

A photograph of a deep canyon with steep, layered rock walls. The rock is a mix of reddish-brown and grey. A river flows at the bottom of the canyon, with some rapids visible in the foreground. The sky is clear and blue.

Innovative Solutions to Regional Water Challenges

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Southern Nevada Water Authority
January 29, 2010**

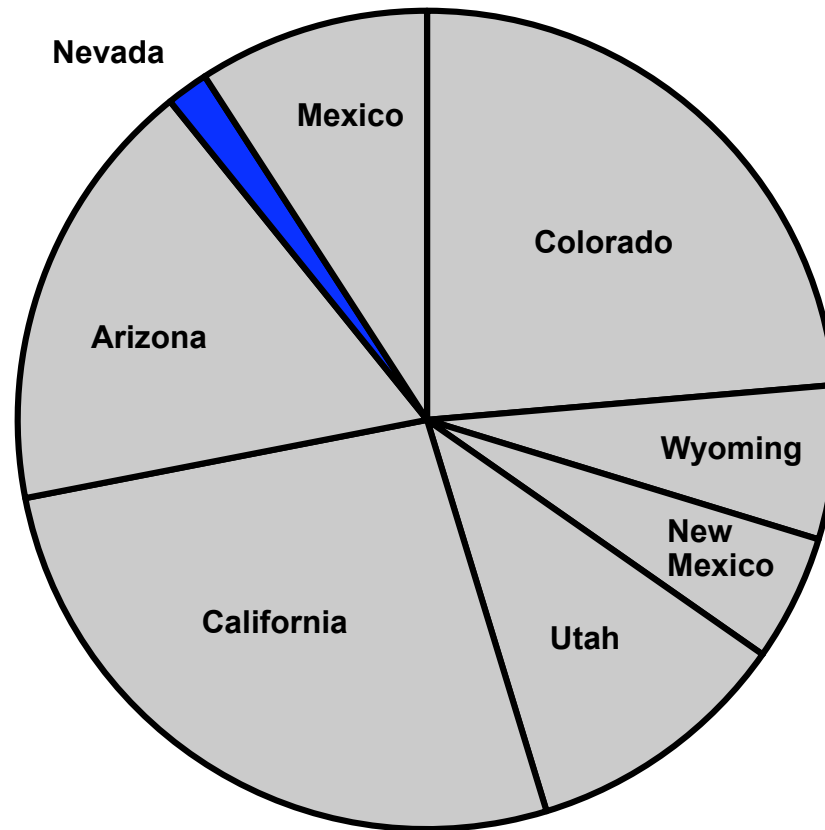
