



ANNUAL REPORT

SOUTHERN NEVADA WATER AUTHORITY™

2008

Southern Nevada Water Authority

Seven agencies mobilized to form the Southern Nevada Water Authority (SNWA) in 1991 to manage and ensure Southern Nevada's regional water resources.

As the SNWA pursues its mission, it has emerged as a global leader in water conservation, sustainability and water-quality programs. The Water Authority continually develops technology and resources to ensure Southern Nevada's sustainable future.

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Kay Brothers, Deputy General Manager of Engineering/Operations
Richard Wimmer, Deputy General Manager of Administration
Chuck Hauser, General Counsel

Special thanks to former board members Andrea Anderson, Chris Giunchigliani, Chip Maxfield and Rory Reid for their contributions to the milestones achieved in 2008.

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Shari Buck
Chair



To our friends and neighbors:

There is no single answer to the complexities posed by drought and climate change. The SNWA engages multiple adaptation strategies including conservation and developing available in-state groundwater resources to address our limited resources. In addition, the SNWA is exploring the latest advances in water treatment.

The SNWA recognizes that successful solutions cannot be created in a vacuum. In 2008, the Water Authority partnered with the U.S. Environmental Protection Agency to develop an international forum for the exchange of ideas and new technology related to water efficiency. The only event of its kind, the WaterSmart Innovations Conference and Exposition will be held annually, serving as the world's largest conference on urban water efficiency and management.

The Water Authority also partnered with some of the nation's largest water agencies to form the Water Utility Climate Alliance. This collaborative group works to improve research related to the impact of climate change on water utilities, develop adaptation strategies and work to reduce greenhouse emissions.

These types of collaborative and innovative approaches resulted in many successes throughout the year: SNWA achieved its long-term conservation goal two years ahead of schedule; continued progress on state and federal permitting activities associated with the Groundwater Development Project; continued to partner with state and federal agencies on research projects such as test operations at the Yuma Desalting Plant; and launched construction of one of the world's most complex tunneling projects for the third intake at Lake Mead.

As the SNWA continues to plan for the future, it persistently identifies strategies that help Southern Nevada successfully adapt to the challenges of our changing world. By sharing its knowledge, the SNWA continues to be a recognized voice in a global community that strives to preserve our most precious natural resource—water.

A handwritten signature in black ink that reads "Shari Buck". The signature is written in a cursive, flowing style.

Sincerely,
Shari L. Buck, Chair
SNWA Board of Directors



Pat Mulroy
General Manager



To our community, stakeholders and customers,

Meeting the demand for a safe and reliable water supply is one of the most pressing challenges facing communities around the globe. From a difficult economic climate to increasingly limited water resources, many different complex and interrelated issues face today's water managers.

In the West the Colorado River, which supports 30 million people and 15 percent of the nation's crops, experienced cumulative flows 11.8 trillion gallons below average during the last decade. Many scientists and researchers now believe persistent drought conditions and continuing lesser flows in the Colorado are symptomatic of a much larger problem—climate change. The challenging economic conditions prevalent throughout 2008 resulted in unprecedented revenue shortfalls due to a combination of declining water use, housing foreclosures and the abandonment of several commercial construction projects that required the rebate of millions of dollars in connection charges.

These extraordinary challenges, inextricably linked, require equally extraordinary solutions; and we look first in our own backyards. The SNWA continues efforts to extend current resources through one of the nation's most aggressive water-conservation programs, resulting in a water-use reduction of 22 billion gallons between 2002 and 2008 despite a population increase of 400,000, and nearly 40 million annual visitors.

In 2008, the SNWA used water acquired on the Muddy and Virgin rivers to create approximately 10,000 acre-feet of Intentionally Created Surplus in accordance with federal guidelines. We also continued pursuing in-state water resources, particularly with state and federal permitting process associated with the Clark, Lincoln and White Pine Counties Groundwater Development Project.

We have long advocated federally funded research to improve water management infrastructure as well as fiscal responsibility required for the sustained management of water projects and resources. As such, the SNWA maintains a financial reserve fund to help finance capital improvement projects such as the critical third intake at Lake Mead.

While we recognize the profundity of these issues, we also recognize that through continued commitment and perseverance on all our parts, we can work together to ensure safe, reliable, sustainable water resources for the future. Our commitment as a public agency remains unwavering—to serve our most important stakeholder, you.

Sincerely,
Pat Mulroy
SNWA General Manager

How do you inspire an entire community to live sustainably? That's the challenge the SNWA faces as it balances drought conditions, the needs of a thriving desert community and long-term conservation goals.

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PARTNERSHIPS



The SNWA's evolving education and incentive programs elevate residents' and businesses' water-resource awareness. Southern Nevada's annual water consumption decreased by approximately 22 billion gallons between 2002 and 2008, despite a population increase of 400,000 during that span and almost 40 million annual visitors.

Last year, residents and businesses participating in the Water Smart Landscapes rebate program converted almost 18 million square feet of turf to water-efficient landscaping, saving more than 1 billion gallons of water—enough to fill the Luxor Hotel pyramid nearly three times. The program has inspired similar landscape conversion programs in Florida, Arizona, California, New Mexico, Washington and Texas.

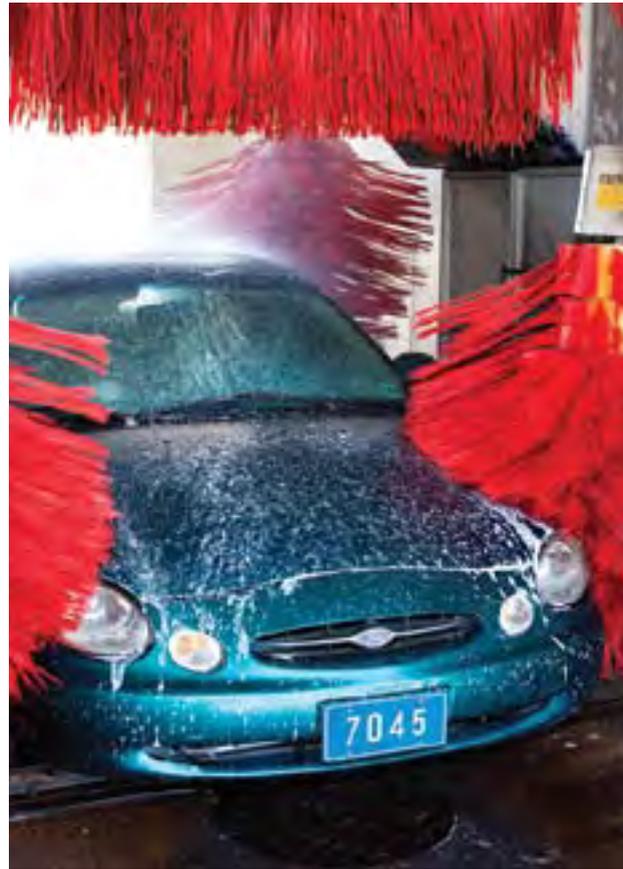
If your actions inspire others to dream more, learn more, do more and become more, you are a leader.

