APPROVED 5/21/2025 CH

****SUMMARIZED MEETING MINUTES****
City of Scottsdale
Scottsdale Environmental Advisory Commission (SEAC)
Regular Meeting

5:30 p.m. Wednesday, February 19, 2025
Community Design Studio Nave
7506 E. Indian School Road, Scottsdale 85251

Call to Order 5:35 p.m.

PRESENT: **Chair Andrew Scheck, Vice Chair Alisa McMahon, Ute Brady, Walter Cuculic** (left meeting at 6:39 pm.)**, Tara Iyengar, Siobhan Ulreich-Power**

ABSENT: **Alexandra Craig**

STAFF PRESENT: **Cindi Eberhardt, Planning & Development Area Director; Justin Suryanata, Tim Conner, Environmental Policy Manager, Environmental Programs Coordinator; Clayton Hults, Planning Technician, Gretchen Baumgardner, Water Policy Manager, Kevin Rose, Acting Executive Director, Scottsdale Water.**

Public Comment: **None**

1) Colorado River Update and Summary of Conservation Efforts
Presentation by Scottsdale Water regarding an update on the Colorado River and water conservation strategies.

Presenters: Gretchen Baumgardner, Water Policy Manager, gbaumgardner@scottsdaleaz.gov and Kevin Rose, Interim Water Resources Executive Director, krose@scottsdaleaz.gov

Staff Contact: Tim Conner, Environmental Policy Manager, tconner@scottsdaleaz.gov
Commission Action: Information/Discussion

Interim Water Resources Executive Director Kevin Rose provided an overview of Scottsdale Water's five treatment and three reclamation facilities.

Water Policy Manager Gretchen Baumgardner provided an overview of Scottsdale's water resource portfolio, with an emphasis on the Colorado River. Through Central Arizona Project (CAP), the Colorado River supplies 70-75% of the water Scottsdale delivers to its customers. Factors affecting Colorado River supply include the 20+ year regional drought, a warming climate and aridification, and the structural deficit (overallocation of the river's supply).

Ms. Baumgardner overviewed the history of the river's allocation between the upper basin states, lower basin states and Mexico from 1922 through today. She also described how, under

the 2007 Interim Guidelines and the 2019 Drought Contingency Plan, declining Lake Mead levels reduce CAP's allocation, and how those cuts in turn reduce CAP's delivery to Scottsdale. The 2007 Interim Guidelines expire at the end of 2026.

Based on 100 years of average flow 1906-2006, the Colorado River is overallocated by 1.6 million acre-feet (MAF) a year. Based on average flow during the current drought (2000-2023), the river is overallocated by 4.0 MAF a year. Ongoing negotiations over the post-2026 guidelines aim to resolve this structural deficit.

Ms. Baumgardner walked through one post-2026 Colorado River operations scenario, the Lower Basin States' Alternative, as an quantifiable example of what post-2026 reductions could look like and how those reductions would affect Scottsdale.

Scottsdale Water is planning for reduced Colorado River supply through conservation and infrastructure. Ms. Baumgardner touched on Scottsdale Water's current incentive rebates and conservation programs.

In terms of infrastructure, four new wells are coming online to increase Scottsdale's capacity to retrieve stored groundwater from the aquifer. Scottsdale is participating in a 22-member stakeholder group evaluating the modification of Bartlett Dam to more fully capture Verde River water. Arizona Department of Environmental Quality (ADEQ) will shortly finalize the state's Advanced Water Purification (AWP) rules. With this regulatory framework established, Scottsdale will be able to expand its Advanced Purified Recycled Water (APRW) capacity to use some of our wastewater to a higher beneficial use, direct potable reuse. A regional APRW facility in west Phoenix is also under discussion.

Commissioners asked questions about APRW expansion, groundwater wells, modification of Bartlett Dam, WaterSmart availability citywide, and any plans to increase water efficiency in pools, spas and fountains.

Vice Chair McMahon inquired about any plans for solar energy at the Water Campus. The Water Campus is already the city's largest consumer of electricity, and as Ms. Baumgardner mentioned, APRW is energy-intensive. Vice Chair McMahon described the 2.3 MW Water Campus solar project approved by City Council in 2016 that would have provided 10% of the power used at the Water Campus at that time. The project was not built. However, the City of Tempe did move forward with a similar solar project, a system providing 30% of the plant's annual power.

Commissioner Brady cautioned about future reliance on groundwater pumping. Vice Chair McMahon provided feedback to encourage Scottsdale Water graphs to more accurately a) illustrate the relationship between growth and consumption and b) reflect present-day trends.

2) Approve Meeting Minutes for:

a) **December 11, 2024**
b) **January 15, 2025**

Staff Contact: Tim Conner, Environmental Policy Manager, tconner@scottsdaleaz.gov
Commission Action: Discussion and Action (roll call vote for each)

MOTION AND VOTE ITEM 2

Vice Chair McMahon made a motion to adopt the December 11, 2024 Meeting Minutes, as well as to defer approval of the January 15, 2025 Meeting Minutes to the March 19, 2025 Regular Meeting. The motion was seconded by Chair Scheck. The motion carried with a vote of 6-0. Commissioners Scheck, McMahon, Brady, Cuculic, Iyengar and Ulreich-Power voted for APPROVAL.

3) Sustainable Scottsdale Awards

Review and discuss the second round of award submittals and possibly select the Sustainable Scottsdale Awards Program Honoree(s).

Staff Contact: Tim Conner, Environmental Policy Manager, tconner@scottsdaleaz.gov
Commission Action: Discussion and Possible Action (roll call vote)

Commissioners came to consensus regarding the 2025 honoree. Vice Chair McMahon provided input on behalf of absent commissioner, Alexandra Craig. The Commission asked staff to request a Presentation slot during an upcoming City Council meeting, preferably in April to coincide with Earth Day, for presentation of the award to Echo Canyon School. Correspondence to the remaining finalists was also discussed.

MOTION AND VOTE ITEM 3

Chair Scheck made a motion to select Echo Canyon School as the 2025 Sustainable Scottsdale Award winner, with Commissioner Brady providing a Second for the motion, which carried 5-0. Commissioners Scheck, McMahon, Brady, Iyengar and Ulreich-Power voted for APPROVAL.

4) Staff Updates

Staff will present updates pertaining to Scottsdale's sustainability initiatives for commission information only. Arizona State law prohibits the Scottsdale Environmental Advisory Commission from discussing or taking action on an item that is not properly noticed on the posted agenda.

Staff Contact: Tim Conner, Environmental Policy Manager, tconner@scottsdaleaz.gov
Commission Action: Information only

Commissioner Cuculic's second term ends March 1, 2025. Nominations will occur on March 4, 2025, and a new commissioner will be appointed on March 18, 2025.

5) Identification of Future Agenda Items

The Scottsdale Environmental Advisory Commission may suggest items they wish to be placed on a future agenda. Per Arizona State law, the Commission shall not discuss, deliberate, or take action on any item suggested as a future agenda item, unless the specific item is properly noticed for Commission discussion and action.

Staff Contact: Tim Conner, Environmental Policy Manager, tconner@scottsdaleaz.gov
Commission Action: Information/Discussion

Commissioners expressed interest in having presentations from Waste Not, an entomologist, Scottsdale Water (part 2), and Commissioner Iyengar's update on plastic waste.

6) **Recognition of Service: Commissioner Walter Cuculic** (Chair Scheck moved this item to after Item #2)
The Commission will recognize Commissioner Cuculic for having completed two consecutive terms of service with the Scottsdale Environmental Advisory Commission.

Staff Contact: Tim Conner, Environmental Policy Manager, tconner@scottsdaleaz.gov
Commission Action: Information/Discussion

Commissioner Cuculic expressed his wish for SEAC to continue improving the environment while saving the city money, including actions in the Sustainability Plan.

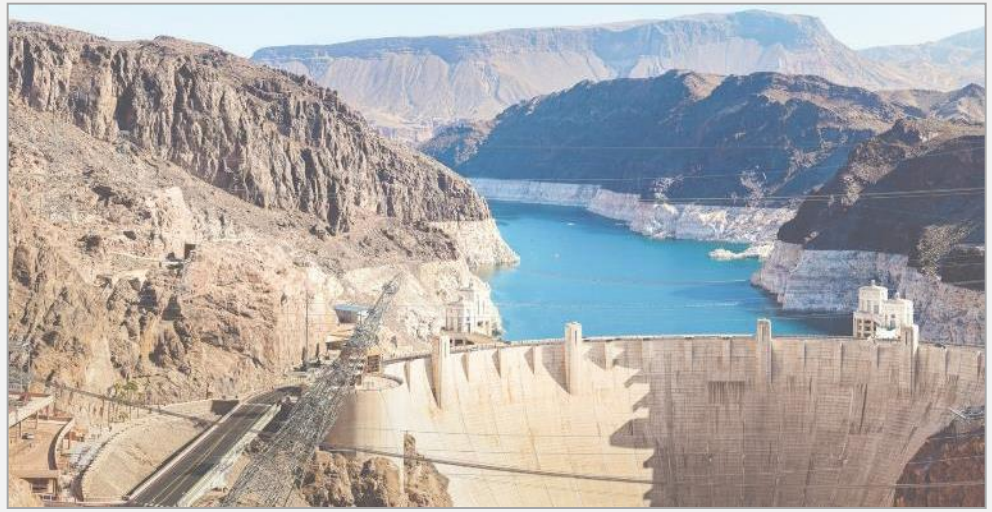
Adjournment 7:03 p.m.

Persons with a disability may request a reasonable accommodation by contacting the Office of Environmental Initiatives at 480-312-7833. Requests should be made 24 hours in advance, or as early as possible, to allow time to arrange the accommodation. For TTY users, the Arizona Relay Service (1-800-367-8939) others may contact the Office of Environmental Initiatives at 480-312-7833.

