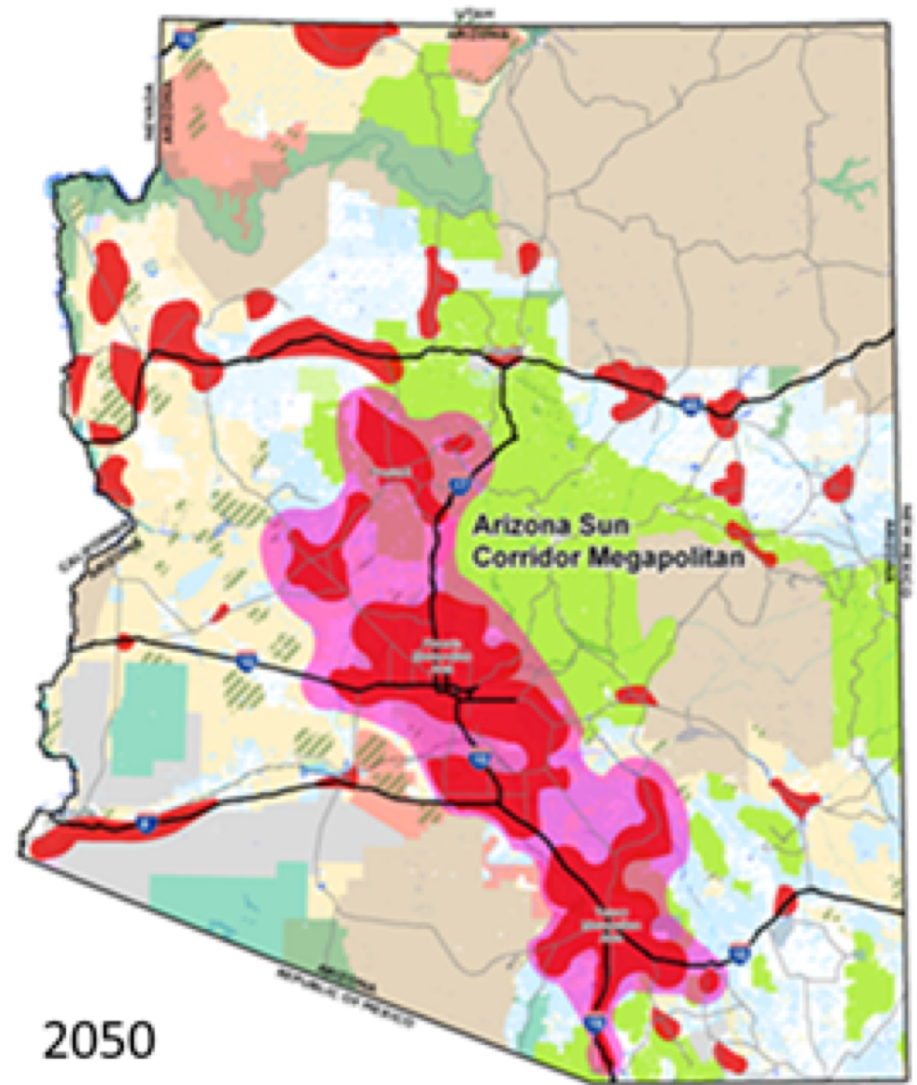
