



Serving Southern Nevada's Water Needs

in a Sustainable, Adaptive, and Responsible Manner

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SNWA is a not-for-profit agency created in 1991

Water Service

- **2 million residents (2 out of 3 Nevadans)**
- **42 million annual visitors**

Southern Nevada's Economic Output

- **\$93 billion annual GDP**
- **> 2/3 of State GDP**



Southern Nevada has spent **decades** preparing for drought and other circumstances to ensure the reliability of water supplies for Southern Nevada



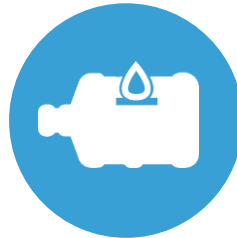
CONSERVATION

Incentives, programs, regulation & pricing



INFRASTRUCTURE

Constructing major facilities and asset management



WATER BANKING

Storing water supplies for the future

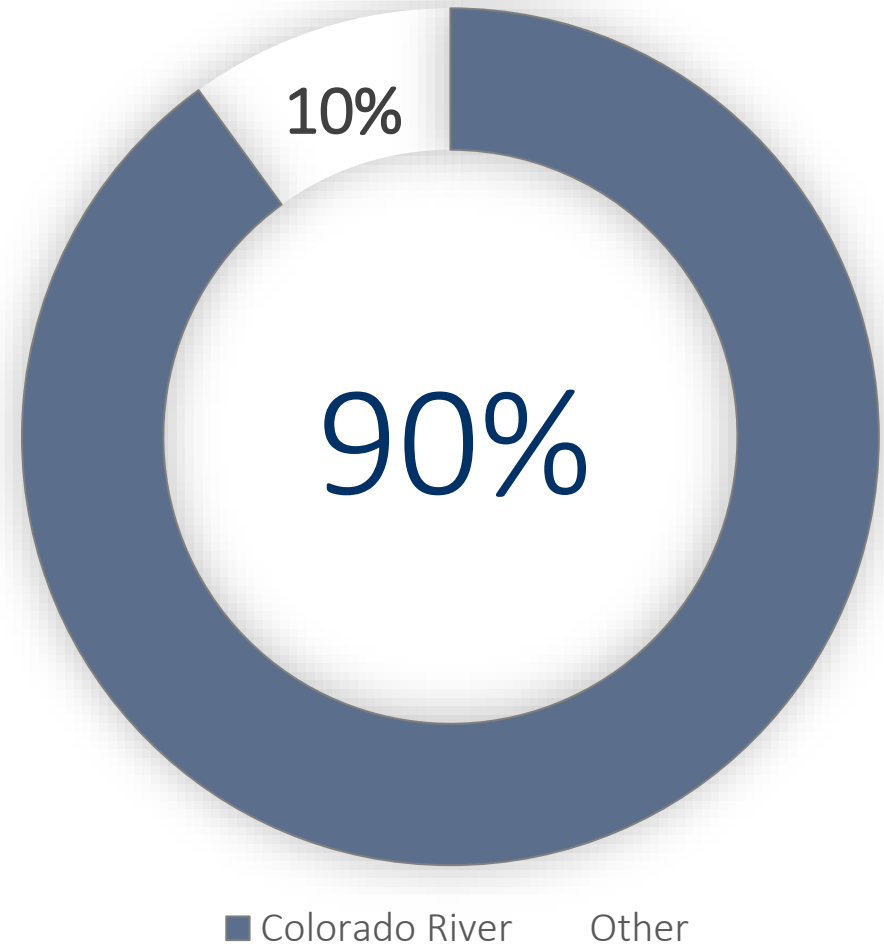


RESOURCE PLANNING

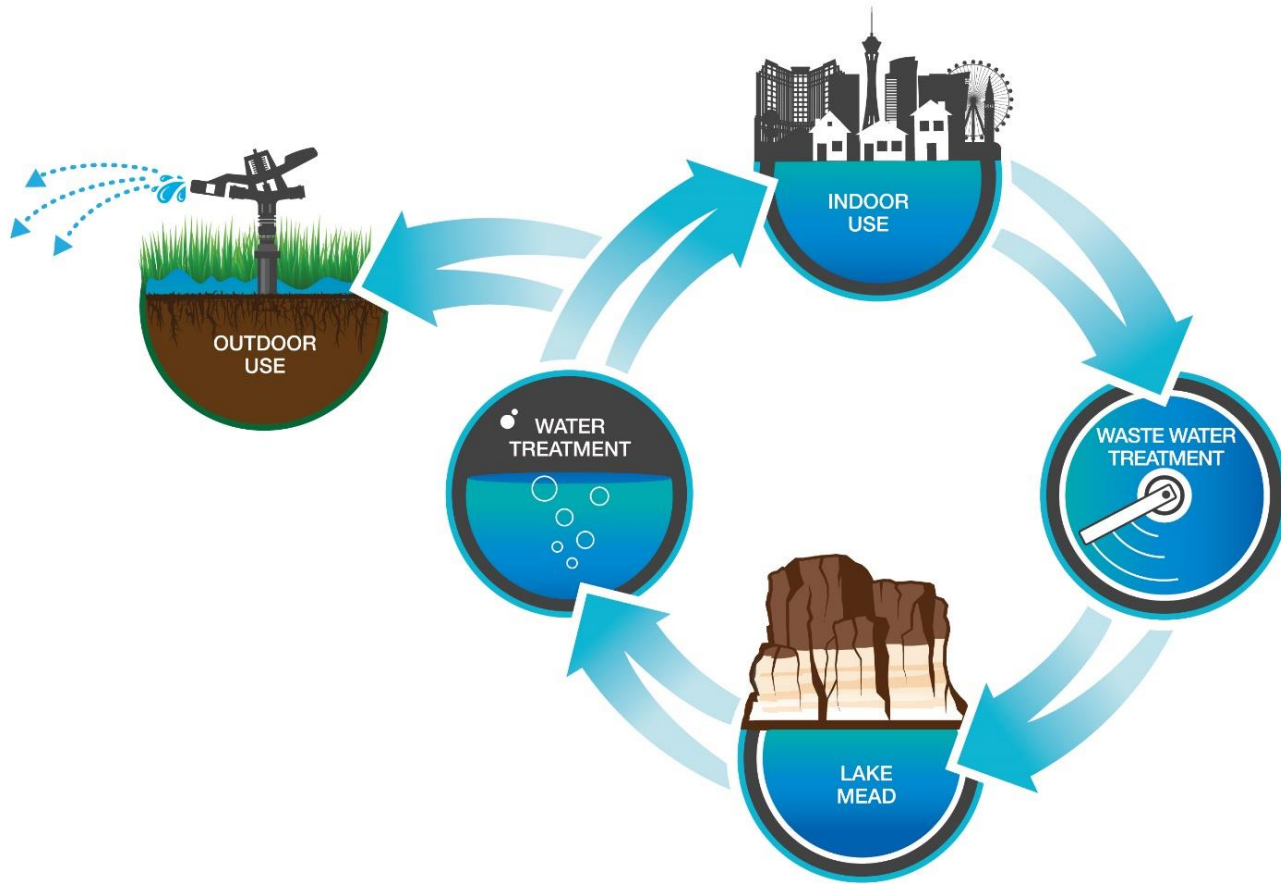
Working with partners & developing comprehensive plans to manage supplies