Scottsdale Environmental Advisory Commission

Item 1: Colorado River Update and Summary of Conservation Efforts

Scottsdale Water Resources

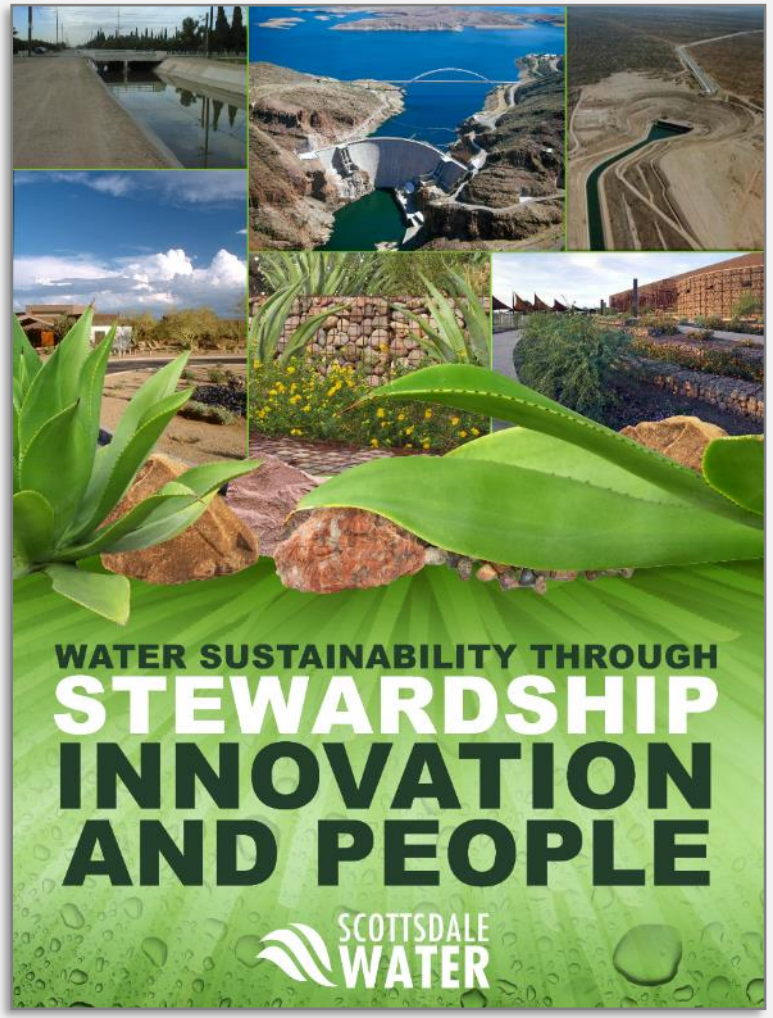


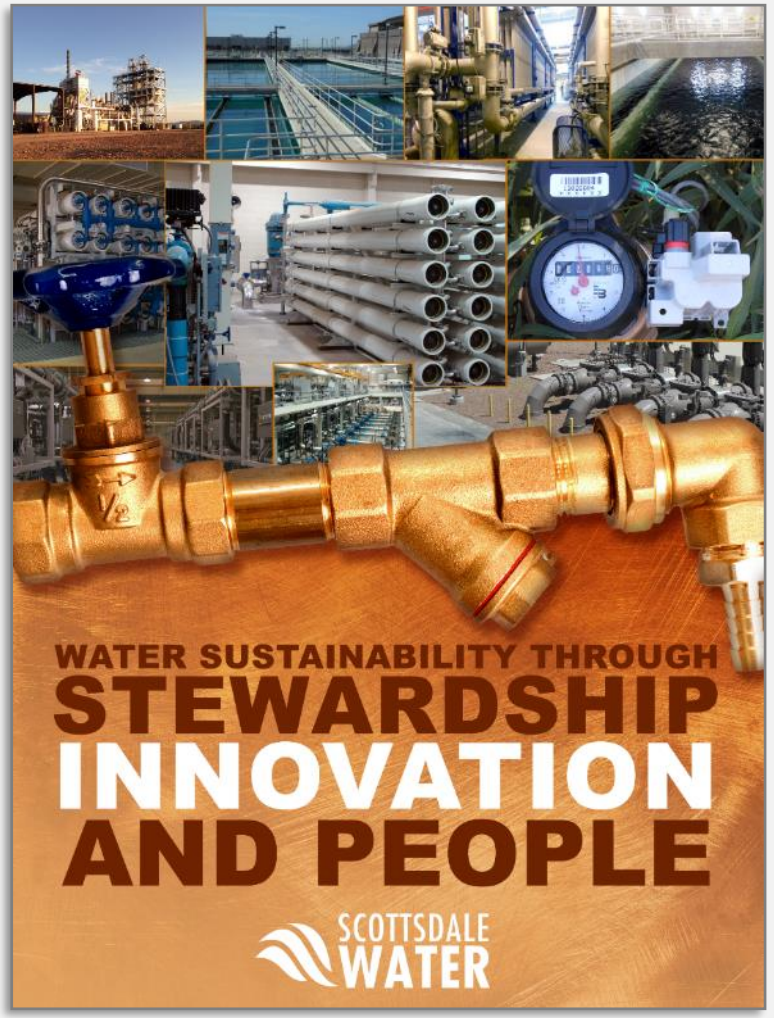
Scottsdale Environmental Advisory Commission
February 2025

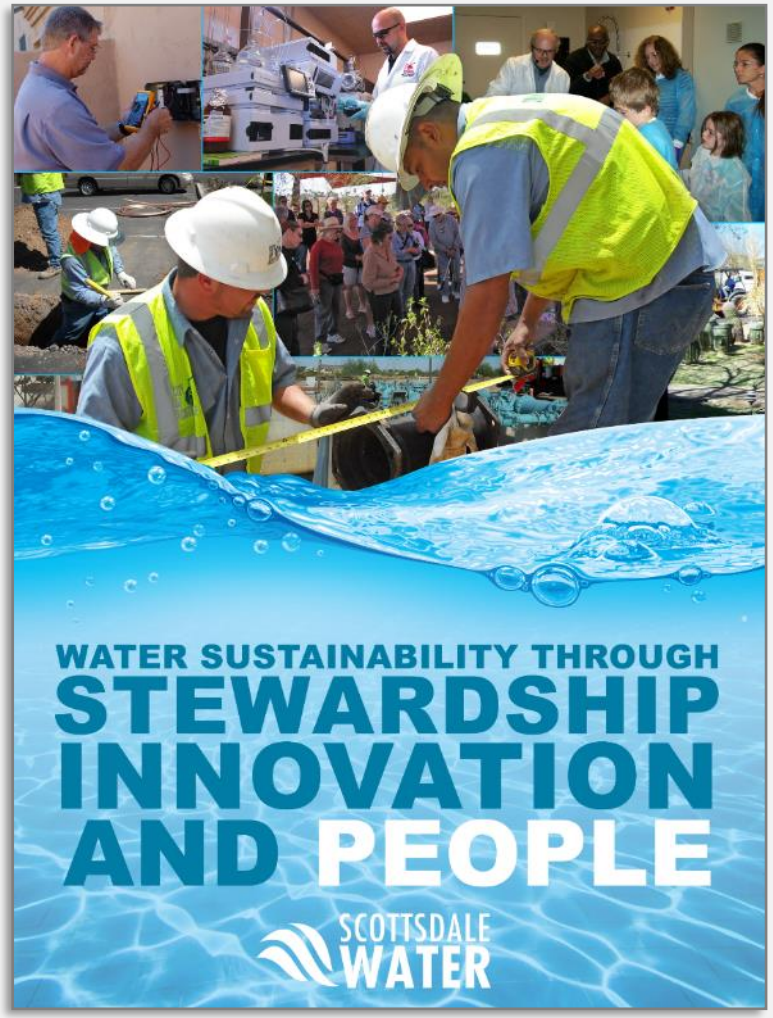
SCOTTSDALE WATER

CITY OF SCOTTSDALE

Scottsdale Water's Vision



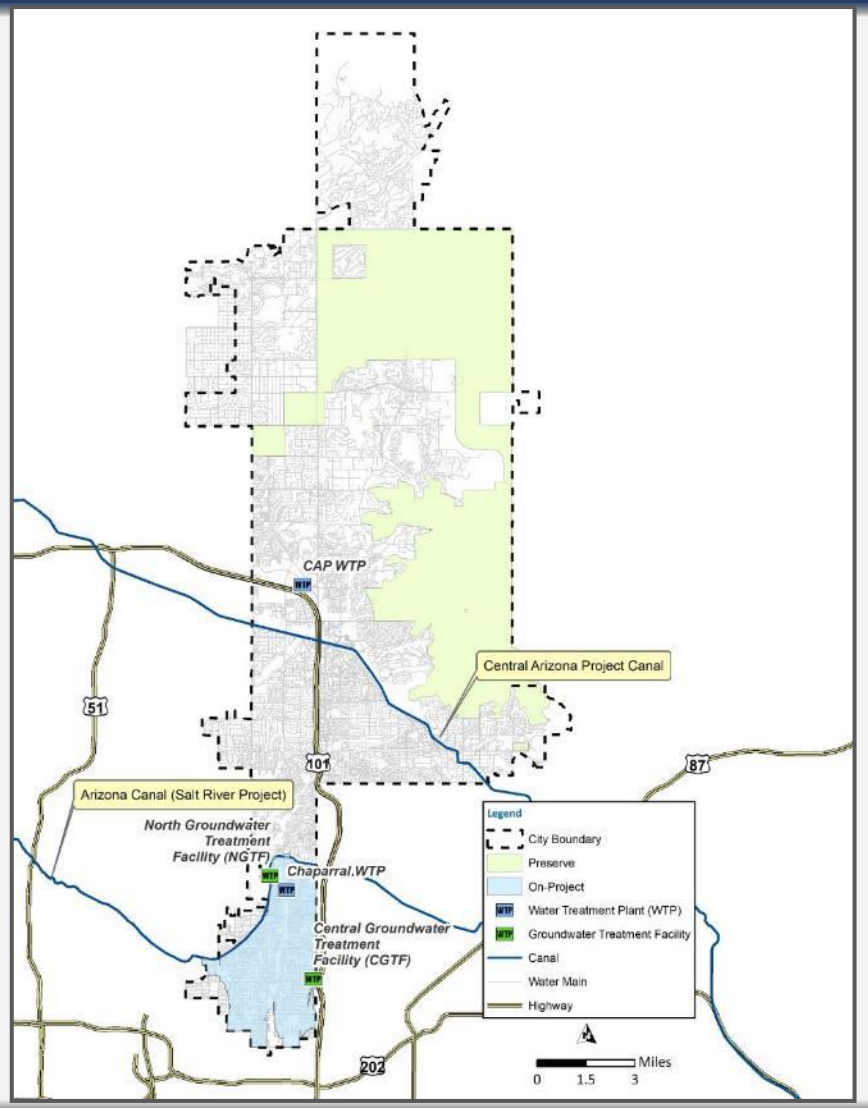




Scottsdale Water

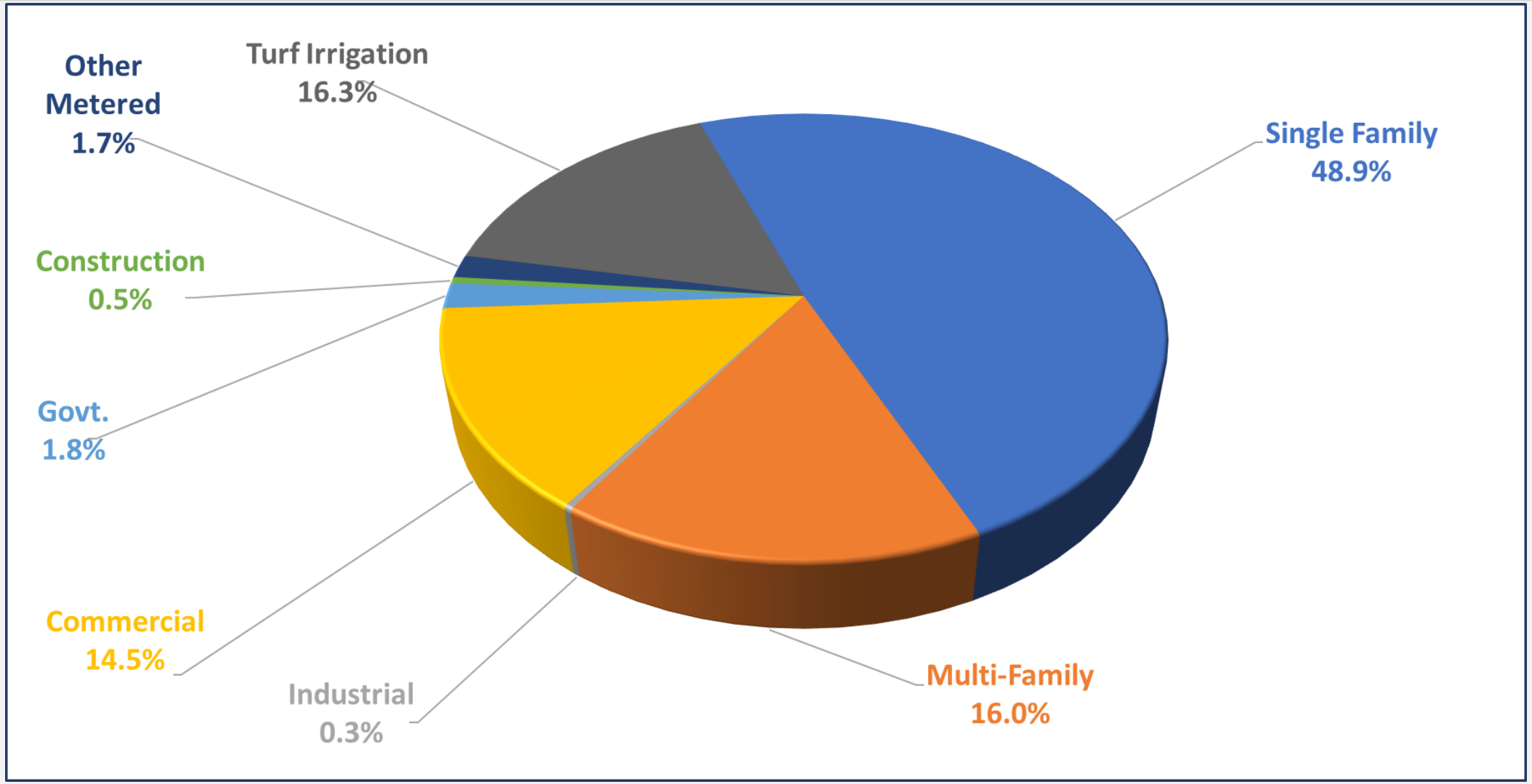
- **Active water accounts: ~94,100**
  - 83,500 Single-family residential
  - 4,500 Multifamily residential
  - 6,100 Commercial, nonresidential
- **Average Annual <u>potable</u> deliveries:**
  - 75,800 acre-feet (67 million gallons/day)

