



Water Efficiency

October 17, 2023

Background

- Discussion Precipitated by CUWCD & State of Utah Water Efficiency Standards (from Early 2023)
- Santaquin Has Been & Will Continue to be Water Efficient
 - Excellent Water Planning for a Century
 - Projects & WR's Date Back to 1932 Forming of the City (& beyond)
 - Canyon Springs
 - Well Water Rights
 - WRF
 - Type 1 reuse
 - SCIC Water Shares

Background

- CUWCD & State of Utah Water Efficiency Standards
 - Mostly aimed at Limiting Turf on Newly Constructed Homes
 - No Change to Existing Homes
 - Provide Incentives to Residents for Conservation

Current Status

- Currently Using About 36% of State Approved WR's
 - (Mostly For Indoor Water Use, Minimal Outdoor Use)
- Currently Using About 46% of Our Outdoor WR's/Shares
 - SCIC Shares
 - City Held Water Rights
 - Type 1 Water
 - Etc.

Current Status

- Currently Hold 95% of Needed WR's for Buildout Indoor Use
 - (Minimal Outdoor Use)
- Currently Only Have/Hold 65% of Buildout Water Rights/Shares

Recently Learned

- Attended Annual Water School by Prepare 60
 - Prepare 60 Consists of
 - Jordan Valley Water Conservancy District
 - Weber Basin Water Conservancy District
 - Central Utah Water Conservancy District
 - Washington County Water Conservancy District
 - Others
 - Together, These Four Entities Have 85% of Utah's Population Within Their Service Areas
 - Including Santaquin for Future CUP/ULS Water Delivery

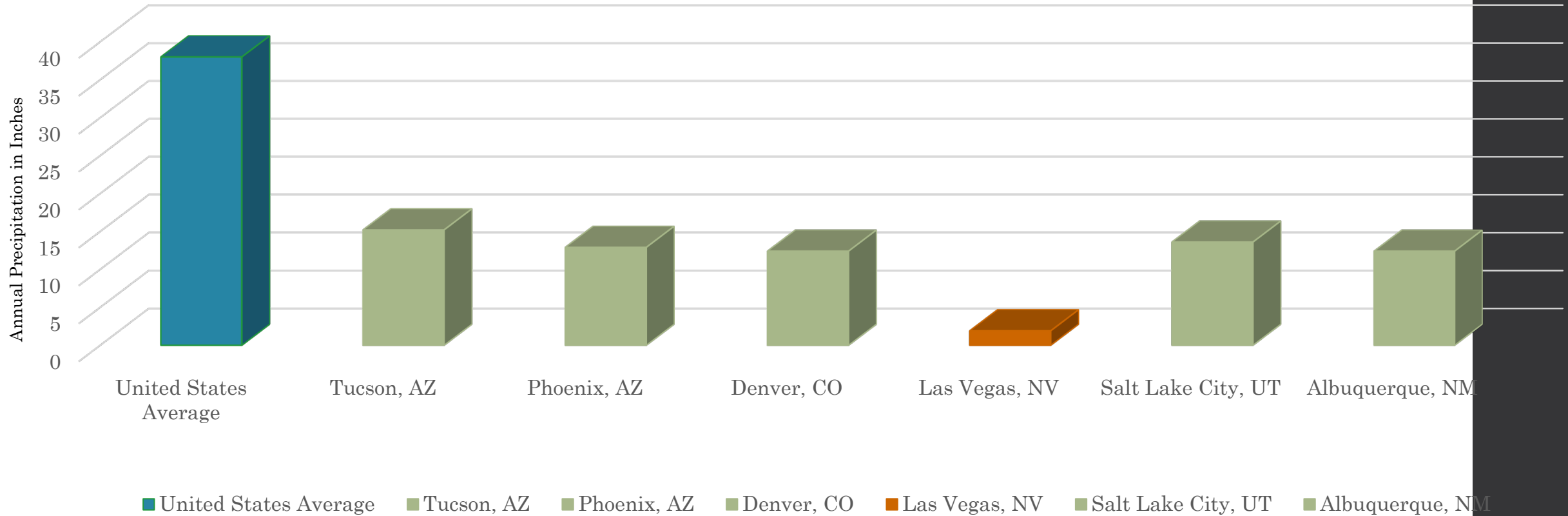
Recently Learned (CASE STUDY)

- Southern Nevada Water Authority (SNWA)
 - Covers Las Vegas & Surrounding Metropolitan Area

