

Southern Nevada's Water Needs

Lower Colorado River Tour

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SOUTHERN NEVADA WATER AUTHORITY®

Southern Nevada



Southern Nevada: A Snapshot



Approximately:

- 8,000 square miles
- 2 million residents
- 40 million annual visitors
- 4 inches annual rainfall

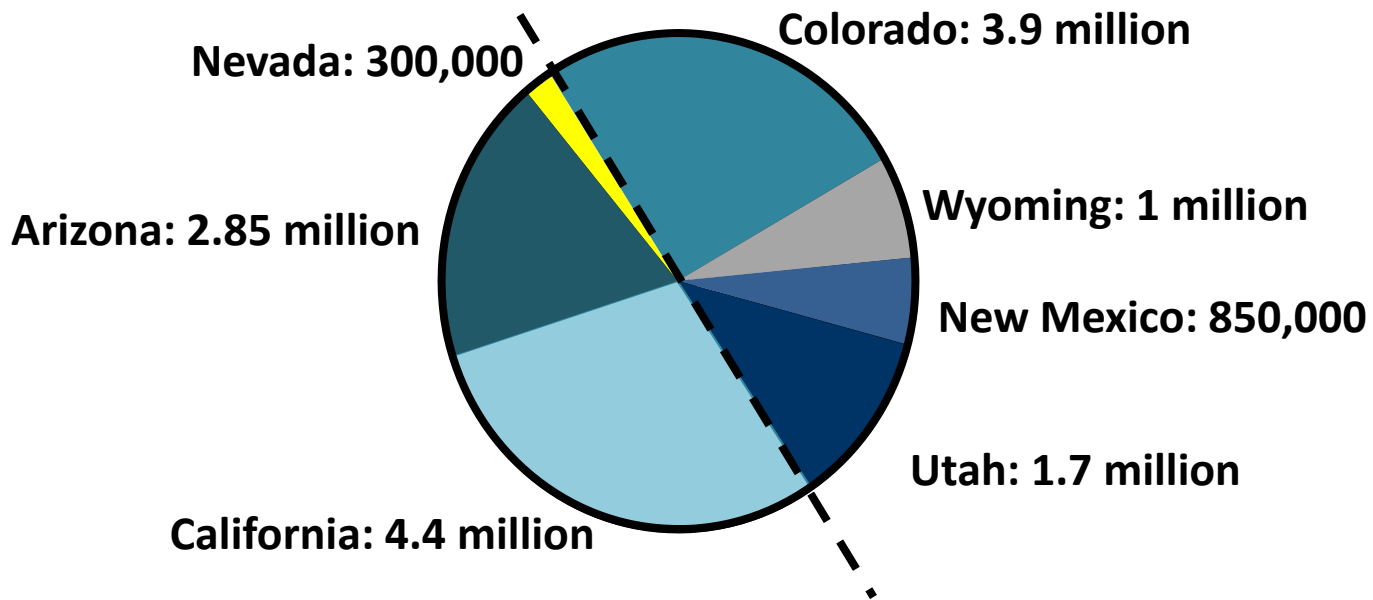


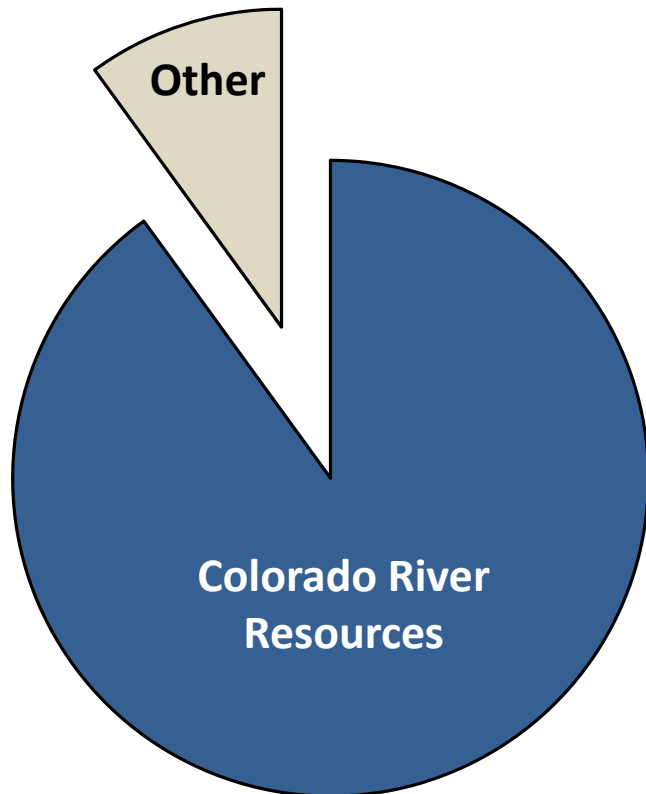
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- **Manage regional water supplies**
- **Implement conservation programs**
- **Build and operate facilities**
- **Long-term water resource planning**
- **Meet state and federal water quality standards**