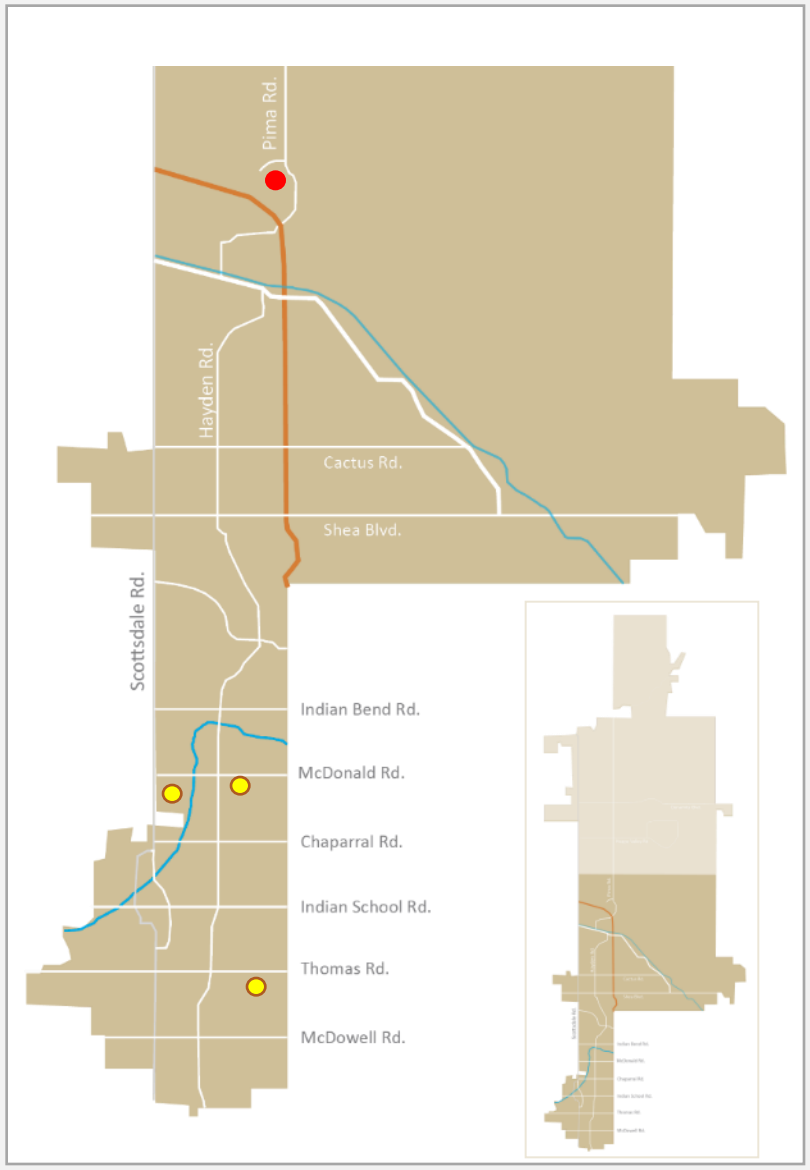
(1 acre foot = 325,851 gallons is enough water to supply <u>one</u> Scottsdale families of four for one year)

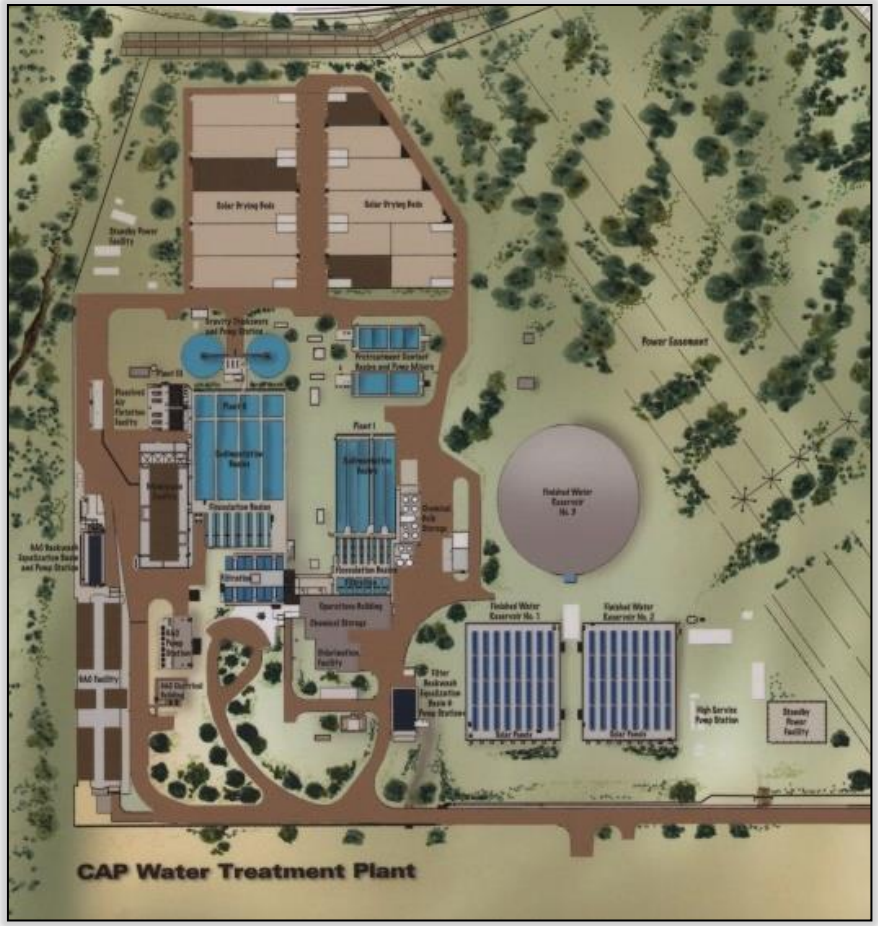


SCOTTSDALE WATER

CITY OF SCOTTSDALE


Other Metered 1.7%
Turf Irrigation 16.3%
Single Family 48.9%
Construction 0.5%
Govt. 1.8%
Commercial 14.5%
Industrial 0.3%
Multi-Family 16.0%