IMPORTANT CONTEXT

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



IMPORTANT CONTEXT



CY18 NV Water Use

Colorado River

Diversions	479 kaf
Returns	<u>- 235 kaf</u>
CU	244 kaf

Note: data are approximates

CONSERVATION



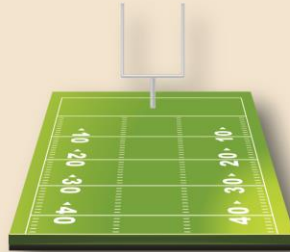
WATER SMART LANDSCAPES PROGRAM FACTS

193 MILLION

Square feet of grass has been removed since the WSL program began in 1999

THAT'S EQUIVALENT TO:

Enough grass to cover more than



3,350
FOOTBALL FIELDS

OR

Rolling an 18" wide strip of sod



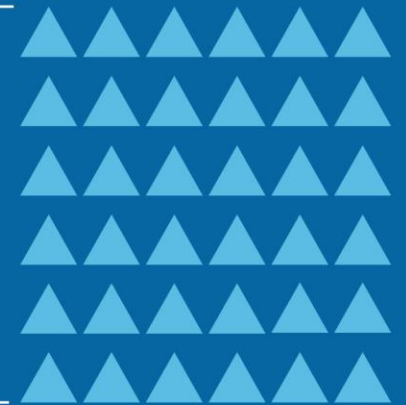
98%
AROUND THE EARTH

130 BILLION

Gallons of water saved to date.

That's enough water to fill the Luxor Hotel Pyramid

360
TIMES



Rev.1/20

WSL rebates paid since program inception: \$234.4 million

CONSERVATION



WINTER
NOV 01 - FEB 29

1 DAY
A WEEK

NEVER ON SUNDAY



SPRING
MAR 01 - APR 30

3 DAYS
A WEEK

NEVER ON SUNDAY



FALL
SEP 01 - OCT 31

3 DAYS
A WEEK

NEVER ON SUNDAY



SUMMER
MAY 01 - AUG 31

6 DAYS
A WEEK
No Watering from 11am-7pm

NEVER ON SUNDAY

Current seasonal compliance rates range from less than 25% to approximately 60%.

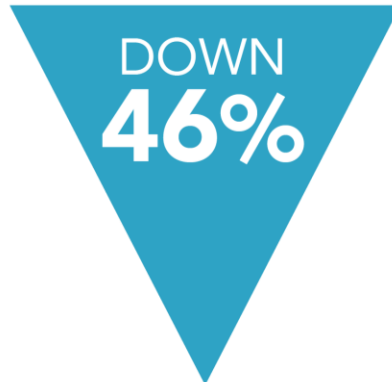
CONSERVATION

Despite population gains, water use has declined since 2002.