John Quincy Adams

The SNWA conservation effort may start at home, but it extends to businesses and community partners. The Water Efficient Technologies (W.E.T.) program, which provides large-scale institutional, commercial, multi-family and industrial businesses financial incentives to install capital improvements that produce long-term water savings, was restructured in 2008. The minimum requirement was decreased from 500,000 gallons to 250,000 gallons saved to encourage mid-sized business participation. As a result, the commercial conservation incentive program helped businesses earn rebates worth \$243,836 for a collective savings of more than 114 million gallons—enough water to wash more than 4 million loads of laundry.

The SNWA routinely responds to requests from other agencies seeking to develop similar programs. In 2008 the SNWA hosted visiting professionals from other states and nations for an inside look at our region's successful conservation programs.

Collectively, these incentive programs, along with mandatory watering restrictions resulted in extraordinary conservation achievements. In 2008, the SNWA surpassed



SNWA incentive programs such as the Water Smart Car Wash program save water and help the community reach conservation goals.

its conservation goal of 250 gallons per capita per day (GPCD) two years ahead of schedule. The SNWA uses the population-based GPCD to measure water consumption, water-use trends and evaluate the community's progress toward conservation goals. As a result of this achievement, the SNWA established a new conservation goal: 199 GPCD by 2035, and updated its five-year conservation plan in accordance with Nevada revised statutes.

This success has not gone unnoticed. A growing number of municipalities across the U.S.—from New Mexico to Florida nationally; and Toronto, Canada to Victoria, Australia internationally—established incentive programs modeled after those of the SNWA.

Inspiring the conservation ethic in every aspect of community life and in each generation is fundamental to the SNWA mission. The SNWA established the Youth Advisory Council (YAC) in 1999 to provide a forum in which the SNWA can receive input from the youth of Southern Nevada on environmental and water issues critical to the future of our community and youth around the world.

The 2008/09 YAC included 37 students representing 20 high schools. The students organized a World Water Day walk at the Springs Preserve to signify the miles women and children in developing countries must walk every day to locate fresh water.

The SNWA's educational outreach also extends to Clark County School District elementary classrooms through Desert Discovery newsletters and teaching guides. The award-winning publications, which introduce conservation lessons that align with the school district's curriculum, distribute to 209 elementary schools, reaching more than 198,000 school children three times each year.



The SNWA's educational outreach efforts include distribution of Desert Discovery newsletters. The publication provides age-appropriate information about conservation, emphasizing the plants, animals and water resources found in Southern Nevada. Spanish versions also are available.

The newsletter distributes free of charge to local public and private elementary schools. A teacher's edition provides additional resources, ideas and activities to complement the content.

The age-appropriate newsletters emphasize the plants, animals and water resources found in Southern Nevada and complement the educational activities more than 25,000 students experience at the Springs Preserve—a hands-on learning center and world-class model of sustainable living. All Preserve buildings earned LEED (Leadership in Energy and Environmental Design) Platinum-certification by 2008, and demonstrate to the community that living sustainably can be educational and entertaining. Since it opened, the Preserve has hosted more than 360,000 visitors.



WaterSmart Innovations keynote speaker Prince Faisal bin Al-Hussein of Jordan

From local youth to industry professionals, the global dialogue on water continued. In October 2008, more than 1,200 industry leaders and professionals from 42 states and 17 nations participated in the Water Authority's inaugural WaterSmart Innovations Conference and Exposition, making it the world's largest and most comprehensive conservation-specific conference of its kind.

The SNWA hosted the conference in partnership with the U.S. Environmental Protection Agency's WaterSense Program, Alliance for Water Efficiency, American Water Works Association, Audubon International, California Urban Water Conservation Council, International Association of Plumbing and Mechanical Officials, International Center for Water Technology and Irrigation Association.



The SNWA proactively embraces the ethic of environmental responsibility.

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COMMITMENT



Beyond taking the steps necessary to ensure statutory environmental compliance, the SNWA's mission reflects an emphasis on environmental responsibility. To that end, the SNWA participates in—and often establishes—initiatives that extend beyond regulatory compliance requirements.

The SNWA has invested millions of dollars and thousands of staff hours in programs and activities directly related to environmental protection. The agency has actively supported research related to federally endangered fish and wildlife, including: the Moapa dace, the woundfin, the razorback sucker, the southwestern willow flycatcher

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We must become the change we want to see.

Gandhi

and the Yuma clapper rail. This research is not required for federal compliance with the Endangered Species Act, but is conducted because it is central to SNWA's environmental ethic and provides the basis for scientifically sound decisions.

The SNWA completed its first restoration project at the Warm Springs Natural Area (WSNA) to protect the endangered Moapa dace, which spawn in the headwaters of the upper Muddy River and requires a warm-springs habitat to reproduce. A contractor specializing in ecosystem restoration designed the Lower Pederson channel restoration project, recreating the dace's natural habitat. Scientists working on the Muddy River Recovery Implementation Program, a multi-agency endangered species program for the entire Muddy River to Lake Mead, predict the restored habitat will significantly increase the Moapa dace population over the next few years.

Commitment

The WSNA's thermal springs system is the last remaining habitat in the world for the dace. The remaining dace population has been dramatically impacted by the introduction of non-native predators, such as the tilapia. Purchasing the property in 2007 allows the SNWA to help protect the Moapa dace population.

Partnering with state and federal fish and wildlife agencies, the SNWA monitors other sensitive species in the area, including the largest breeding population of vermilion flycatchers in Nevada, the Virgin River chub and other species along the lower Virgin and Muddy rivers, and in Lake Mead and the Colorado River.

The SNWA manages programs that monitor bird and bat populations that resulted in the detection of more than 10 new species at the City of Henderson Demonstration Wetlands and the Las Vegas Wash. The presence or absence of certain species also can provide information about water quality within the Wash.

The Water Authority supports the Las Vegas Wash Coordination Committee (LVWCC), which developed and implements the Las Vegas Wash Comprehensive Adaptive Management Plan. The plan is a long-term strategy addressing erosion impacts on water quality and other environmental issues as water flows through the Wash into Lake Mead.

The LVWCC and its member agencies have made significant progress toward improving the Las Vegas Wash. The SNWA completed the Upper Diversion Weir in 2008. The weir—the 11th erosion control project—will increase the wetlands area and sustain a wildlife habitat for more than 160 bird species, 180 plant species and seven fish species that make the Las Vegas Wash their home.

