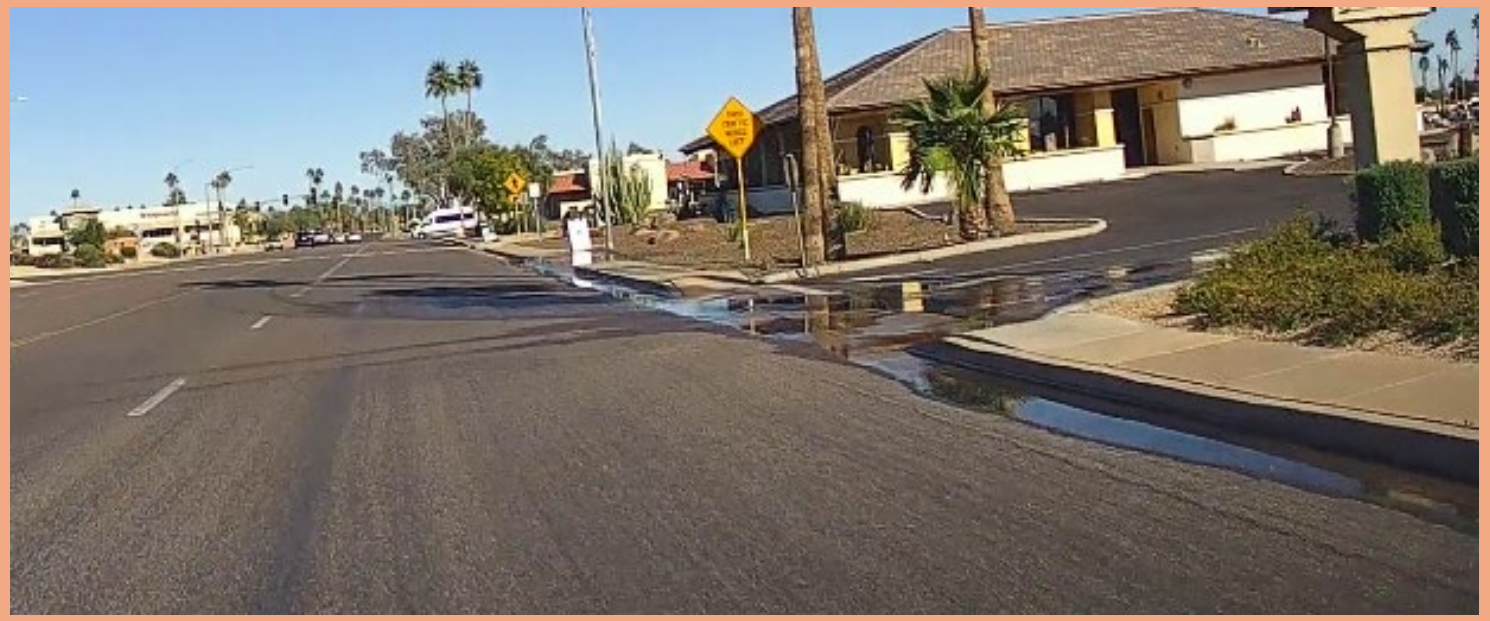
PORA WATER COMMITTEE

Notes for Meeting
12-16-2025

Fugitive Water from Medical Clinic “B”

Fugitive Water on Spanish Garden from Shopping Center

Fugitive Water from Shopping Center



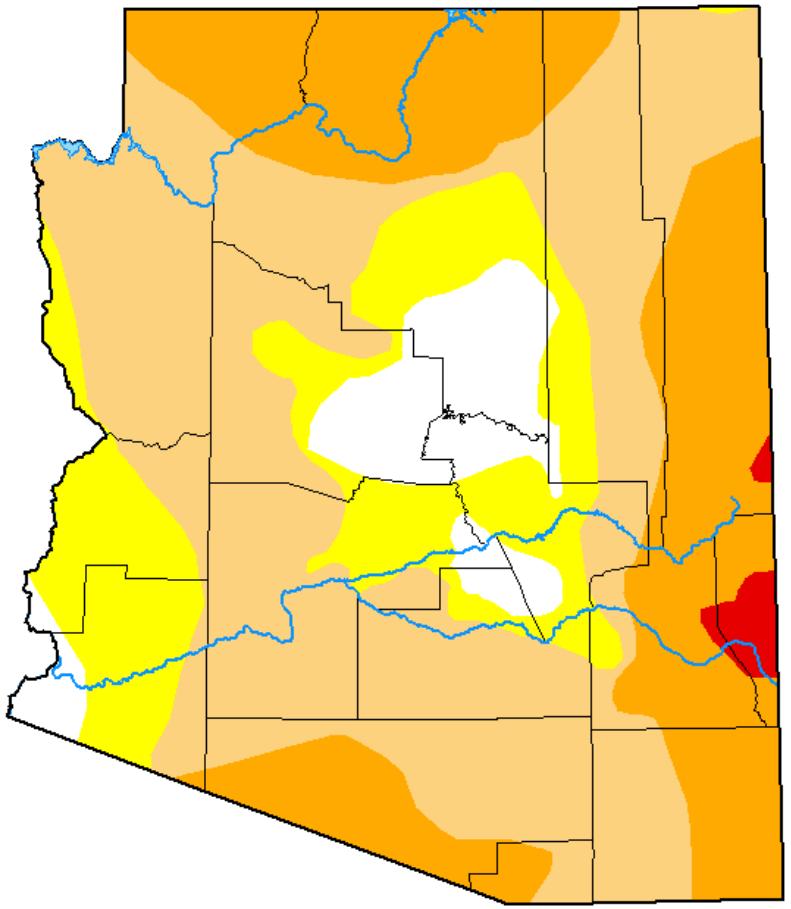
Fugitive Water from Victory Autism Academy

Fugitive Water from Victory Autism Academy

Residential Backflow Regulator

U.S. Drought Monitor

Arizona



December 2, 2025

(Released Thursday, Dec. 4, 2025)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	8.23	91.77	74.89	28.97	1.03	0.00
Last Week *11-25-2025*	8.23	91.77	76.46	28.99	1.03	0.00
3 Months Ago *09-02-2025*	0.00	100.00	100.00	91.35	39.48	1.98
Start of Calendar Year *01-07-2025*	3.74	96.26	76.63	45.54	14.03	0.00
Start of Water Year *09-30-2025*	0.00	100.00	100.00	79.21	25.06	1.49
One Year Ago *12-03-2024*	9.16	90.84	56.37	37.19	11.19	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author:

David Simeral

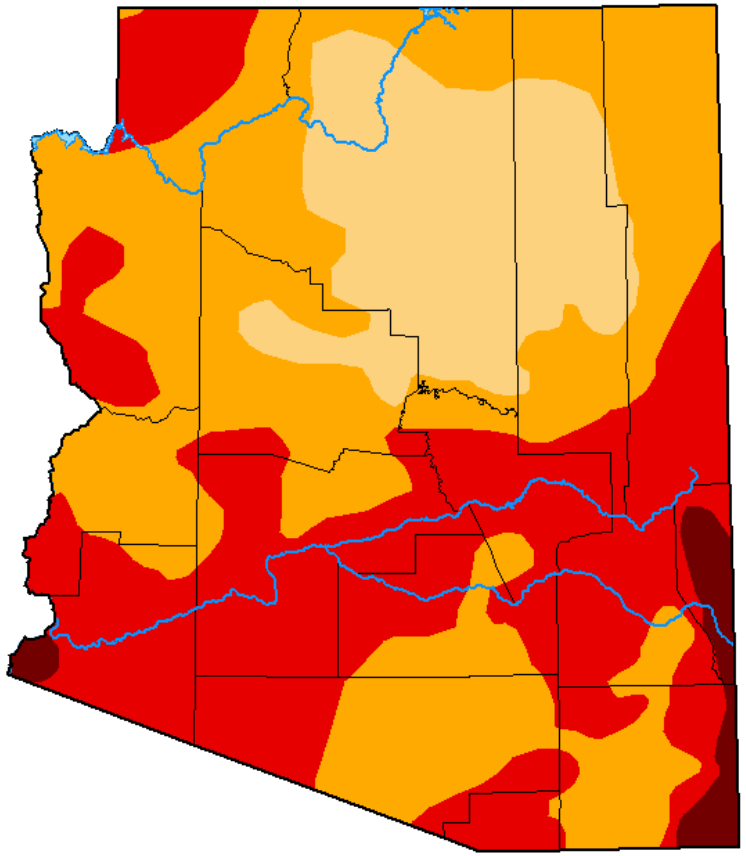
Western Regional Climate Center

droughtmonitor.unl.edu

Arizona Drought Monitor

U.S. Drought Monitor

Arizona



August 26, 2025

(Released Thursday, Aug. 28, 2025)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	100.00	82.80	39.48	2.32
Last Week *08-19-2025*	0.00	100.00	100.00	82.80	38.78	2.32
3 Months Ago *05-27-2025*	0.00	100.00	99.34	82.18	60.75	6.14
Start of Calendar Year *01-07-2025*	3.74	96.26	76.63	45.54	14.03	0.00
Start of Water Year *10-01-2024*	27.62	72.38	39.91	4.61	0.00	0.00
One Year Ago *08-27-2024*	17.38	82.62	20.84	1.92	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author:

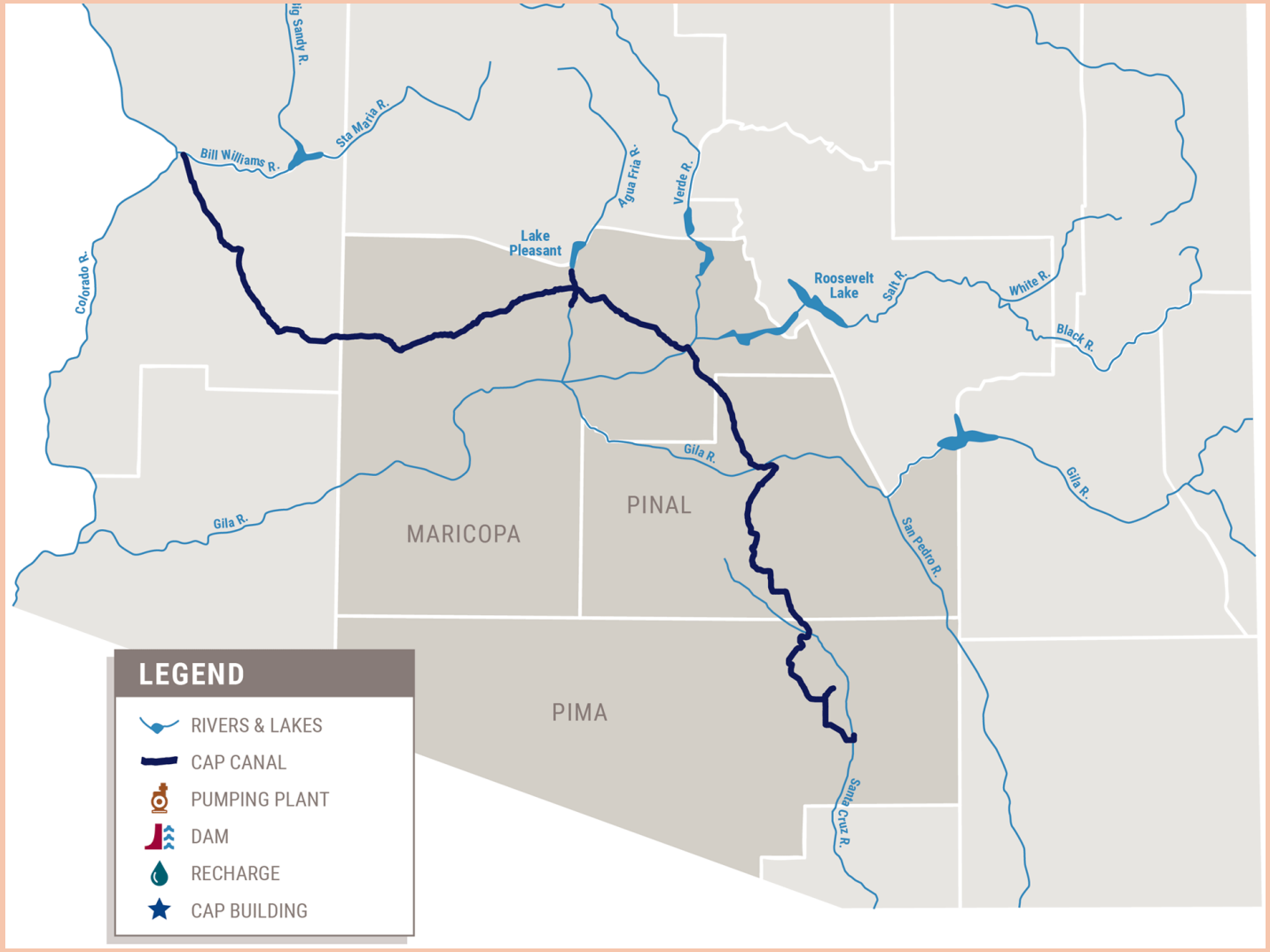
Brad Rippey

U.S. Department of Agriculture

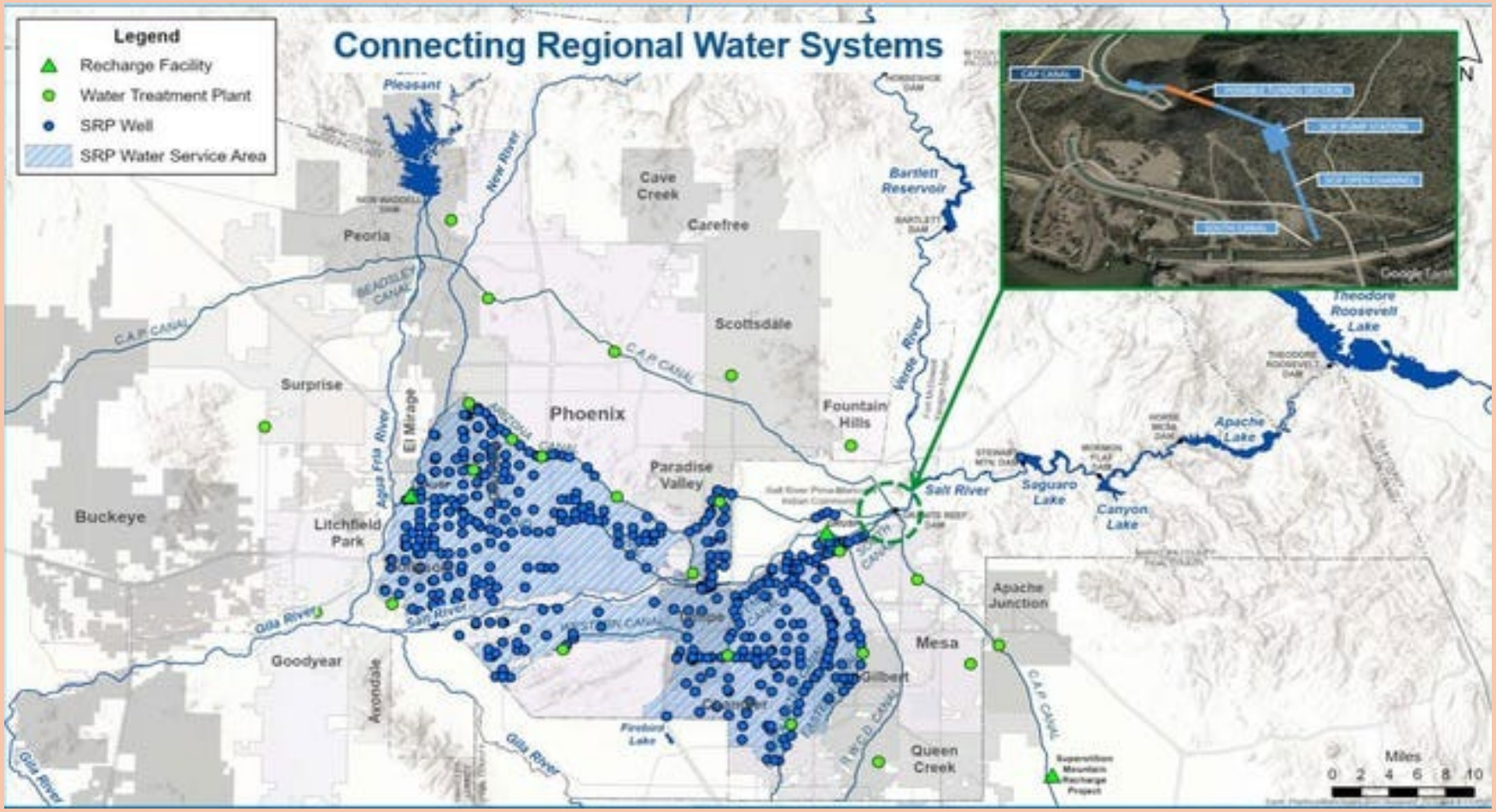
droughtmonitor.unl.edu

Arizona Weekly Drought Monitor

Arizona CAP and Salt River Systems

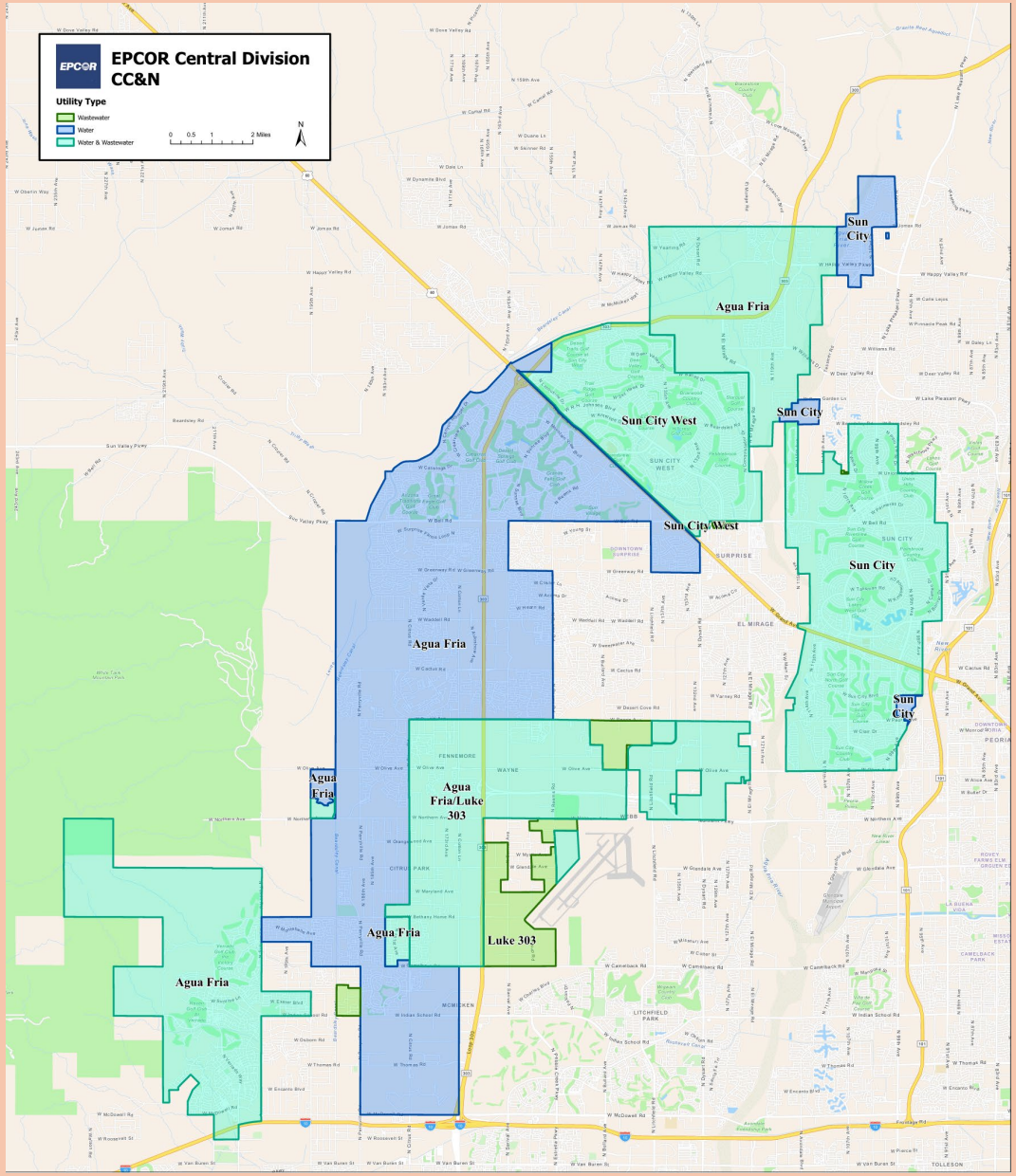


Arizona CAP and Salt River Systems



By Combining 3 EPCOR Water Districts it was possible to show water availability and recharge credits sufficient to qualify for ADAWS.
Sun City, Sun City West and Agua Fria were approved to become the West Valley System by ADWR.
Projected demand for the 3 distrcts by 2034 is 68,047.11 acre feet per year.
The sum of groundwater allotment, Central AZ Project water allotment, effluent recovered plus effluent stored by 2034 is equal to 69,753.01 acre feet per year which exceeds the estimated annual demand.

EPCOR ADAWS West Valley System



EPCOR ADAWS West Valley System

Water Augmentation Projects to Provide for Commercial and Residential Growth in Arizona

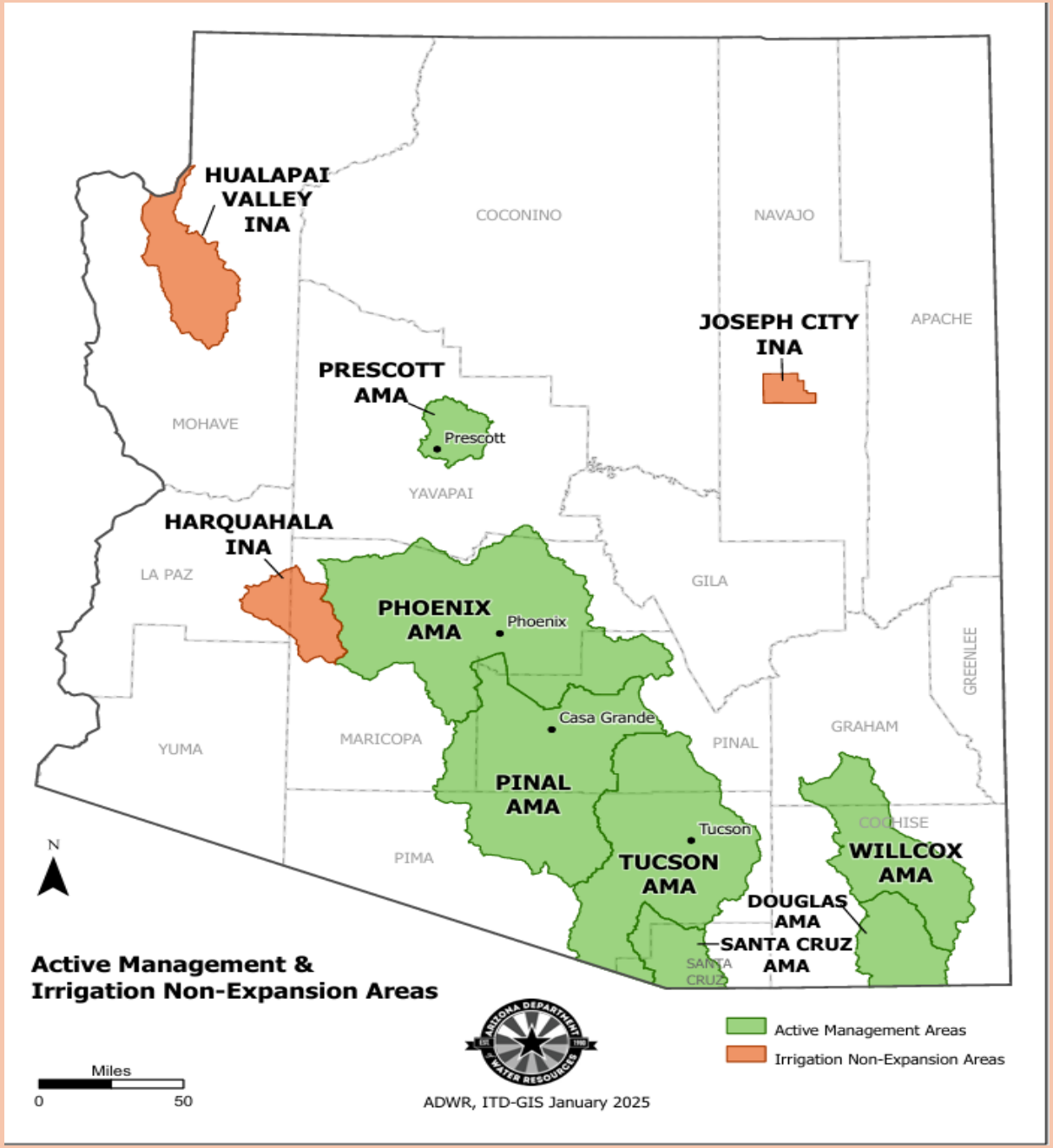
- Ag To Urban
- Harquahala Transfer – Buckeye and Queen Creek
- Ocean Water Desalination – Turning seawater into drinking water.
- Surface Water Projects – Capturing and moving river or lake water.
- Wastewater Reclamation – Treating and reusing wastewater to create a new supply.