SOUTHERN NEVADA

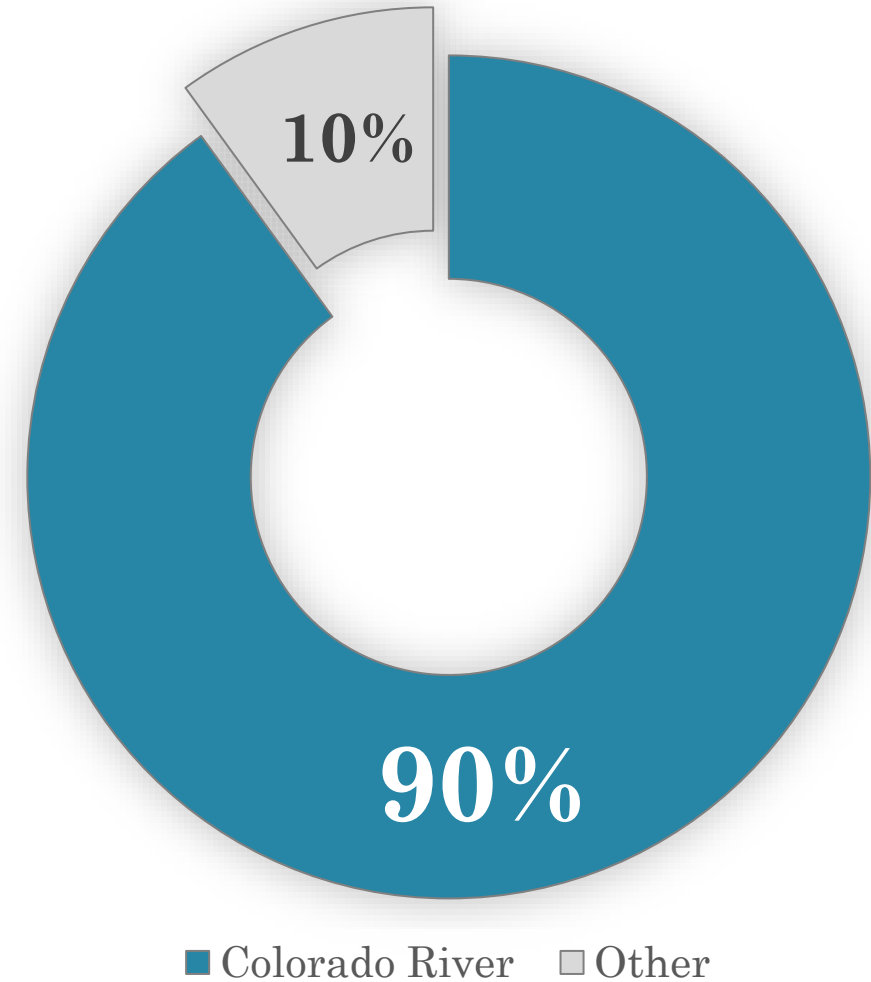
- **2.2 million residents**
- **40 million annual visitors**
- **Approx. 600 square miles
(metropolitan area)**
- **4 inches of annual precipitation**

Las Vegas is the driest metropolitan area in the United States.