The new weir will help eliminate 15 vertical feet of channel bed erosion upstream from the site. The project comprises two concrete spillways, a bypass channel and bridge connecting the Sunrise Mountain Trailhead, located on the north side of

the Las Vegas Wash and the Nature Preserve, a 100-acre area that lets visitors explore the many facets of a dynamic wash environment.

The SNWA also reduces its environmental impacts and carbon emissions by expanding its use of renewable energy. Renewable energy opportunities are abundant in Southern Nevada: Our region experiences approximately 320 sunny days each year. Last year, the SNWA harnessed this solar power by designing 450 kilowatts (kW) of solar photovoltaic systems to provide solar power to the Alfred Merritt Smith Water Treatment Facility and the River Mountains Water Treatment Facility. The projects include high-concentration photovoltaic (HCPV) systems at River Mountains and solar panels that shade parking lots at both water treatment facilities. Combined, these projects generate approximately 920,000 kilowatt hours per year.

The SNWA is a founding member of the Silver State Energy Association (SSEA), which finds the highest-quality, most



In 2008, the U.S. Environmental Protection Agency (EPA) selected the SNWA as part of its GreenScapes program. The national program recognizes organizations actively promoting environmentally friendly landscaping practices. The SNWA was selected for its milestone achievements in water-saving grass conversions.

cost-effective methods of acquiring and distributing electrical energy for its members. SSEA also provides improved project development opportunities and power purchasing capabilities, shared resources and expertise, and the opportunity for jointly managing energy needs.

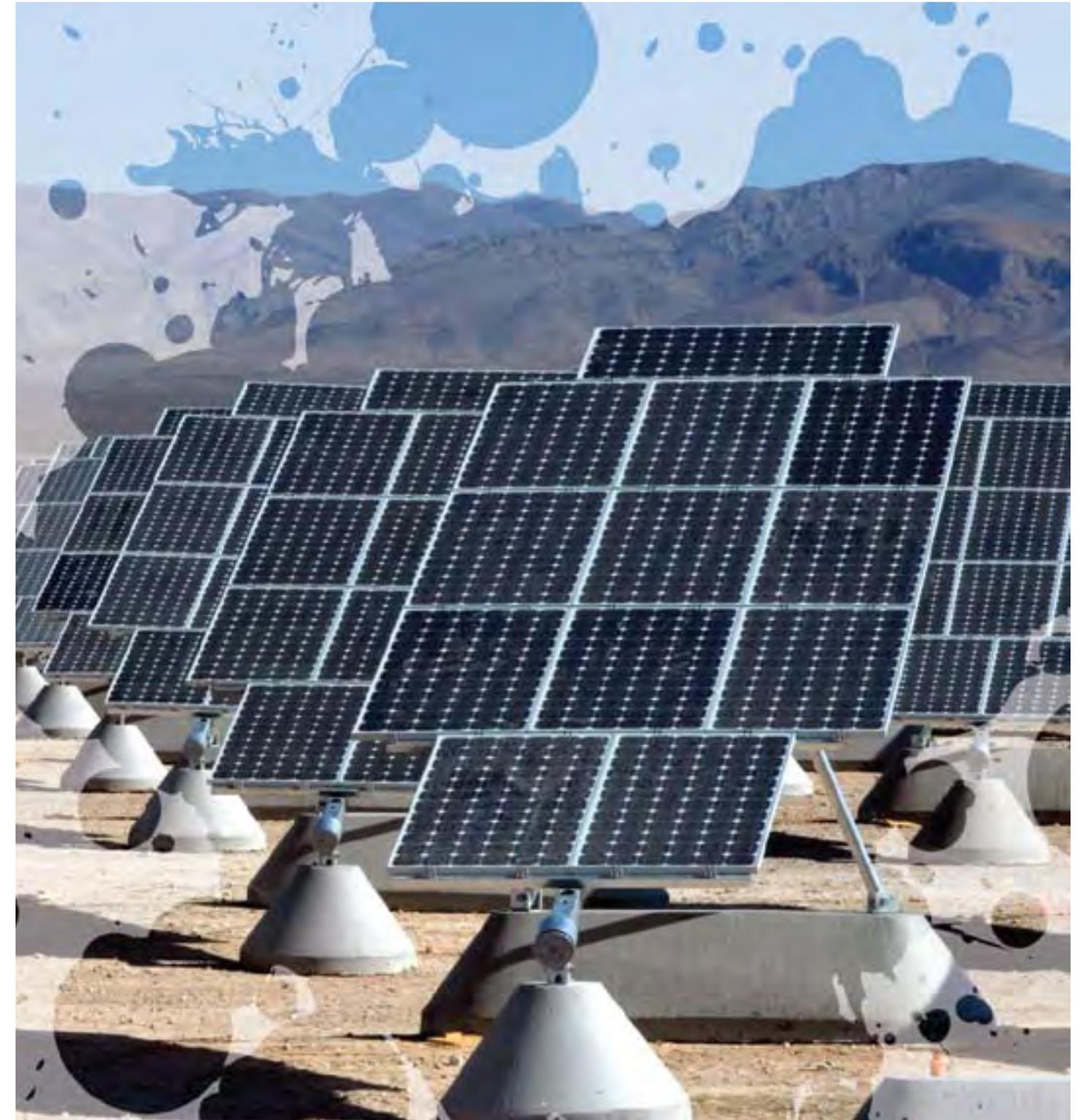
Solar energy is only one renewable energy source the SNWA harnesses. Hoover Dam hydropower provides the Water Authority approximately 10 percent of its annual energy. Additionally, the SNWA established hydropower projects at three Rate-of-Flow Control Stations in Las Vegas and Henderson. Combined, these systems can produce more than 2 megawatts of energy—more than 100 average homes use in one year.

The SNWA is actively pursuing other promising renewable energy projects. The Arrow Canyon Energy Recovery Project, expected to be operational in 2010, is a hydro-turbine generator that will produce 3,500 megawatt hours annually. The energy will be used to serve other SNWA loads.

The SNWA may consider future hydro-turbine energy recovery components for potential future energy recovery on the Clark, Lincoln and White Pine Counties Groundwater Development Project. Turbine generators can generate electricity as water flows through the pipeline from higher to lower elevations. Hydro-turbine energy recovery used on the Groundwater Development Project could potentially generate approximately half of the energy needed to pump and treat water for the project.



The SNWA uses hydroelectric turbines to generate electricity from its pipelines.



The American Southwest remains gripped by a seemingly relentless drought. Between 1999 and 2008, Colorado River flows averaged just 66 percent of normal.

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ACTION



Decreased Rocky Mountain snowpack and evaporation significantly reduced runoff to the Colorado River, the source of 90 percent of our water. The Colorado experienced cumulative flows that were 11.8 trillion gallons below average during the last decade. At the conclusion of 2008, Lake Powell's storage was at 57 percent of capacity, and Lake Mead's storage was at 47 percent of capacity.

