



SOUTHERN NEVADA WATER AUTHORITY®

2014 ANNUAL REPORT

A not-for-profit agency

The SNWA is committed to securing water resources to meet current and future demand for our community. As a result, the SNWA takes a portfolio approach to water resource development, leveraging a combination of permanent, temporary and future resources. These include Nevada's Colorado River apportionment, reuse programs, the local groundwater basin, conservation, water-banking agreements and intentionally created surplus (ICS). The SNWA creates ICS through conservation, efficiency improvements or introducing additional water into the Colorado River.

This approach to water resource planning is adaptable to changing climate conditions, including the 15-year drought along the Colorado River. Protecting our water supply against drought continues to require innovative and collaborative efforts involving our community and regional stakeholders.

A new low lake level pumping station at Lake Mead—recommended by a citizens advisory committee in 2014—is currently under construction. This pumping station and the new Intake No. 3 will secure our community's access to its primary water supply as lake levels decline.

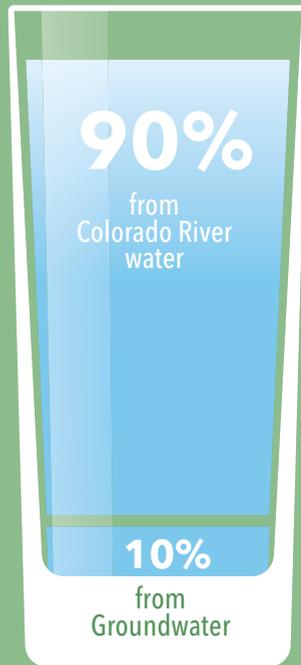
Regionally, the SNWA, along with the Colorado River Basin States, municipal water users and the Bureau of Reclamation are collaborating to protect reservoir elevations and respond to the current drought. The Colorado River Pilot System Conservation Program will fund up to \$14 million in conservation projects that benefit the Colorado River system. Program partners evaluate and select projects, compensating users for voluntary water use reductions. Water conserved as a part of this agreement will benefit the entire Colorado River System by increasing reservoir elevations; these resources cannot be recovered by any individual water user.

Developing and diversifying: **RESOURCES**

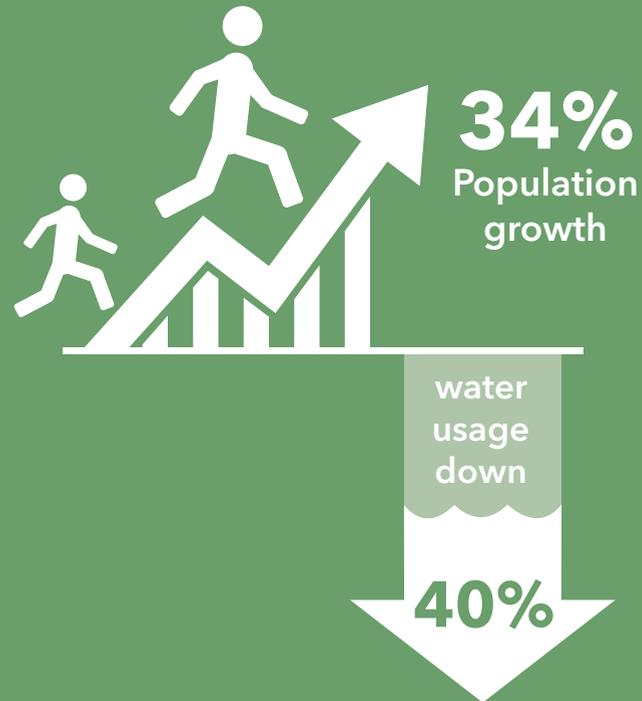


Follow the water
as it makes the journey
from snowpack to tap.
Learn more about where
your water comes from,
and what it takes to
deliver it to homes across
Southern Nevada.