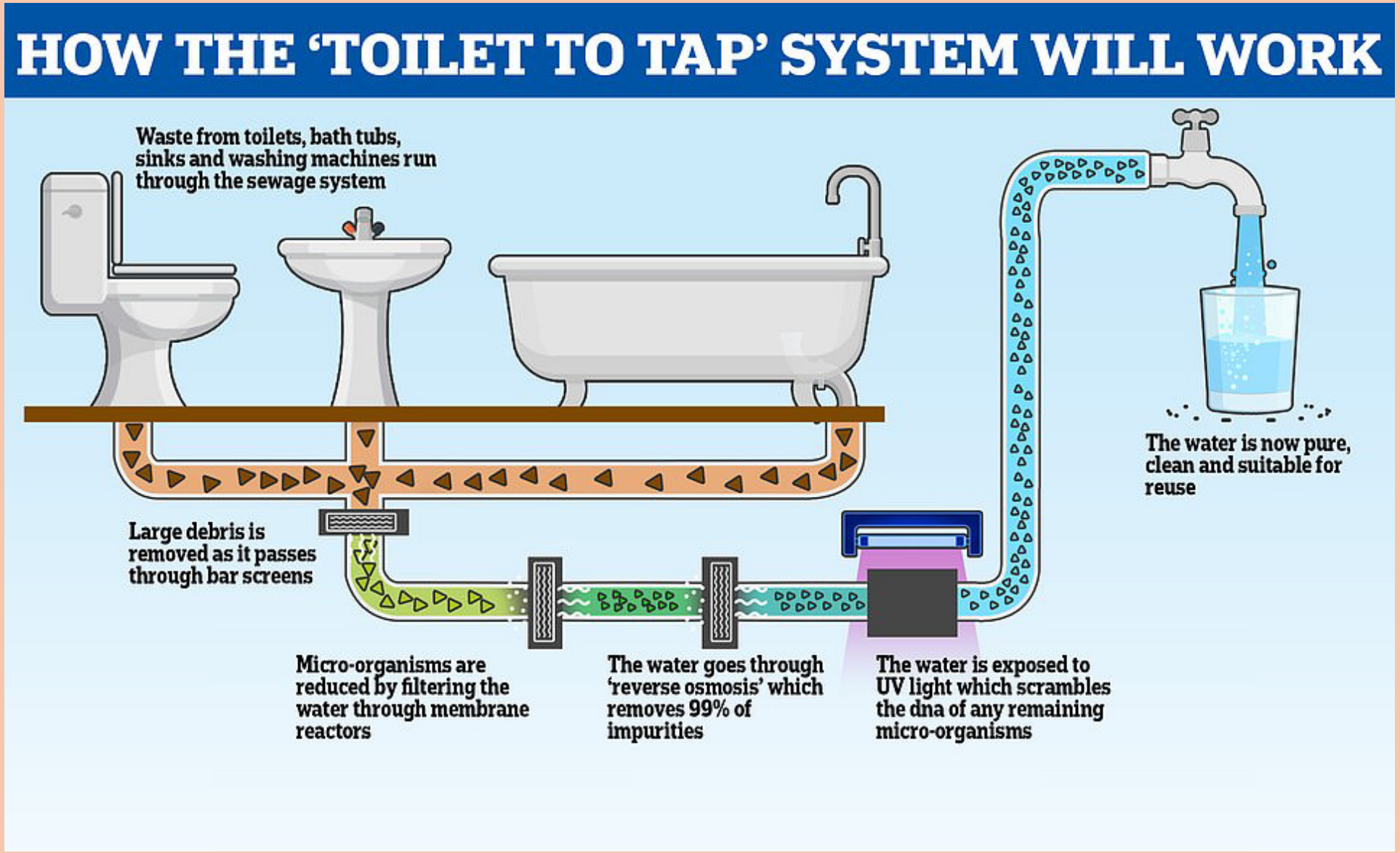
AG TO URBAN:

- Farmers sell land to Developers
- Residential Areas use about 1/5th amount of water per acre than Ag. Need serious monitoring.
- New Residential Areas fall under the rules for CAGRD.
- CAGRD is losing water required for replenishment
- Legislature modified the CAGRD to reduce replenishment requirement.

Arizona Active Management Areas.

Harquahala Transfer: Buckeye Paid $80M and Queen Creek will pay $240M for Harquahala water rights.

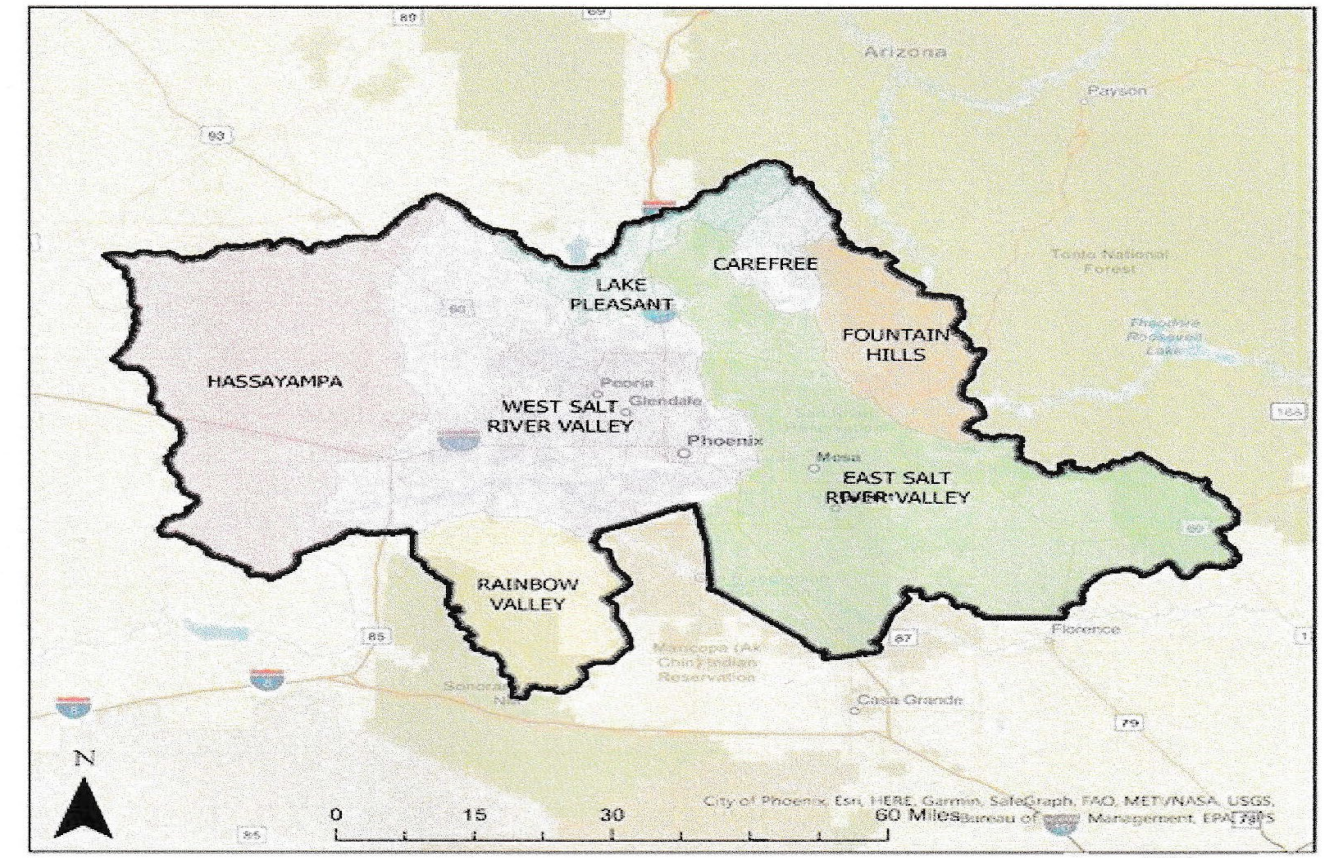




TOILET TO TAP SYSTEM

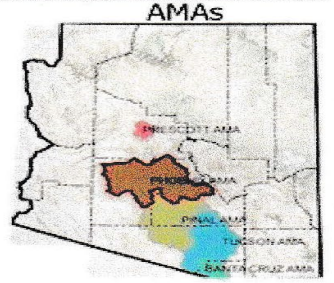
Major Sub-Basins in Phoenix AMA

Figure 1-1 Phoenix Active Management Area and Sub-Basins



SUB-BASIN NAME

- CAREFREE
- EAST SALT RIVER VALLEY
- FOUNTAIN HILLS
- HASSAYAMPA
- LAKE PLEASANT
- RAINBOW VALLEY
- WEST SALT RIVER VALLEY



