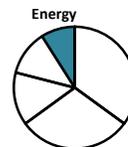
SNWA Expenses

Energy

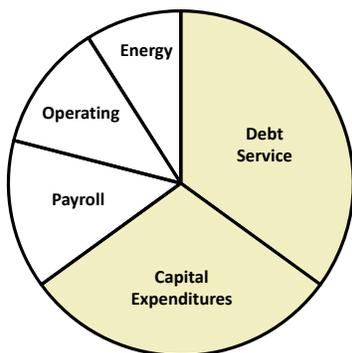
The SNWA's Energy Management department maintains a five-year portfolio of future energy contracts.

Their role is procuring resources to reduce overall costs and maintaining a sustainable resource.

As a result of the department's efforts, the SNWA has saved more than \$56 million.



Uses of Funds



Capital costs and debt service make up more than two-thirds of the SNWA's funding obligations.

SNWA Response to Economic Downturn

The SNWA was not immune to impacts from a depressed economy.

Like other businesses across Southern Nevada, the SNWA made significant cuts in expenditures, deferred projects, and modified funding strategies to balance the budget and reduce impacts to rate payers.

SNWA Response to Economic Downturn

The SNWA saved more than \$56 million in cuts and deferrals of operating costs.

- **Reduced workforce expenditures (\$26 million)**
- **Reduced staff by more than 225 employees**
- **Offered an early retirement option**
- **Implemented a voluntary furlough program**

SNWA Response to Economic Downturn

The SNWA saved more than \$395 million by deferring projects that were not required online in the near future.

- Future desalination development
- Intake No. 3 Pumping Station
- Intake No. 3 Discharge Pipeline

SNWA Response to Economic Downturn

Financing Strategies and Modifications

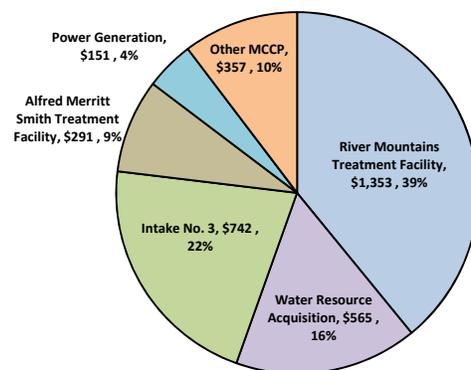
- **Water Smart Landscape Program** - Funding strategy changes deferred approximately \$57 million
- **Arizona Water Banking Agreement** – Modified the payment schedule, which provided approximately \$125 million in cash relief through 2014
- **Virgin and Muddy River Leases** – Extended expiring lease agreements at a lower cost, saved approximately \$4.73 million
- **Debt Refinancing** – Refinancing activity provided approximately \$103 million in cash-flow relief. An additional \$191 million in cash-flow relief will be realized in future years.

Challenge

The SNWA will experience annual shortfalls in revenue beginning in 2016 if the current funding structure remains unchanged.

Challenge

SNWA Outstanding Debt
(July 31, 2012)

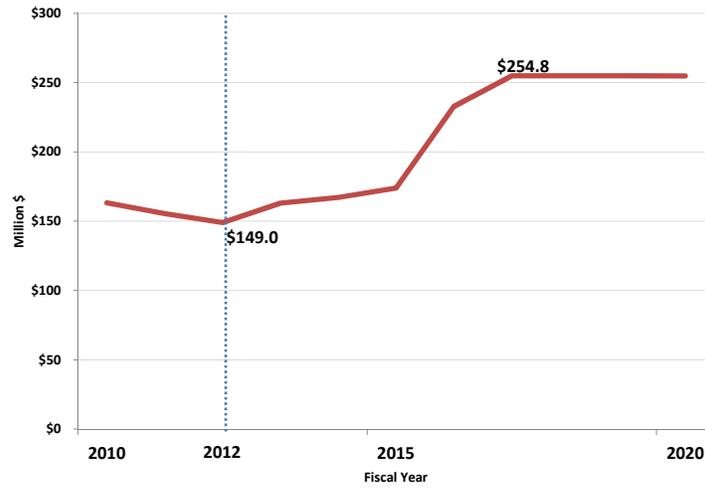


Amounts in Millions

Total Debt: \$3,459,000,000

Challenge

SNWA Debt Service



Upcoming Meetings

Wednesday, November 14

Local purveyor system
and rate discussions

Wednesday, December 5

Bond Financing