Southern Nevada
POPULATION



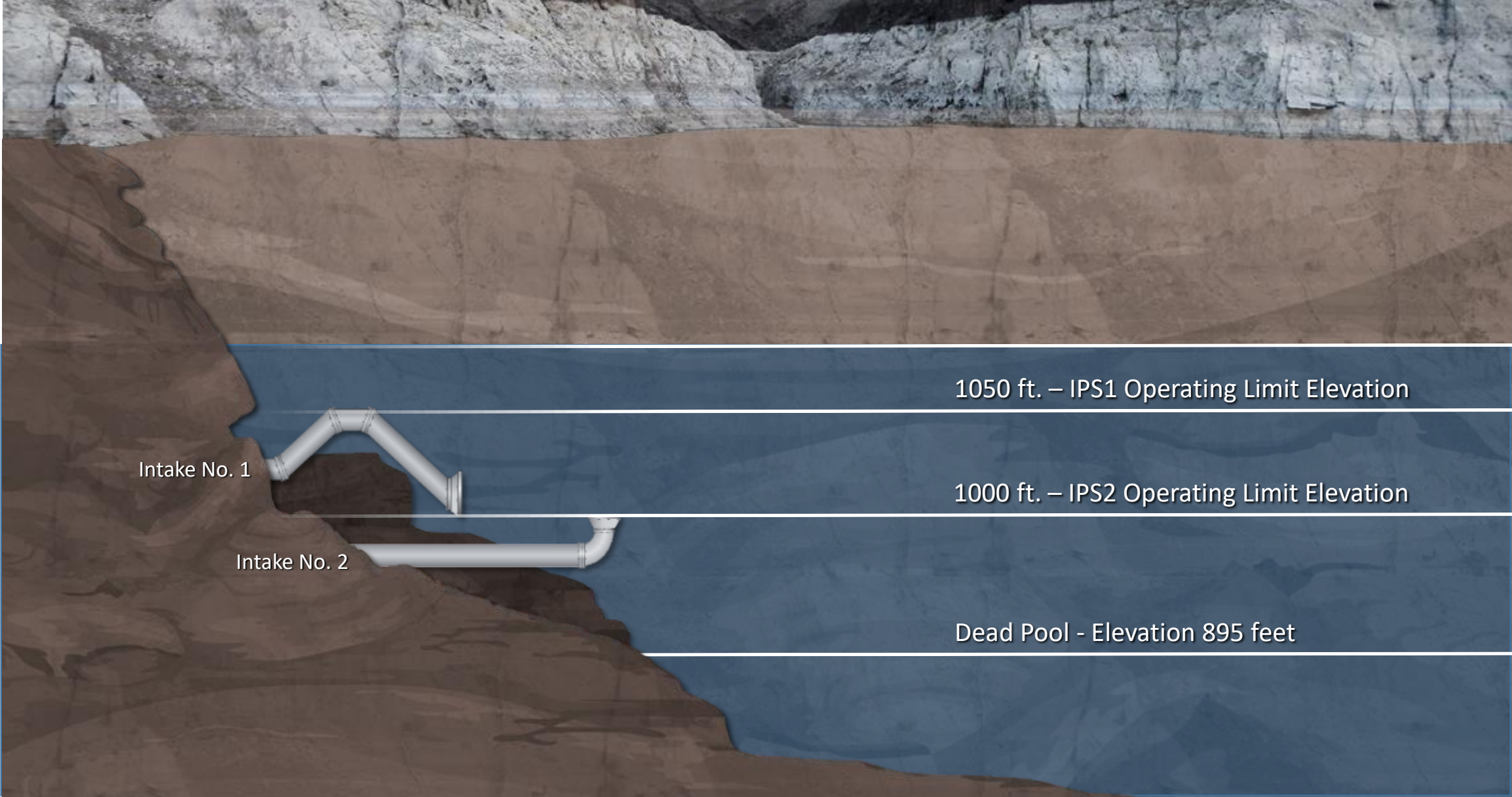
Per Capita
WATER USE



Colorado River Water
CONSUMPTION

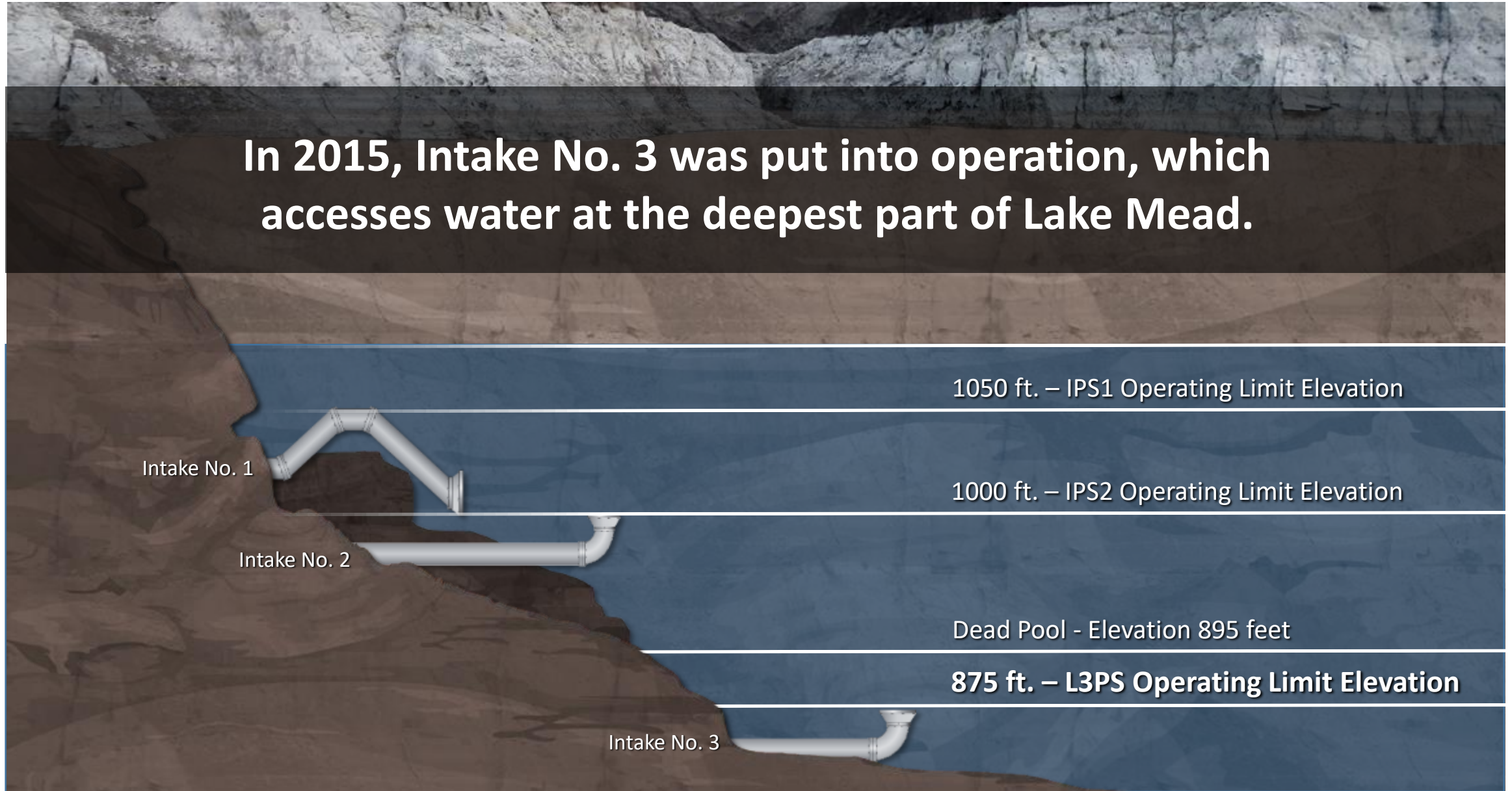


ORIGINAL INFRASTRUCTURE



NEW INFRASTRUCTURE

In 2015, Intake No. 3 was put into operation, which accesses water at the deepest part of Lake Mead.