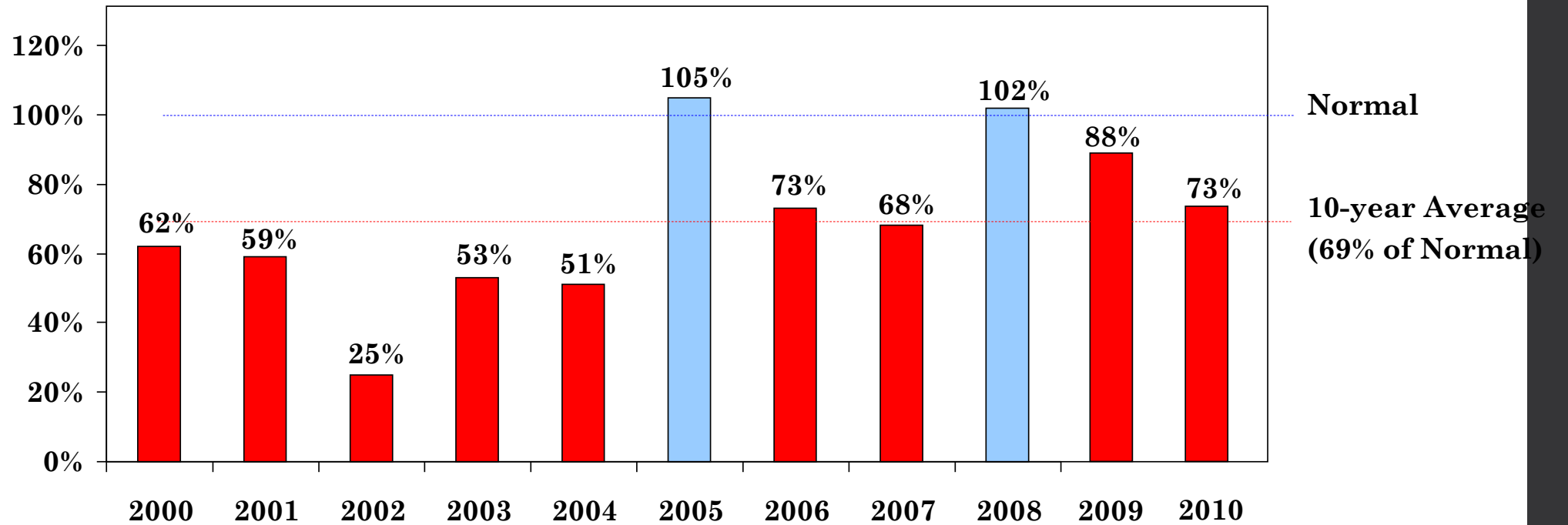
WATER RESOURCES

**Southern Nevada is nearly fully
reliant
on the Colorado River to meet
the community's water
demands.**



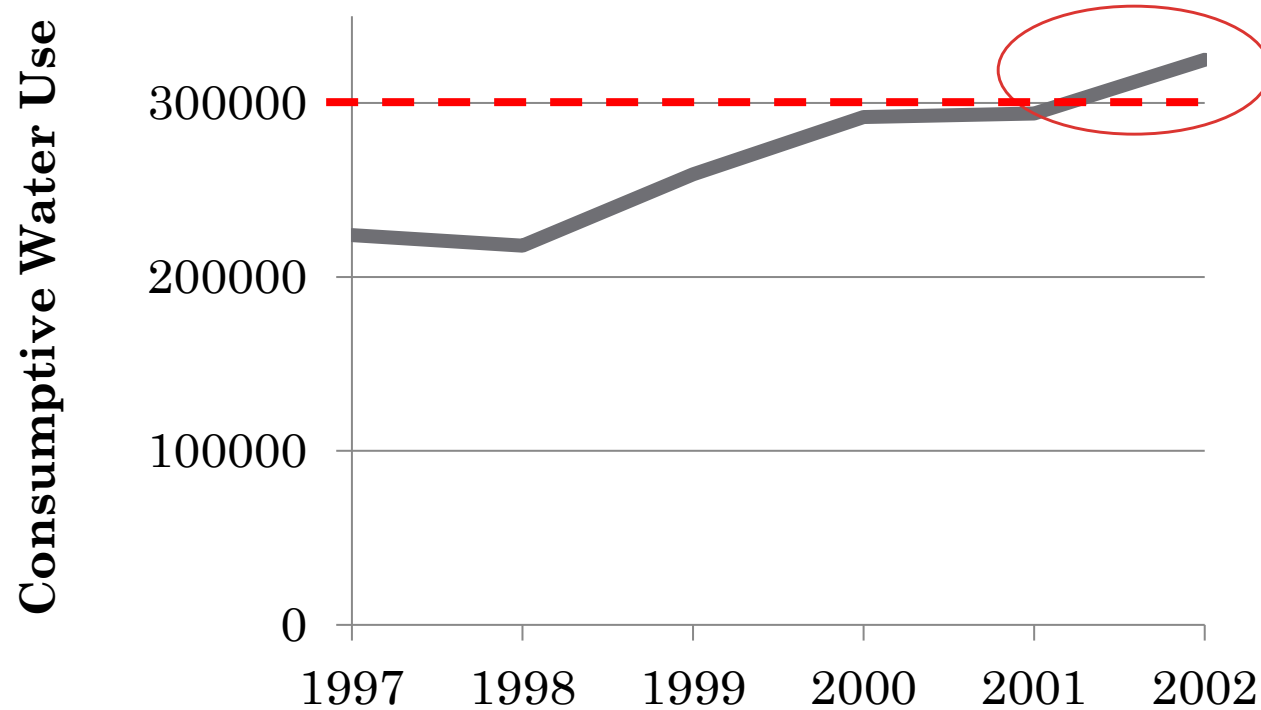
DROUGHT

In the early 2000s, the Colorado River began to experience significantly decreased inflows.