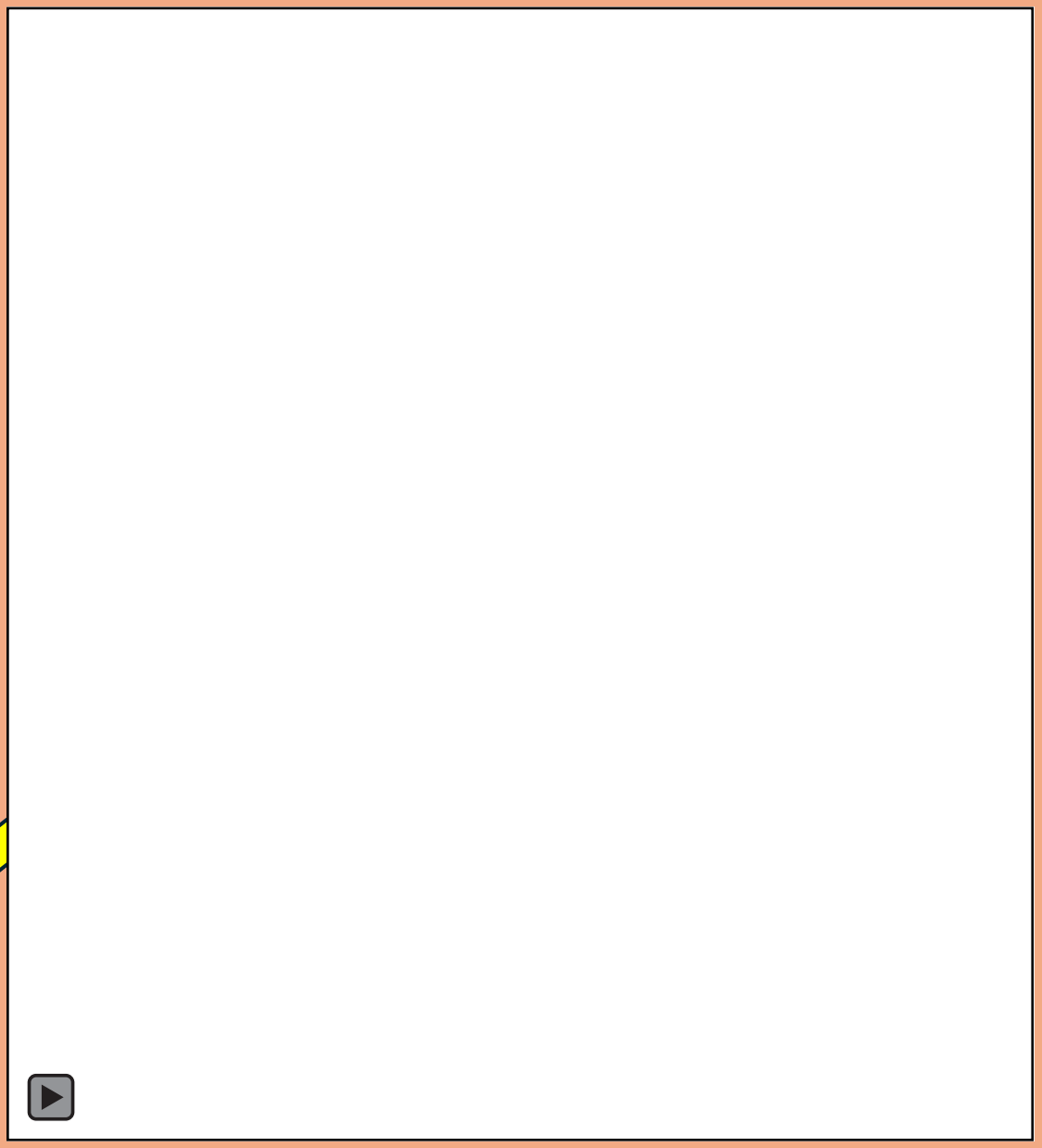
EXTRA SLIDES

Groundwater Treatment

Use the Sewer Cleanout Piping to Send Water to the Wastewater System for Treatment and Recharge

Sanitary Sewer Connection

Drain Your Pool Here



To Think About…….

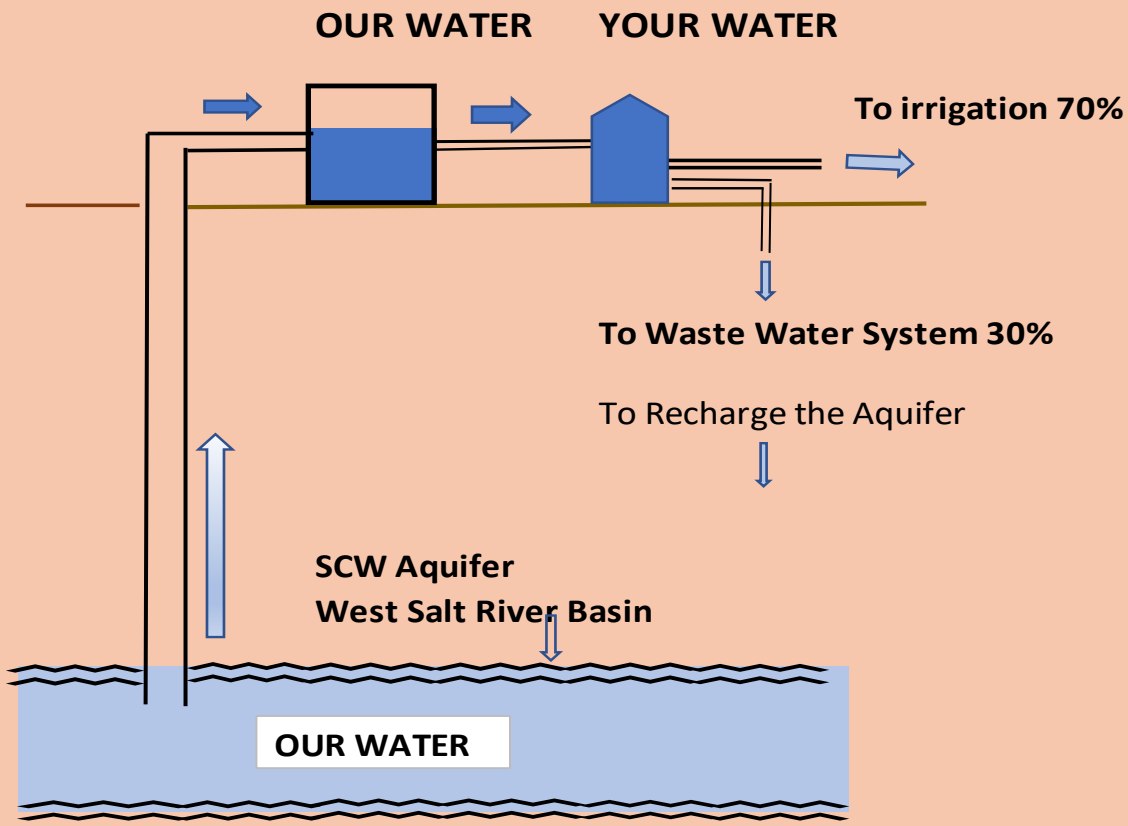
“….corporate profits are a key part of the aquifer depletion puzzle.”

“Their profits depend on aquifer depletion. In other words, there is a multibillion-dollar corporate interest to prevent regulation and to pump the water until it’s gone.”

From the Book “*Running Out*”, by Lucas Bessire. (Comments about the Ogallala Aquifer in Central USA)

Grundfos Hot Water Pump Attaches to Hot Water Heater

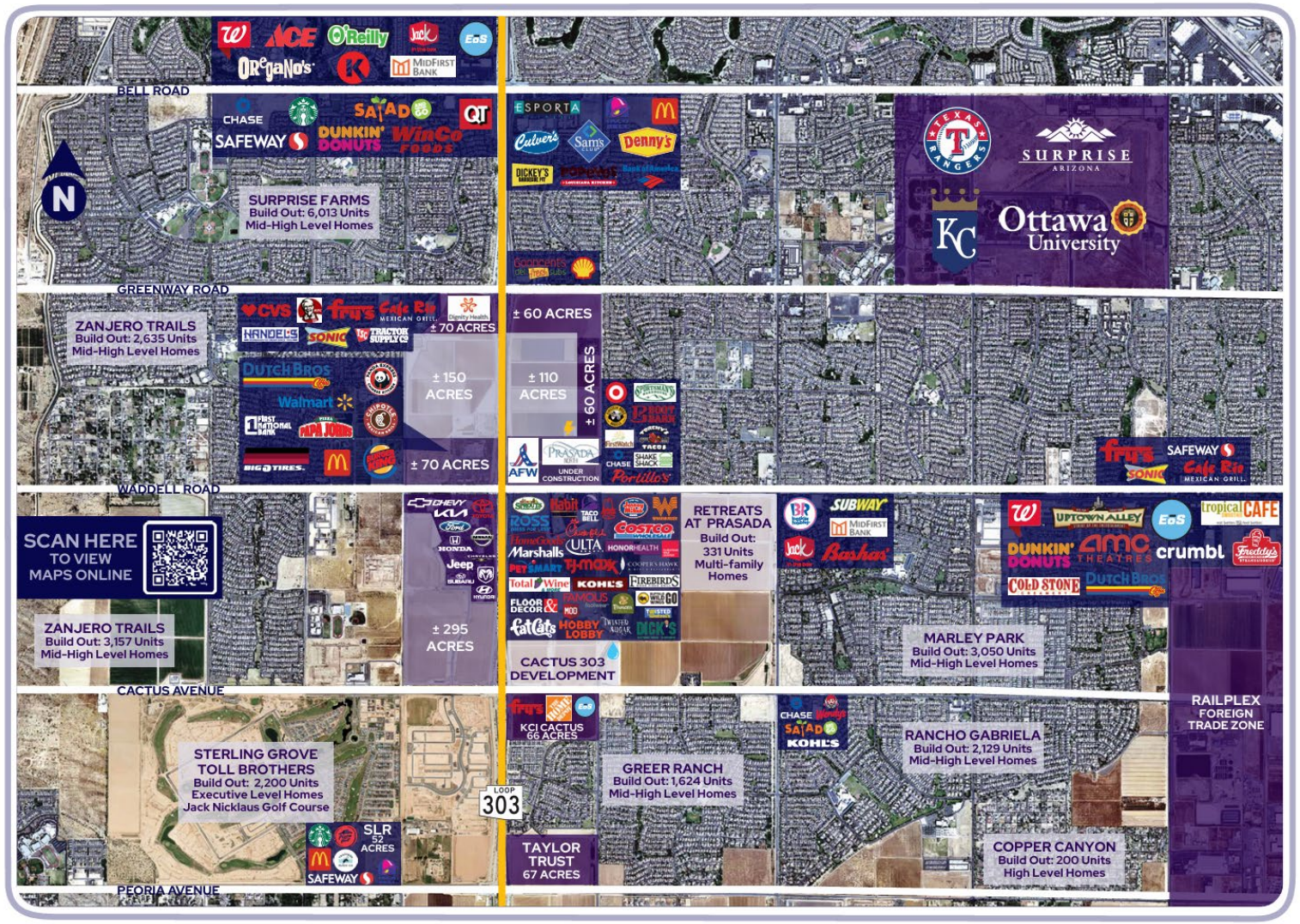
YOUR WATER IS OUR WATER



Groundwater Going

LOOP 303 DEVELOPMENT

SURPRISE
ARIZONA



LOOP 303 HIGHLIGHTS

- 7 Miles Through City Limits
- High Visibility
- Connects to I-17 & I-10
- 500+ Acres Future Development
- 2 APS Substations & 230-kV Lines
- EPCOR's Agua Fria Pump Station
- Anchor Retail & Power Center
- Executive Housing
- Hospital(s) & Future MO
- Tech/Business Park

LEGEND

PGV: Prasada Gateway Village

PGV-1
- Neighborhood
- Retail Employment
- Residential

PGV-2
- Community Level Retail
- Hospitality
- Entertainment
- Residential

PGV-3
- Auto Dealers Related
- Employment
- Retail
- Commercial
- Hospitality

PGV-E
- Office
- Hospital/Medical
- Retail
- Hospitality
- Residential

PGV-RC
- Regional Shopping Center
- Entertainment
- Employment
- Residential
- Hospitality