L3PS

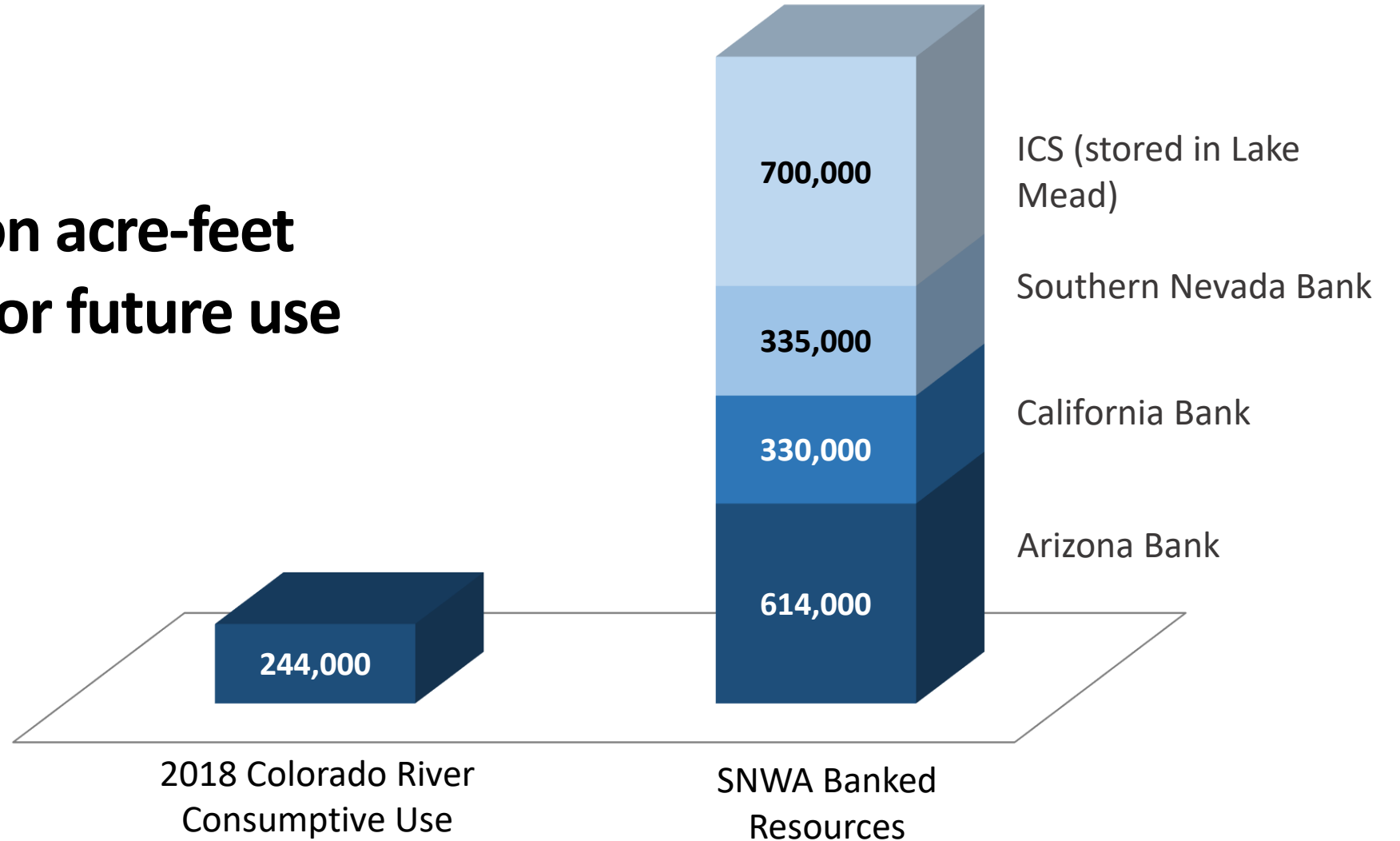
LOW LAKE LEVEL PUMPING STATION

Scheduled to be completed in 2020

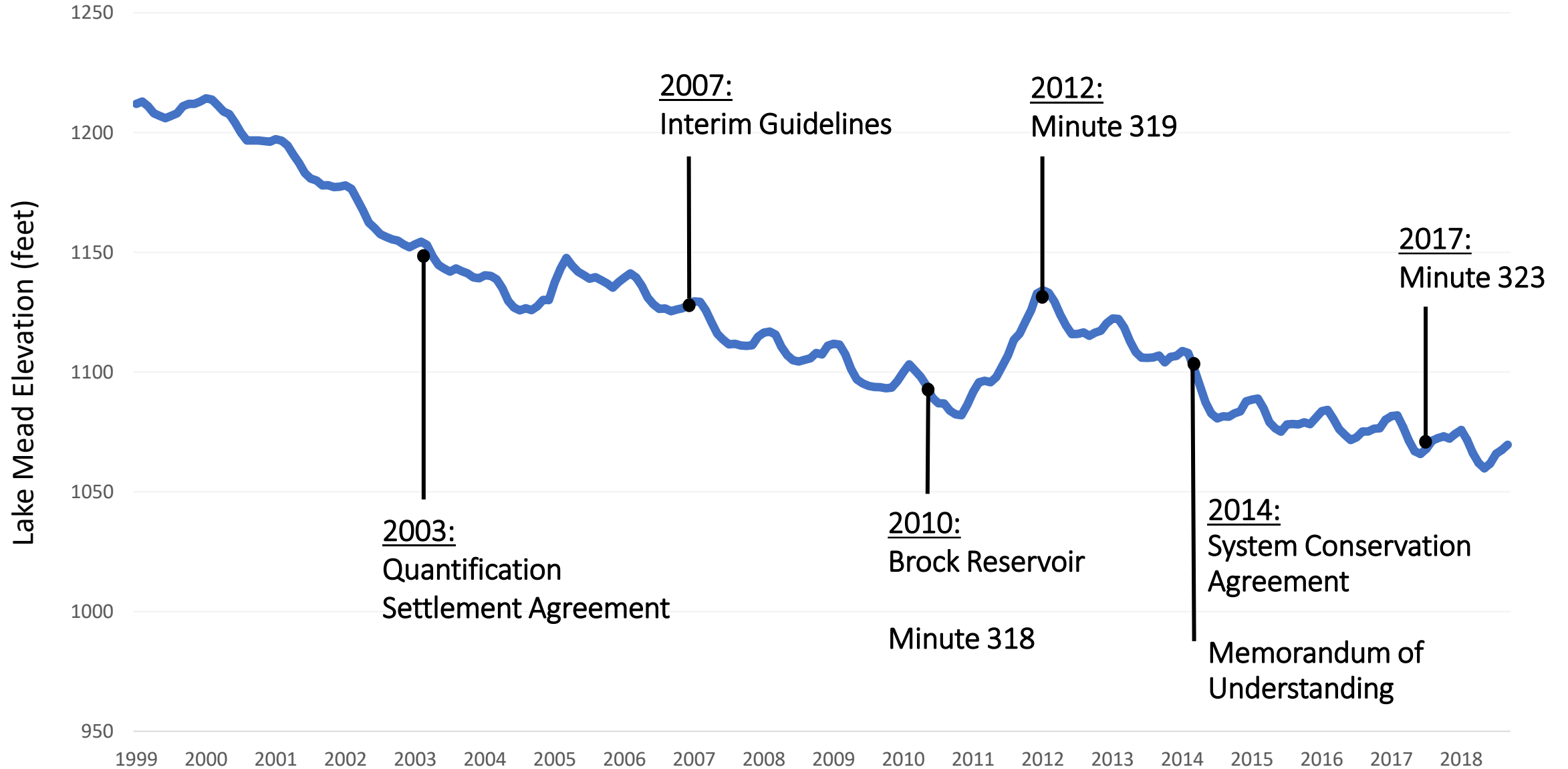


WATER BANKING