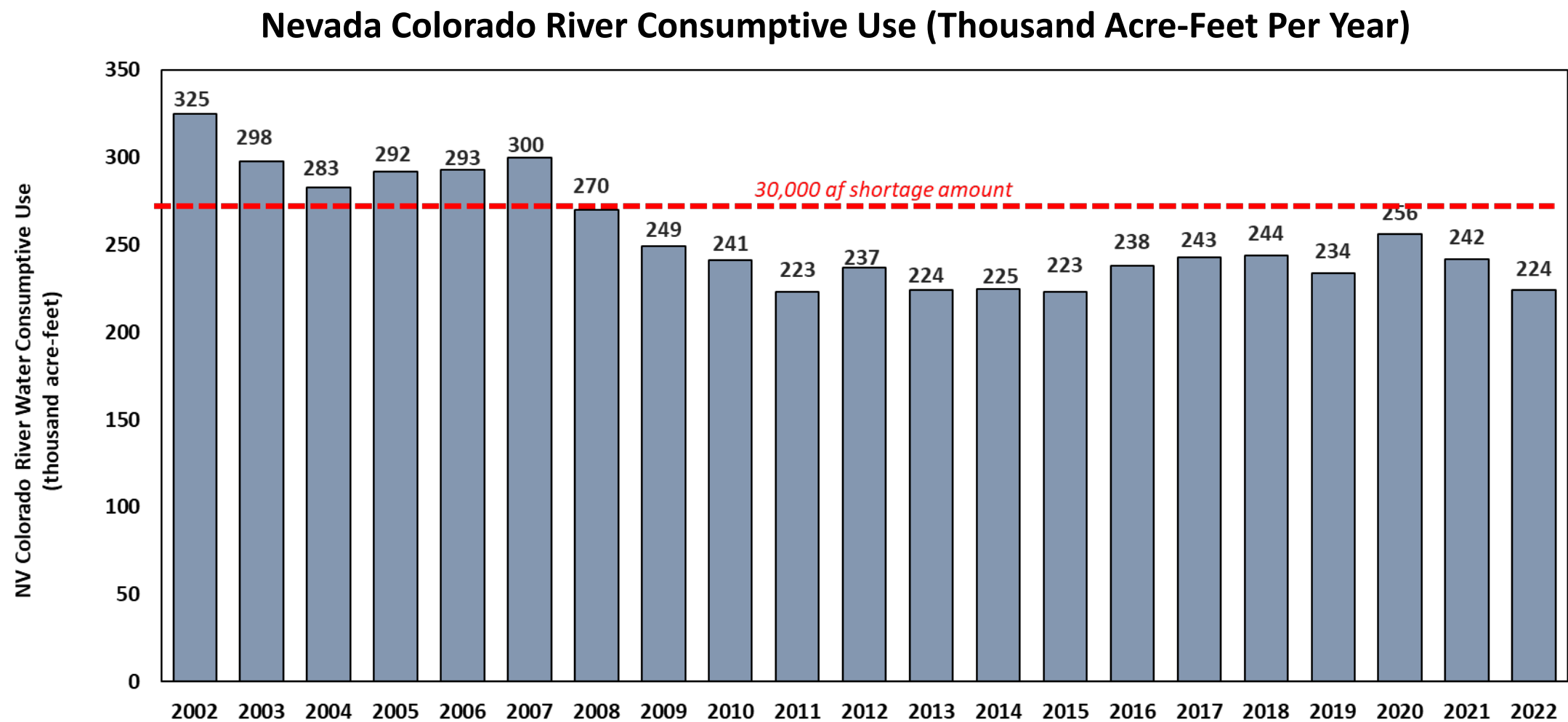


DROUGHT – 2000s

**The community was exceeding
its Colorado River allotment.**

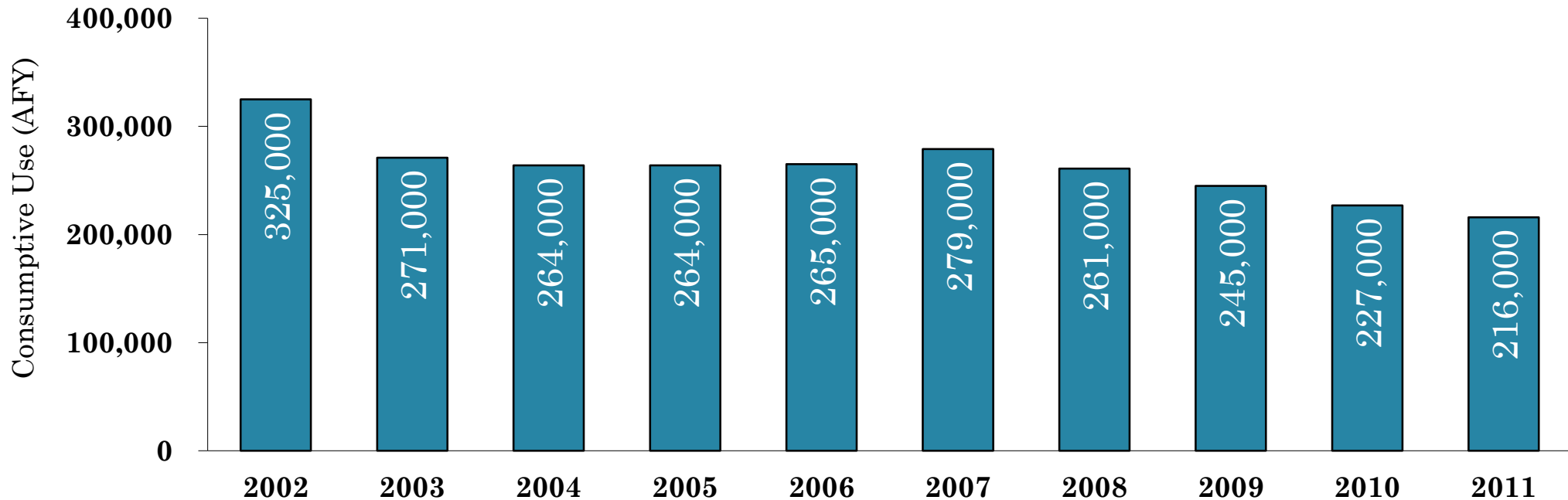


Thanks to conservation, shortages have been mitigated in the near term.



CONSERVATION RESULTS

In less than 10 years, Southern Nevada's consumptive water use declined by about 36 billion gallons, despite the addition of nearly 400,000 people.



CASE STUDY (cont.)

- SNWA

- Reduced Water Usage by 1/3
 - Over 100,000 Acre Feet Conserved
 - While **Adding** 400,000 Residents
- Infused ~~\$270M
 - \$2,700 per Acre Foot
 - Santaquin City's Current Money In Lieu of Water is \$5,500

What SNWA & Other Districts Are Doing

- SNWA
 - Limiting Turf & Outdoor Watering
 - Flip your Strip
- Washington County Water Conservancy District
 - Limiting Turf & Outdoor Watering
 - Any New Golf Course Must Bring Their Own (Wet) Water
 - Flip your Strip
- Weber Basin Water Conservancy District
 - Limiting Turf & Outdoor Watering
 - Metering (60,000 + Meters Needed)
 - Flip your Strip

Moving Forward

- Drinking Water
 - We Will Continue to Add WR's Through Development Dedication Requirements
- Outdoor Water
 - GAP Between Needed Water Rights/Shares & Available (Wet) Water