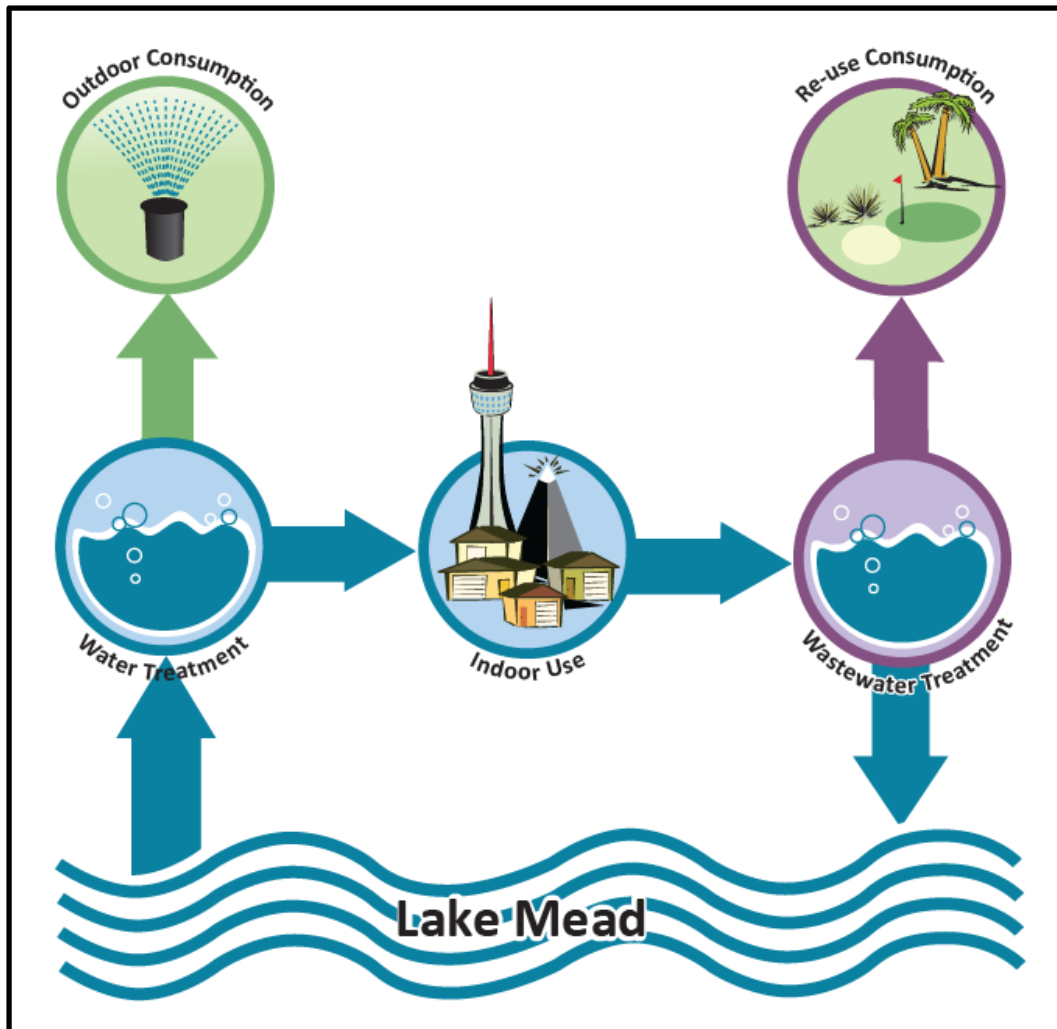


Nevada receives 300,000 acre-feet of Colorado River water annually, accessed through facilities at Lake Mead.