Power Source

Water Source

SCAN HERE
FOR LOCAL
AND ONLY IN
SURPRISE DINING

CONNECT
&
FOLLOW

SURPRISE ECONOMIC DEVELOPMENT

@SURPRISEECONDEV

SURPRISE ECONOMIC DEVELOPMENT

SURPRISE ECONOMIC DEVELOPMENT

January 2024

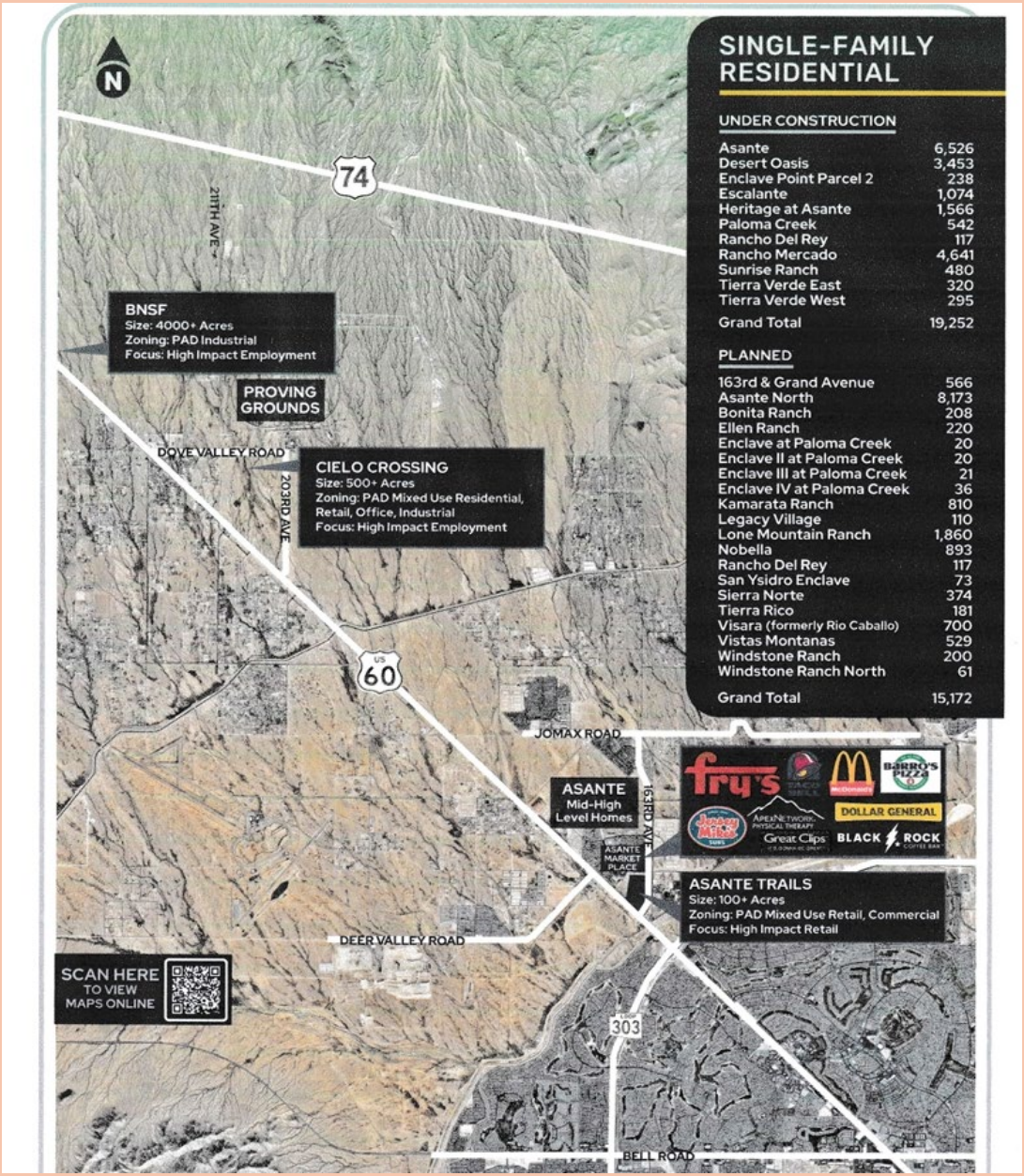
North Surprise Development Plans

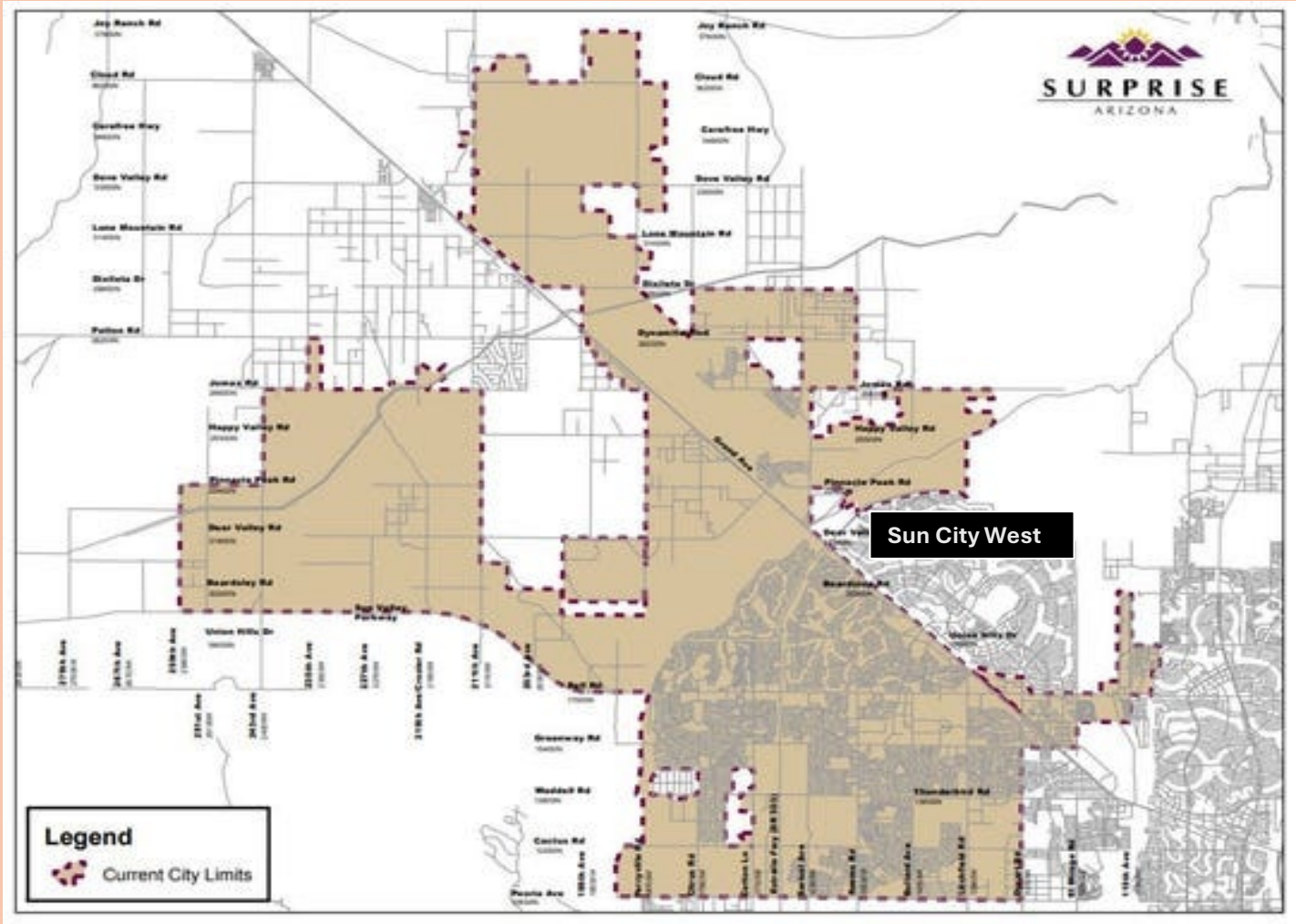
19,252 Residences Under Construction

15,172 Additional Residences Planned

Estimate 2.5 persons per household = 86,060 people.

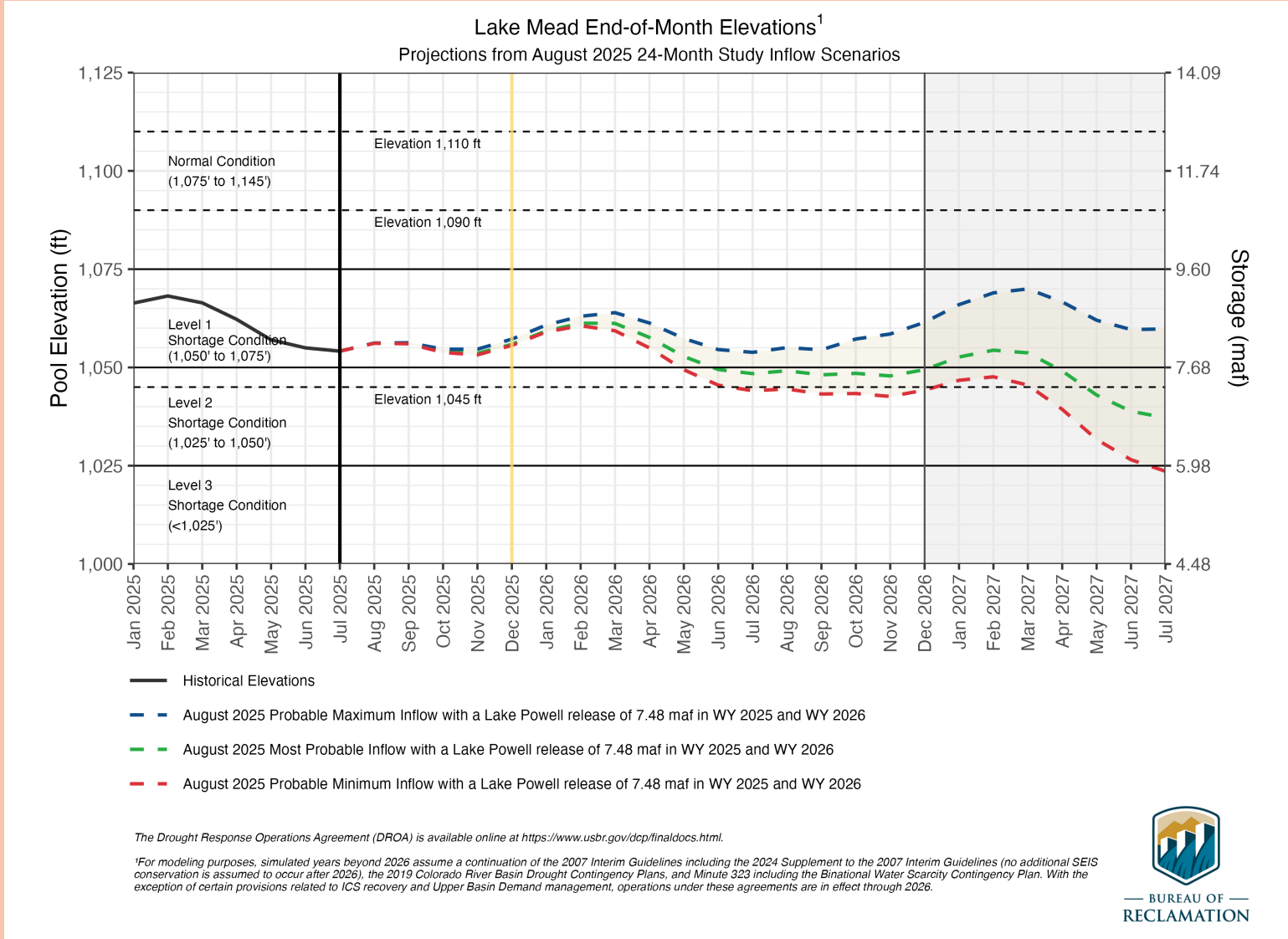
Maybe 86,000 cars???