SOUTHERN NEVADA



COLORADO RIVER BASIN

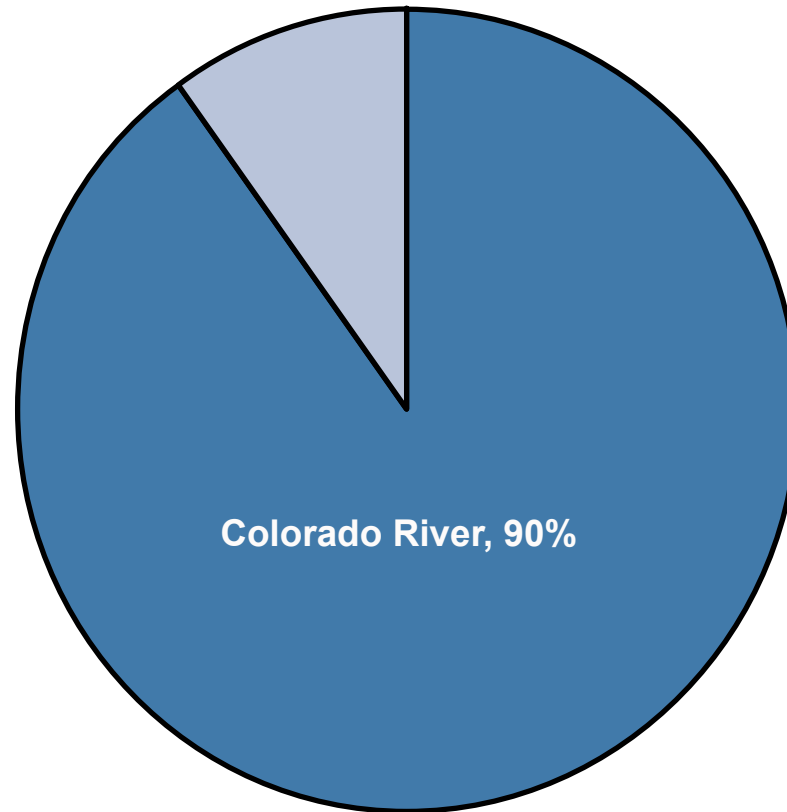


COLORADO RIVER ALLOCATIONS



SOUTHERN NEVADA'S WATER RESOURCES

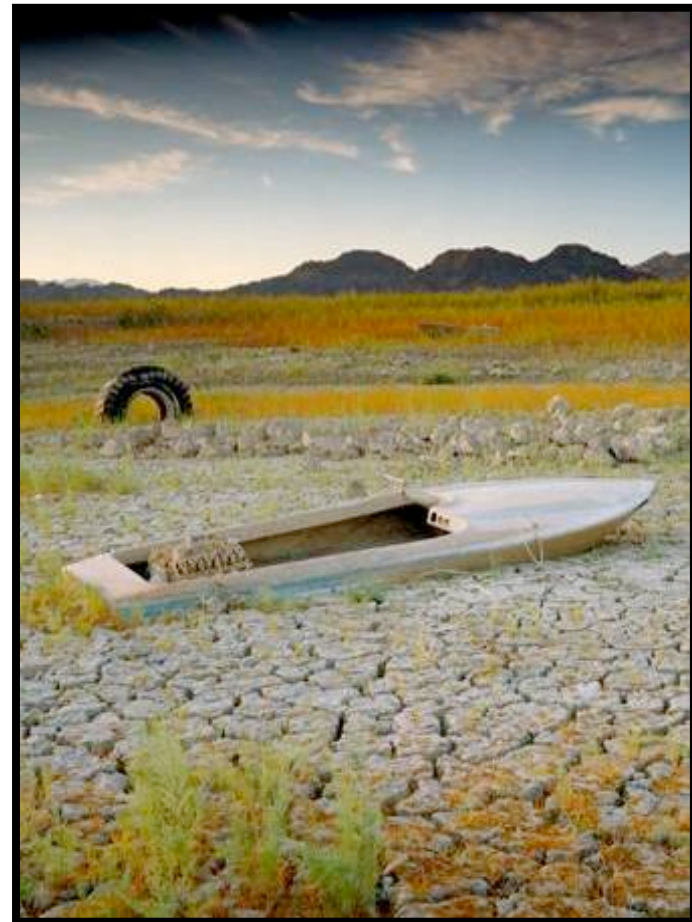
**Other Water
Resources, 10%**



Colorado River, 90%

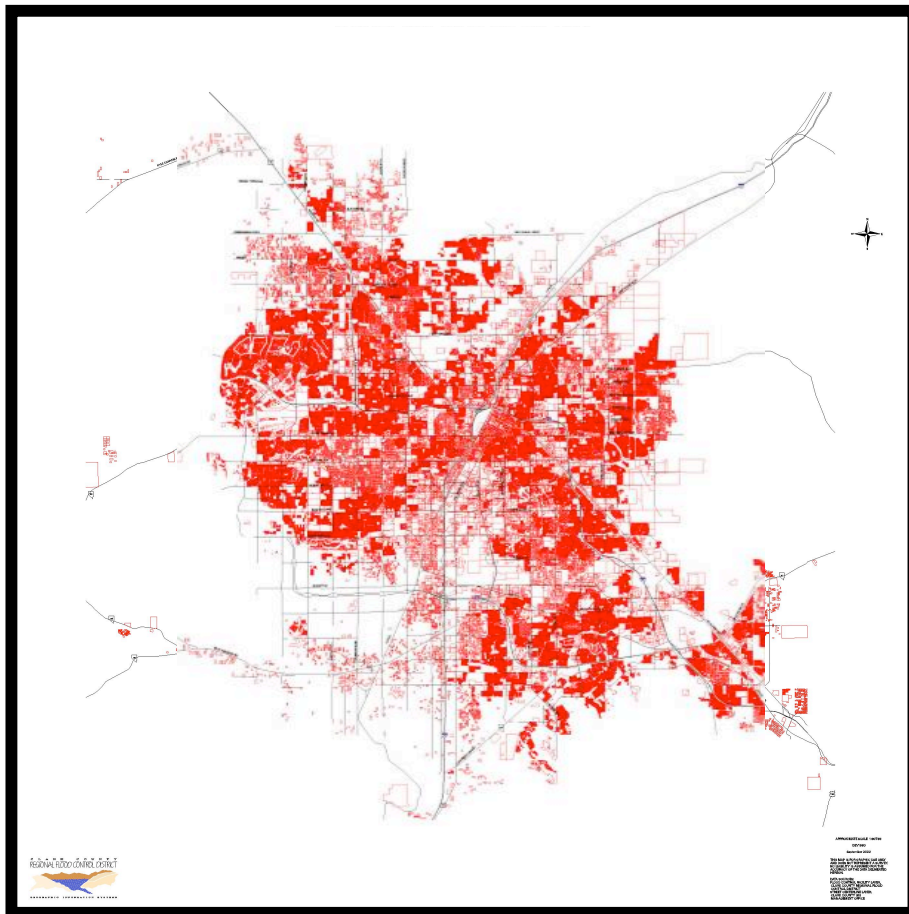
MAJOR CHALLENGES

- **Growth**
- **Drought**
- **Climate Change**



CHALLENGES

**In the 1990's Southern Nevada hit a crisis point:
additional water was needed to meet growing demands.**