**Colorado River resources meets
90 percent of Southern Nevada's
water demands.**

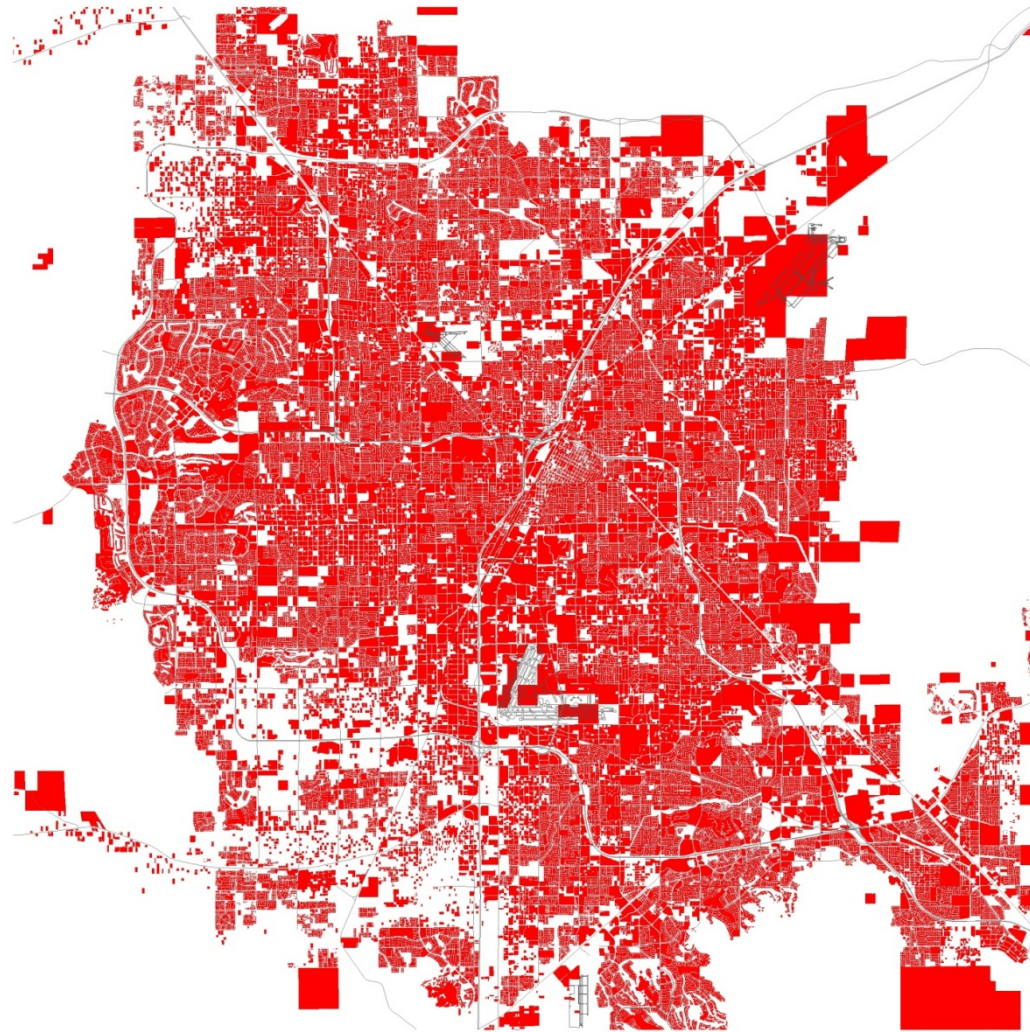


In Southern Nevada, any water used indoors is treated at a wastewater treatment facility and then returned to Lake Mead.

Nevada receives a “return-flow credit” for water treated and returned.