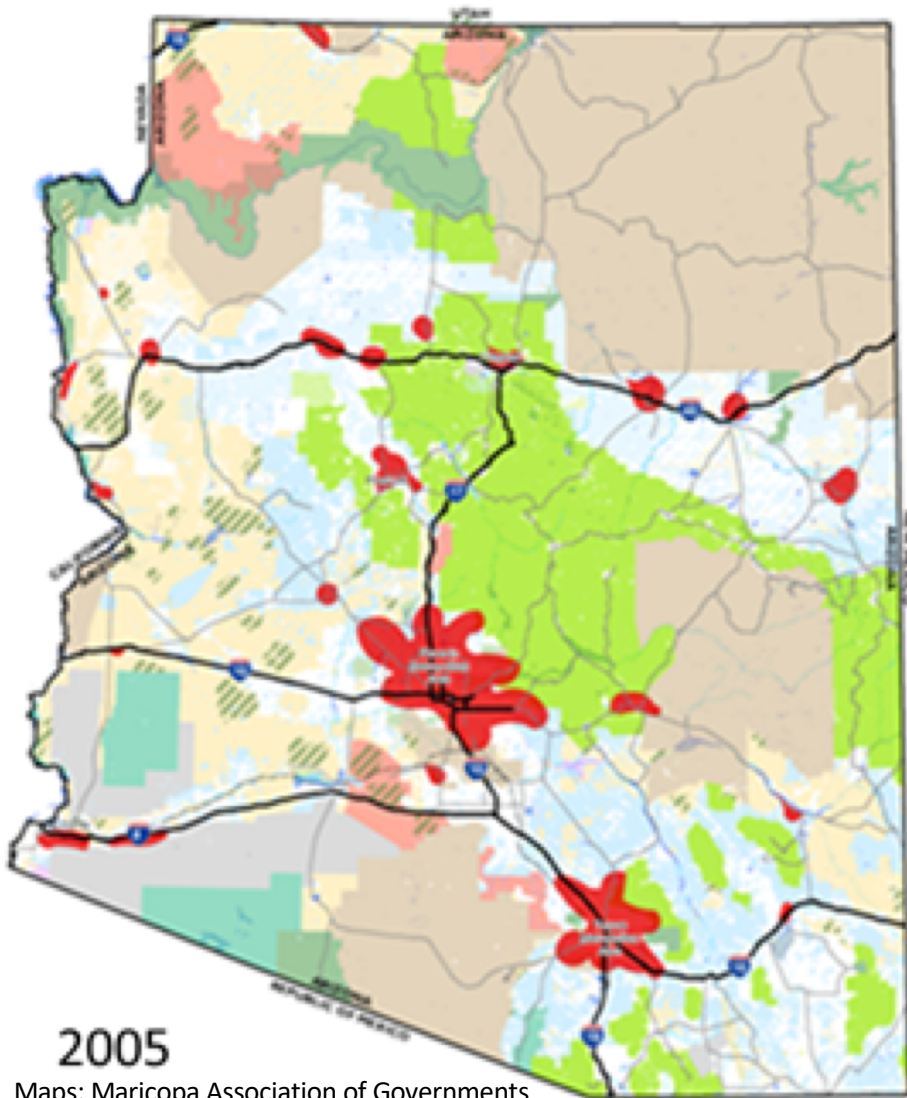