**2 million acre-feet
banked for future use**

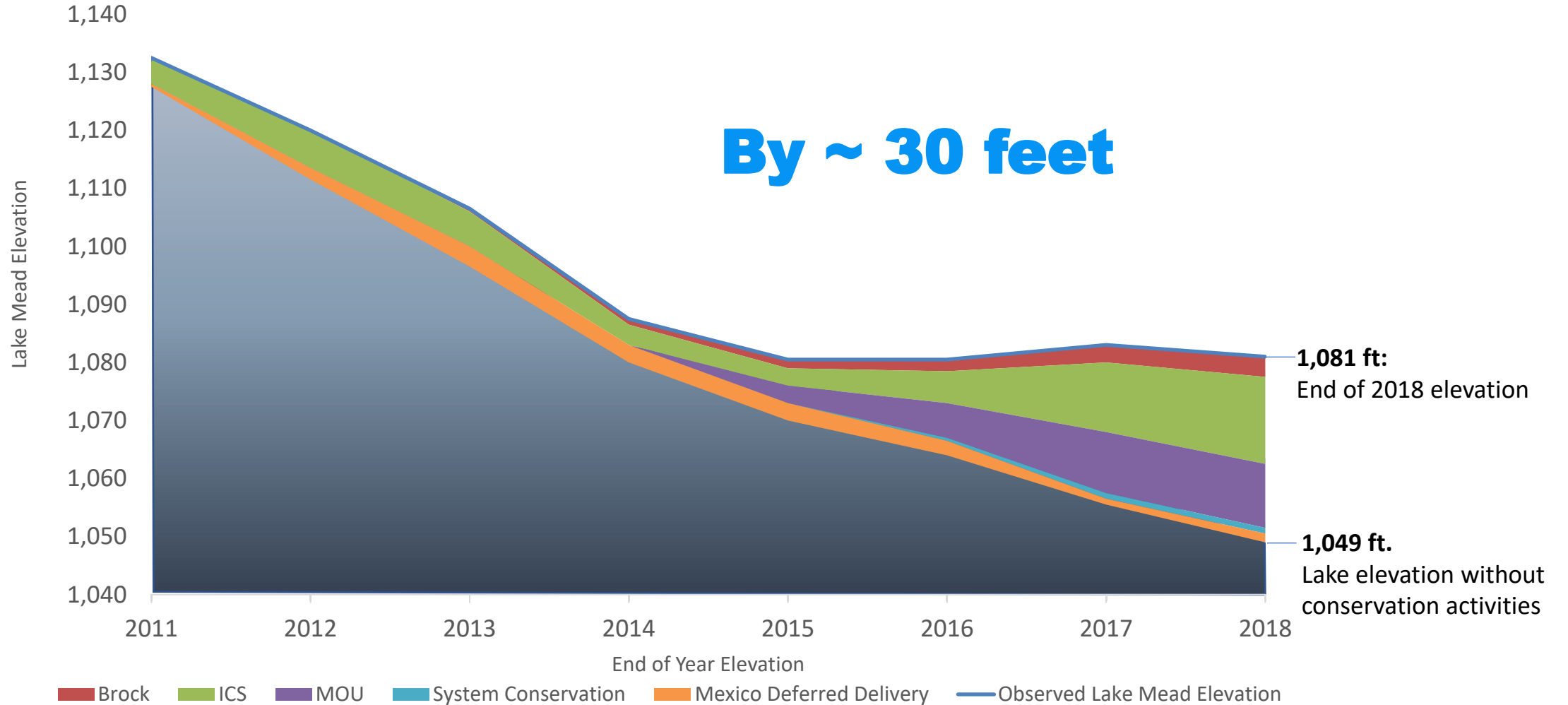


WORKING WITH PARTNERS



BENEFITS TO LAKE MEAD

Investments in conservation have slowed Lake Mead's decline.