Return-flow Credits

Challenge: Explosive Growth



1950
Pop 47,000

1960
Pop 116,000

1970
Pop 262,000

1980
Pop 444,000

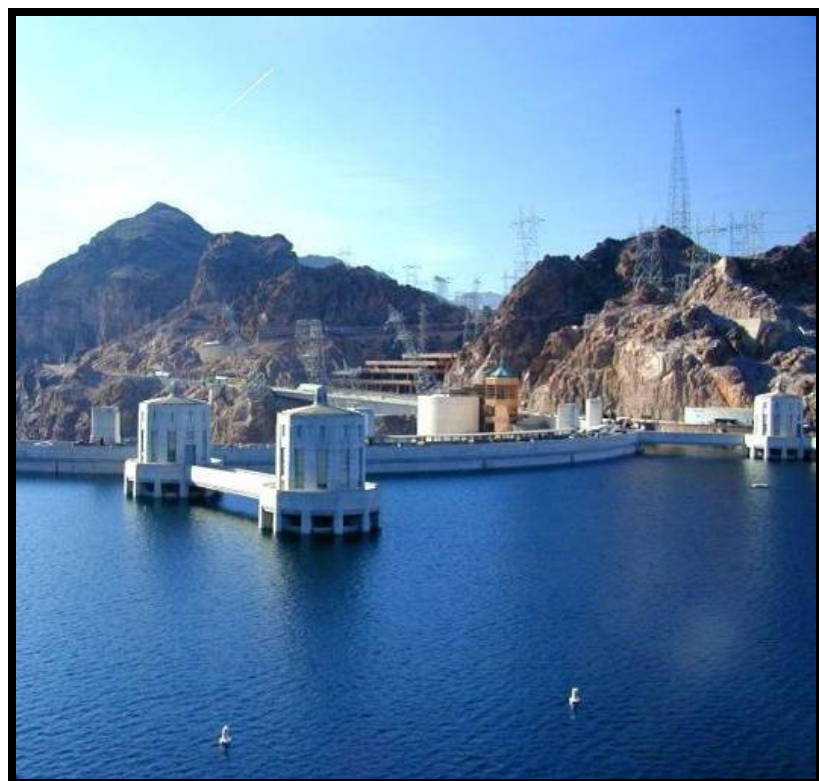
1990
Pop 708,000

2000
Pop 1,300,000

2010
Pop 2,000,000

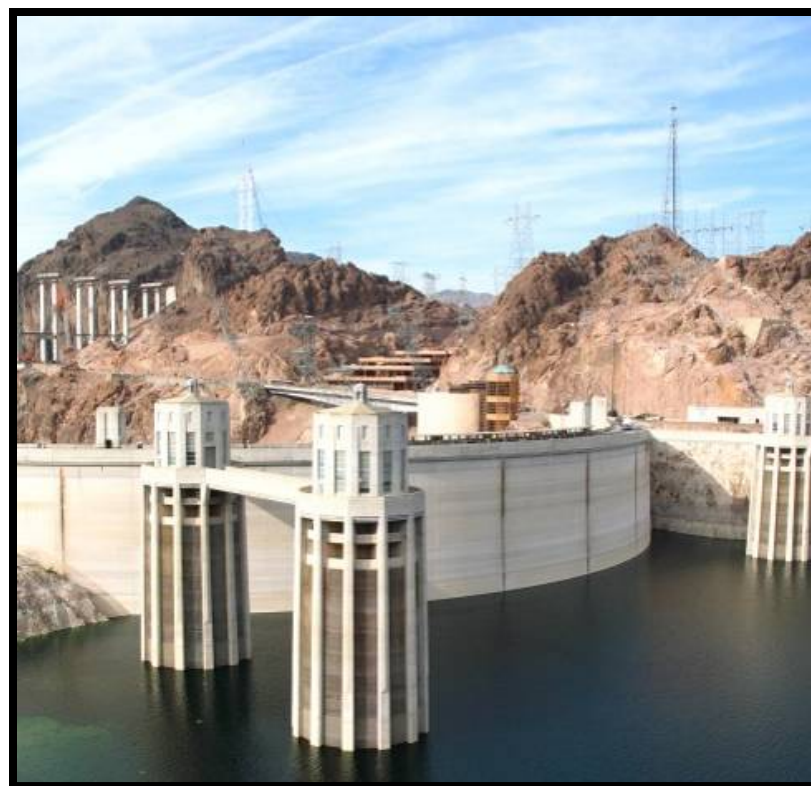
Challenge: Severe Drought Affecting Primary Supply

Lake Mead's elevation dropped more than 100 feet in a 10-year span.