4. Growth

A high-speed photograph of a water splash, with numerous droplets and a central crown-like shape of water, set against a light blue background. The splash is reflected on a surface below it.



Supply Gap projections
0.9 to 3.5 MAF

Source: Arizona Department of Water Resources, *Strategic Vision* (2014)

3. Colorado River Supplies



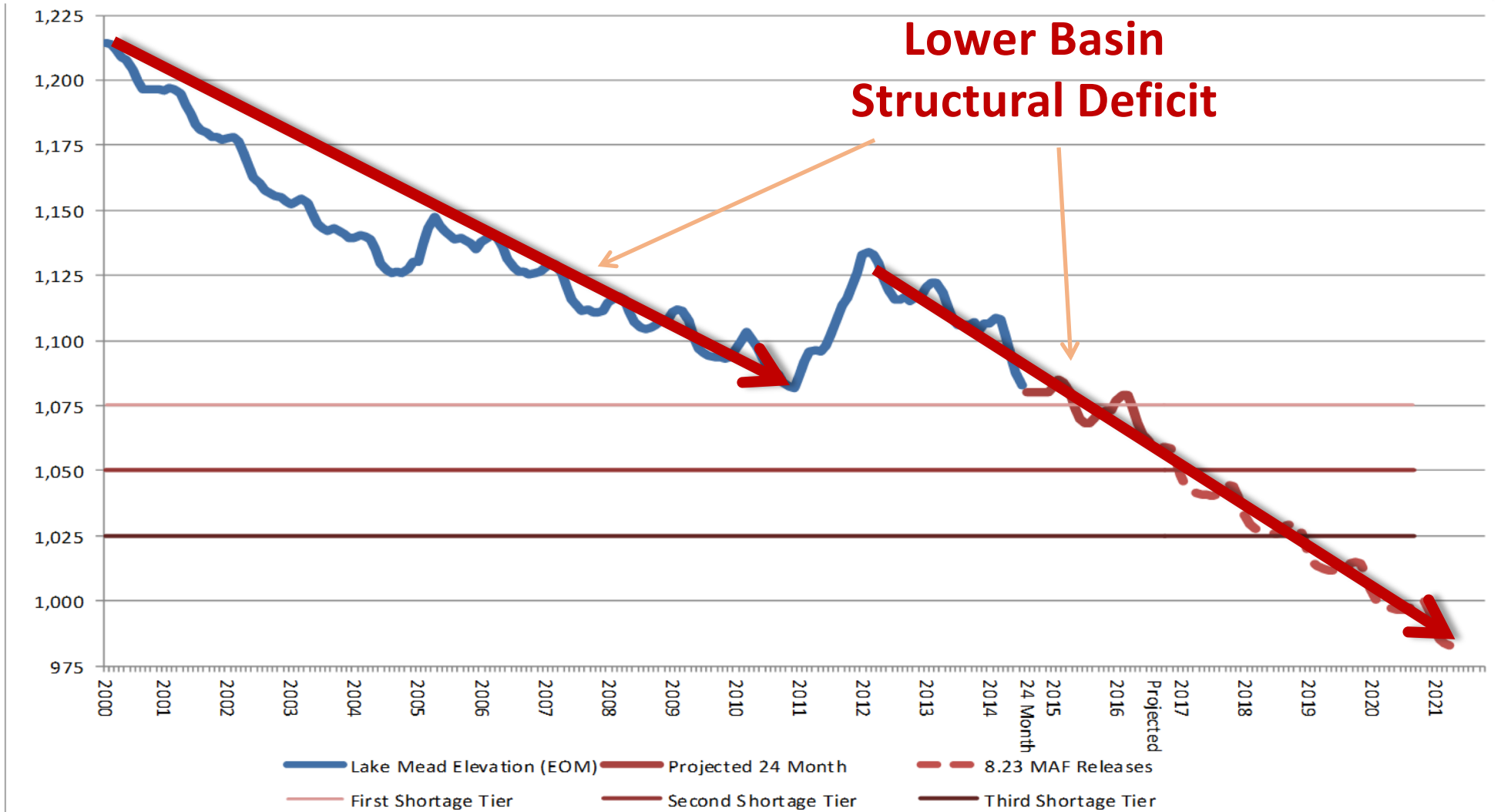
CAP

CENTRAL ARIZONA PROJECT

YOUR WATER. YOUR FUTURE.