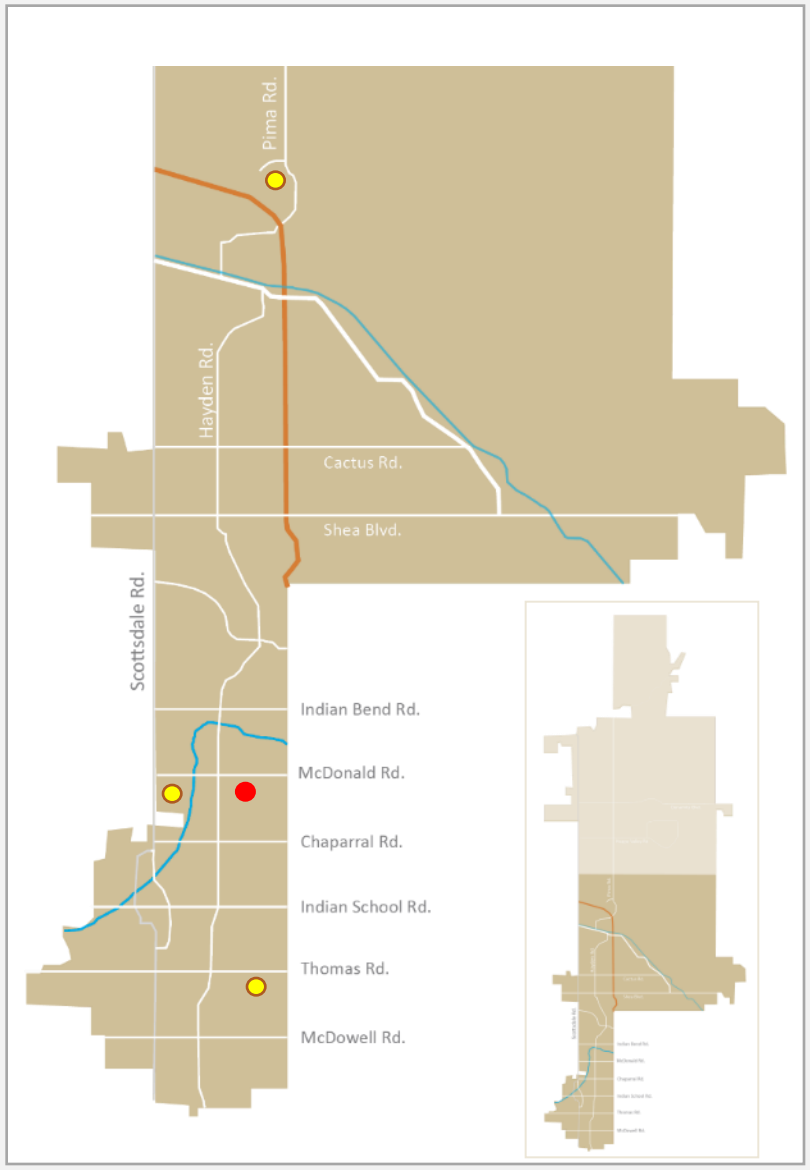




- CAP Water Treatment Plant
- 70 mgd total capacity

SCOTTSDALE WATER

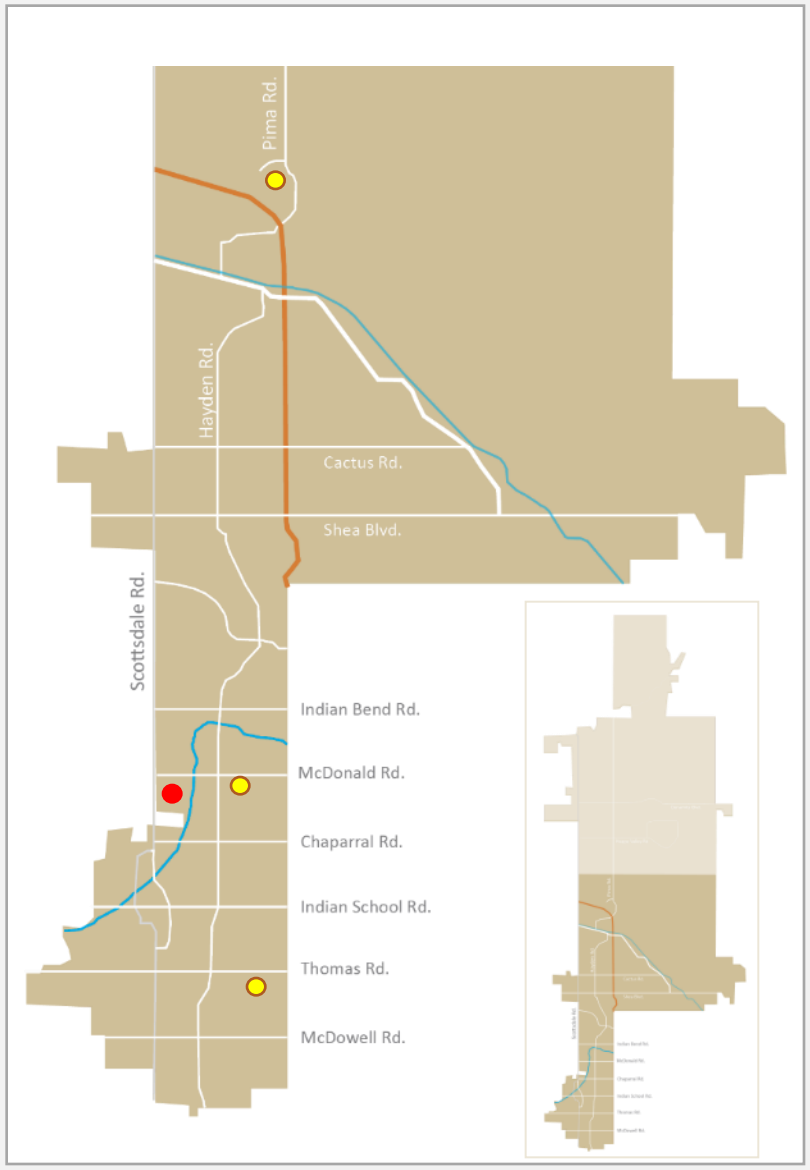
Chaparral Water Treatment Plant



- 30 mgd capacity potable water
- Treats water from Salt and Verde rivers (SRP)

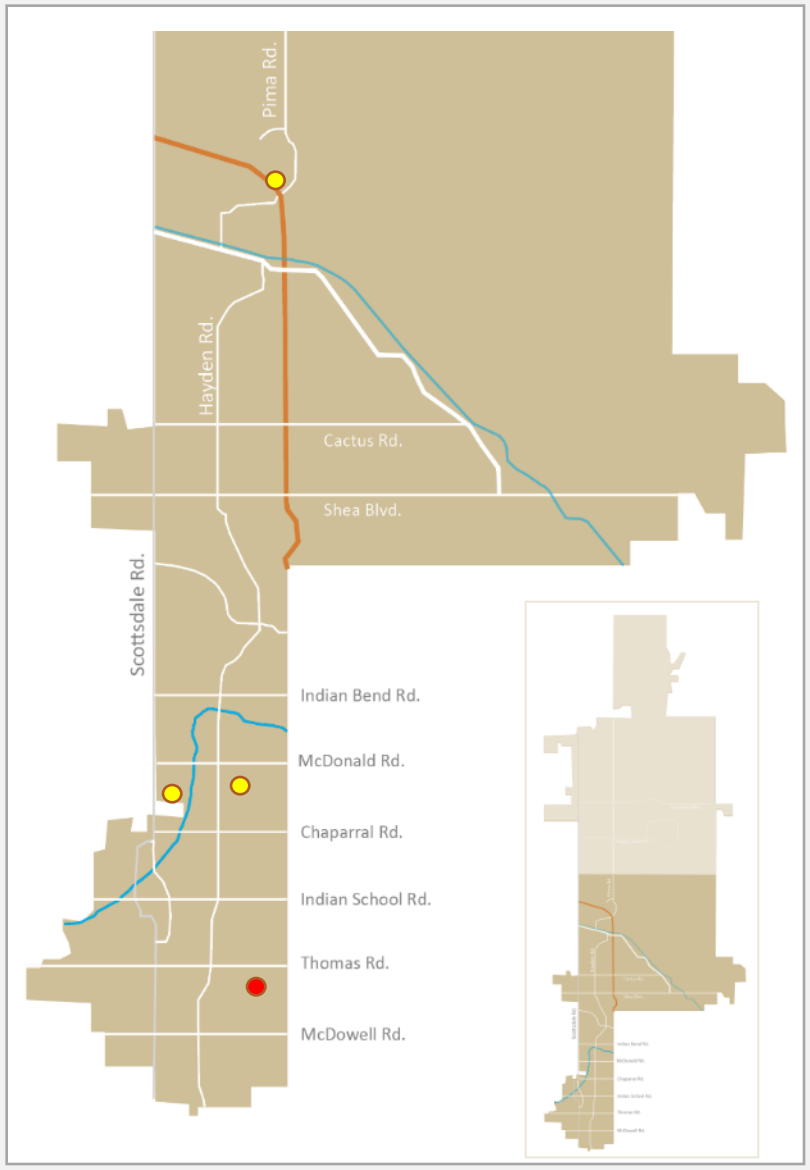
SCOTTSDALE WATER

NIBW Granular Activated Carbon Treatment Facility



- Treats water from the NIBW Superfund with GAC.
- Owned by Motorola Solutions, operated by Scottsdale Water

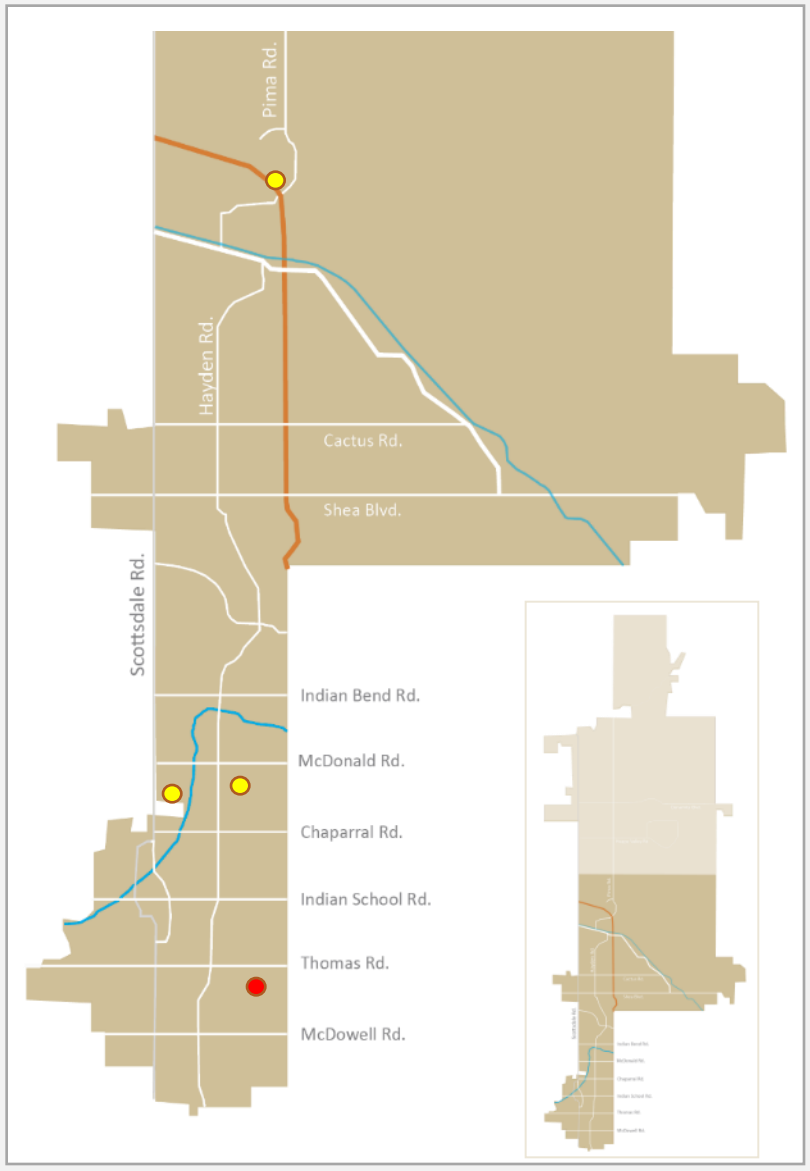
SCOTTSDALE WATER



Central Groundwater Treatment Facility

- Treats NIBW Superfund groundwater through air stripping.

SCOTTSDALE WATER

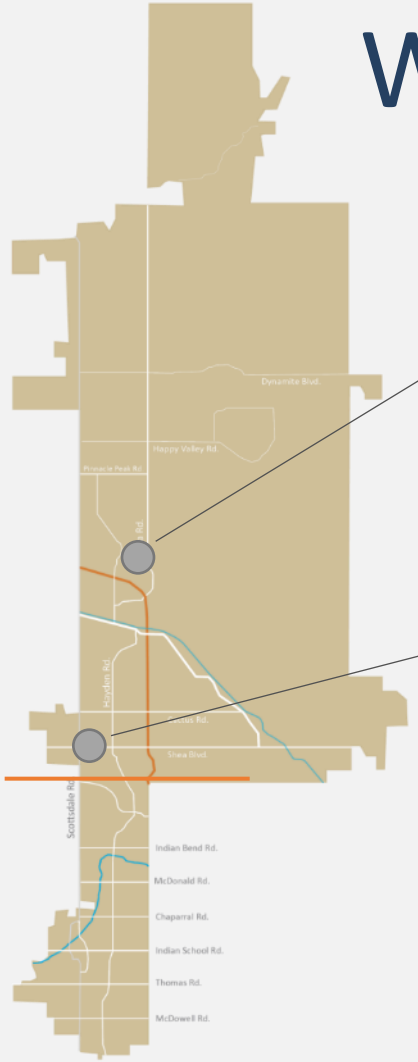


Thomas Groundwater Treatment Facility

- 1.5MGD
- Reverse Osmosis

SCOTTSDALE WATER

Water Reclamation Facilities



Water Campus

- Water Reclamation Plant
- Advanced Water Treatment Plant

Gainey Ranch WRP

Water Campus Reclamation Components

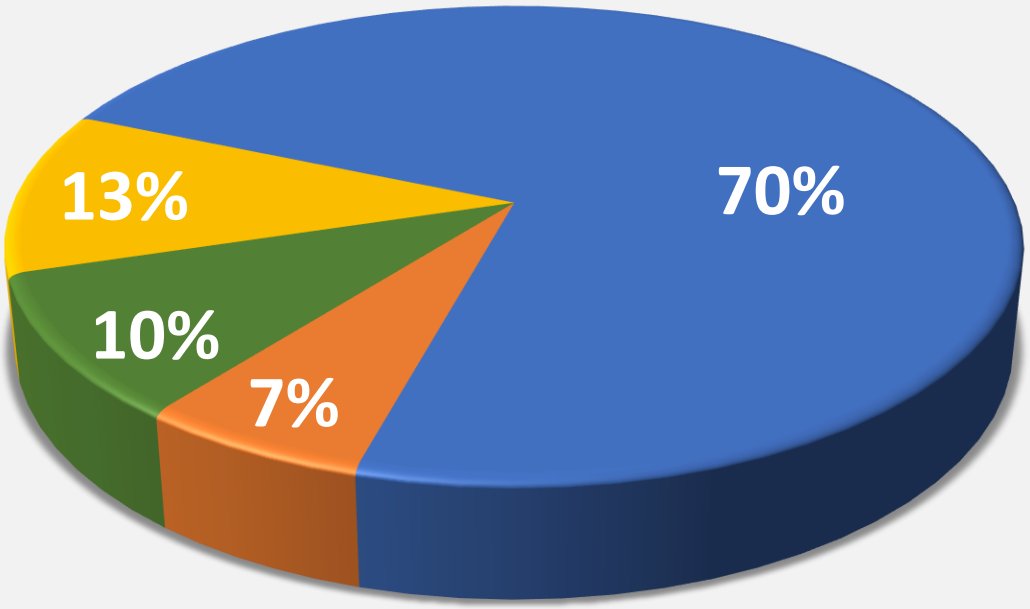
- 24 MGD Water Reclamation Plant (WRP)
  - Biological process for Class A+ Effluent
- 20 MGD Advanced Water Treatment Plant (AWT)
  - Mechanical process meeting drinking water standards