Hoover Dam, Lake Mead

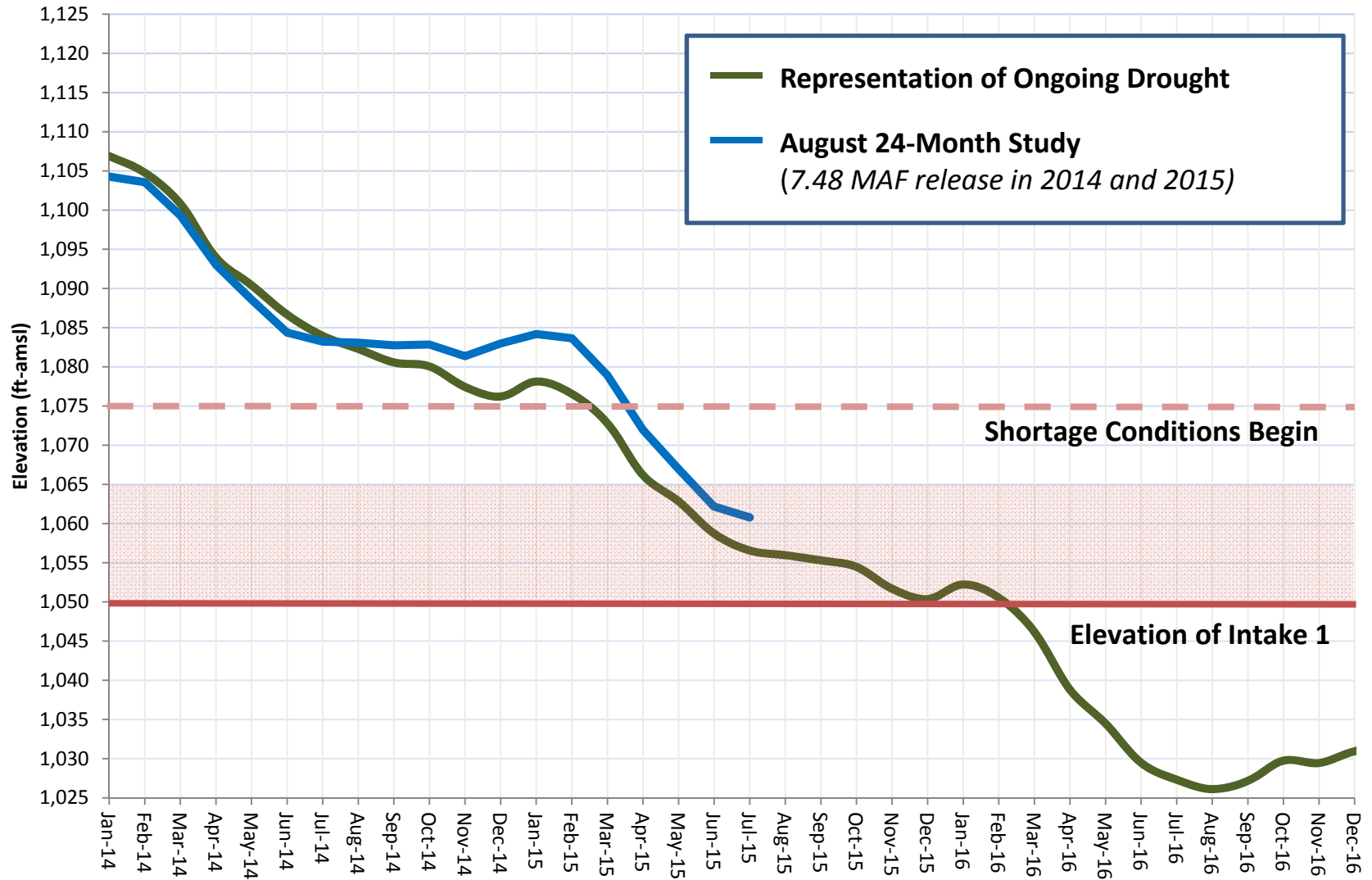
2000



Hoover Dam, Lake Mead

2010

Challenge: Severe Drought Affecting Primary Supply