Southern Nevada's sources of water

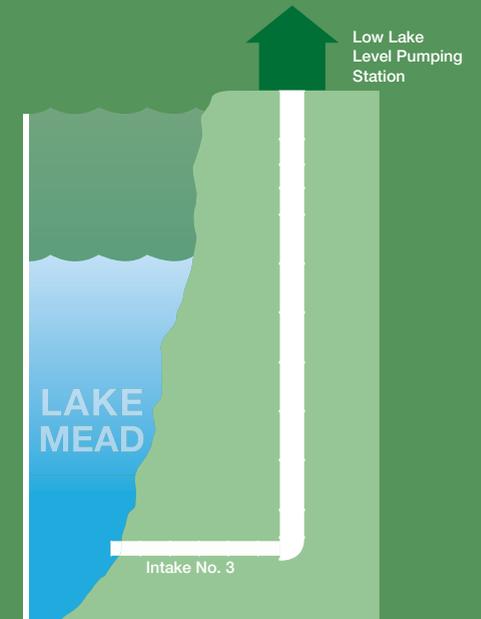


The SNWA's conservation campaign and water reuse programs helped Southern Nevadans reduce net per capita water use while the population has grown since 2002



The low lake level pumping station under construction at Lake Mead will draw water from as low as

875
FEET
(mean sea level)



PROTECTING THE VALLEY FROM DROUGHT



1.7 MILLION
acre-feet banked

in three states along the Colorado River and in Lake Mead through intentionally created surplus

Arizona
601,000 AF

California
205,000 AF

Nevada
337,000 AF

Lake Mead
565,000 AF



99%

of all treated wastewater in Southern Nevada is recycled

Mandatory watering restrictions, a turf removal program and other water-efficiency measures have all contributed to reducing Southern Nevada's net per capita consumption of Colorado River water by 40 percent since 2002, while our community grew by more than a half-million people during that same time.

These active conservation efforts have helped to prepare our community for the impacts of the record drought along the Colorado River, which flows into Lake Mead. As a result, if Lake Mead levels continue to decline and a federal shortage is declared, the SNWA does not anticipate any near-term impacts.

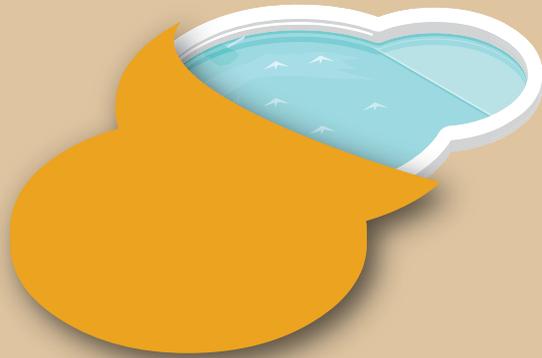
While many other communities throughout the West have just begun to implement drought-response plans, Southern Nevada is well-positioned to absorb any immediate reductions that may result from a federal shortage declaration, thanks to early implementation of conservation programs and our community's aggressive response during the drought's early stages. In effect, conservation has become a way of life in our desert community, and continued conservation will be vital for the ongoing sustainability of our region.

Extending **water** **resources:** **CONSERVATION**

108
MILLION

Gallons saved by resort properties and businesses participating in the SNWA's Water Efficient Technologies program in 2014.





1.8 BILLION GALLONS

of water saved by Southern Nevadans who purchased pool covers, irrigation controllers, rain sensors and commercial and industrial equipment through SNWA incentive programs



150,966 square feet

of TURF

removed by Las Vegas' golf courses and replaced with water-efficient landscaping saving

8.3 MILLION GALLONS of water annually



watersmart
INNOVATIONS

The WaterSmart Innovations Conference and Exhibition—the largest water-efficiency conference of its kind—drew nearly

1,000 PARTICIPANTS



from ←



34 STATES



and **10** NATIONS

CONSERVATION HIGHLIGHTS

OUR

community replaced



4.4 MILLION square feet of turf

saving more than **245** MILLION GALLONS of water in 2014

The SNWA works around the clock to monitor, analyze and deliver a safe and reliable water supply to our community, ensuring our water complies with or surpasses federal drinking water standards.