Direct Potable Reuse Permit

Water Campus Advanced Water Treatment Facility

- Monitoring at 3 points of compliance
- Purified water must meet drinking water quality standards
- Flow monitoring
- Operational monitoring
- Quarterly Self Monitoring Reports submitted to ADEQ

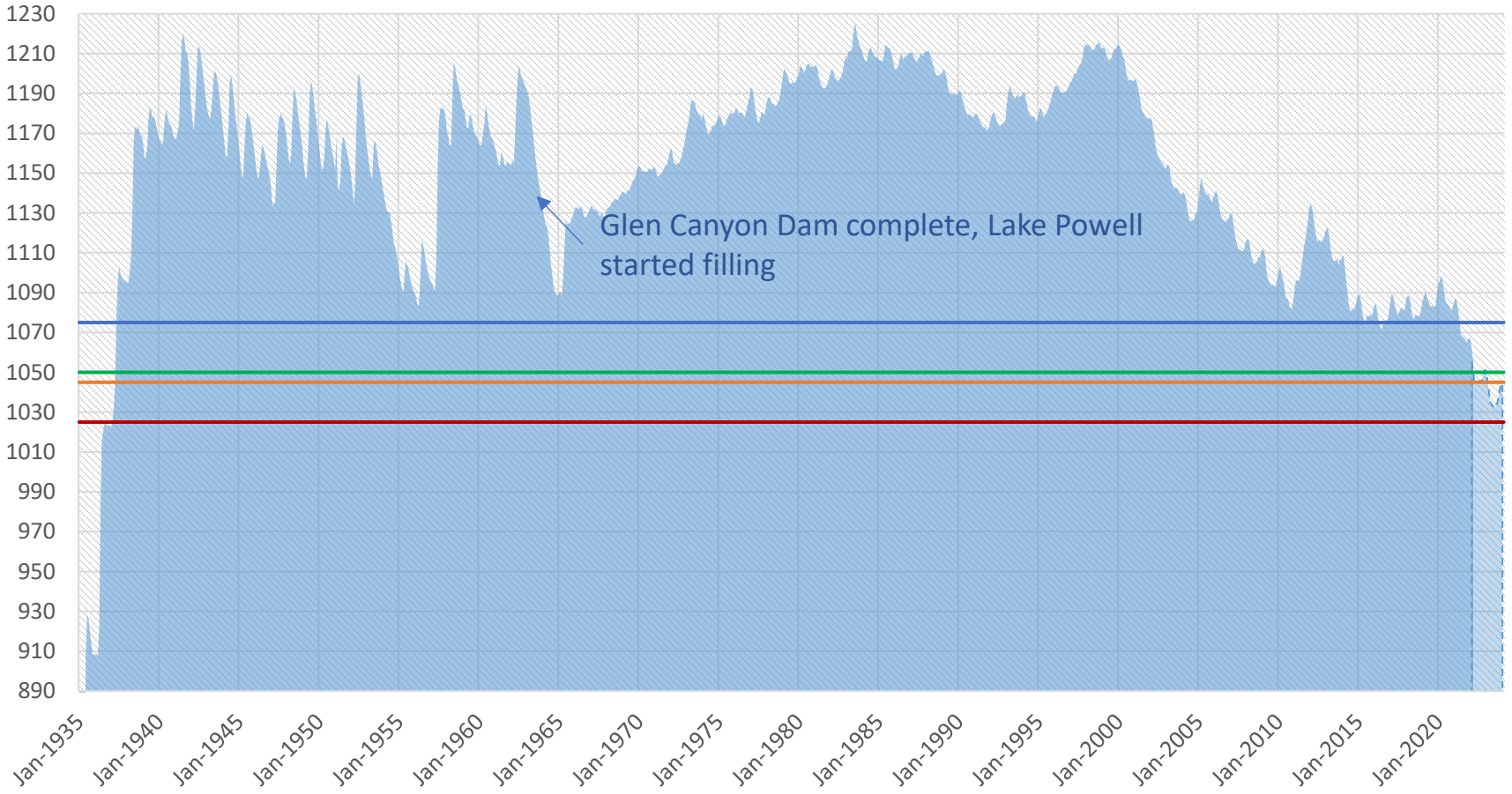
2023 ALL Water Delivery to Customers



- CAP (Colorado River Water): 63,250 AF
- SRP (Salt River Project Water): 11,630 AF
- Groundwater: 6,800 AF
- Reclaimed: 9,100 AF

Total Water Delivered: 90,780 AF

Lake Mead Water Lever Elevations



Contributing Factors

- 20+ years of dry conditions
- Warming climate and aridification
- Structural deficit and overallocation

Colorado River Supplies

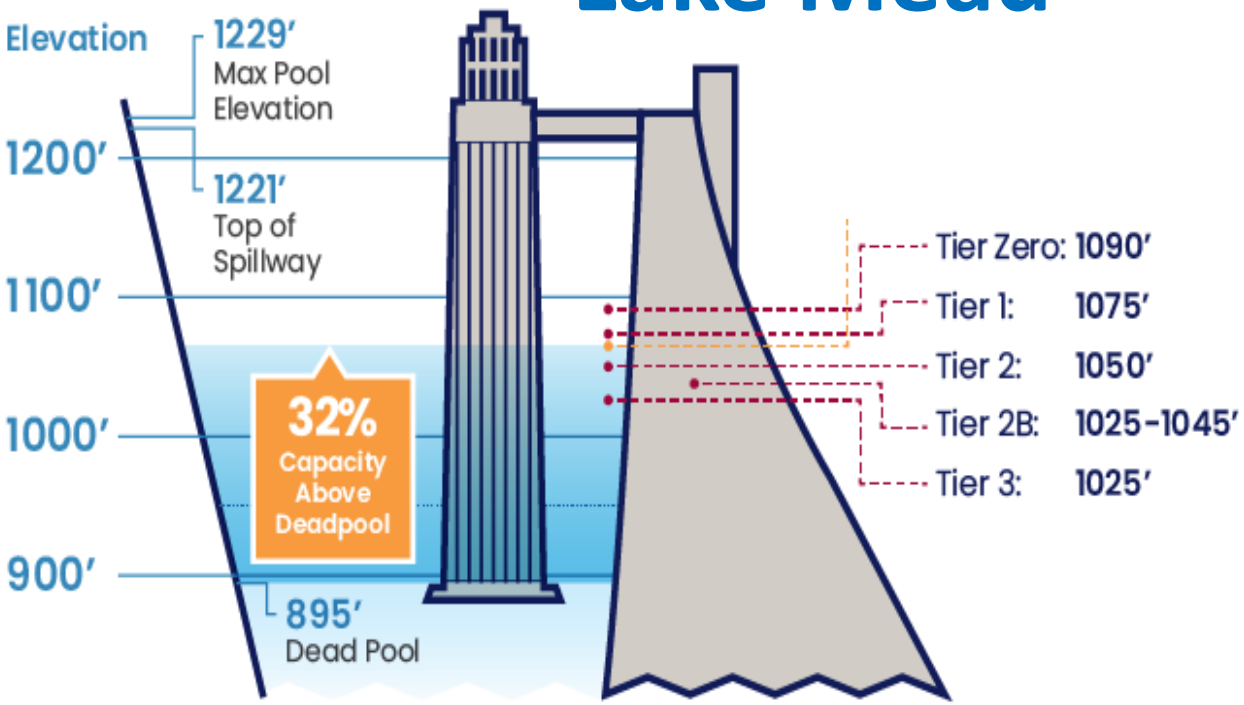
- Water allocations - “The Law of the River”.
- CAP water is junior in the lower basin.

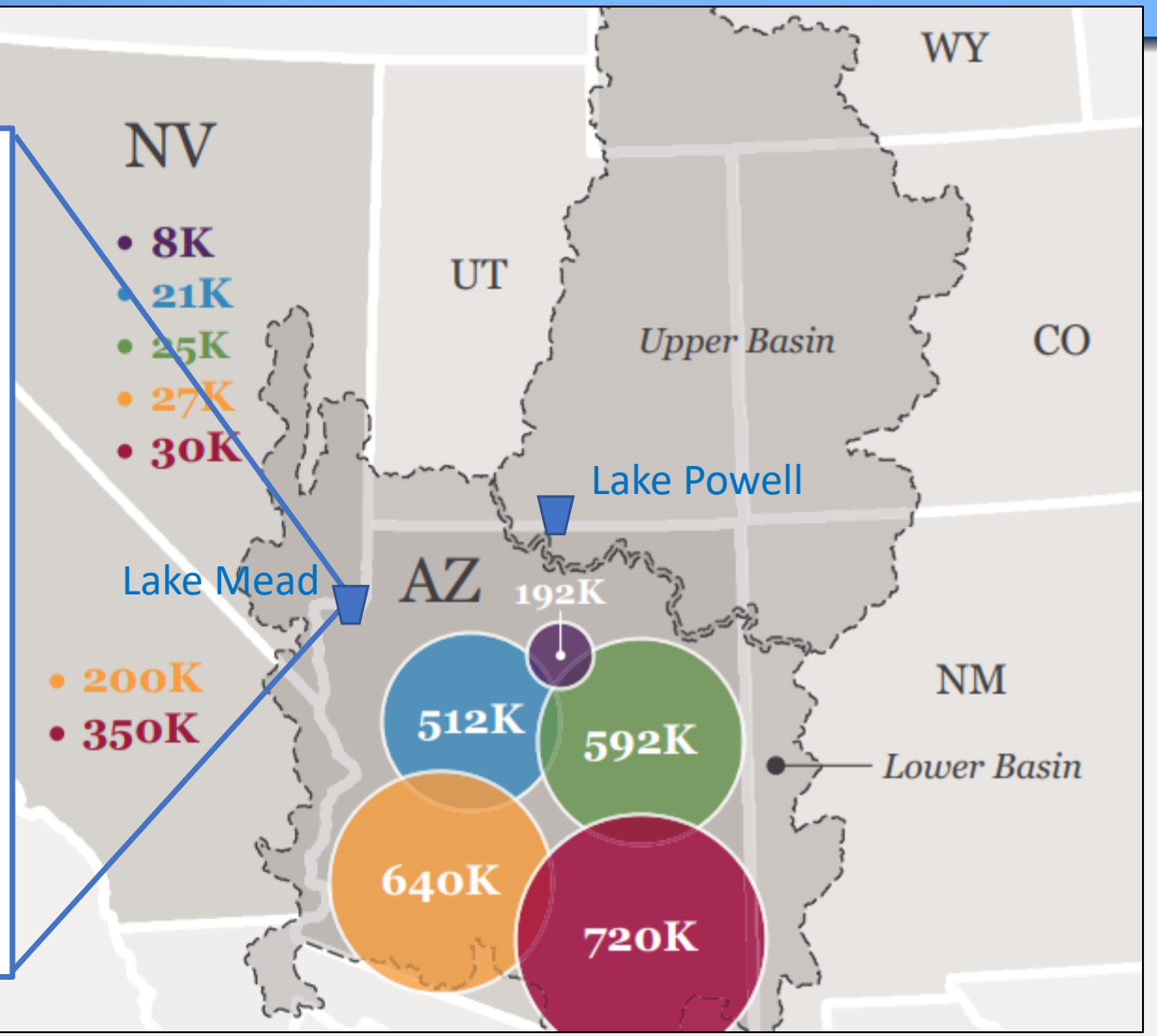
Basin	Amount
Upper Basin	7.5 maf
Lower Basin	7.5 maf
Subtotal	15.0 maf
Mexico	1.5 maf
Total	**16.5* maf**