ADDRESSING THE ISSUE: *Reduce use*

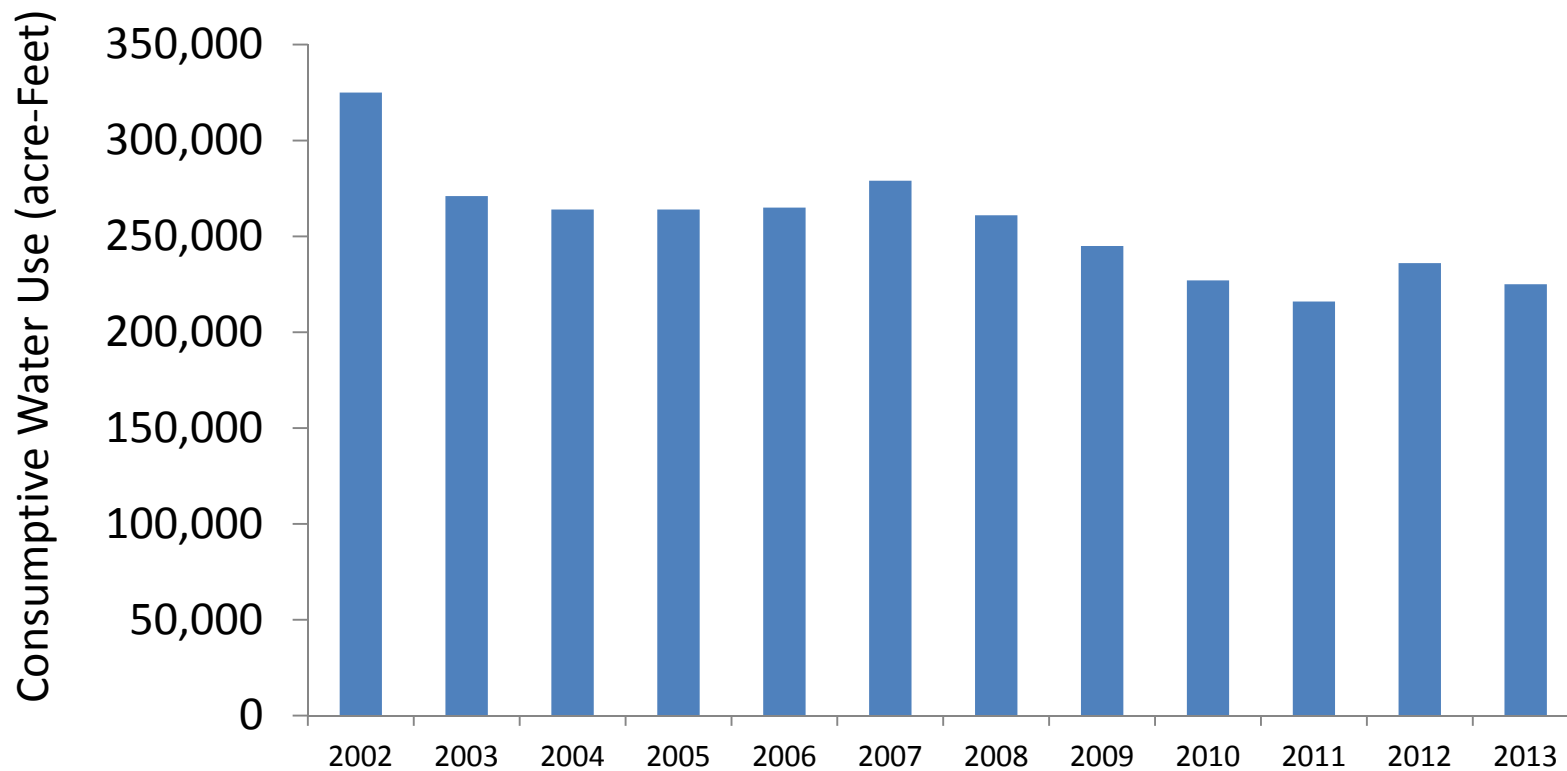
Southern Nevada has embraced a culture of efficient watering practices.