The SNWA not only tests for more contaminants than required, we proactively test many regulated and unregulated contaminants more frequently and more intensively than required. Two water treatment facilities treat up to 900 million gallons of water each day, utilizing state-of-the-art ozonation for primary disinfection, followed by filtration. Water is treated again as it travels through our distribution system to ensure the highest quality as it reaches customer taps.

Experts in our world-class research and development lab are not satisfied just with keeping water safe close to home. Partnering with other agencies, we actively participate in studies designed to advance water quality around the country and around the world. We research innovative treatment technologies as well as the potential health effects of emerging contaminants on water supplies.

The SNWA collaborates with Lower Basin states to identify and help mitigate Colorado River water quality risks. Together, we've addressed issues such as uranium mining and natural salt inflow along the river to prevent environmental or public health impacts.

Meeting or surpassing
federal standards:

WATER QUALITY

Watch the
process as
water is treated
and delivered to
our community.



51,050
SQUARE FEET

of cutting-edge laboratory space is dedicated to compliance testing and water quality research and development



100
STUDIES

since 2001 investigated issues such as ozone treatment and the impacts of algal blooms and climate change on Lake Mead's water quality

WATER QUALITY HIGHLIGHTS



327,000
ANALYSES PERFORMED
on Southern Nevada's drinking water in 2014

Workers completed a
3 MILE TUNNEL
below Lake Mead

→ as part of the lake's **Intake No. 3 project**, which allows continued access to the highest quality drinking water in Lake Mead. It will be operational in 2015.

It takes a lot of power to move water. The SNWA uses 850,000 Megawatt-hours (MWh) of electricity to treat and deliver nearly 140 billion gallons of water each year to Southern Nevada.

The SNWA strives to include renewable resources in its energy portfolio—currently 13 percent of the SNWA's energy portfolio is generated from solar and hydropower. In 2015, we plan to increase alternate energy resources another 5 percent, with a long-term goal of generating 25 percent of all our energy needs from renewable energy resources by 2025.

The SNWA participates in partnerships, such as the Silver State Energy Association, which allow us to secure cost-efficient energy, while developing and managing resources jointly with other member utilities.

The power **to** **move water:** **ENERGY**



Solar panels at our River Mountains Water Treatment Facility track the sun and supply .24 MW of power.

13%
CURRENT

SNWA's renewable energy portfolio

25%
GOAL

ENERGY HIGHLIGHTS



60,000
METRIC TONS

of Carbon Equivalent
was offset by SNWA's
reduced use of
fossil fuel



Solar and hydropower projects
combined generated enough
energy to offset the equivalent
energy needs of nearly



average Southern Nevada homes annually



91%

of the SNWA's fleet is alternative
fuel vehicles

All living things need water to survive: That's why the SNWA works to protect and restore the environment in areas that support vital water resources.

We actively participate in 18 programs to help sustain endangered, threatened and other special-status species. In Spring Valley, we restored a habitat for 2,500 endangered Pahump poolfish; and we continue monitoring, studying and surveying species—such as northern leopard frogs and winter raptors—in central Nevada and western Utah.

To help our community learn more about the importance of restoration efforts, we're constructing walking trails and educational kiosks at the Warm Springs Natural Area, which provides habitat for 28 listed and sensitive species. At the Las Vegas Wash, more than 12 miles of stream bank have been stabilized, and 18 weirs help control flows to prevent erosion.

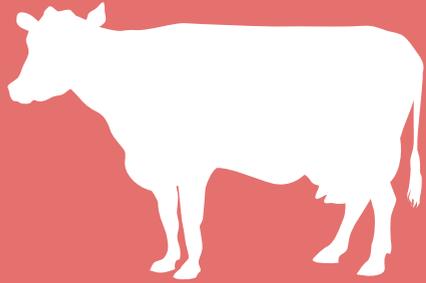
The Wash—home to more than 1,000 species of plants and wildlife—received a \$400,000 federal grant in 2014 to continue these restoration and preservation initiatives including water quality monitoring, revegetation and bird monitoring programs.