Population

1950 – 47,000

1960 – 116,000

1970 – 270,000

1980 – 444,000

1990 – 800,000

2000 – 1,300,000

INNOVATIVE SOLUTIONS

Southern Nevada forged innovative partnerships, utilizing temporary resources until permanent non-Colorado River resources could be developed.

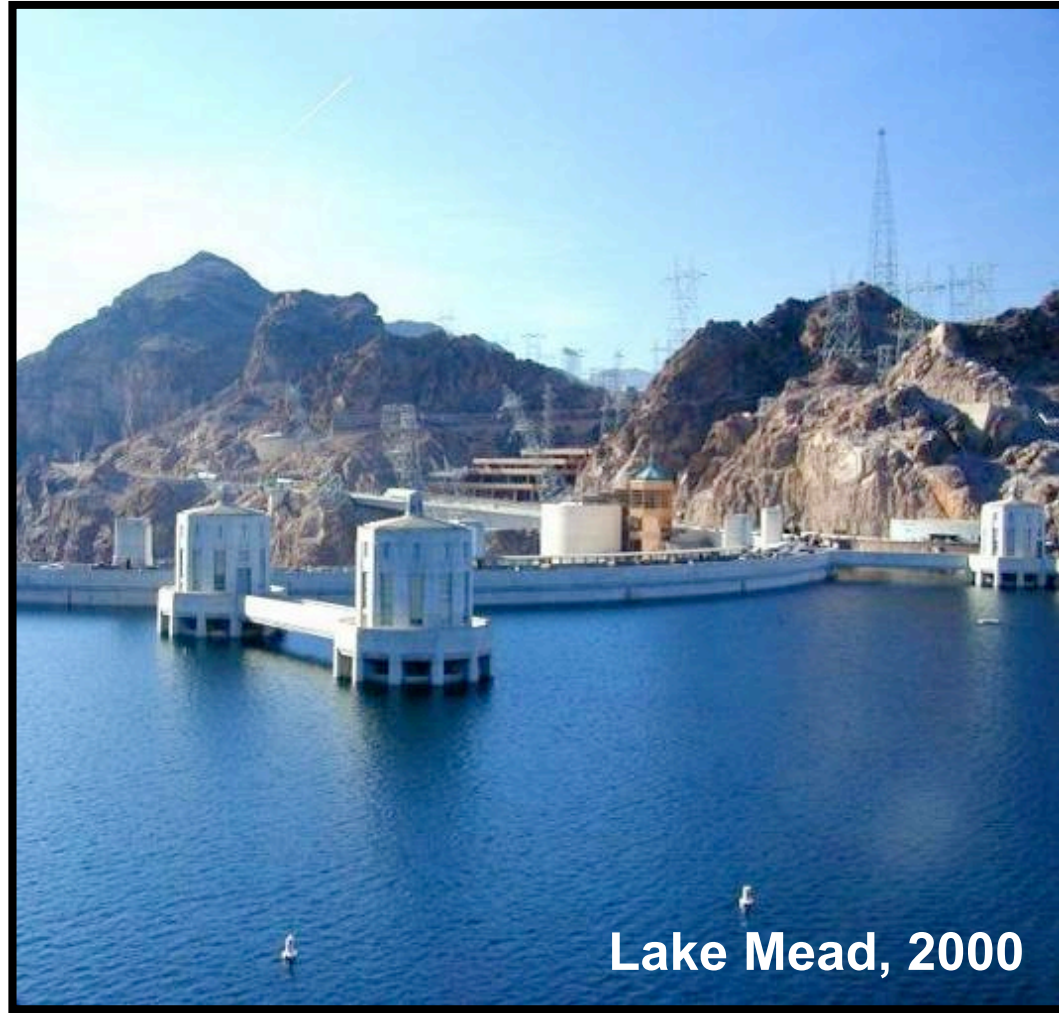
- **Water Banking**
 - Local
 - Interstate
- **Interim Surplus**