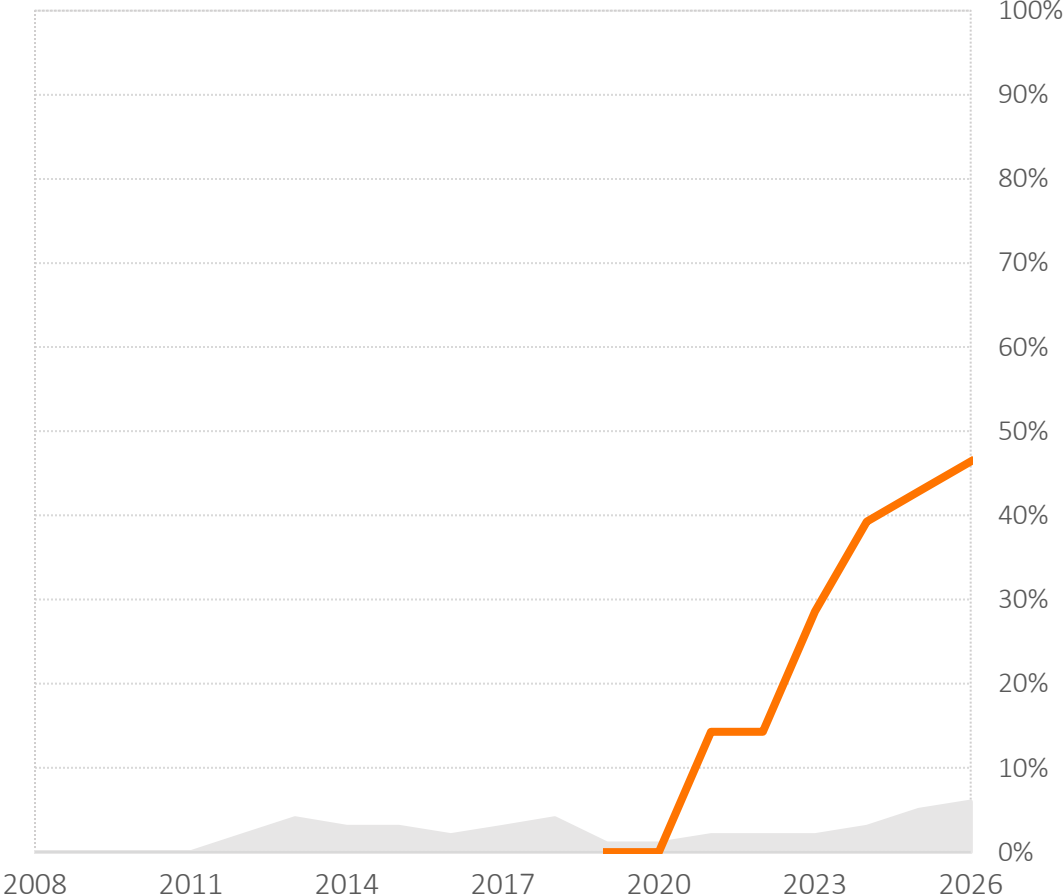


BUT, MORE WAS NEEDED

Risk of Lake Mead < 1,020 feet

2007 Projections
(1906-2005 hydrology)

No DCP
*(August 2018
Projections; 1988-
2015 hydrology)*



DROUGHT CONTINGENCY PLANS (DCP)

The Drought Contingency Plans will reduce the risk of Colorado River reservoirs reaching critical elevations.

UPPER BASIN

GOALS:

- Reduce risk of Lake Powell reaching critically low elevations (3,490 ft. / 3,525 ft.)
- Reduce risk of involuntary curtailment within Upper Basin to maintain compliance with 1922 Compact

KEY ELEMENTS

- CRSPA initial units drought response operations
- Demand Management Storage capacity

LOWER BASIN

GOALS:

- Reduce risk of Lake Mead elevations from below 1,020 ft.