Safekeeping **the**
ecosystem:

ENVIRONMENT



Rare species
are making a
comeback in Nevada.
We're helping to provide
habitats for wildlife,
such as the endangered
Moapa dace, at the
Warm Springs
Natural Area.



300

MONITORING LOCATIONS

provide data on sheep and cattle grazing to protect rangeland health



2,200

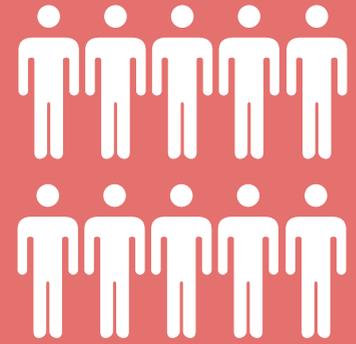
ENDANGERED MOAPA DACE

were detected at the Warm Springs Natural Area in 2014.

That's a

30%

population increase since 2013



10,000

VOLUNTEERS



removed more than

500,000

POUNDS OF TRASH

and revegetated more than **400** acres with native plants at the Las Vegas Wash

ENVIRONMENTAL HIGHLIGHTS



200

MILLION GALLONS

of urban runoff, shallow groundwater, stormwater and reclamation facility water is filtered through the Las Vegas Wash

EACH DAY

on its way to Lake Mead

W

We are all stewards of our water resources. The SNWA is dedicated to educating our community and inspiring involvement in water issues.

Our community can find water-saving tips, ideas and assistance through a Conservation Helpline, the SNWA website, a variety of publications, email notifications, newsletters, social media sites and other free resources—including a public-access television show.

Community involvement is our way of doing business. Since 1994, seven citizens advisory committees have provided input on a variety of water policy issues for Southern Nevada. In 2014, the Integrated Resource Planning Advisory Committee (IRPAC), representing citizens and businesses, was asked to address issues related to declining water reservoir levels and the reliability of municipal water systems. The committee recommended a low lake level pumping station at Lake Mead to protect our community from losing access to the majority of its water supply. The pumping station will work in concert with the community's current intake system and will be funded by a fixed charge recommended by IRPAC.

Our Youth Advisory Council, comprising local high school students, made a presentation before the Colorado River Water Users Association (CRWUA). The students encouraged CRWUA members to establish youth councils in each of the Basin States.

SNWA's low lake level pumping station will ensure Southern Nevada maintains access to its primary water supplies in Lake Mead, even at extremely low lake levels.

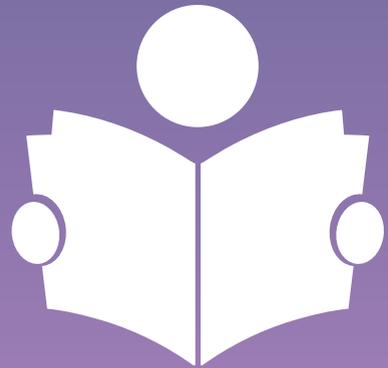


Joining **together:** **COMMUNITY**

DIY

1,300 PEOPLE ATTENDED

water-efficient landscaping and drip irrigation installation classes taught by SNWA experts since 2007



200,000

CLARK COUNTY
ELEMENTARY SCHOOL
STUDENTS

learn about water and the environment through our Desert Discovery newsletter

COMMUNITY HIGHLIGHTS

15,292

PEOPLE CALLED

our Conservation Helpline for water-saving information in 2014



SOUTHERN NEVADA



LANDSCAPE AWARDS

204

LOCAL LANDSCAPES

received SNWA-sponsored Southern Nevada Landscape Awards, demonstrating that "water-smart" can be colorful and lush



Economic improvement and an emphasis on fiscal responsibility have helped the SNWA ensure funding is available for future water infrastructure and system maintenance.