To accomplish great things, we must not only act, but also dream, not only plan, but also believe.

Anatole France

The SNWA is closely monitoring drought conditions in the Colorado River Basin and enacts the appropriate response necessary to protect the community from possible supply reductions and preserve essential municipal water supplies.

The Water Authority revised its drought plan, incorporating new resources such as Intentionally Created Surplus (ICS), and shortage sharing arrangements as detailed in federal guidelines established in 2007. ICS is Colorado River water that has been conserved, or non-Colorado River water that has been introduced into the system, creating credits for future use. The revised plan outlines how the SNWA will meet its delivery obligations if available Colorado River water resources are further reduced.

SNWA member agencies also are updating their ordinances to reflect permanent drought restrictions. The Water Resource Plan integrates the new drought plan, which is reviewed annually and updated as needed.

Conservation will continue to play a vital role, but it is only one way the SNWA manages limited water resources. The Water Authority has worked diligently over the last decade to acquire additional in-state resources and secure other temporary banked supplies to augment Southern Nevada's Colorado River allocation and local groundwater supplies. The SNWA also is constructing a third intake under Lake Mead, which will help manage system capacity and water quality during times of drought.



A fishing overlook is no longer in use since water levels have fallen more than 100 vertical feet at Lake Mead.

Lake Mead's third intake will be one of the most challenging and technically advanced projects of its kind in the world. Begun in 2008, the project's advanced engineering and technology are comparable to Hoover Dam's highly sophisticated engineering.

Using a tunnel-boring machine manufactured specifically for this project, workers will excavate a 20-foot diameter tunnel nearly 3 miles long under Lake Mead.

More than 200 engineers and staff helped design the separate components comprising the intake project, including a tunnel linking intakes 2 and 3. Once completed, this tunnel will convey water to both the Alfred

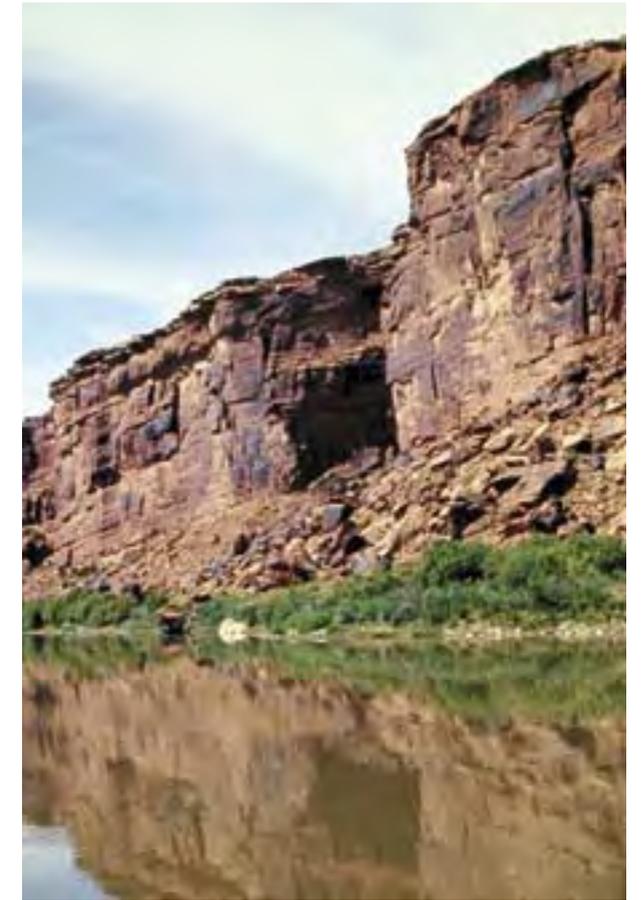
Merritt Smith and River Mountains water treatment facilities.

The new intake will allow the SNWA to continue drawing cooler water in the event persistent drought conditions cause Lake Mead's levels to drop below the first intake. This project is expected to be completed in 2013.

The continued development of in-state water resources will help to reduce our dependence on the Colorado River and augment available supplies should drought conditions continue to impact system flows.

The SNWA allocated \$40 million to purchase or lease additional water rights on the Muddy and Virgin rivers in 2008. This allocation compensates water rights holders in Muddy Valley, Bunkerville and Mesquite as they forego farming activities to transfer the Virgin and Muddy river water rights to Lake Mead. The SNWA currently owns approximately 9,000 acre-feet of Muddy River and 6,000 acre-feet of Virgin River water rights. The SNWA can utilize these water rights to create ICS under federal guidelines established in 2007.

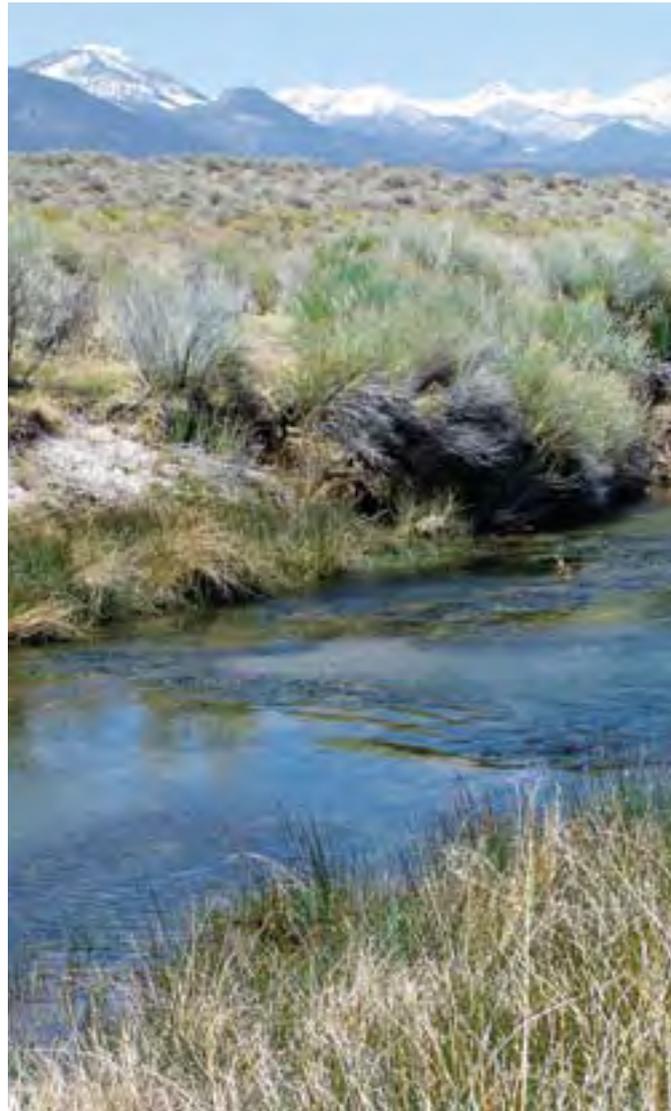
If the water is not used the year it is created, it becomes extraordinary conservation ICS, which can be used like a bank account and stored in Lake Mead for multiple years.