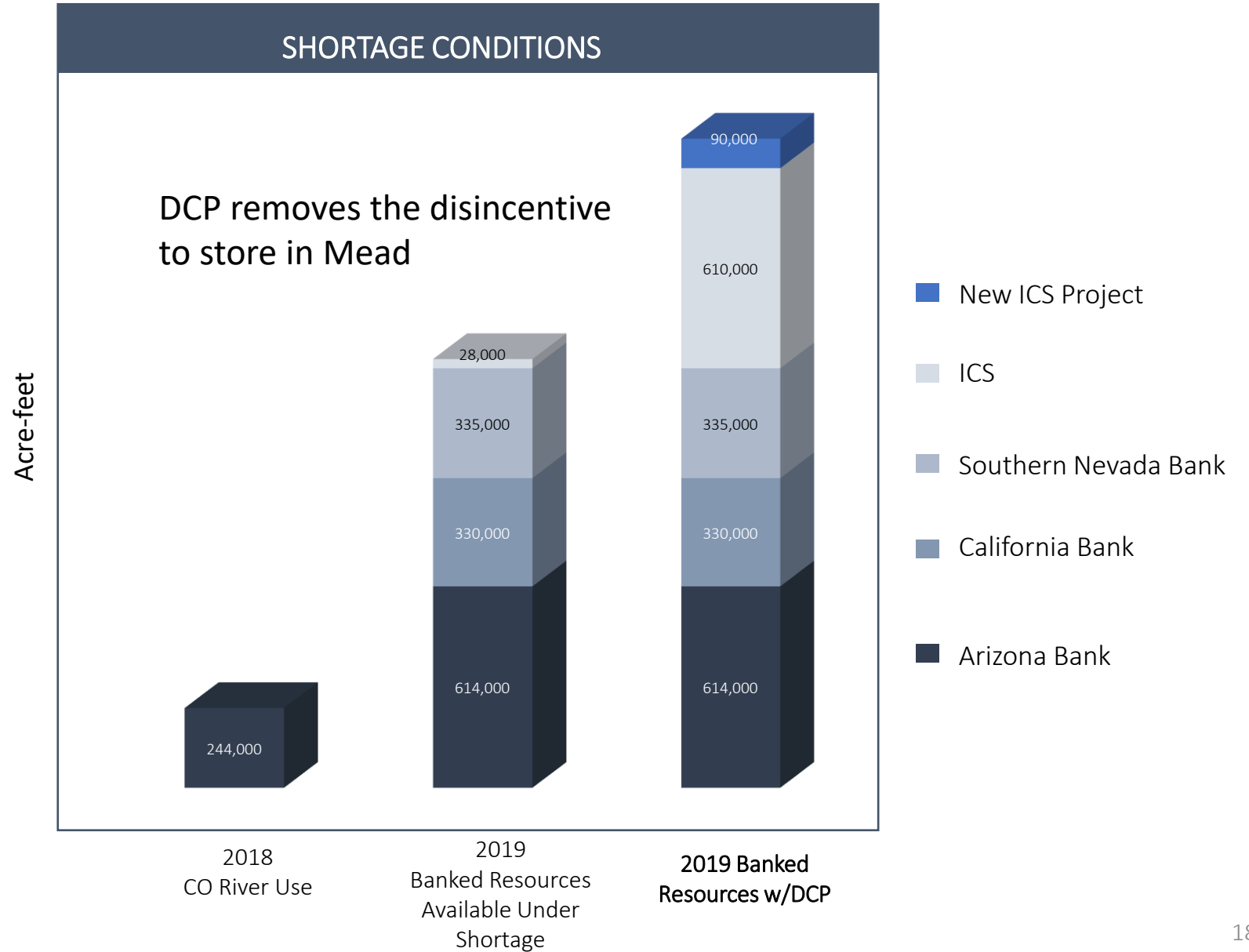
KEY ELEMENTS

- Creates water contributions
- Removes disincentives to storing water in Lake Mead
- Enhances ability to store and access water in Lake Mead

2007 Interim Guidelines, Minute 323, Lower Basin Drought Contingency Plan & Binational Water Scarcity Contingency Plan

Lake Mead Elevation (ft msl)	2007 Interim Guidelines Shortages		Minute 323 Delivery Reductions	Total Combined Reductions	DCP Contributions			Binational Water Scarcity Contingency Plan Savings	Combined Volumes by Country <i>US: (2007 Interim Guidelines Shortages + DCP Contributions)</i> <i>Mexico: (Minute 323 Delivery Reductions + Binational Water Scarcity Contingency Plan Savings)</i>					Total Combined Volumes
	AZ	NV	Mexico	<i>Lower Basin States + Mexico</i>	AZ	NV	CA	Mexico	<i>AZ Total</i>	<i>NV Total</i>	<i>CA Total</i>	<i>Lower Basin States Total</i>	<i>Mexico Total</i>	<i>Lower Basin States + Mexico</i>
1,090 - >1,075	0	0	0	<i>0</i>	192	8	0	41	192	8	0	<i>200</i>	<i>41</i>	<i>241</i>
1,075 - >1050	320	13	50	<i>383</i>	192	8	0	30	512	21	0	<i>533</i>	<i>80</i>	<i>613</i>
1,050 - >1,045	400	17	70	<i>487</i>	192	8	0	34	592	25	0	<i>617</i>	<i>104</i>	<i>721</i>
1,045 - >1,040	400	17	70	<i>487</i>	240	10	200	76	640	27	200	<i>867</i>	<i>146</i>	<i>1,013</i>
1,040 - >1,035	400	17	70	<i>487</i>	240	10	250	84	640	27	250	<i>917</i>	<i>154</i>	<i>1,071</i>
1,035 - >1,030	400	17	70	<i>487</i>	240	10	300	92	640	27	300	<i>967</i>	<i>162</i>	<i>1,129</i>
1,030 - 1,025	400	17	70	<i>487</i>	240	10	350	101	640	27	350	<i>1,017</i>	<i>171</i>	<i>1,188</i>
<1,025	480	20	125	<i>625</i>	240	10	350	150	720	30	350	<i>1,100</i>	<i>275</i>	<i>1,375</i>