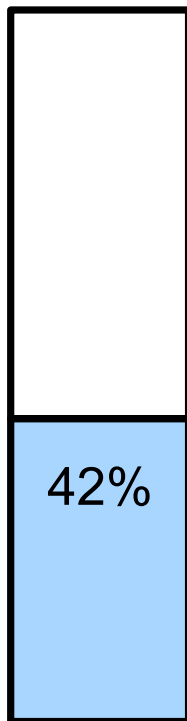
Dead Horse Point, Colorado River (Utah)

COLORADO RIVER DROUGHT

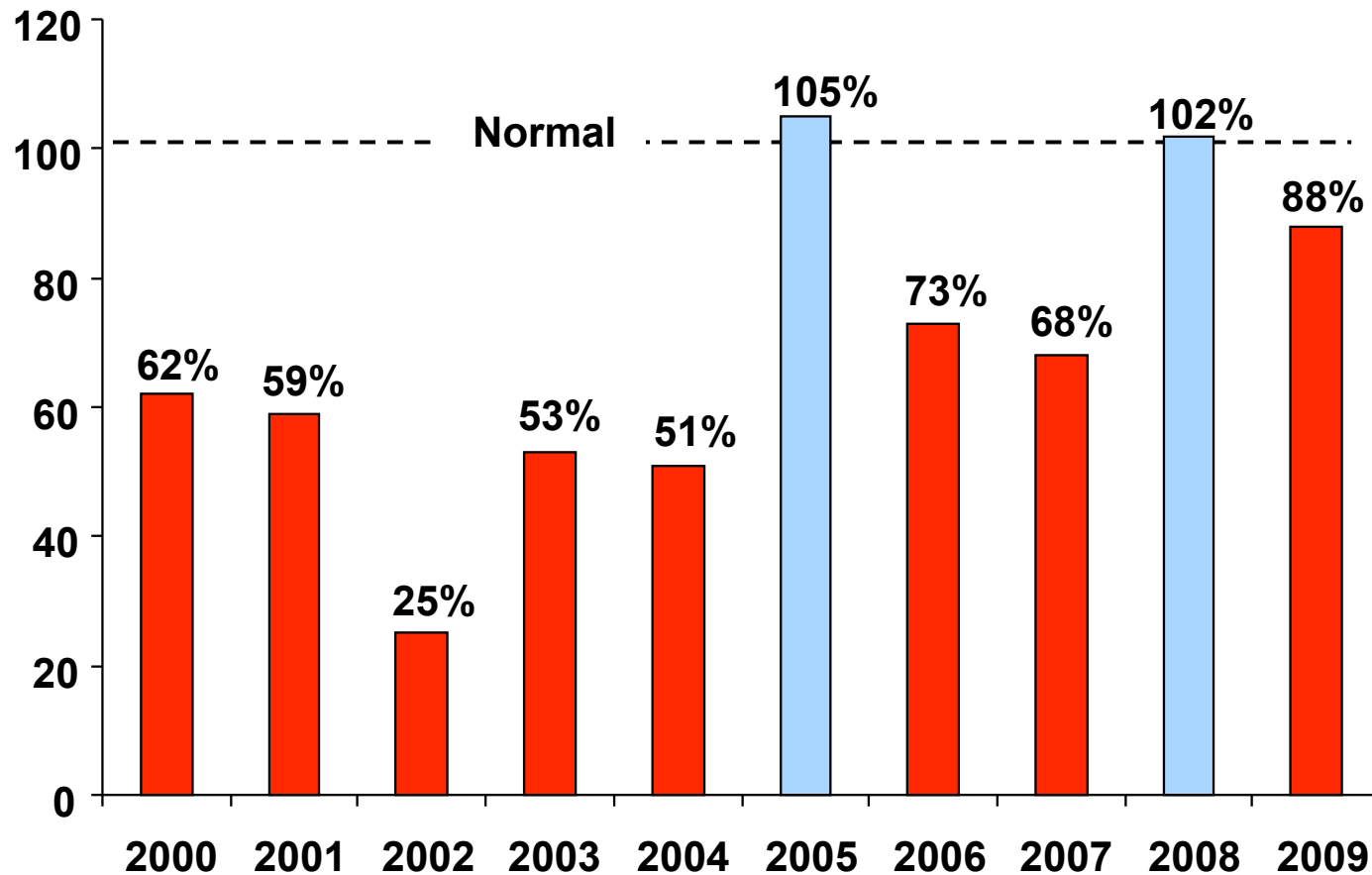
96%



COLORADO RIVER DROUGHT



COLORADO RIVER DROUGHT



The 10-year historical average inflow to the Colorado River system was 69% of normal.

LOCAL RESPONSE - CONSERVATION

Conservation was Southern Nevada's first response to drought.

2003: Implemented drought plan

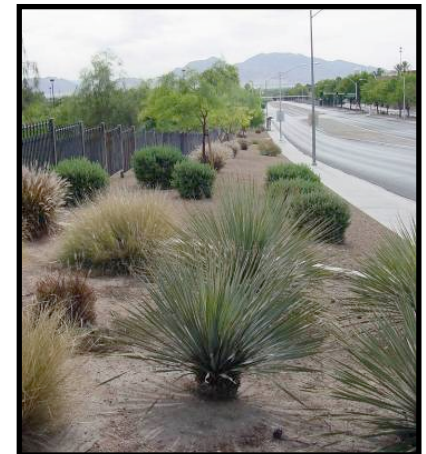
2004: Realized 25% conservation goal

2005: Adopted new conservation goal

2008: Realized 250 GPCD goal

2009: Adopted new goal (199 GPCD by 2035)

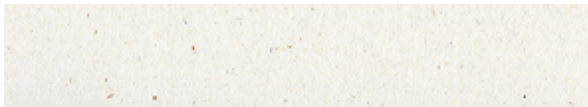
Water consumption decreased by nearly 21 billion gallons between 2002 & 2008, despite a population increase of 400,000 during that span.