To develop and convey the SNWA's 1989 groundwater rights and applications in Delamar, Dry Lake, Cave, Spring and Snake valleys, the SNWA has proposed the Clark, Lincoln and White Pine Counties Groundwater Development Project. Based on the SNWA's current permitted rights and pending applications, up to 137,000 acre-feet per year could be developed from these valleys, 3,000 of which would be transferred to Lincoln County based on a 2003 agreement.

Many of the water resources associated with the SNWA's Clark, Lincoln and White Pine Counties Groundwater Development Project have been permitted. The State Engineer's office has scheduled a hearing on the SNWA's remaining applications in 2011.

Through local and interstate arrangements, the SNWA has acquired temporary banked resources to serve as an important management tool.



Banked resources 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. Resources include the Arizona, California and Southern Nevada water banks.

As it works to ensure a safe and reliable water supply, the SNWA continually explores new technology and innovative solutions including seawater desalination.

The SNWA is participating in a bi-national process between the U.S. and Mexico to discuss long-term desalination opportunities and system efficiency improvements in Mexico.

As part of its exploration into desalination, the SNWA is participating, along with other agencies, in a one-year test pilot run of the Yuma Desalting Plant, located along the Arizona/Mexico border. In 2010, test pilot operations are expected to produce water-quality and environmental data



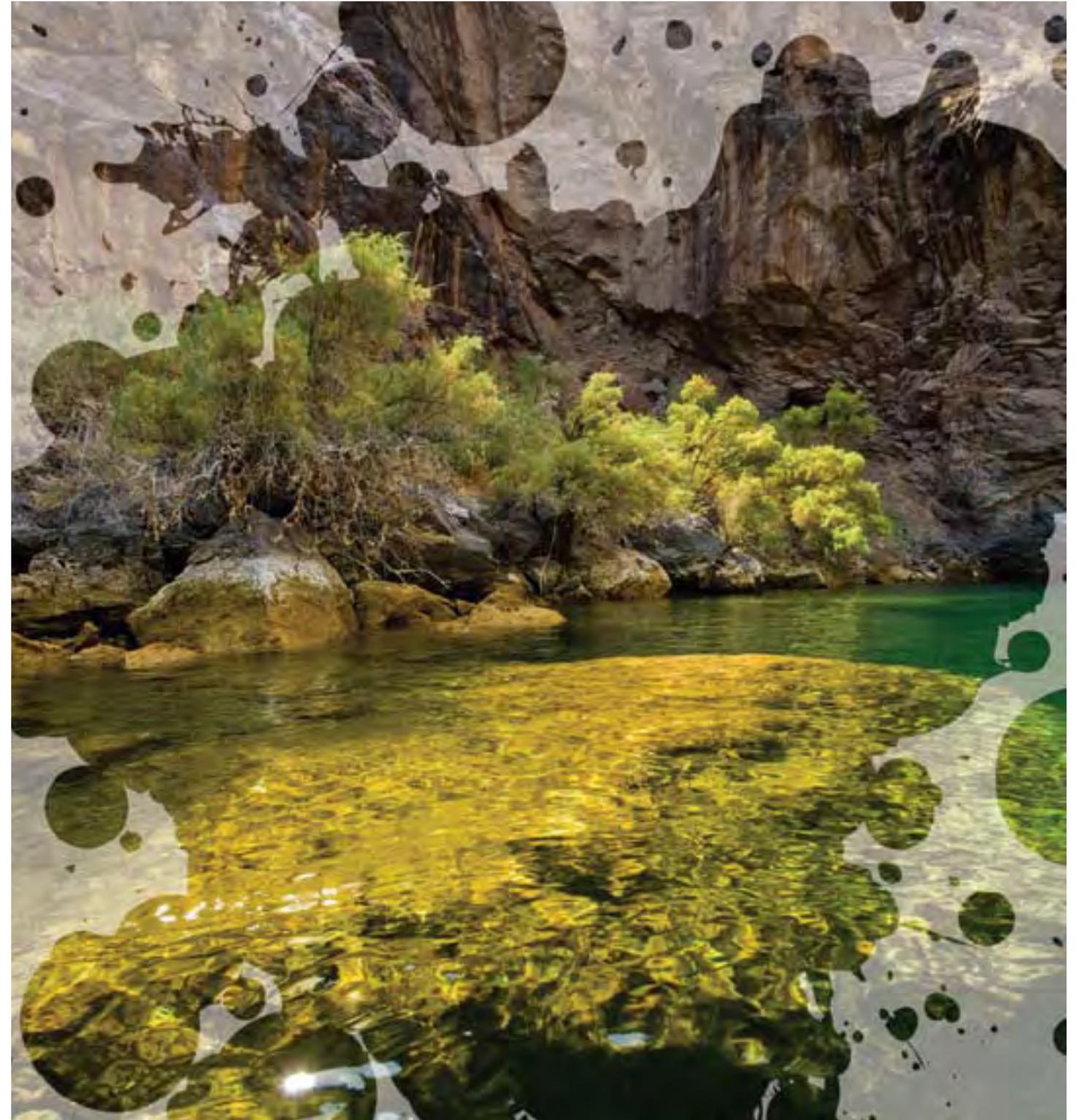
We all save for a rainy day, but what happens when there hasn't been a drop of rain for months? SNWA member agencies have been saving water since 1987 as part of the Southern Nevada Groundwater Bank, an artificial recharge program. Artificial recharge occurs by pumping treated Colorado River water into the valley's primary groundwater aquifer. More than 330,000 acre-feet of water are stored in the local groundwater basin for future use.



The SNWA is participating in a bi-national process between the U.S. and Mexico to discuss long-term desalination opportunities and system efficiency improvements.

examining the plant's operational effects. The plant will operate at one-third capacity while agencies collect data and research pre-treatment methods to determine the viability of long-term operation of the plant at full capacity.

The plant, idle for more than 15 years, once treated brackish water pumped to meet water-quality requirements. Arizona agricultural drainage flows will be used as the source water for the pilot run.



Securing Southern Nevada's water is only part of the SNWA equation. Our mission is to verify the quality, security and reliability of that water.

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EXPECTATIONS



The SNWA manages two advanced water treatment facilities designed to provide drinking water that meets or surpasses all state and federal Safe Drinking Water Act standards for water quality. The SNWA accomplishes this by collecting tens of thousands of water samples from Lake Mead treatment facilities, water distribution systems, neighborhood sampling stations, groundwater wells and reservoirs valleywide. Hundreds of thousands of analyses are conducted on those samples to ensure our water quality.