**PROTECT
LAKE MEAD**

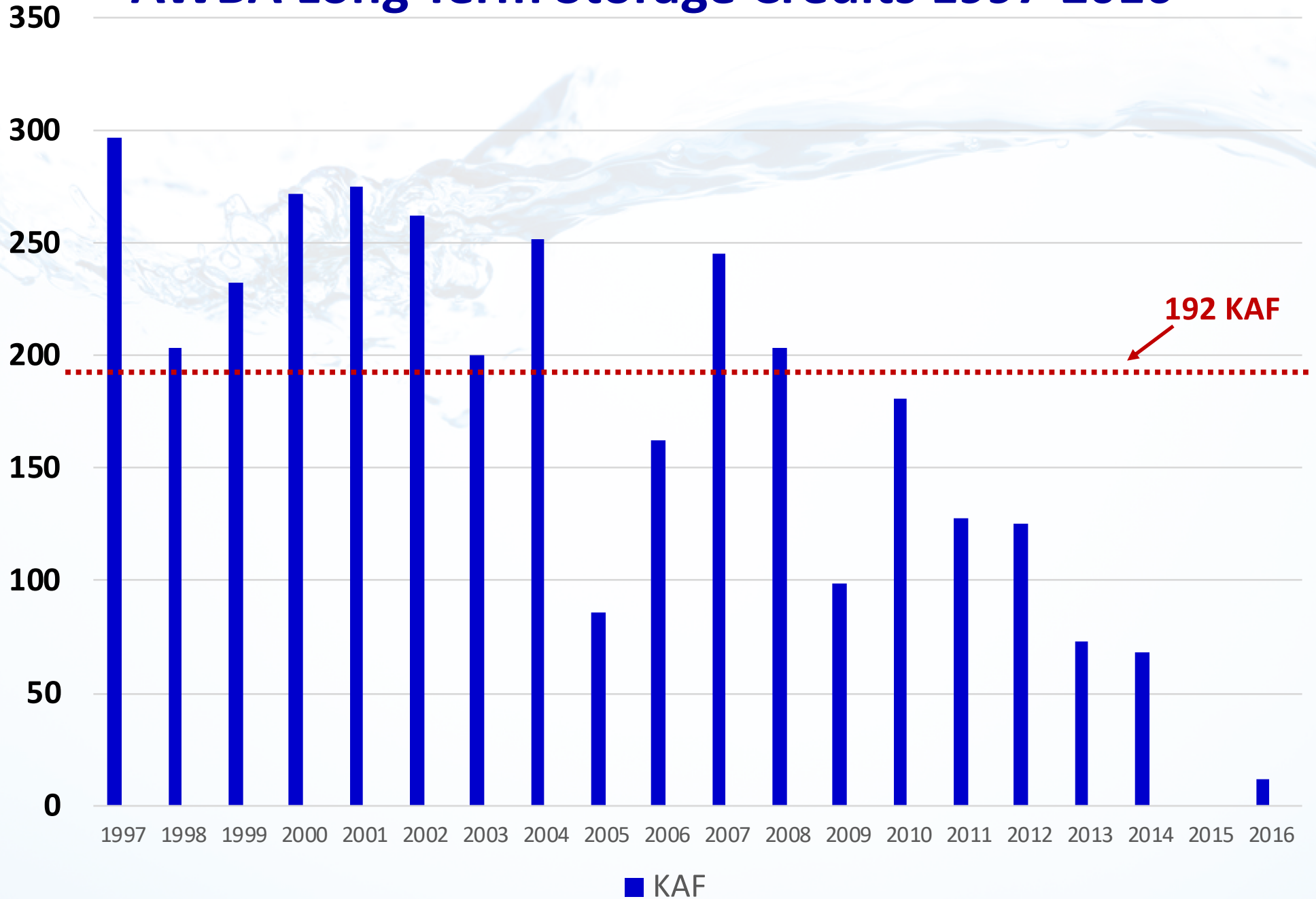
Lake Mead Elevation



Drought Contingency Proposal

Lake Mead Elevation	AZ [2007]	AZ [Plan]	AZ TOTAL	NV [2007]	NV [Plan]	NV TOTAL	CA [2007]	CA [Plan]	CA TOTAL	BOR	TOTAL
1090-1075	0	192K	192K	0	8K	8K	0	0	0	100k	300k
1075-1050	320K	192K	512K	13K	8K	21K	0	0	0	100k	633k
1050-1045	400K	192K	592K	17K	8K	25K	0	0	0	100k	717k
1045-1040	400K	240K	640K	17K	10K	27K	0	200K	200K	100k	967k
1040-1035	400K	240K	640K	17K	10K	27K	0	250K	250K	100k	1,017k
1035-1030	400K	240K	640K	17K	10K	27K	0	300K	300K	100k	1,067k
1030-1025	400K	240K	640K	17K	10K	27K	0	350K	350K	100k	1,117k
<1025	480K	240K	720K	20K	10K	30K	0	350K	350K	100k	1,200k

AWBA Long Term Storage Credits 1997-2016



A background image showing a dynamic splash of water. A vertical stream of water falls from the top center, creating a large, energetic splash that spreads outwards and downwards. The water is clear and bright, with many small droplets and bubbles visible. The overall color palette is light blue and white, giving it a clean, fresh appearance.

2. Groundwater Issues

Emerging Groundwater Conflicts

La Paz County Fights Foreign Farms Over Water for Alfalfa

Arizona Republic, November 6, 2015

Leaders of a rural Arizona county want help from the governor and other state officials to protect their water supply as companies from the Middle East move to the state to grow alfalfa they intend to ship overseas to feed their cattle. . . . County leaders are upset about the trend, saying the companies are exploiting Arizona's groundwater law in a time of drought that allows farms to pump as much water as they want.