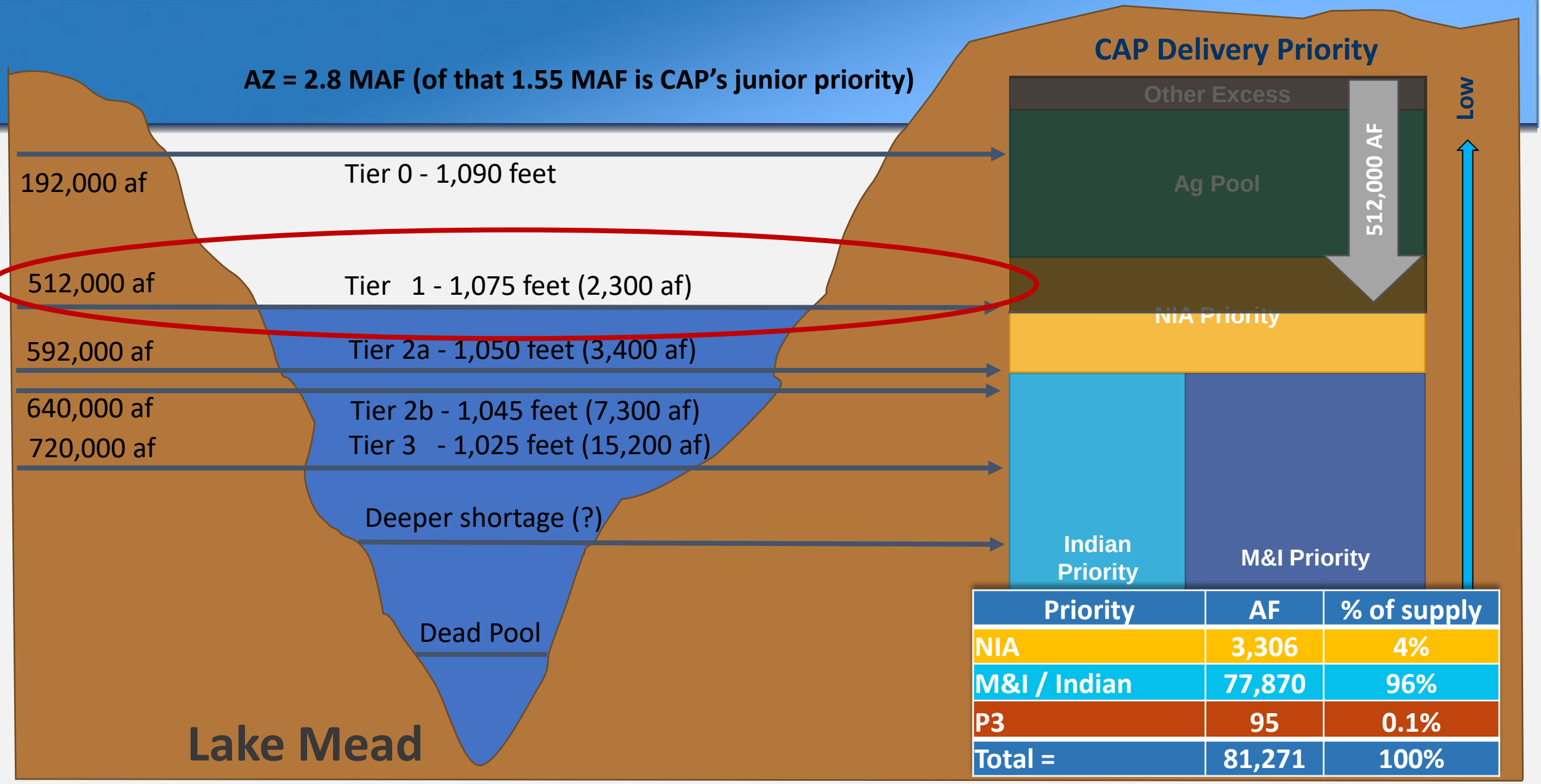
*Based on only thirty years of streamflow records starting in the late 1890

Lower Basin	Amount
California	4.4 maf
Arizona	2.8 maf
Nevada	0.3 maf
Total	**7.5 maf**

Lake Mead


Elevation
1229′
Max Pool Elevation
1200′
1221′
Top of Spillway
1100′
1000′
900′
32%
Capacity Above Deadpool
895′
Dead Pool
Tier Zero: 1090′
Tier 1: 1075′
Tier 2: 1050′
Tier 2B: 1025-1045′
Tier 3: 1025′


NV
• 8K
• 21K
• 25K
• 27K
• 30K
• 200K
• 350K
UT
WY
CO
Upper Basin
Lake Powell
Lake Mead
AZ
192K
512K
592K
640K
720K
NM
Lower Basin



Priority	AF	% of supply
NIA	3,306	4%
M&I / Indian	77,870	96%
P3	95	0.1%
Total =	81,271	100%

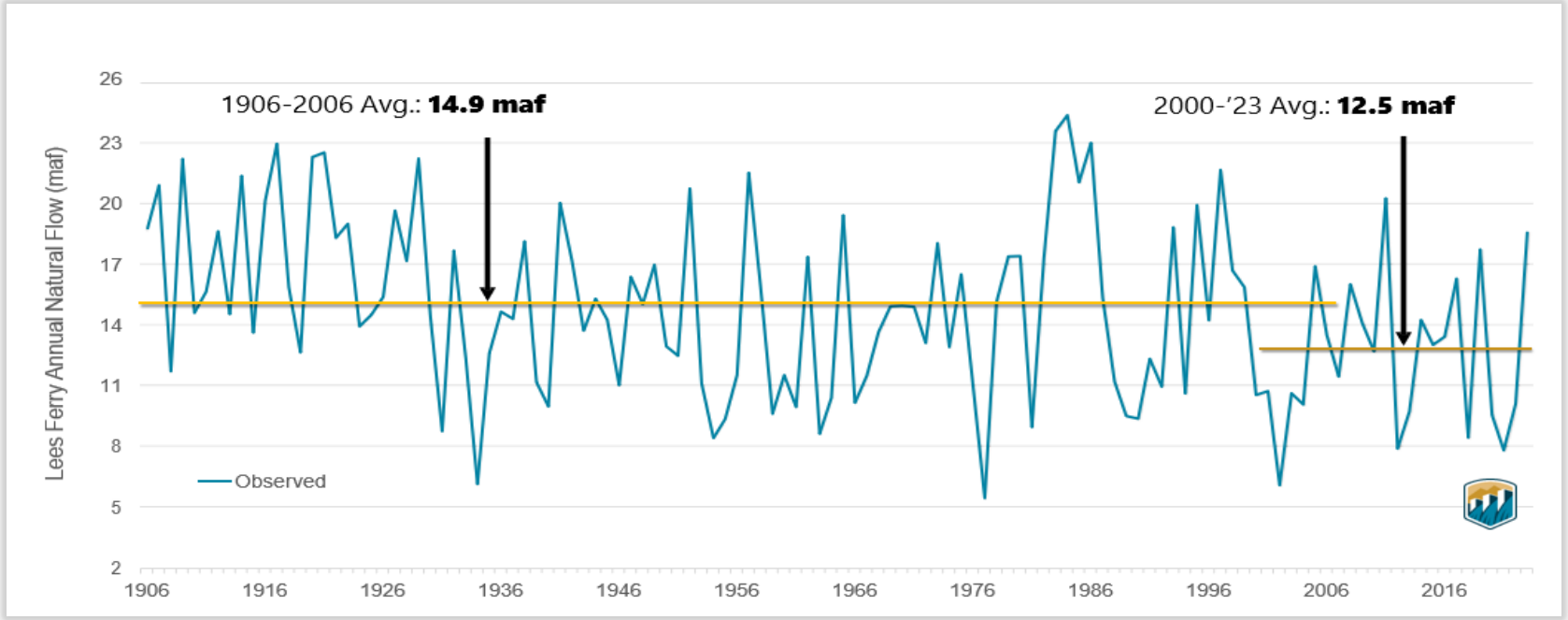
CAP Water Shortage Tiers and Scottsdale's Corresponding Shortage Stages

CAP Water Shortage Tiers	TIER ZERO	TIER 1	TIER 2A	TIER 2B	TIER 3	PROTECT LEVEL
Lake Mead Elevation (in feet)	1,090	1,075	1,050	1,045	1,025	<1,025
Corresponding City Water Shortage Stage	Stage Zero Shortage Preparation	Stage 1 Minimum Shortage	Stage 1 Minimum Shortage	Stage 2 Moderate Shortage	Stage 3 Severe Shortage	Stage 4 Critical Shortage
Potential City Water Supply Reduction (MGD)	0	2.0	3.0	6.5	13.5	24
Potential City Water Supply Reduction (AF/year)	0	2,300	3,400	7,300	15,200	26,900
Approximate percent reduction to Scottsdale's CAP Supply [(a)]	0	3%	4%	9%	18%	33%

Post 2026 Colorado River Reservoir Operations

2007 Interim Guidelines have not sufficiently reduced risk

"Based on operational experience since 2007, the current guidelines are not robust enough…. More robust and adaptive guidelines are needed for the efficient and sustainable management of the major mainstream Colorado River reservoirs and system resources."[1]