The Colorado River is captured at Lake Mead with no prior treatment. The Southern Nevada Water System, our system of treatment and distribution facilities, treats lake

Don't judge each day by the harvest you reap, but by the seeds you plant.

Robert Louis Stevenson

water to Safe Drinking Water Act standards and delivers it to Southern Nevada's water purveyors: the cities of Boulder City, Henderson and North Las Vegas; Las Vegas Valley Water District; and Nellis Air Force Base.

Water is treated at both the Alfred Merritt Smith Water Treatment Facility, located on the shores of Lake Mead, and at the River Mountains Water Treatment Facility, located in Henderson. The two facilities have a combined treatment capacity of 900 million gallons per day, and use the latest treatment technologies, including ozonation and chlorine disinfection.

In 2008, the River Mountains Water Treatment Facility implemented a chlorine-ammonia treatment process, reducing the potential for bromate formation, a potential carcinogen and byproduct of water containing bromide.

The Water Quality Laboratory and Applied Research & Development Center at River Mountains is one of the most sophisticated municipal water quality laboratory complexes in the world. The laboratory staff collects and tests thousands of samples spanning lake to tap, including neighborhood sampling stations, groundwater wells and reservoirs. This extensive testing process earned the SNWA laboratory certification from the Nevada Division of Environmental Protection, and it is one of few municipal facilities certified by the U.S. Environmental Protection Agency for *Cryptosporidium* and *Giardia* detection.

As our largest source of potable water, Lake Mead is sampled for dissolved oxygen, pH levels, conductivity, temperature, turbidity, nutrients, fecal coliforms, and *E. coli* and perchlorate. Organisms living in the lake can cause taste and odor concerns in drinking water as well as clog the SNWA's water-treatment filters and infrastructure.



Quagga mussels (shown on a boat hull) spread rapidly and block water delivery infrastructure at Lake Mead.

One particular species poses a major concern in the depths of Lake Mead. The SNWA continues the battle against the growing quagga mussel population. Quagga mussels filter the water and can greatly reduce phytoplankton, the base of the food chain, endangering other species. The invasive quaggas clump together and attach to solid surfaces, potentially clogging intakes and threatening water infrastructure. Scientists discovered the presence of non-native quagga mussels in Lake Mead in 2007, likely introduced

on a vessel originally from the Great Lakes region where quagga mussels were first discovered. Quagga mussels can completely dominate an ecosystem and replace native species, wreaking havoc on the ecology.

The SNWA continuously researches and tests new procedures to combat Lake Mead's growing quagga mussel population. Divers inspect and clean intake screens every six months using a pressure blast process to remove the mussels so water can flow through the SNWA infrastructure. Chemical treatment systems also protect the infrastructure.

The SNWA cosponsored a national symposium at the University of Nevada, Las Vegas to explore additional strategies to combat the species' rapid proliferation. The invasive species also poses problems in the Great Lakes region, as well as isolated areas in Iowa, Kentucky, Michigan, Minnesota, New York, Ohio and Pennsylvania.

The Water Authority is currently testing protective coatings, which prevent mussel attachment to hard surfaces. A rigorous



Have you ever wondered how Southern Nevada's water compares to federal standards? Each of the SNWA's member agencies produce a water quality report, containing information about the quality of your water.

The reports are produced and distributed every year to comply with the federal Safe Drinking Water Act.

Learn more about water quality and treatment at snwa.com.

cleaning and treatment regimen will continue mitigating the species at Lake Mead while the SNWA explores alternative control options.

SNWA laboratory researchers are advancing water quality here and around the world. In 2008, the SNWA led a national study that identified low levels of 51 different endocrine disrupting compounds (EDCs) and pharmaceuticals and personal care products (PPCPs) at 19 U.S. water treatment plants. These substances gain access to water supplies when consumers rinse or flush them down drains or toilets.

Although PPCP and EDC concentrations were detected in drinking water, researchers conducting the study concluded that they did not pose a public health threat. The SNWA and the Water Research Foundation are exploring the feasibility of standardized testing for PPCP and EDC occurrences in water supplies nationwide. Their research involves more than 20 laboratories in the U.S., Australia, Europe and Canada; findings will be published in early 2010.

High water-quality standards earned the SNWA's Alfred Merritt Smith Water Treatment Facility a Directors Award for the 11th consecutive year from the Partnership for Safe Water. The Directors Award recognizes water systems surpassing the required federal standards for safe drinking water. Each year, utilities must complete a successful self-assessment and peer review, which examine treatment plant operations and administration.

The U.S. Environmental Protection Agency developed the Partnership for Safe Water, a voluntary cooperative program, to protect America's drinking-water supply. The SNWA is one of only 16 U.S. water utilities that have maintained Directors status for 10 or more years by consistently sustaining high water-quality standards.



2008 was an unprecedented year in the SNWA's financial history. The weakened global economy was felt at home, impacting Southern Nevada's economy and consequently, SNWA's revenue streams.

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PICTURE

The SNWA experienced unprecedented revenue shortfalls in 2008 due to a combination of declining water use, housing foreclosures and the abandonment of several commercial construction projects that required the rebate of millions of dollars in connection charges.

To continue to ensure its fiscal stability, the Water Authority deferred millions of dollars in major construction projects, with the exception of Lake Mead's critical third intake. The new intake will allow the SNWA to continue drawing cooler water even if persistent drought conditions cause Lake Mead's level to drop below the upper intake.

The SNWA has a financial reserve fund of \$480 million, which allows the SNWA to sell bonds through the Las Vegas Valley Water District and the State and County Bond Banks to finance capital improvement projects such as the third intake at Lake Mead.

The SNWA operates from three primary sub funds:

- Wholesale Delivery Operations, which is funded by wholesale delivery charges paid by retail purveyor members of the Water Authority;
- New Expansion Debt Service, which is funded primarily by connection charges, usage fees and sales taxes; and
- Capital Improvements Construction, which is funded almost entirely by tax-exempt municipal bonds the SNWA has sold.

Sub funds for the SNWA's Groundwater Management Program and for the Las Vegas Wash are also operated, but their activity is minimal.

By state statute, the SNWA operates as a single proprietary fund. Costs of providing goods and services to customers are recovered through user charges.