Arizona rejects San Simon irrigation restrictions

Arizona Daily Star, August 15, 2015

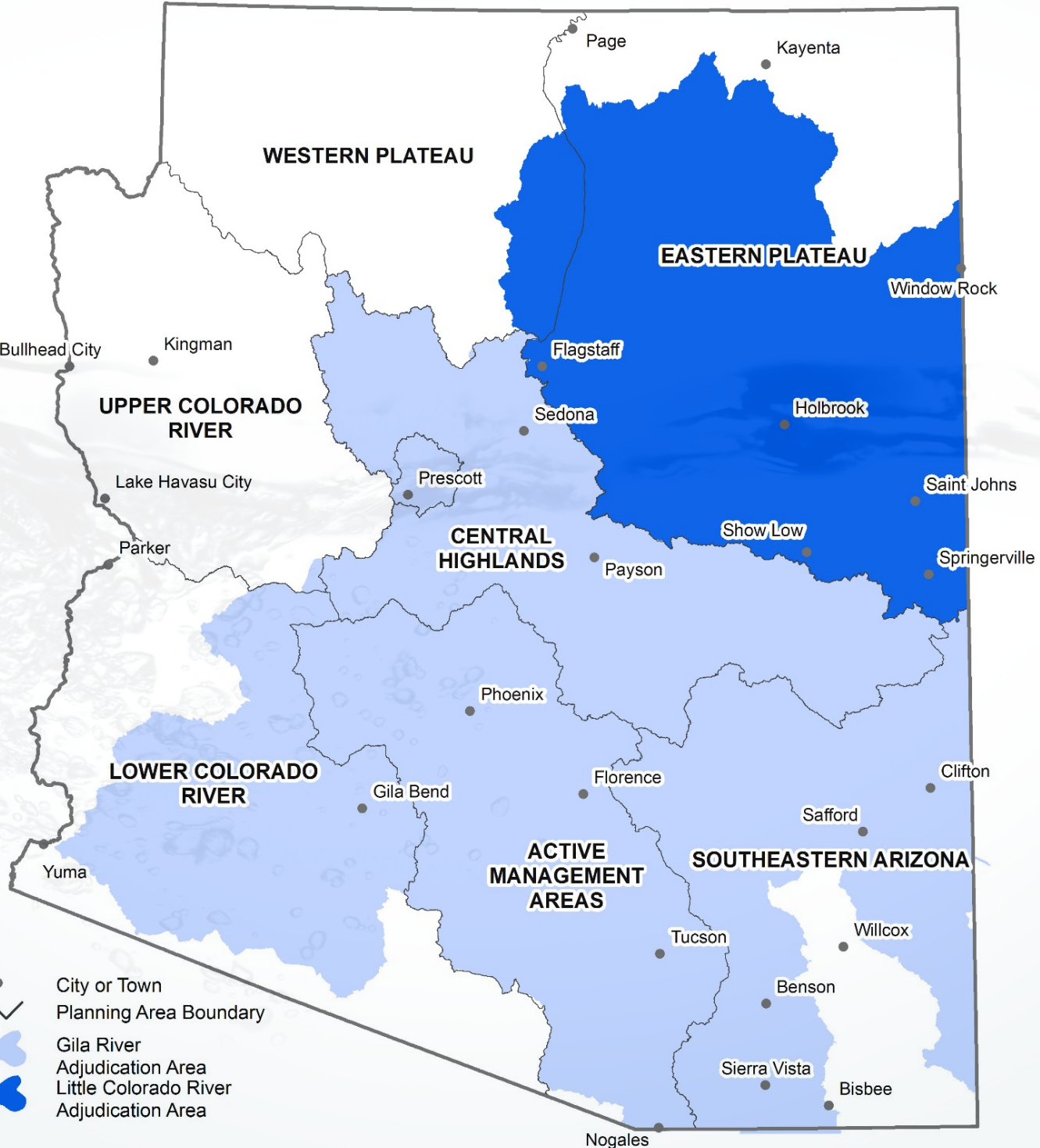
Agricultural pumping can continue without limits in the far corner of Southeast Arizona.

A light blue background with a subtle, artistic splash of water droplets and ripples, primarily visible on the left and bottom edges.