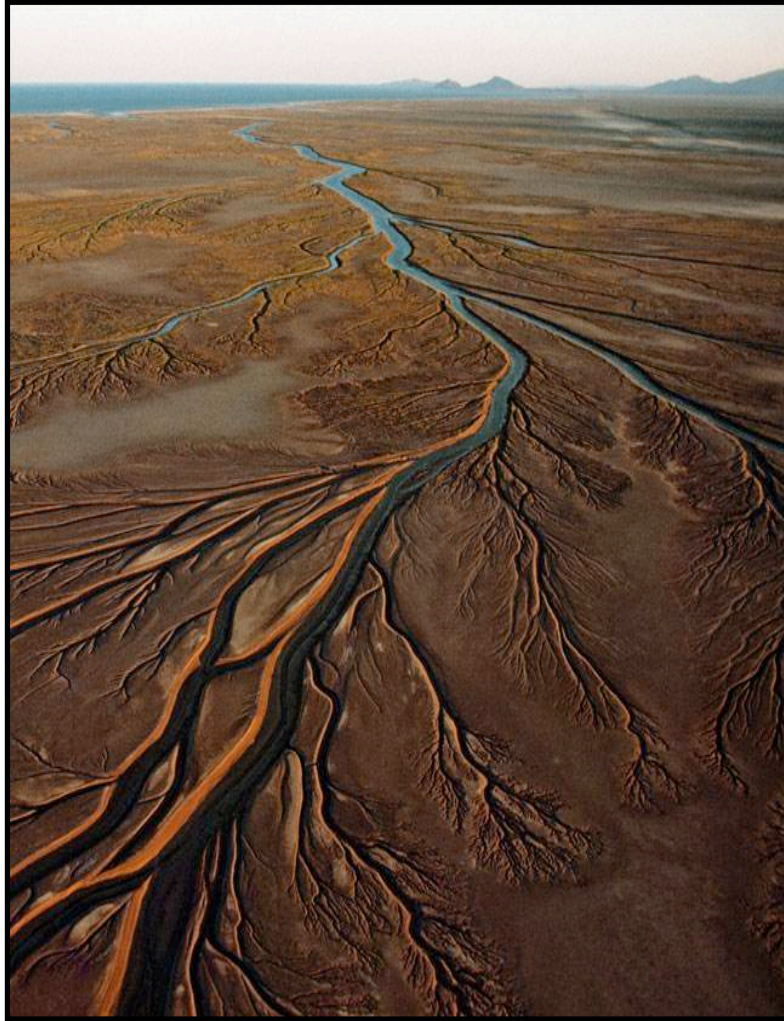
REGIONAL RESPONSE - INNOVATION

The Seven Basin states have worked over the last decade to implement innovative water solutions for the Colorado River.

- Rules for Surplus
- Shortage sharing
- Coordinated management



REGIONAL RESPONSE - PARTNERSHIPS



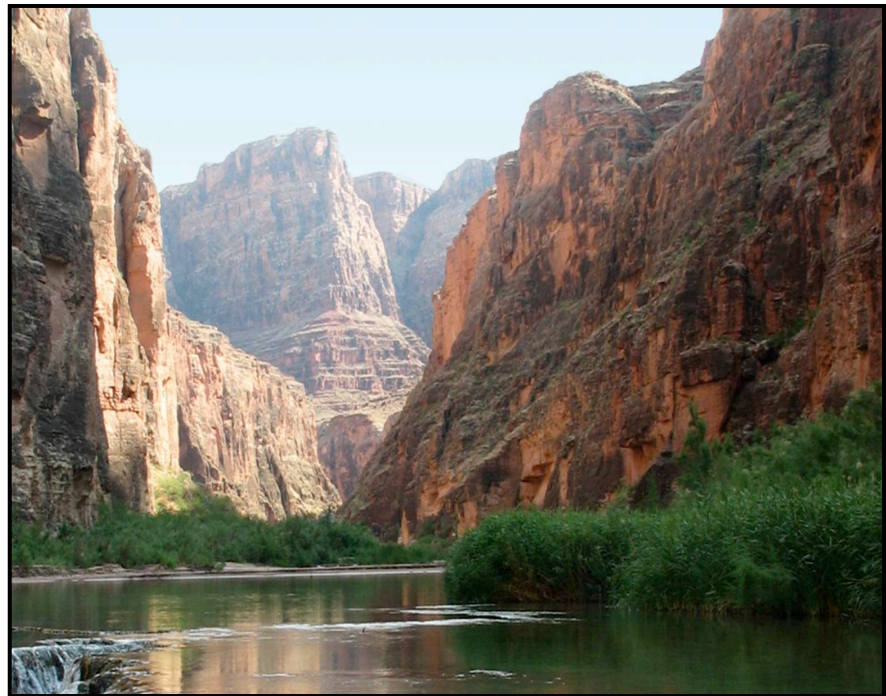
Colorado River Delta, Mexico

- **Banking arrangements**
- **Shared facilities**
- **Augmentation study**
- **Collaborative protection of environmental resources**

CLIMATE CHANGE

The uncertainties posed by climate change will require us to use many of the same tools that have allowed us to successfully address water resource challenges over the last decade.

- **Conservation**
- **Innovation**
- **Partnerships**





SOUTHERN NEVADA
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