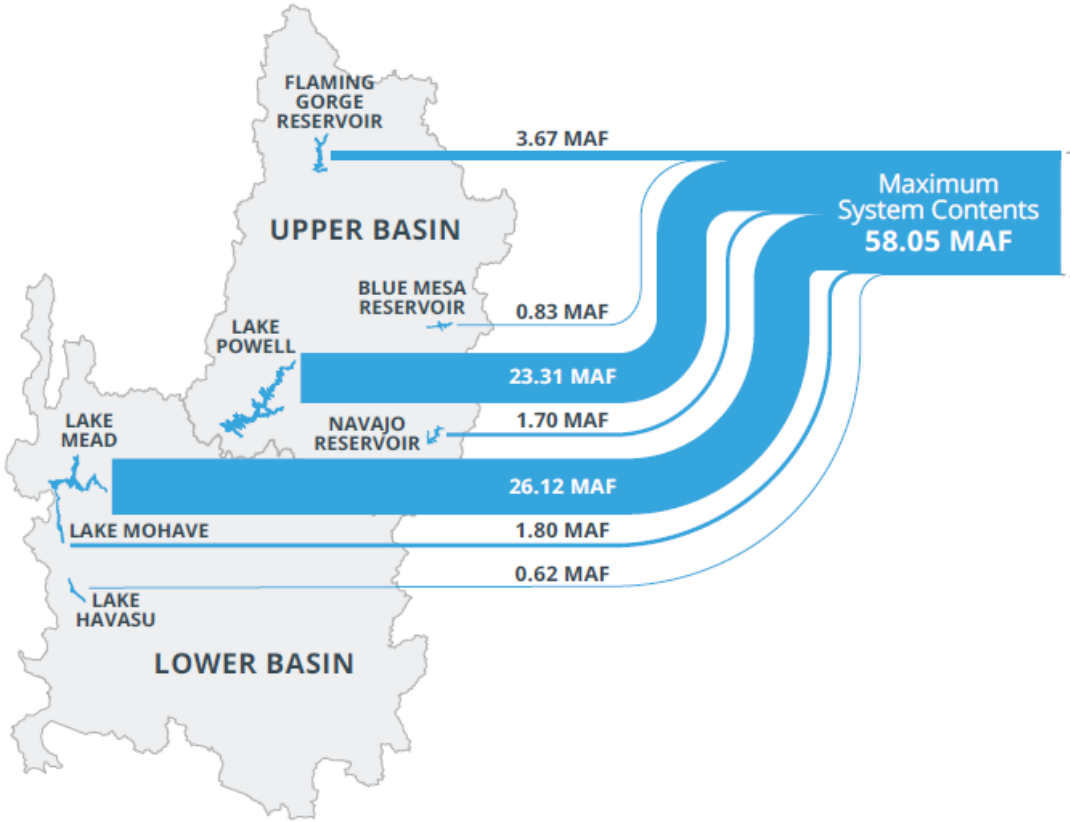
~16% differential

[1]Scoping report for Post-2026 Colorado River Reservoir Operations

LOWER BASIN ALTERNATIVE REDUCTION DETERMINATION

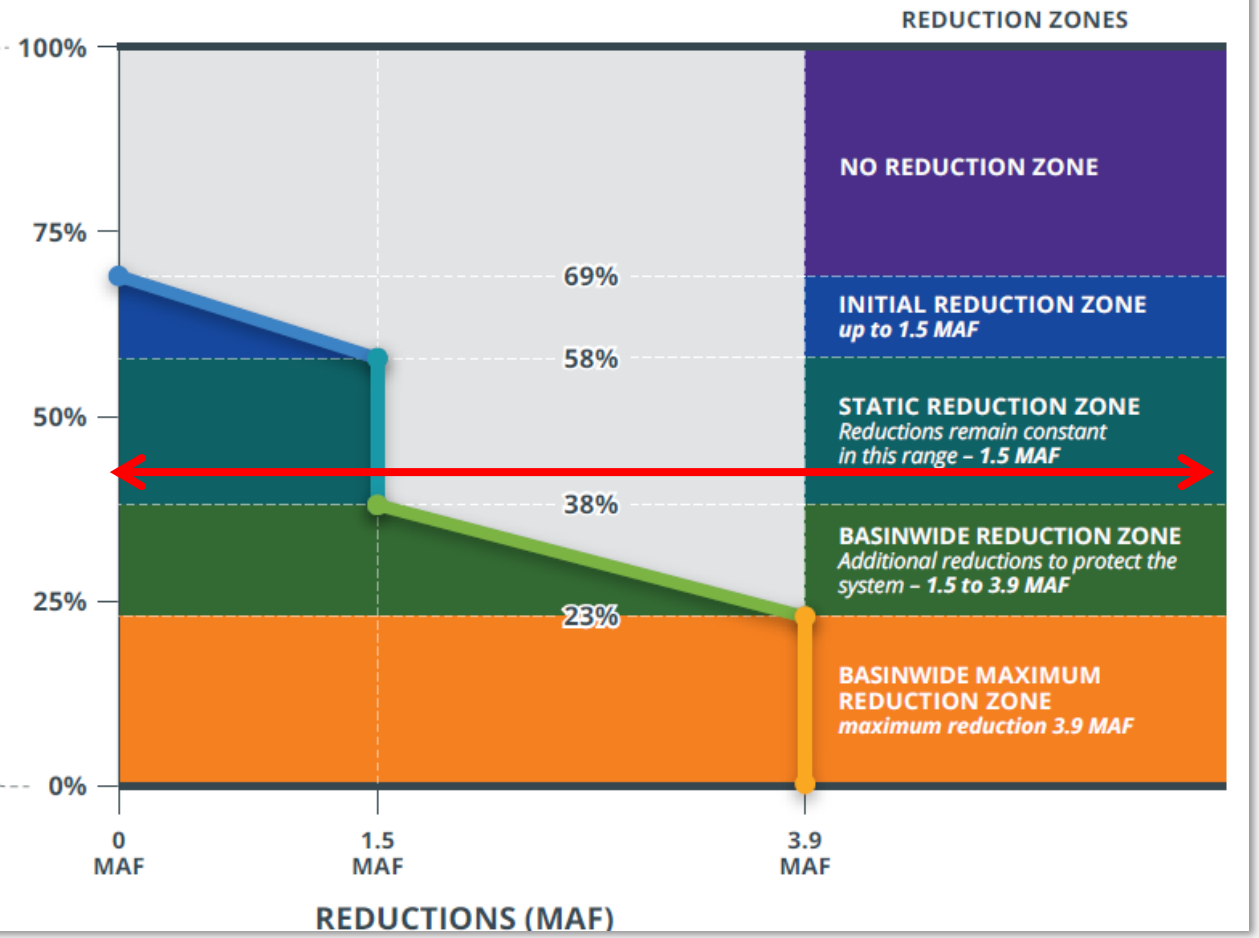
MAXIMUM SYSTEM CONTENTS

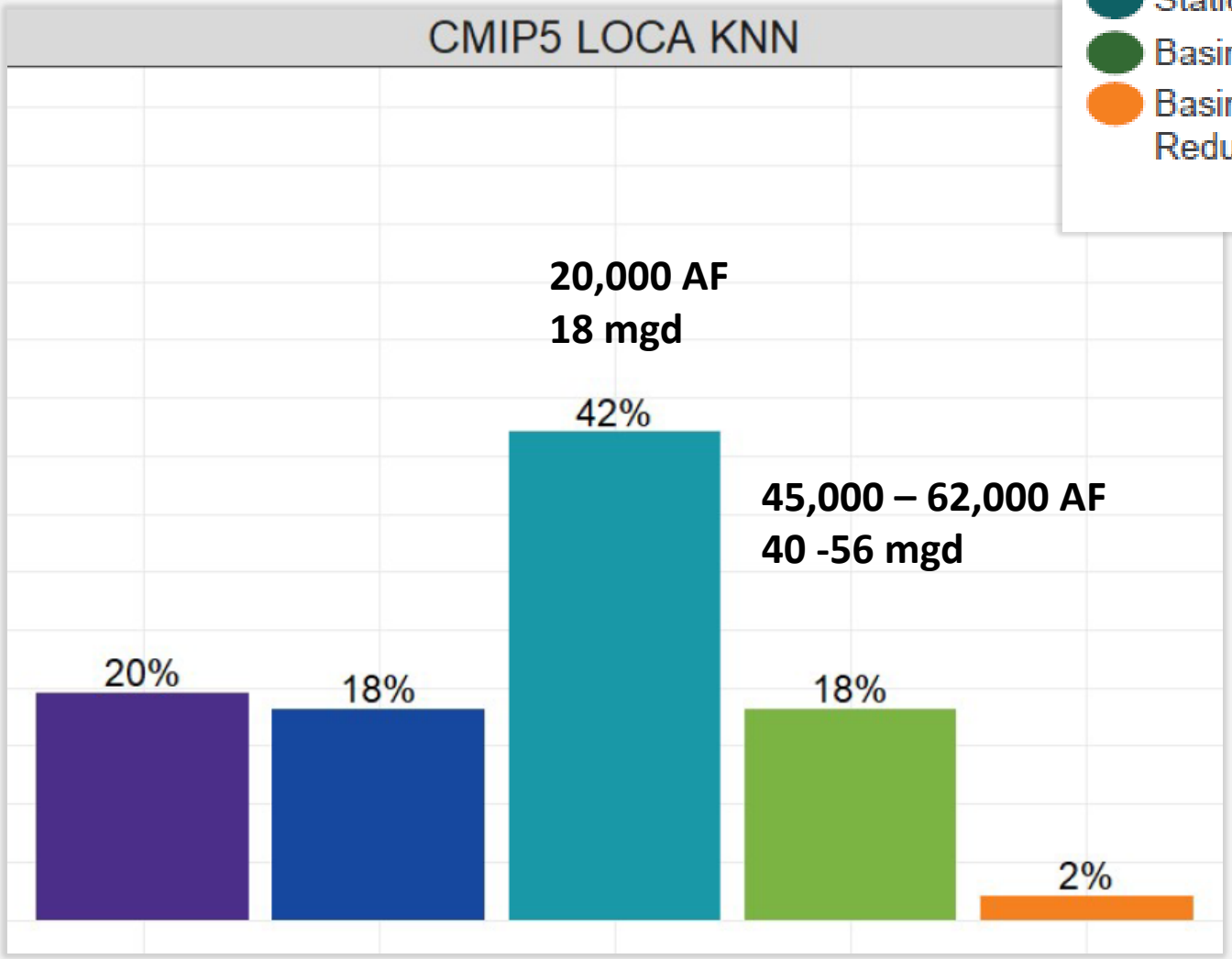
System contents are based on the volume in each reservoir that is available for release, in millions of acre-feet (MAF)



REDUCTION DETERMINATION

Reductions are based on the available system contents, based on the function below





- 20% of the time = no reduction
- 18% of the time up to 25% reduction
- 42% of the time 25%
- 18% of the time 50 – 75% reduction (estimated)
- 2% of the time 100% reduction

Scottsdale's ongoing and Continual Response

- Activate our Drought Management Plan
- Expanded conservation and messaging
- Expanding our AMI network
- WaterSmart portal
- HOA Program
- Large user policy

- Increasing our large well capacity
- Bartlett Dam Modification stakeholder
- Examine ARPW (DPR) potential regionally and at the Water Campus

Incentive Rebates

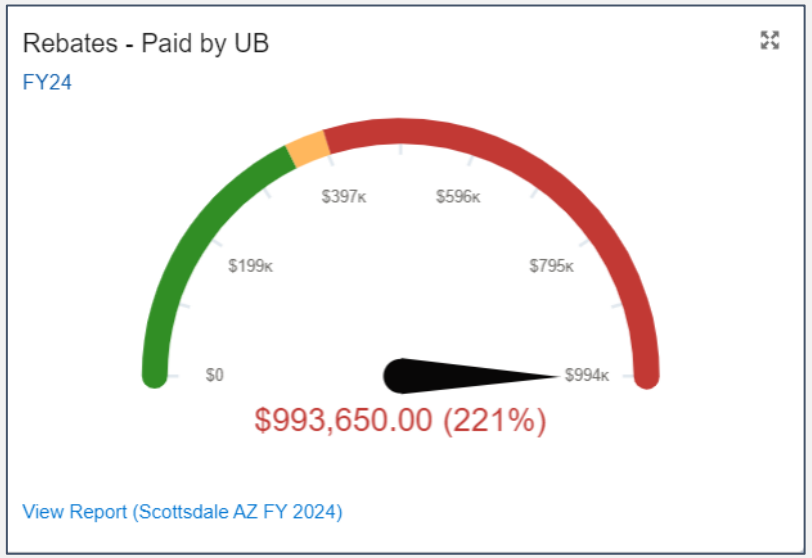
Removals

- Pool
- Grass removal and conversion

Installations

- Toilets (commercial)
- Urinals (commercial)
- Showerheads (commercial)
- Smart irrigation controllers
- Smart Monitoring and Efficiency Technology