1. Water

Rights

Uncertainty





Strategic Priority No. 1

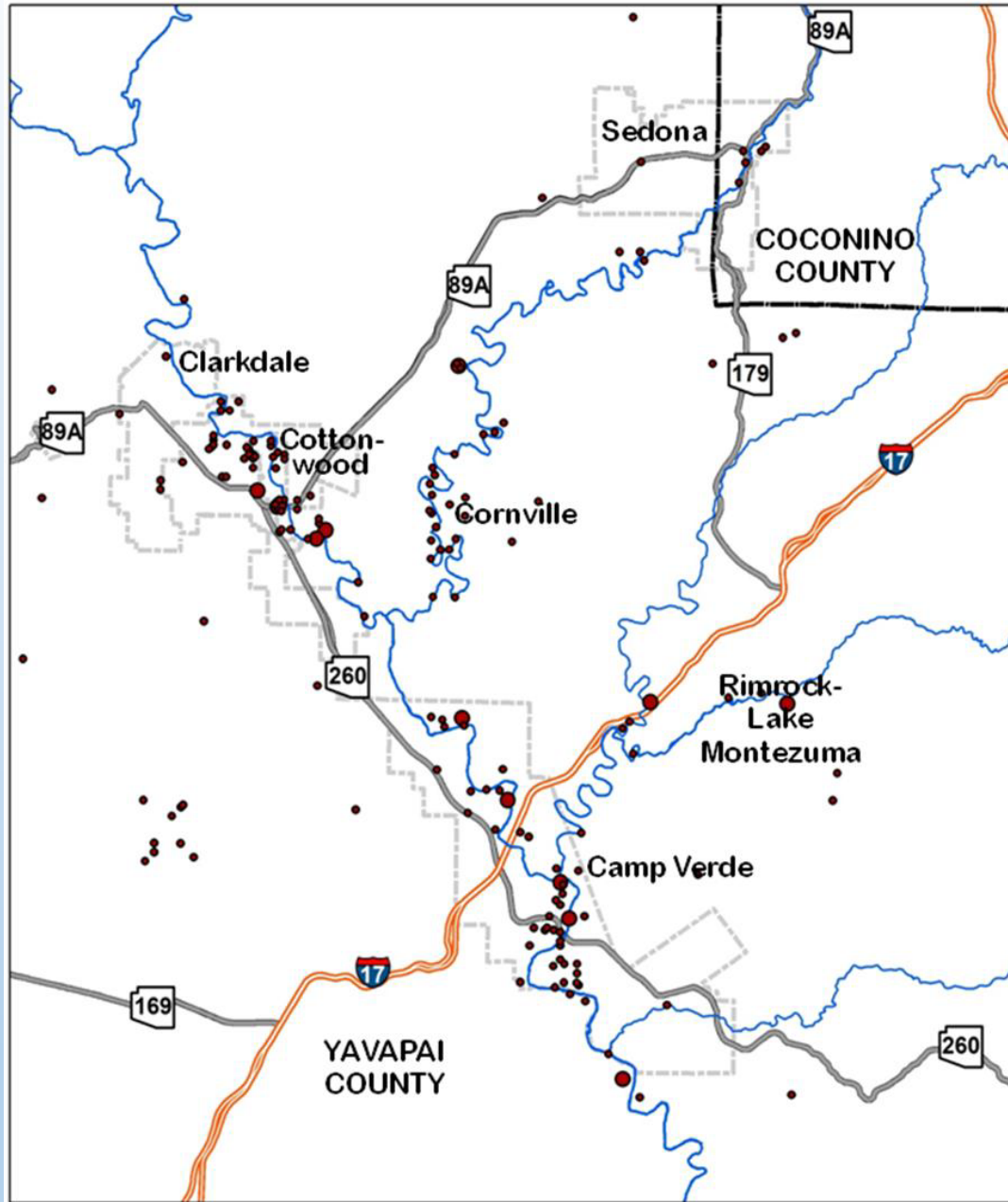
Resolution of Water Rights Claims

“Until that process is complete, **uncertainty** regarding the nature, extent and priority of water rights will make it **difficult** to identify **all the strategies necessary** for meeting projected water demands.”

Arizona Department of Water Resources, *Arizona's Next Century: A Strategic Vision for Water Supply Sustainability (2014)*