Providing safe drinking water for more than 2 million Southern Nevada residents and businesses every year is no small task. Intakes, pumping stations, delivery systems, treatment facilities and a state-of-the-art laboratory help ensure that taps across the valley provide drinking water that meets or surpasses federal standards.

This reliability and quality is not achieved without myriad challenges. The SNWA continues to mitigate the effects of prolonged drought and a recovering economy upon Southern Nevada's water resources, water infrastructure and associated finances. Despite these challenges, the SNWA continues to provide service while covering expenses.

The SNWA is financed through several primary sources, including water delivery charges; connection fees; sales tax; a commodity charge; and an infrastructure charge, which helps fund large water system projects. A portion of the SNWA's budget is used to meet bond obligations through debt service payments to fund the community's water treatment and distribution system. Other capital expenditures fund water delivery and transmission projects.

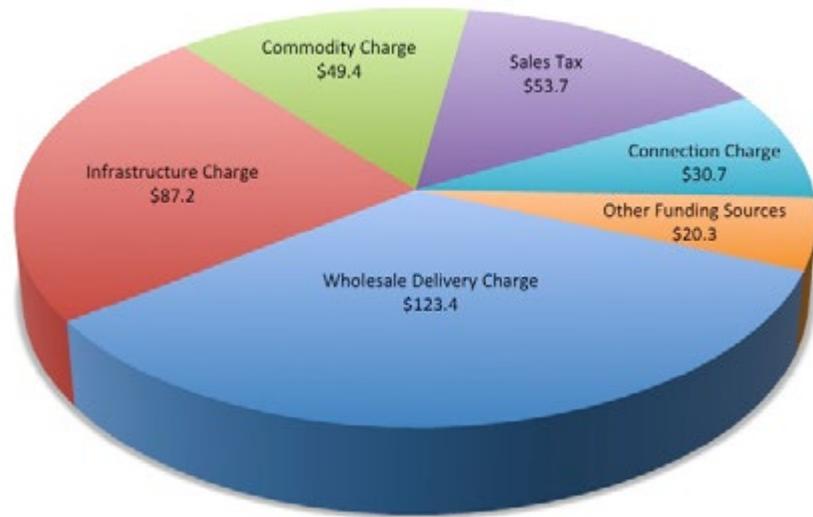
The following financial information is based on the Fiscal Year ended June 30, 2015, and represents an overview of the SNWA sources and uses of funds.

Supporting **water resources:**

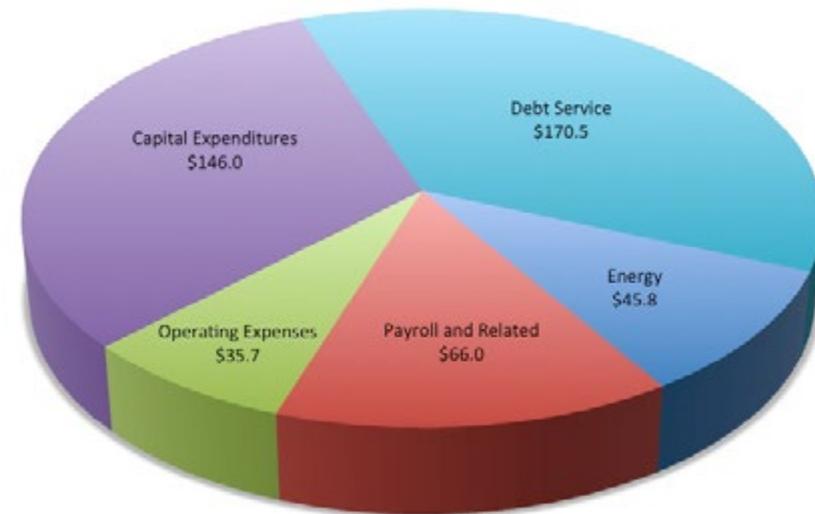
FINANCE

FY 2014-2015

Sources of funds*



Uses of funds*



* in millions of dollars

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