- **SNWA Water Smart Landscape Program offers rebates to landowners to convert grass to water-efficient landscaping**
- **167 million square feet of turf converted to date**
- **More than 9 billion gallons saved annually**
- **Other programs include car wash coupons, pool cover rebates, water efficient technology improvements, watering restrictions and development codes**



ADDRESSING THE ISSUE: *Reduce use*

Our community has made significant conservation achievements.



Southern Nevada consumptively used about 32 billion gallons less water in 2013 than in 2002, despite annual population increases and millions of annual visitors.

ADDRESSING THE ISSUE: *Seek creative solutions*

Rather than trying to reopen the Colorado River Compact, Nevada has benefitted from the flexibility it offers.

- **Coordinated operations** of Lakes Powell and Mead have helped protect Lake Mead's elevations.
- Resources secured through **Intentionally Created Surplus** provisions help meet current demands and provide some relief in the event of supply shortages.



ADDRESSING THE ISSUE: *Evaluate Facility Risks*

A new drinking water intake in Lake Mead protects Nevada's ability to draw Colorado River water at low lake elevations.

- **Protects system capacity** and reliability if lake levels fall below elevation 1,050 feet and Intake No. 1 cannot operate
- **Accesses better water quality**



ADDRESSING THE ISSUE: *Diversify Resources*

Southern Nevada has secured temporary resources to meet short-term demands.

- Arizona and California groundwater banks
- Southern Nevada groundwater bank
- Brock Reservoir ICS water
- Yuma Desalting Plant ICS water
- Binational ICS

ADDRESSING THE ISSUE: *Diversify Resources*

The SNWA is pursuing unused, unappropriated groundwater resources within its state.

- When constructed, the project will convey up to 84,000 acre-feet of groundwater from eastern Nevada to Southern Nevada via 263-mile pipeline
- Alternate supply to drought-stricken Colorado River
- Meets increased long-term demands





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