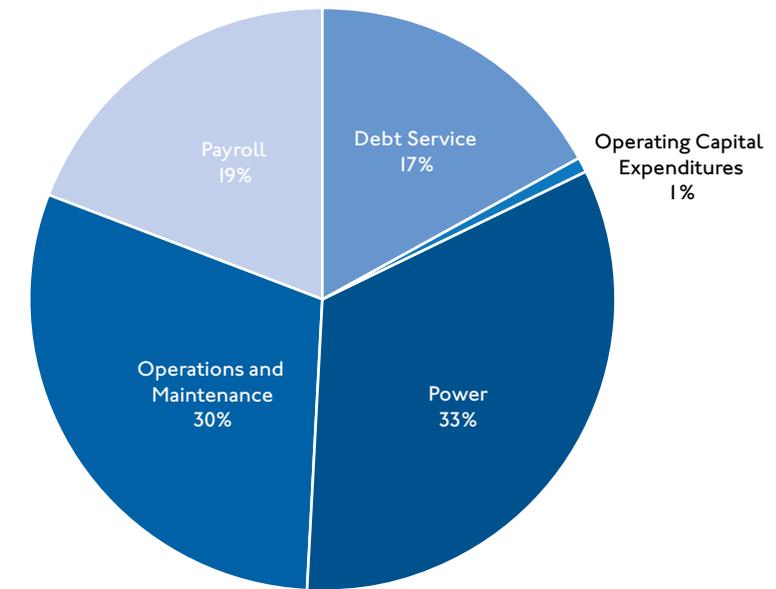
In the last Fiscal Year, the SNWA provided 19,900 acre-feet less water to its purveyor members than the previous year. A portion of the reduction was attributable to planned, aggressive conservation efforts; however, the economic downturn resulted in unforeseen revenue losses. Decreased water demand is predicted to result in a revenue shortfall of more than \$8 million between Fiscal Years 2007 and 2009. To help mitigate these impacts, the SNWA deferred most construction projects and restructured the Water Smart Landscapes program in November 2008. Under the revised program, the SNWA rebates \$1.50 per square foot for the first 5,000 square feet converted and \$1 per square foot for the remainder. Properties are limited to \$300,000 in rebates per fiscal year. Previously, participants received \$1.50 per square foot without limitation. The program revision produced \$4 million in savings for Fiscal Year 2008, while still supporting nearly 25 million square feet of conversions.

Additionally, SNWA reduced its energy expenditures in 2008 through securing lower power prices in prior years and decreasing power requirements due to lower water use. Electric power costs represented 33 percent of operational expenses in 2008, down 6 percent from 2007. The SNWA is one of the largest power users in Southern Nevada and requires power to treat and deliver water to retail purveyors. The SNWA has managed to avoid the impacts of higher energy costs by managing its own power supplies in a cooperative effort with the Colorado River Commission, resulting in an estimated savings of \$35.6 million over the last two years. Mitigating the financial effects of rising power rates will continue to be a primary focus for the SNWA.

The following financial information is based on the Fiscal Year ended June 30, 2008, and represents an overview of the SNWA's individual operating programs, funds, revenues and expenditures.

Wholesale Delivery Operations Expenditures

Fiscal Year ended June 30, 2008



Wholesale Delivery Operations

The Wholesale Delivery Operations sub fund had a balance of \$12.3 million as of June 30, 2008. The Wholesale Delivery Charge is designed to cover the costs of administration and delivery of water through the Southern Nevada Water System. For the fiscal year ended June 30, 2008, the Wholesale Delivery Charge was \$257 per acre-foot of treated Colorado River water delivered to purveyor members of the SNWA. Purveyor members then sell the water to retail customers. The SNWA has no retail customers of its own. Nellis Air Force Base pays a modified Wholesale Delivery Charge, and Boulder City pays a Raw Water Wholesale Delivery Charge.

New Expansion Debt Service

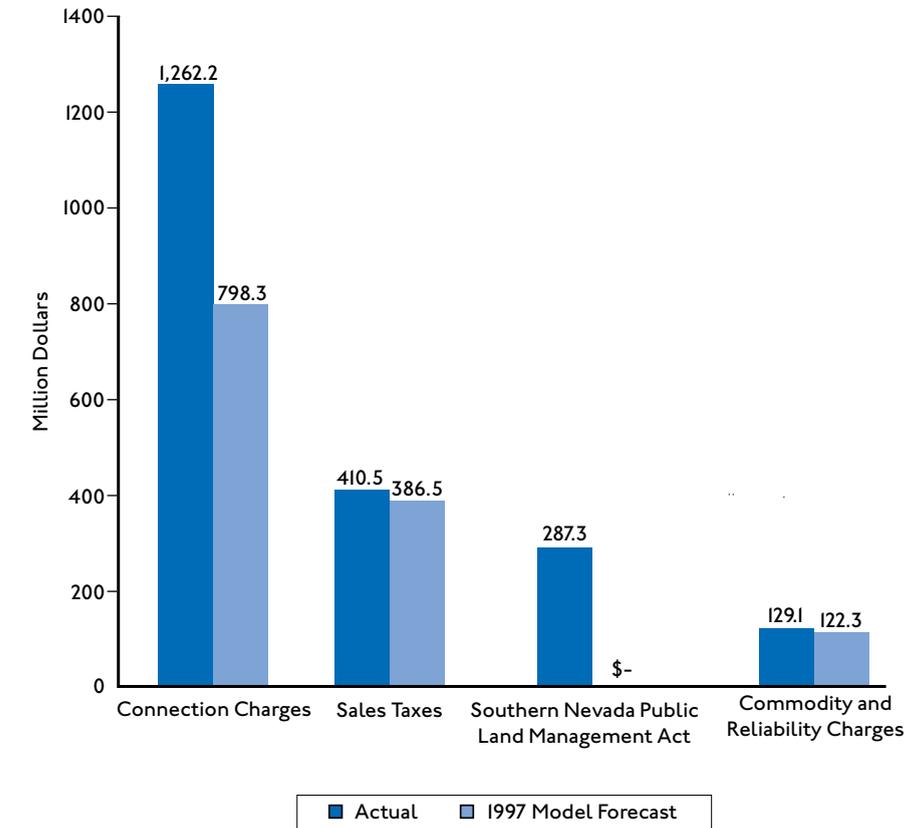
The New Expansion Debt Service sub fund had a balance of \$402.3 million as of June 30, 2008. This balance is needed to provide a prudent debt service coverage ratio, and is consistent with projections of the Capital Improvements Funding Program, which determines how the costs of the SNWA Capital Improvements Plan (CIP) will be funded. Most of the construction costs will be provided by funds from the sale of tax-exempt municipal bonds. The money to make debt service payments on those bonds will continue for years after the last connection to the new system is sold; the balance in this fund is projected to continue to grow for years, and then will begin to decline to a zero balance.

This graph shows the major revenue sources in the New Expansion Debt Service Fund through December 2008. The major revenue source in this fund is the regional connection charge. This charge on every new connection to the system is collected by the SNWA's purveyor members and remitted monthly. By the close of 2008, new connection revenue decreased by more than \$59 million since 2007, and by more than \$126 million since 2006. Regional connections in 2009 are predicted to decrease an additional \$43 million.