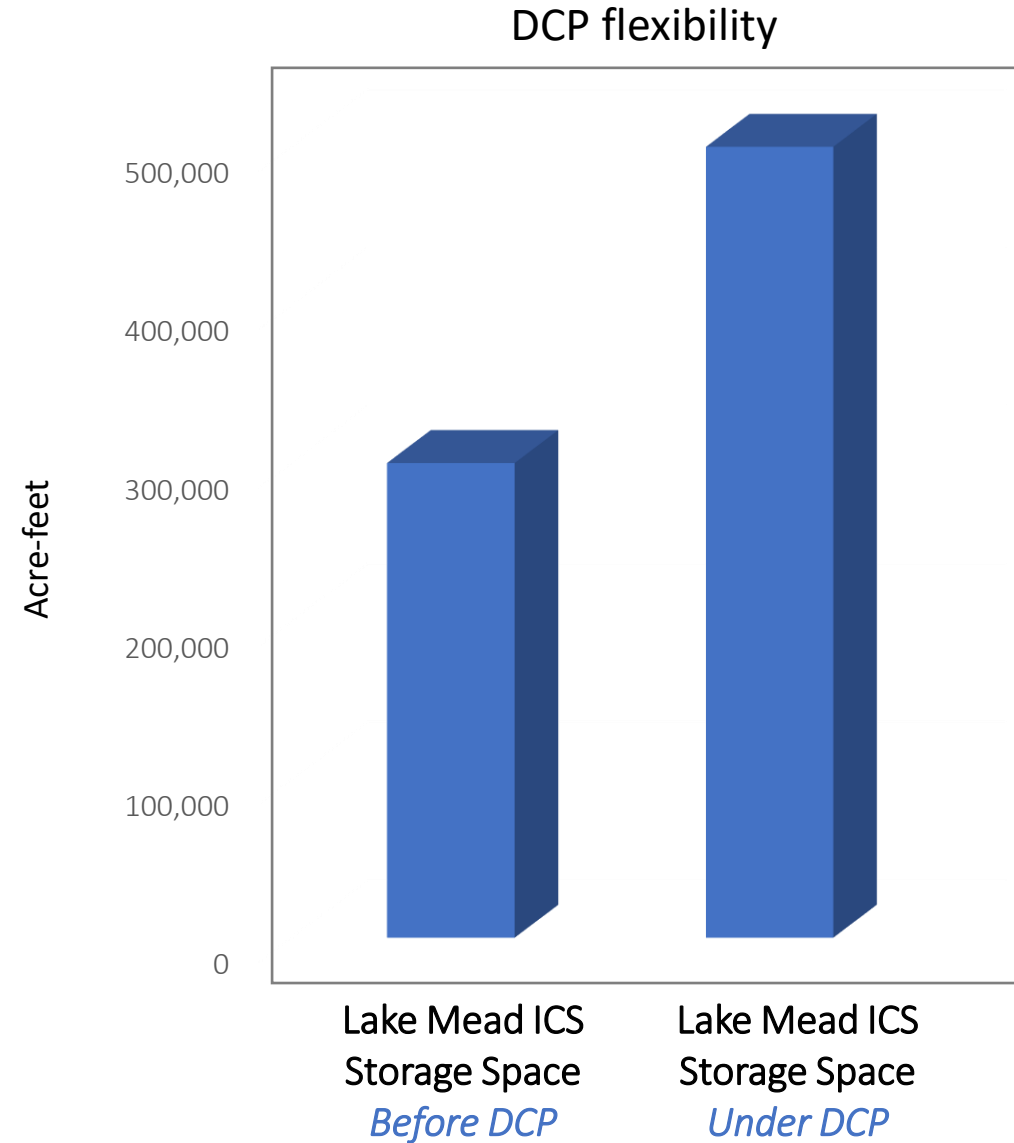
Exhibit 1 – Lower Basin Drought Contingency Operations (LBOps)



DCP

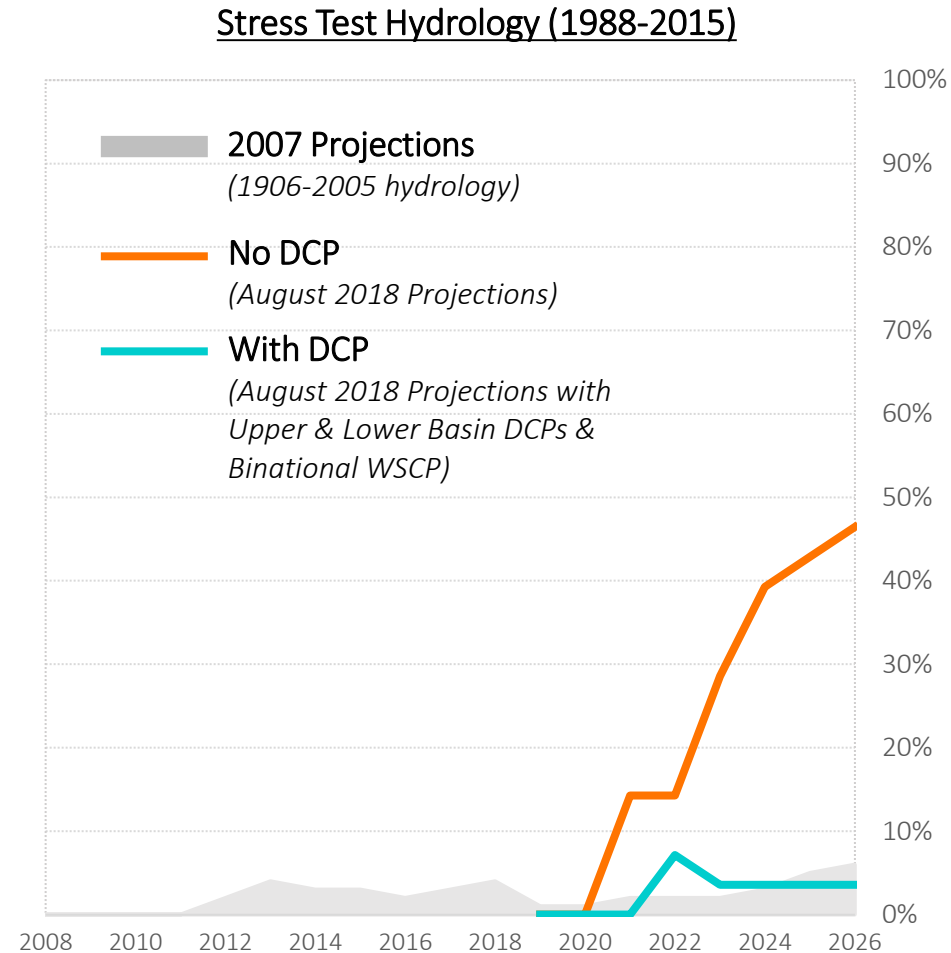
Extraordinary Conservation ICS

Total storage limits of ICS in Lake Mead increased by 200,000 acre-feet (per contractor).



REDUCING RISK – LAKE MEAD <1,020

Modeling indicates that DCP will reduce risk.



MORE LONG-TERM PLANNING

Colorado River Climate and Hydrology Work Group

- Volunteer group of more than a dozen federal, state, and local water management agencies and other ad-hoc participants

Goals

- Advance scientific understanding to improve the accuracy of hydrological forecasts and projections
- Enhance the performance of predictive tools
- Better understand the uncertainty related to future supply and demand conditions in the Colorado River Basin

Accomplishments

- State of the Science Report (available April 2020)
- ~\$1.5M in research investments



SOUTHERN NEVADA WATER AUTHORITY