The Subflow Problem





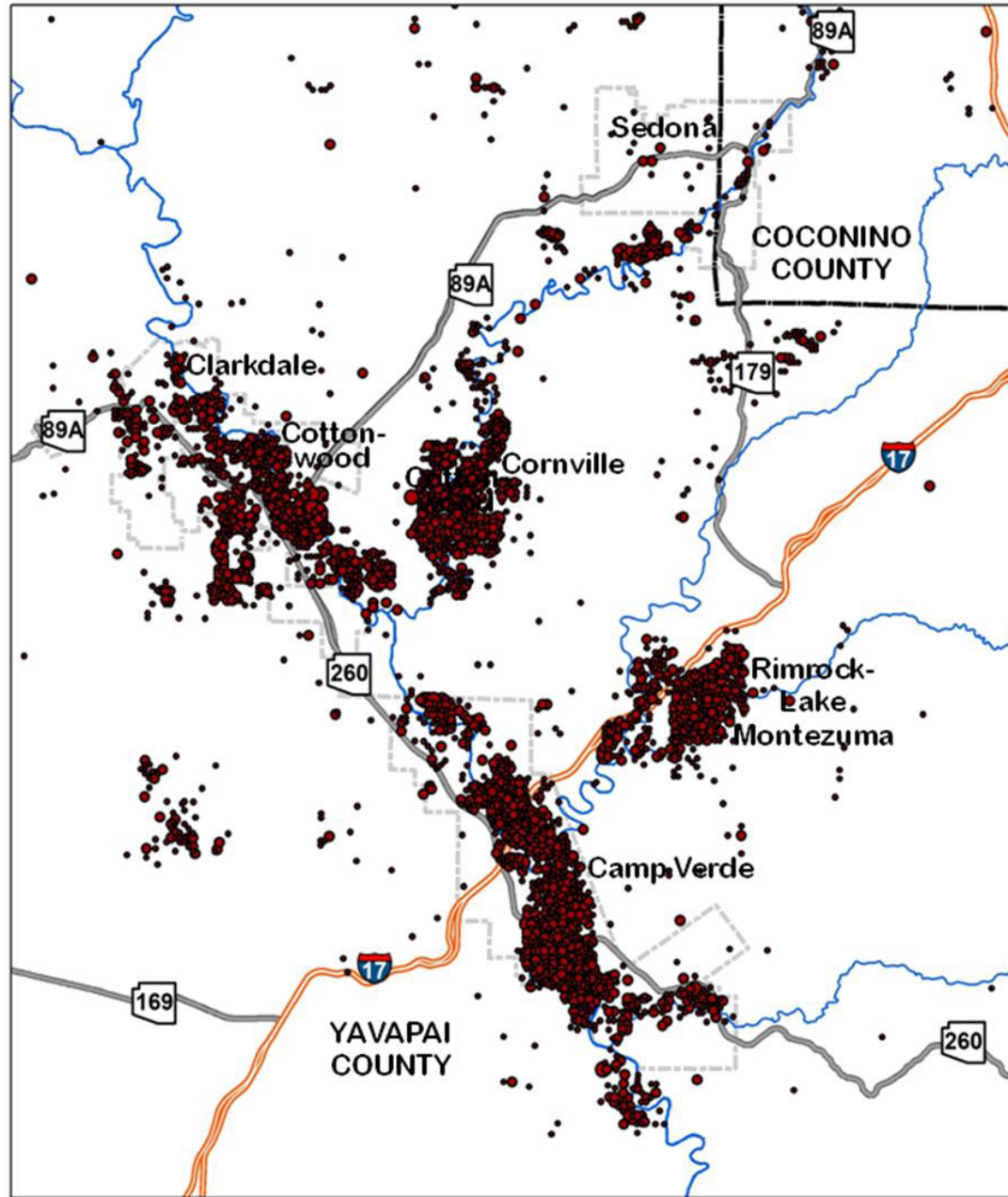
Verde Valley Wells as of 1950: 228 Wells



- Location with 1 well
- Location with 2-4 wells



Source: United States Geological Service



Verde Valley Wells as of 2011: 6,436 Wells



- Location with 1 well
- Location with 2-5 wells
- Location with 6-12 wells
- Location with 13 or more wells