 - How Do We Fill The GAP?
 - CUP/ULS Will Fill Some, but **Not All**
 - Purchase Additional CUP/ULS Water From Other Utah County Cities (If they will give it up)
 - Developer's Find & Bring Other Wet Water (If Available)

Recommendations

- Drinking Water
 - Stay the Course Continue to Add WR's Through Development Dedication Requirements
- Outdoor Water
 - Stay the Course Continue to Add WR's Through Development Dedication Requirements (As Available)
 - Current Cost of Adding CUP/ULS Water
 - ~\$15,000*/Ac-Ft (Current Allotment of 908.5 Ac-Ft → ~\$318,000 Annually, For 40 years)
 - Implement Some Water Efficiency Standards on New Homes
 - Could Reduce Future Needs Significantly (I.e)
 - If We Reduce Future Additional Use by 15% → \$6.7M* ** ***
 - If We Reduce Future Additional Use by 20% → \$9M* ** ***
 - If We Reduce Future Additional Use by 33% → \$15M* ** ***
 - * Using Current Anticipated/Estimated CUP/ULS Cost, But Could Be Higher/More
 - ** Does Not Include Purchase Price of Water (Borne By Development)
 - *** Does Not Include Pumping Costs, City Systems O&M, Etc.

Recommendations

- We Could Use CUWCD & State Funds to Implement & Save Significant Future Value & Costs For Residents

?? QUESTIONS ??

THOUGHTS