Rebate Dashboard - Processing & Results



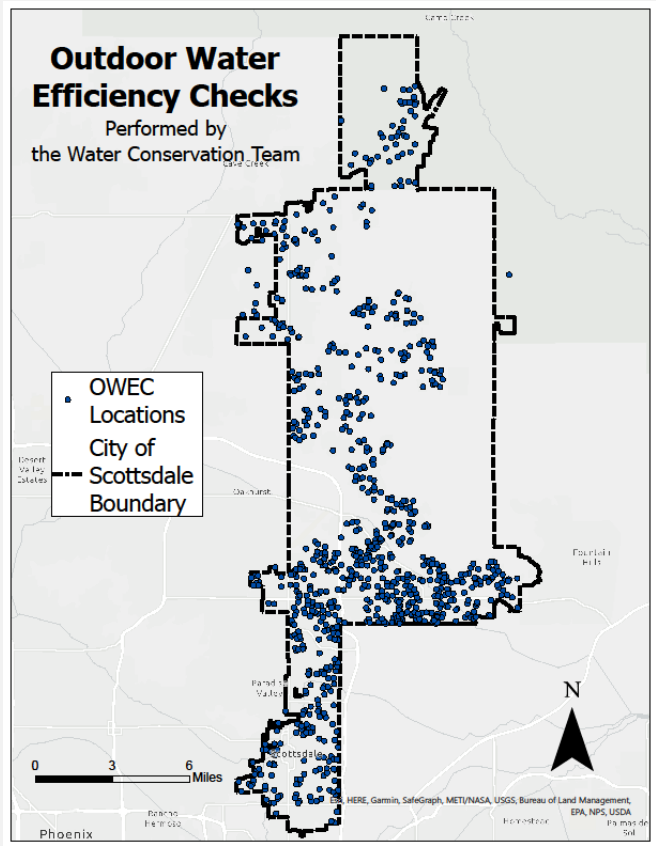
Results - compare water use 12-month pre- and post-rebate

- Irrigation Controller Rebate: 18,000 gallons
- Grass Removal Rebate: 49,000 gallons
- First New Tech rebate: 1,000,000 gallons

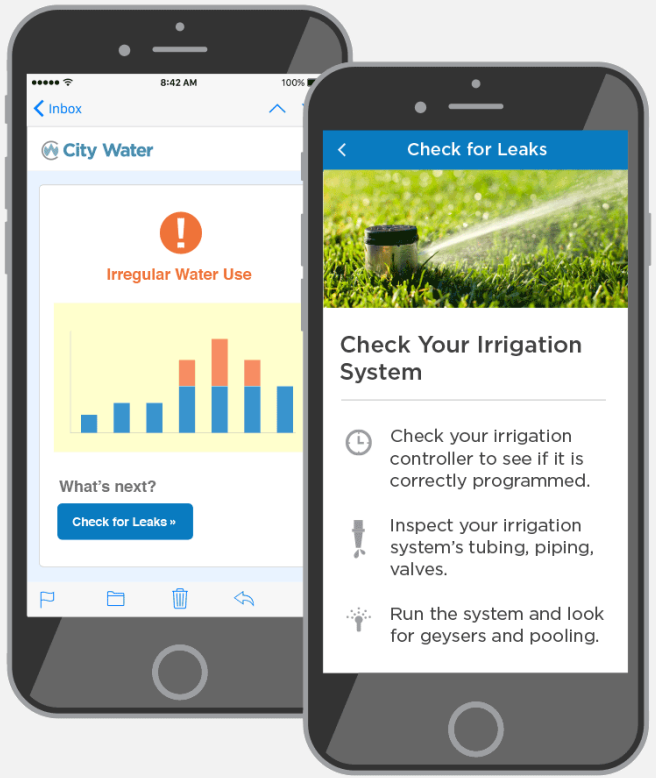
June 2023 – June 2024: 576 grass removal application received, conducted 230 site visits
Overall, we received an even 1,000 rebate applications for FY24

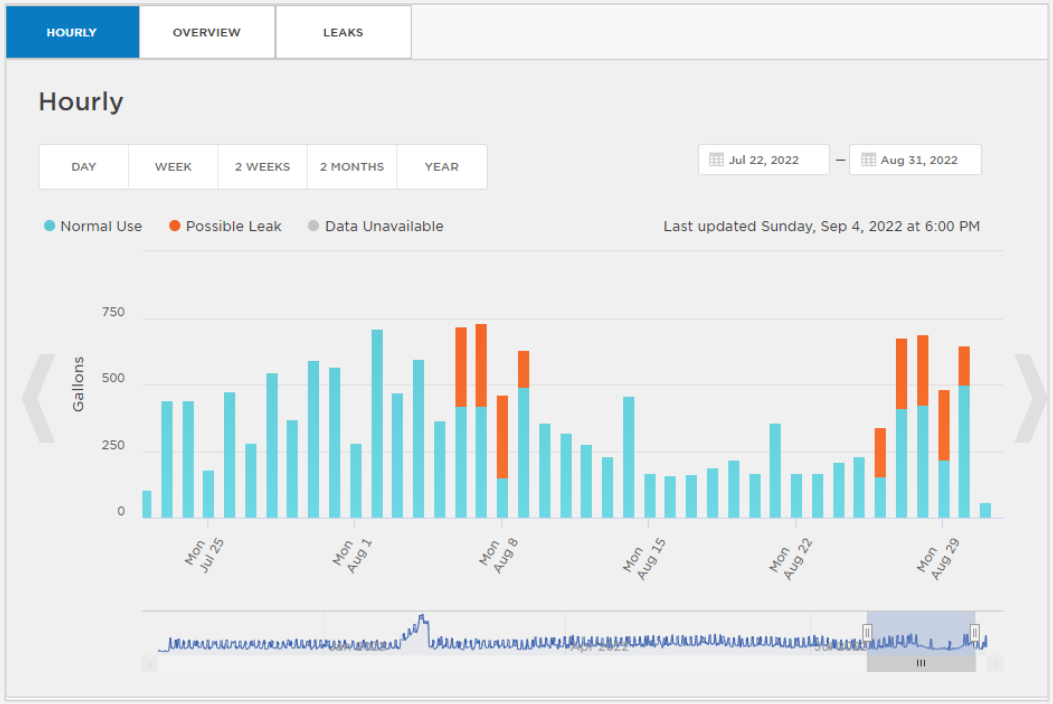
Outdoor Water Efficiency Checks

- Free single-family irrigation check with an irrigation professional
- Discover how much and how often to water
- Learn how to read your meter and check for leaks
- Receive water conservation tips



WaterSmart

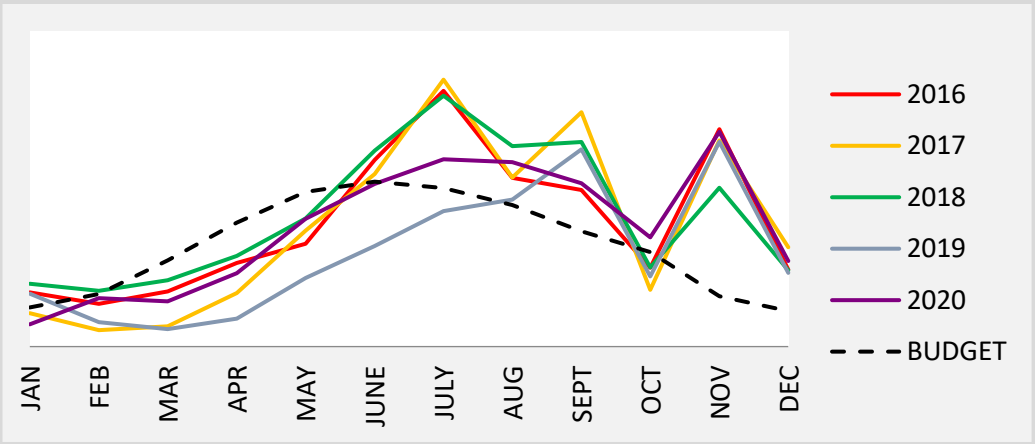




Customer Comments

- *A tree that fell in the storm damaged a water line that was not at first apparent*
- *Broken irrigation pipe*
- *Kid left a hose on*
- *We appreciate you letting us know…*

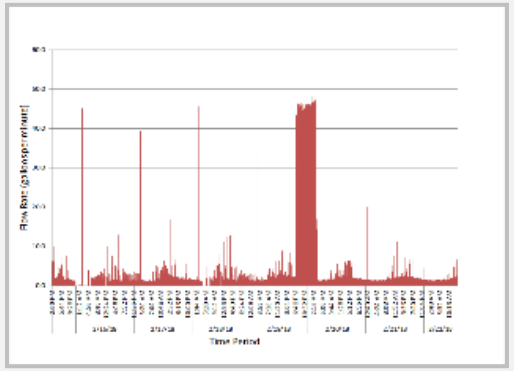
HOAs and Multifamily Resources

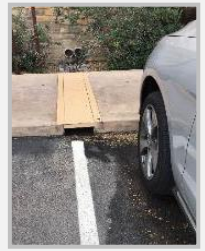


- Meet with HOA board, landscaper, management company
- Understand landscape water needs
- Obtain water saving potential by:
  - No overseeding
  - Removing grass
  - Preserving asphalt
- Meter location services
- Discover water conservation programs

Commercial Audit Program

- Meet with customer
- Understand water needs
- Meter location services
- Recommendations
  - Rebates
  - Submeters
  - Leak resolution





Infrastructure Projects

Increase Groundwater Well infrastructure

- Four new additional large producing wells tied into the CAP WTP

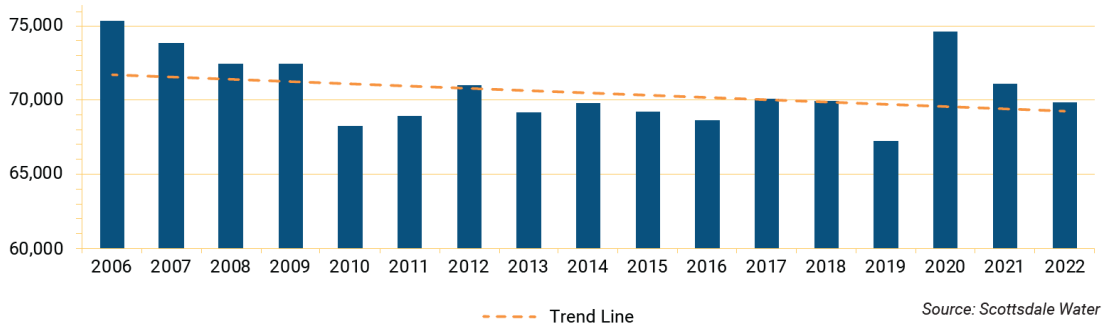
APRW Capacity

- Evaluation on Expansion of APRW potential
- Regional APRW feasibility

Bartlett Dam Modification

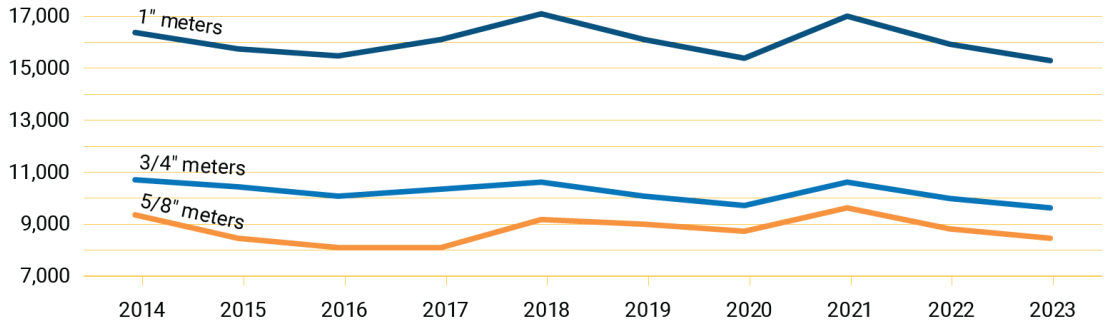
- Stakeholder and potential recipient of additional variable Verde supply

SCOTTSDALE WATER TRENDS
METERED POTABLE WATER DEMAND (ACRE-FEET)



Source: Scottsdale Water

AVERAGE MONTHLY WATER USE, SINGLE-FAMILY RESIDENTIAL
(GALLONS USED PER METER SIZE)



Source: Scottsdale Water

Questions?

SCOTTSDALE WATER

CITY OF SCOTTSDALE