Source: United States Geological Service

Upper & Middle Verde River Watersheds – Future Demand

2050 population ~ 600,000

Supply Gap

Verde Valley Sub-Basin – 10,000 AF

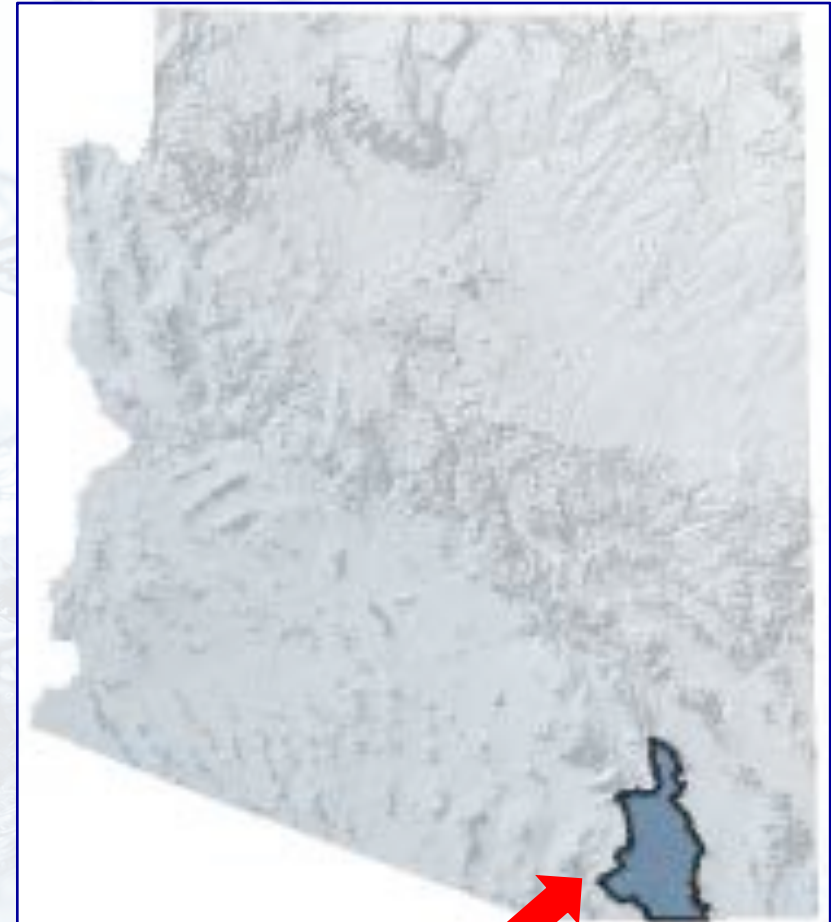
Prescott AMA – 32,000 AF

Big Chino Sub-Basin – 3,100 AF

Total – 45,000 AF

Projected Upper San Pedro Demand

Sector	2010	2035	2060
Agriculture	8,800	8,800	8,800
Dairy	42	42	42
Feedlot	0	0	0
Municipal	19,168	26,226	31,062
Other Industrial	288	288	288
Mining	0		
High		12,000	12,000
Low		2,000	2,000
Power Plants	0		
High		0	0
Low		0	0
Rock Production	75		
High		1,489	1,764
Low		620	735
Turf	1,552		
High		1,675	1,731
Low		1,552	1,734
Total (High)	29,925	50,520	55,687
Total (Low)	29,925	39,528	44,661



**≈ 50% increase in
municipal demand**

Biggest Water Challenges

A background image showing a dynamic splash of water, with droplets and ripples, in shades of light blue and white, creating a sense of movement and freshness.

- 1. Water Rights Uncertainty**
- 2. Groundwater Conflict**
- 3. The Structural Deficit (CAP)**
- 4. Possible Supply Gap**

“Build a pipeline.”

“Get rid of the golf courses.”

If it's yellow . . .

“Seed the Clouds”

“Get rid of the environmentalists.”

“Too much goes to agriculture.”

“Desalinate.”

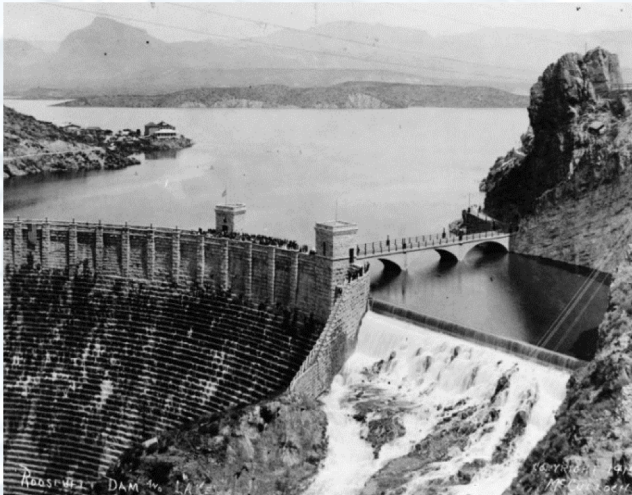
“Get rid of the feds.”

“No more new homes.”

“Kill the grass.”

. . .let it mellow.

foresight Leadership cooperation Federal STATE



Roosevelt Dam
1911



Imperial Dam
1938



**Groundwater Mgt &
Central Arizona Project**
1980s

Sarah Porter

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Great Reads on Water, Arizona & the West

August, Jack. *Vision in the Desert: Carl Hayden and the Hydropolitics of the American Southwest* (2005)

Hiltzik, Michael. *Colossus: The Turbulent, Thrilling Saga of the Building of Hoover Dam* (2011)

Needham, Andrew. *Power Lines: Phoenix and the Making of the Modern Southwest* (2014)

Stegner, Wallace. *Beyond the Hundredth Meridian: John Wesley Powell and the Opening of the West* (1992)



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