The second major revenue source in this fund is sales tax. This is the one-quarter of 1 percent that was added to the existing sales tax rate in Clark County in April 1999. This revenue is collected by the state Department of Taxation and remitted to the SNWA monthly on a two-month lag. The SNWA shares this revenue with wastewater agencies, rural water and wastewater systems and the Las Vegas Wash. Sales tax collections will conclude in June 2025, or when \$2.3 billion has been collected, whichever occurs first. The SNWA has received approximately \$652 million through June 30, 2008, retaining approximately \$410 million, with the balance allocated to the Las Vegas Wash, rural systems and wastewater purveyors.

New Expansion Revenues

Cumulative through June 2008
Actual vs. 1997 Model Forecast



One revenue source that is challenging to forecast is the SNWA's share of revenues from the Southern Nevada Public Land Management Act (SNPLMA), a federal law passed in 1997. The SNPLMA calls for the SNWA to receive an amount equal to 10 percent of the purchase price of certain public land sales in the Las Vegas Valley, with proceeds restricted to paying debt service of construction costs of the SNWA's Capital Improvements Plan.

SNWA revenues from the SNPLMA are based solely on the availability and sale price of public lands in the valley. Since the act was finalized after the 1997 model forecast was prepared, that forecast contained no projection of revenue from this source. The \$287.3 million in SNPLMA revenue received to date makes it the third-largest New Expansion revenue source. However, its prominence as a revenue source is expected to decrease substantially in future years.

The primary outflow of this fund is debt service payments on bonds sold to fund the Capital Improvements Program. Also, according to the Capital Improvements Funding Plan, the fund also pays some construction expenses directly (pay-as-you-go), which eliminates the cost of borrowing (interest).

A fourth revenue source is a combined rate-based commodity charge and reliability surcharge. Southern Nevada residents who are connected to a municipal water system pay the commodity charge monthly. Funds raised from this charge are used to improve water quality and enhance the reliability of the water system. The Water Authority commodity charge is 10 cents per 1,000 gallons of water used and is applied to all customers. This accounts for about 10 percent of Capital Improvements Program (CIP) funding.

The reliability surcharge is based on the need of every customer to have water when they turn on their tap. The reliability surcharge is based on the concept that customers have varying levels of critical need for water and should pay accordingly. The

surcharge shifts some of the financial burden of costs associated with reliability from residential customers to all other customers. The rate, which is applied against the total water bill with a few line item exceptions, has been set at 0.25 percent for residential customers and at 2.5 percent for all other customers. The reliability surcharge provides about 5 percent of CIP funding.

Capital Improvements Construction

The Capital Improvements Construction sub fund ended Fiscal Year 2008 with a balance of zero as of June 30, 2008. The sub fund opened Fiscal Year 2008 with a balance of \$291 million. This fund receives bond proceeds and pays construction expenses with those proceeds. When bond funds are depleted, the cash balance in the New Expansion Debt Service sub fund is used until additional bonds can be sold. At that time the New Expansion Debt Service sub fund is reimbursed for its capital expenditures and the remaining bond funds stay in the Capital Improvements Construction sub fund to pay for future capital expenses. The SNWA sold additional bonds in November 2006. The Capital Improvements Construction sub fund is almost always "over-committed but under-expended," meaning construction contract commitments generally exceed the amount of bond proceeds on hand. This fund has earned an estimated \$6 million in tax-exempt arbitrage interest by complying with federal requirements for exemption. These interest earnings have reduced the overall costs associated with the Capital Improvements Construction sub fund. Debt-management strategies are expected to save an additional \$370 million over the life of the projects.

Groundwater Program

The Groundwater Program sub fund had a balance of \$4 million as of June 30, 2008. As authorized by state law, the SNWA assesses an annual fee of \$30 per acre-foot of permitted groundwater rights, or \$30 per domestic well. Proceeds from this fee are used to manage the aquifer, fund permanent recharge of the aquifer and, when needed, fund well abandonment and conversion to municipal water systems. Much of the ending balance will be spent on artificial recharge and well conversions in future fiscal years.

Las Vegas Wash

The Las Vegas Wash sub fund had a balance of \$1.2 million as of June 30, 2008. The SNWA invests in programs and research to find solutions to critical environmental issues surrounding the Las Vegas Wash, the natural channel that returns runoff from the Las Vegas Valley to Lake Mead. To assist in this, the SNWA organized the Las Vegas Wash Coordination Committee, which comprises stakeholders in the Las Vegas Wash. Operating costs are funded by assessments of member agencies. In addition, the Las Vegas Wash receives 4 percent of sales-tax proceeds received by the SNWA. These proceeds have been used to fund capital improvements in the Wash, such as the construction of weirs to stabilize and protect wash banks. However, a funding formula is in place for stakeholders in the Las Vegas Wash to reimburse the SNWA for operations of the committee. Grants also represent a significant revenue source for activity related to the Wash.

The following table provides a ledger view of sources and uses of funds within the individual sub funds discussed in this financial overview for the Fiscal Year ending June 30, 2008. The first half of the ledger represents sources of funds received during the Fiscal Year; the bottom half represents expenditures of those funds. Dollar amounts in each row are added across for a total. The numbers shown in the beginning and ending balance rows are balances in these funds before and after this year's sources and uses of funds. Dollar amounts are presented in millions.

Sources and Uses of Funds Summary

Fiscal Year Ended June 30, 2008
(In millions of dollars)

	Wholesale Delivery Operations	New Expansion Debt Service	Capital Improvements Construction	Groundwater Program	Las Vegas Wash	Total
Beginning Balance (July 1, 2007)	17.9	506.3	290.7	3.3	0.2	818.4
Sources of Funds						
Operating Revenues	118.8			2.0	1.2	122.0
Other Revenues	1.3	0.1			9.3	10.7
New Expansion Revenues		135.0			3.5	138.5
Intra Fund Loans	(18.3)	(5.0)	25.2		(1.9)	(0.0)
Interest Income	0.6	24.9	6.2	0.2	-	31.9
Total Sources of Funds	102.4	155.0	31.4	2.2	12.1	303.1
Uses of Funds						
Power Costs	(35.2)					(35.2)
Payroll Costs	(32.1)			(0.3)	(0.8)	(33.2)
Operations and Maintenance	(20.8)			(1.2)		(22.0)
Operating Capital Expenditures	(1.5)				(0.7)	(2.2)
Reclassifying Prior Period Expenses					1.4	1.4
Const. & Resource Expenditures		(123.6)	(322.1)		(11.0)	(456.7)
Debt Service	(18.4)	(135.4)				(153.8)
Total Uses of Funds	(108.0)	(259.0)	(322.1)	(1.5)	(11.1)	(701.7)
Fiscal Year Net Change	(5.6)	(104.0)	(290.7)	0.7	1.0	(398.6)
Ending Balance (June 30, 2008)	12.3	402.3	-	4.0	1.2	419.8