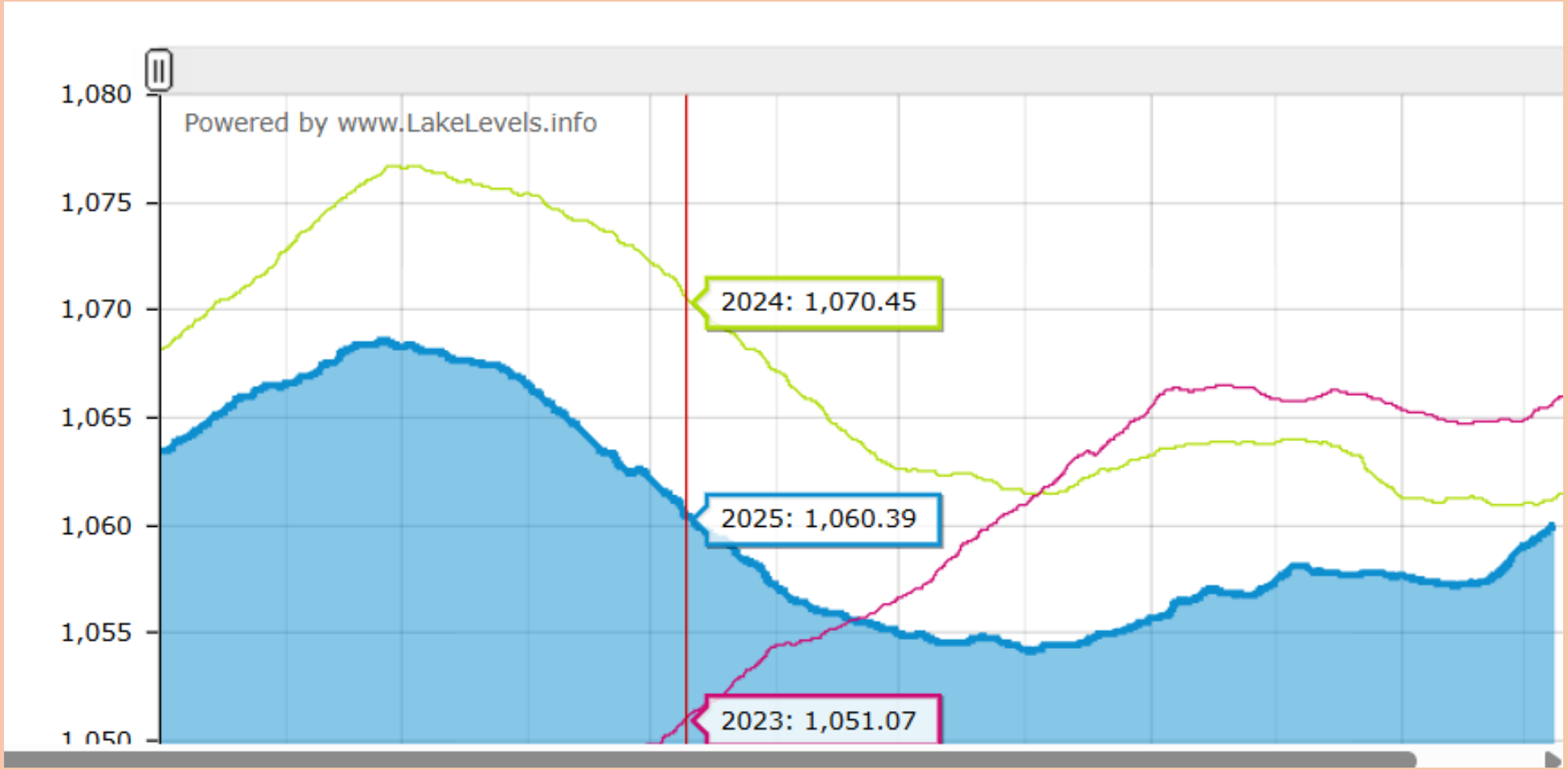


City of Surprise.

Development Continues to the West and NW of SCW



Lake Mead Elevations 2025, 2026, 2027



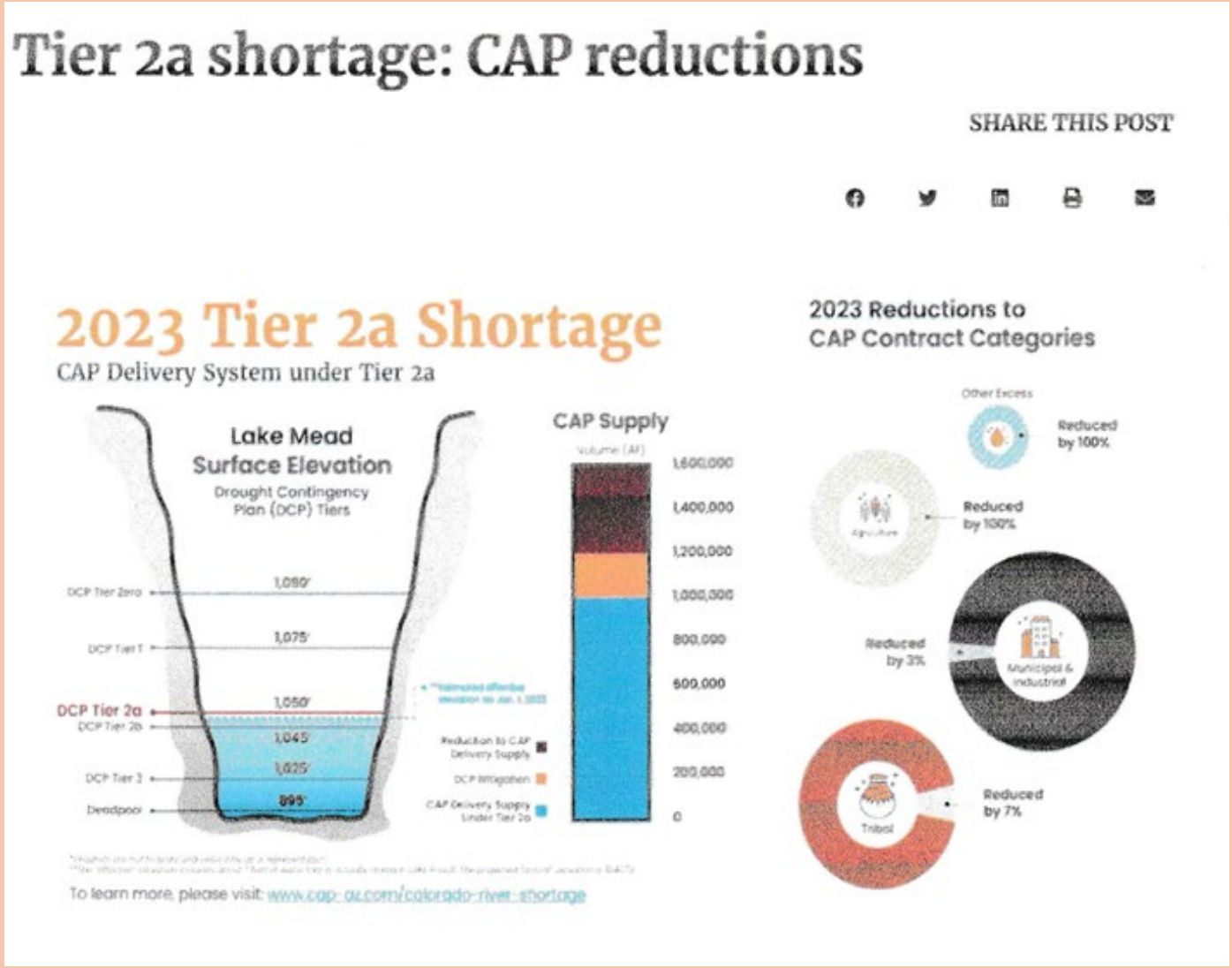
Lake Mead Water Levels 2023, 2024 and 2025
1059.96’ on December 8, 2025

Excess CAP Water = ZERO

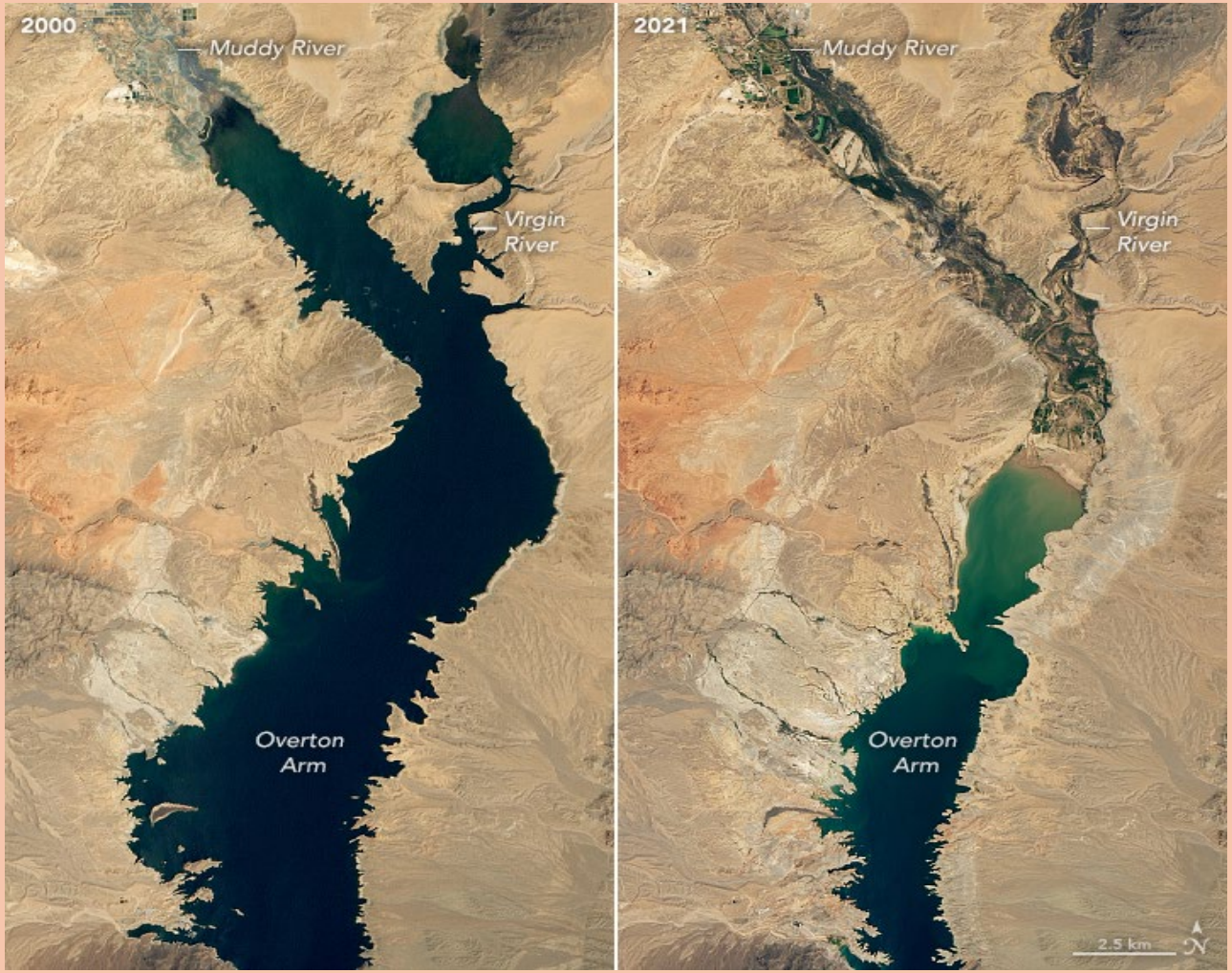
Agricultural = ZERO

Municipal/Industrial = - 3%

Tribal = - 7%



Lake Mead Projections: Tier 2a Allotments:



Lake Mead From Space: August 7, 2000 and August 9, 2021

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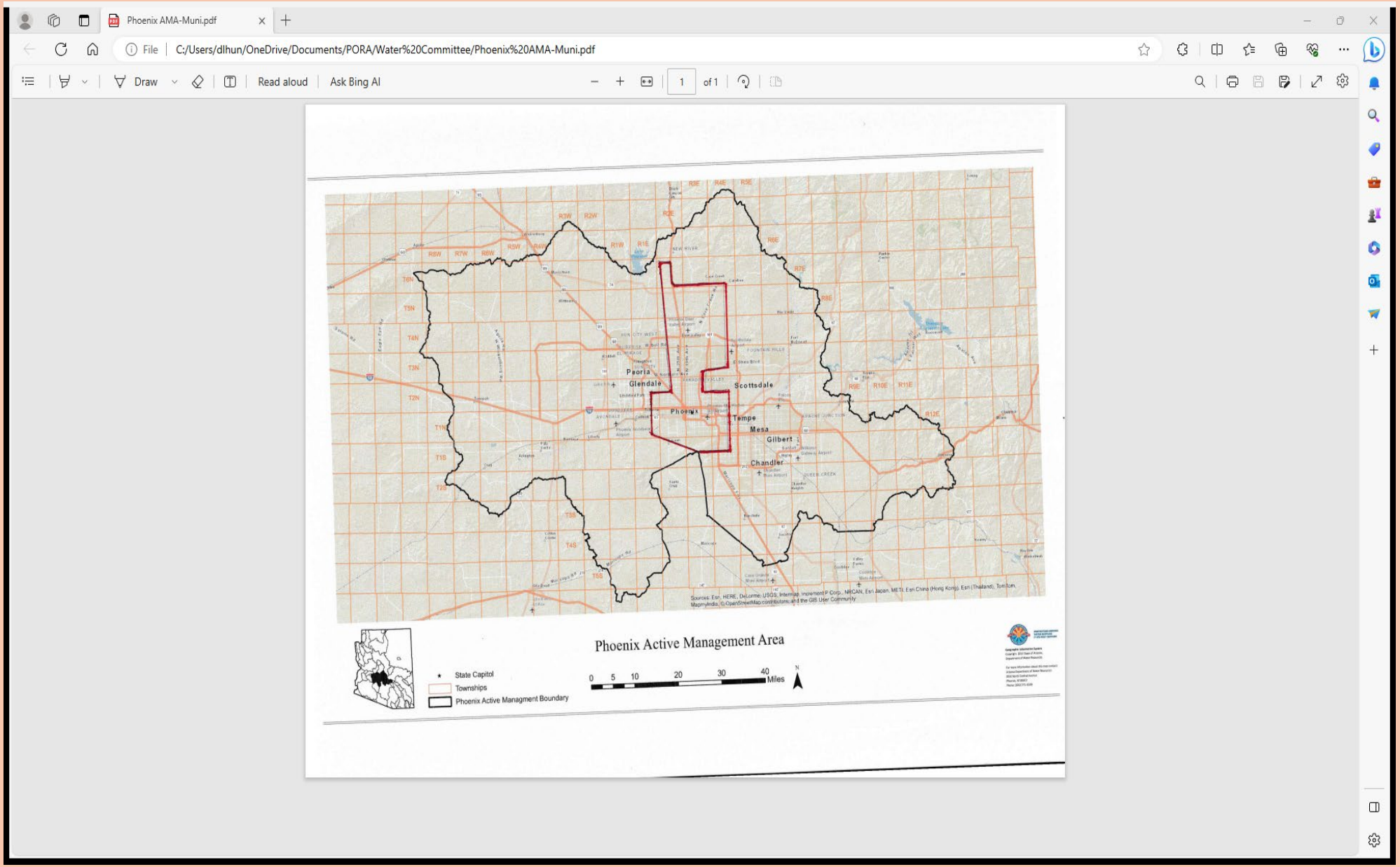
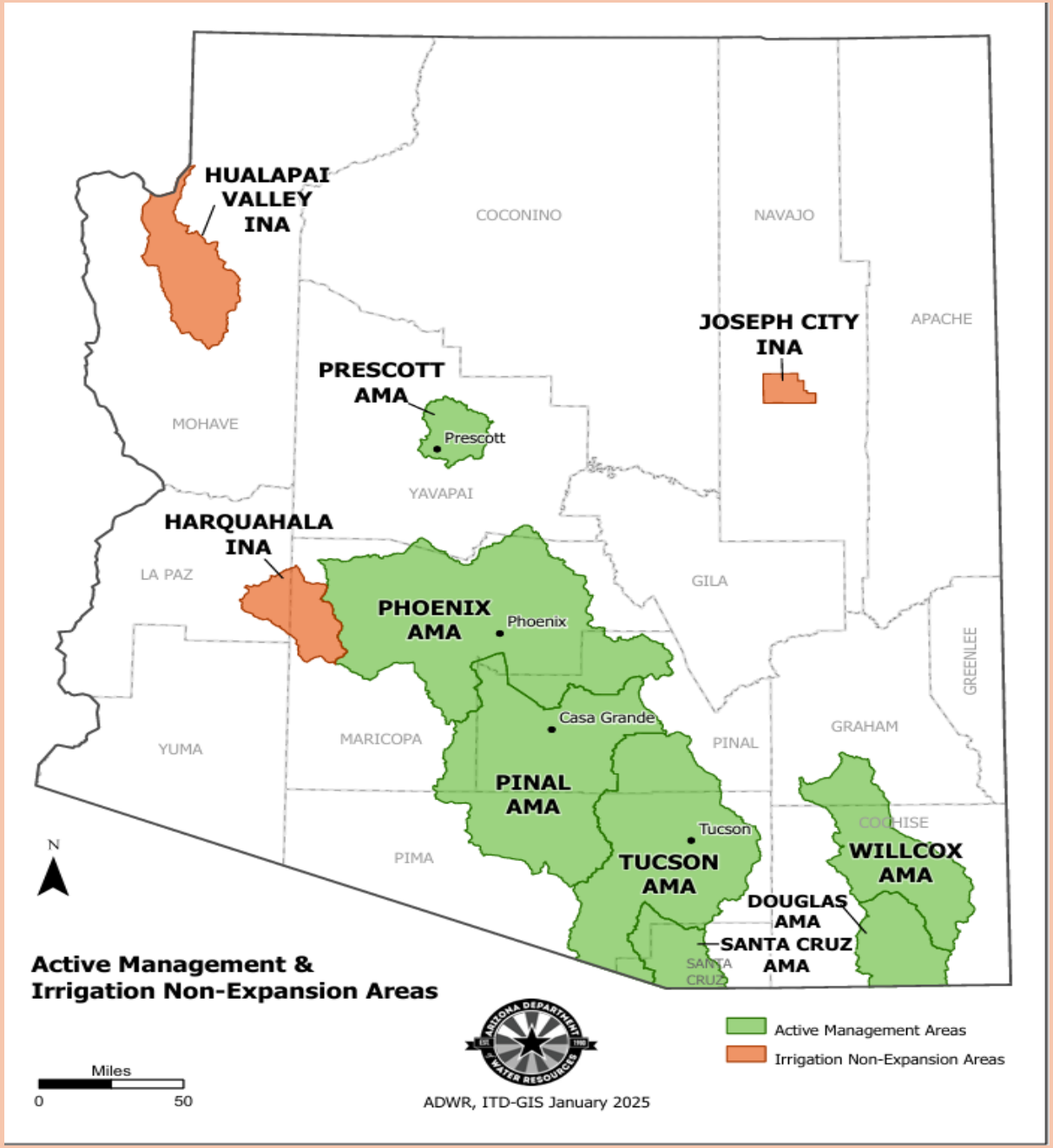


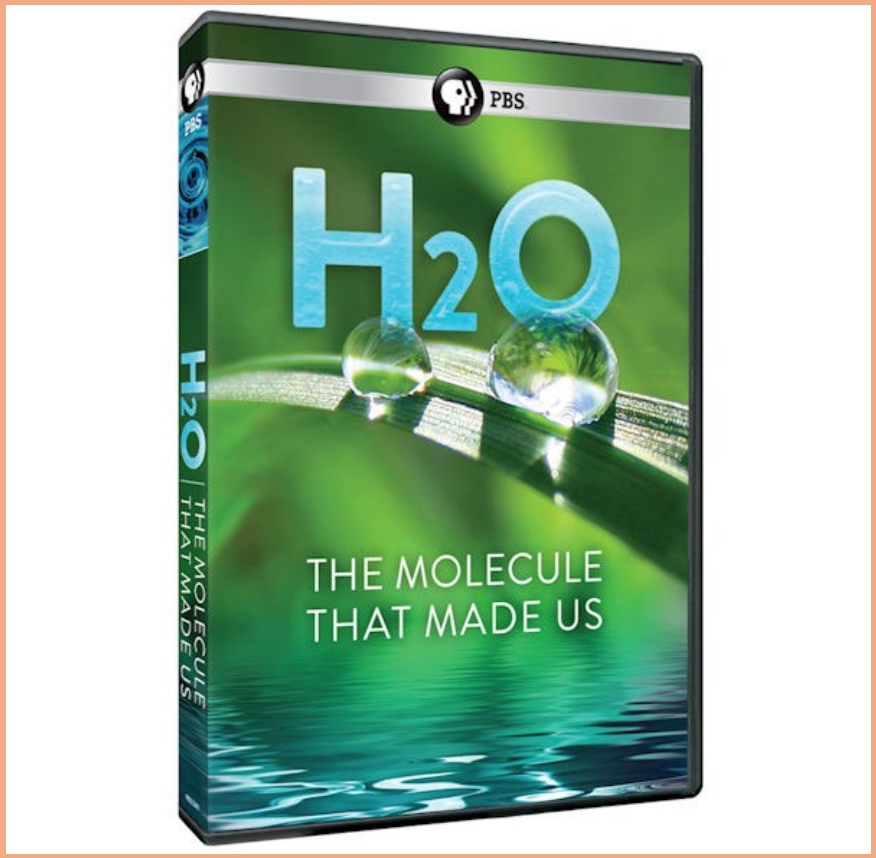
Phoenix AMA Model

Arizona Active Management Areas

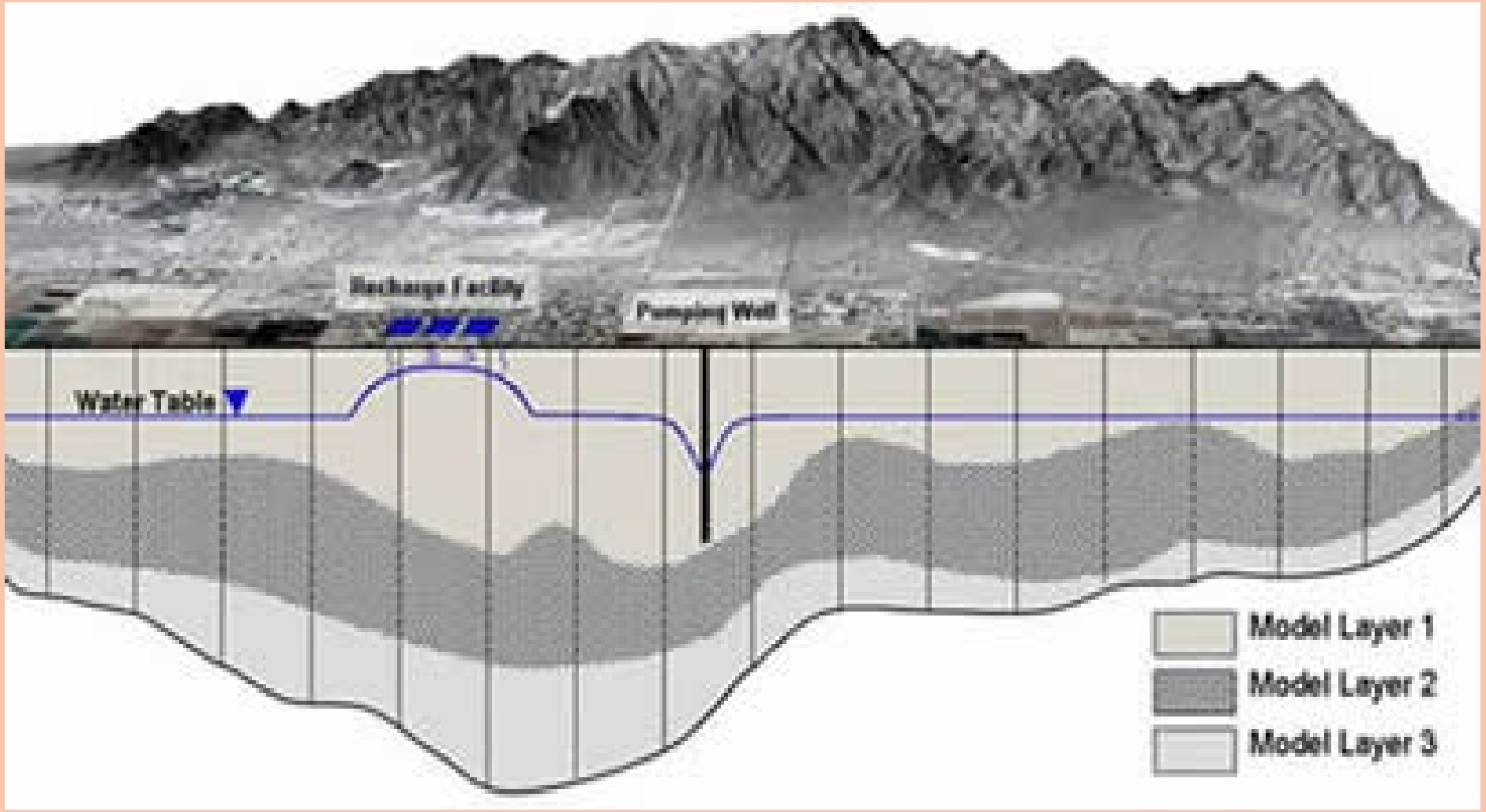


Water Presentations:

Beyond the Mirage- Feb. 11th



H2O,The Molecule….Feb. 25th



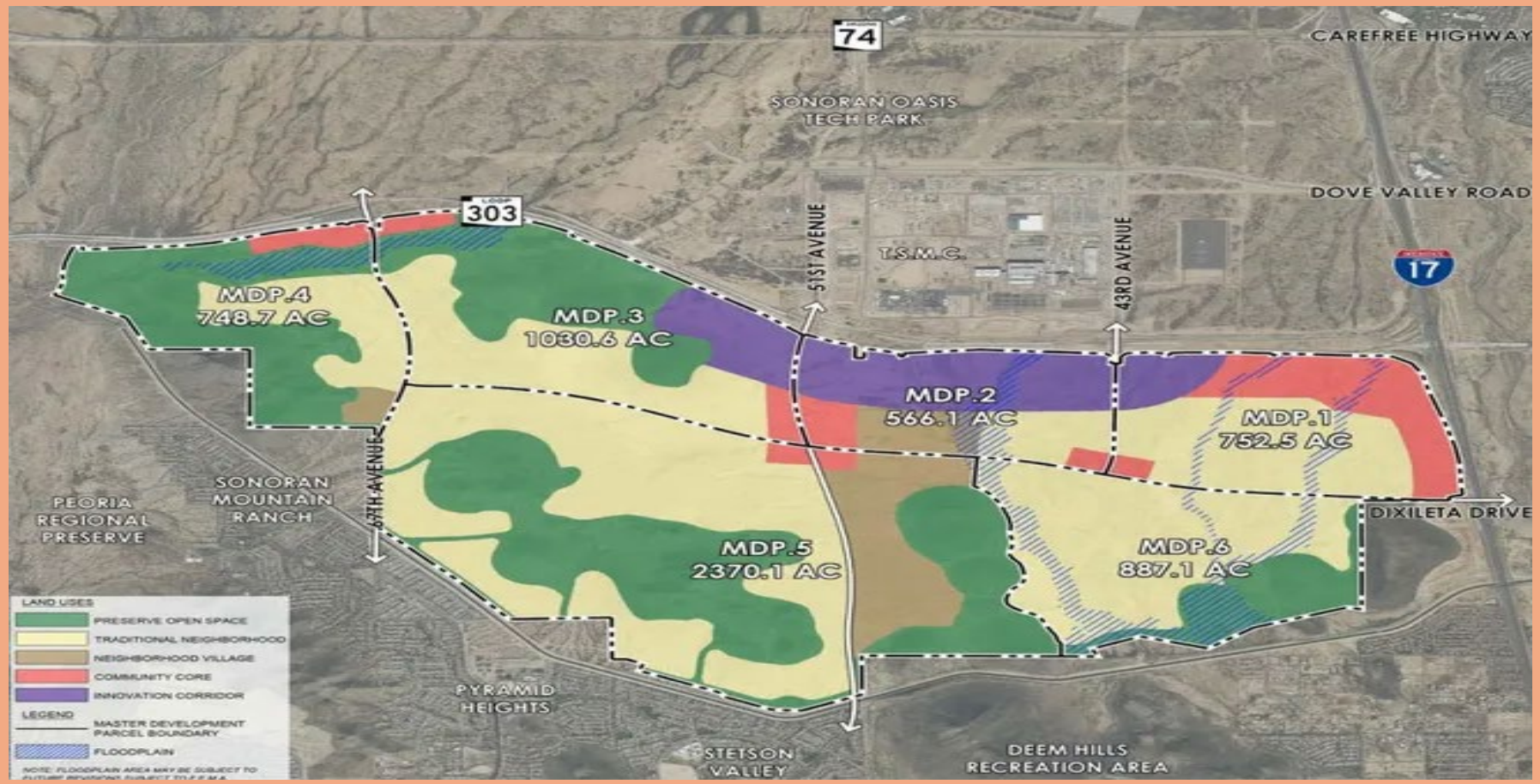
Groundwater with Recharge

Development Near TSMC

Mack Real Estate Group: “Halo Vista” 2,300 acres

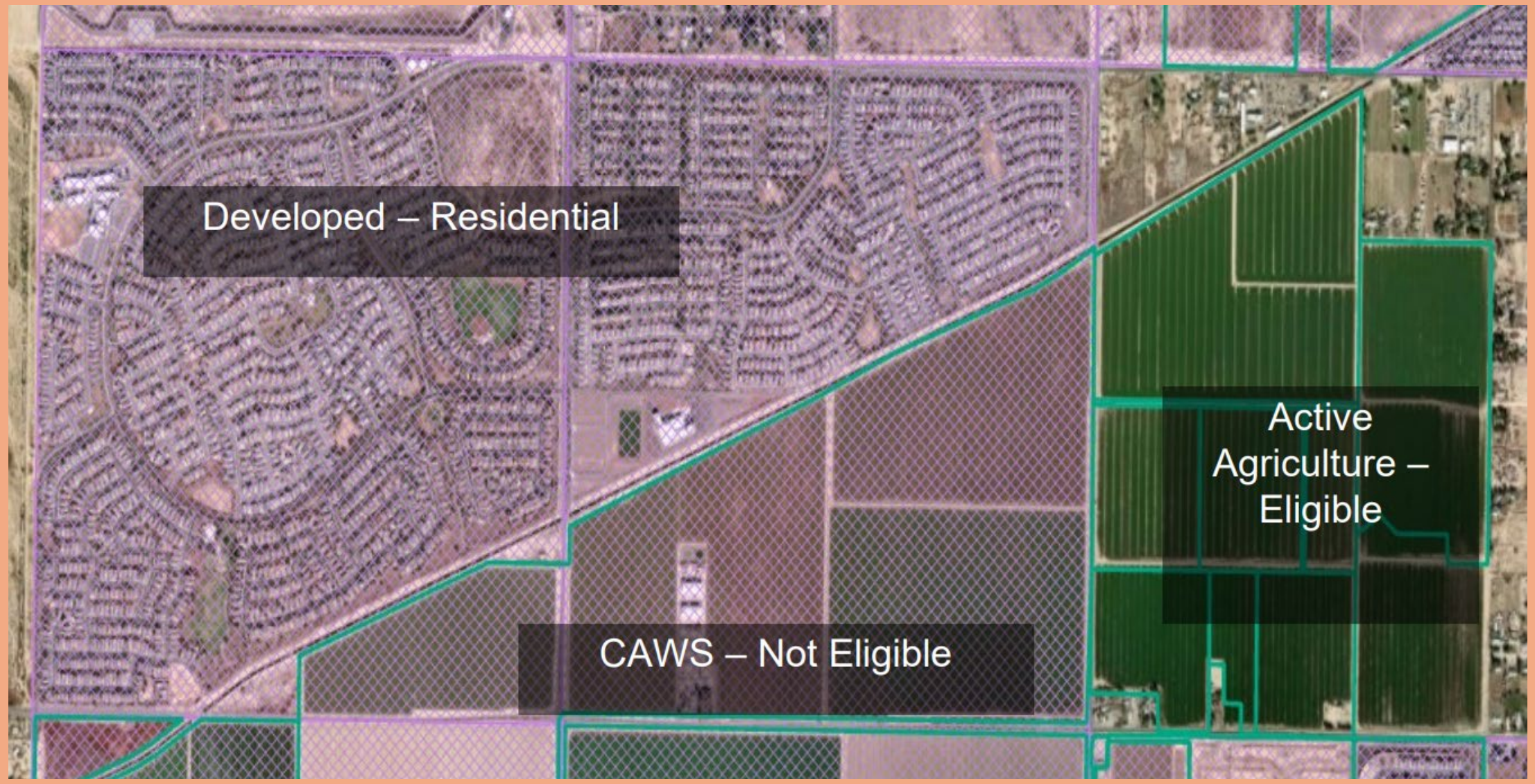
Industrial and Residential “silicon valley”

Development Near TSMC



Pulte Group: “North Park” 6,000 acres, 19,000 Dwellings

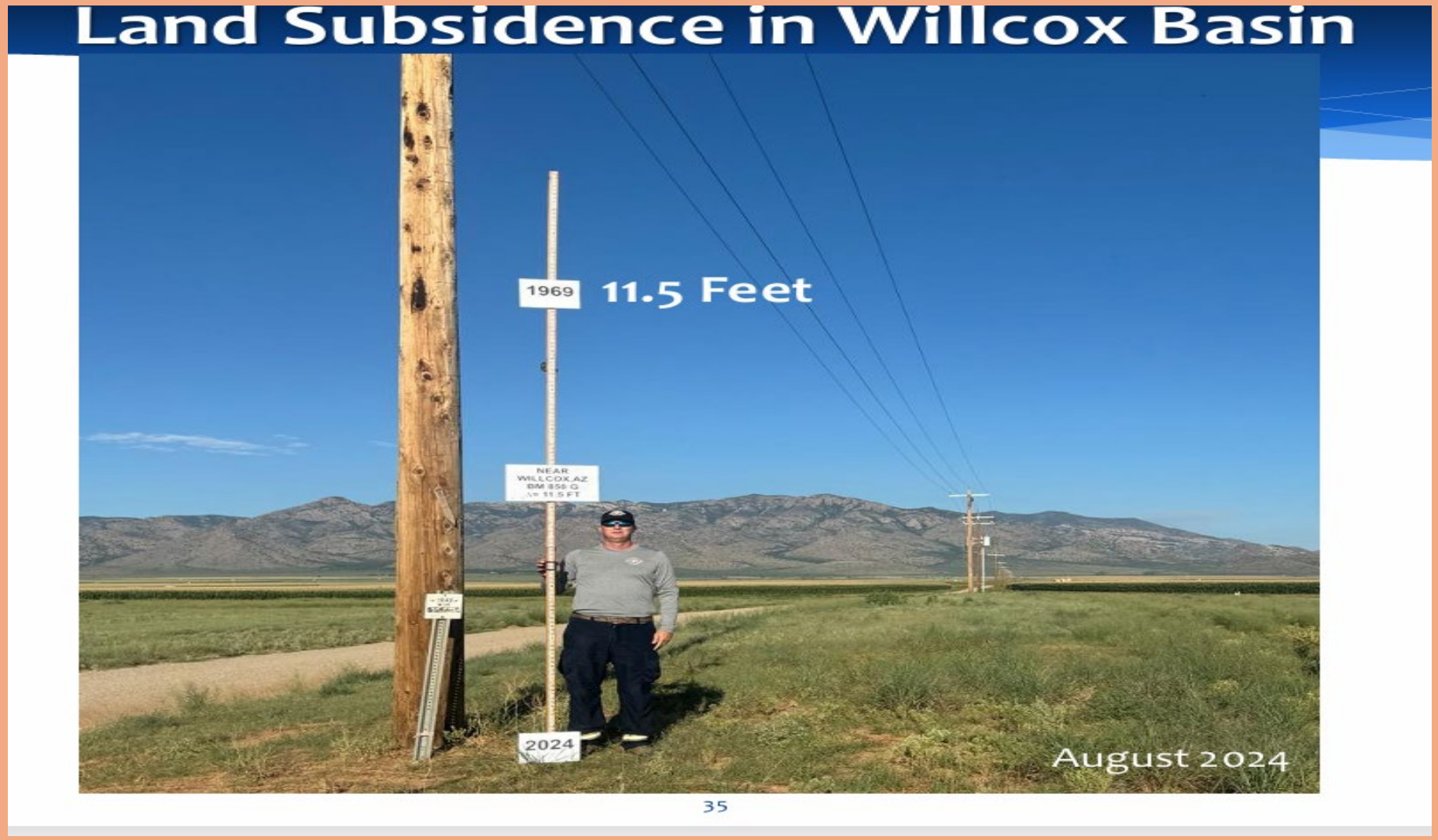
AG TO URBAN


Developed – Residential
Active Agriculture – Eligible
CAWS – Not Eligible

Willcox Subsidence

Causes Fissure Growth.

Fifty miles of Fissures mapped in the Willcox Basin



Willcox Subsidence - Causes Fissure Growth.

Fifty miles of Fissures mapped in the Willcox Basin

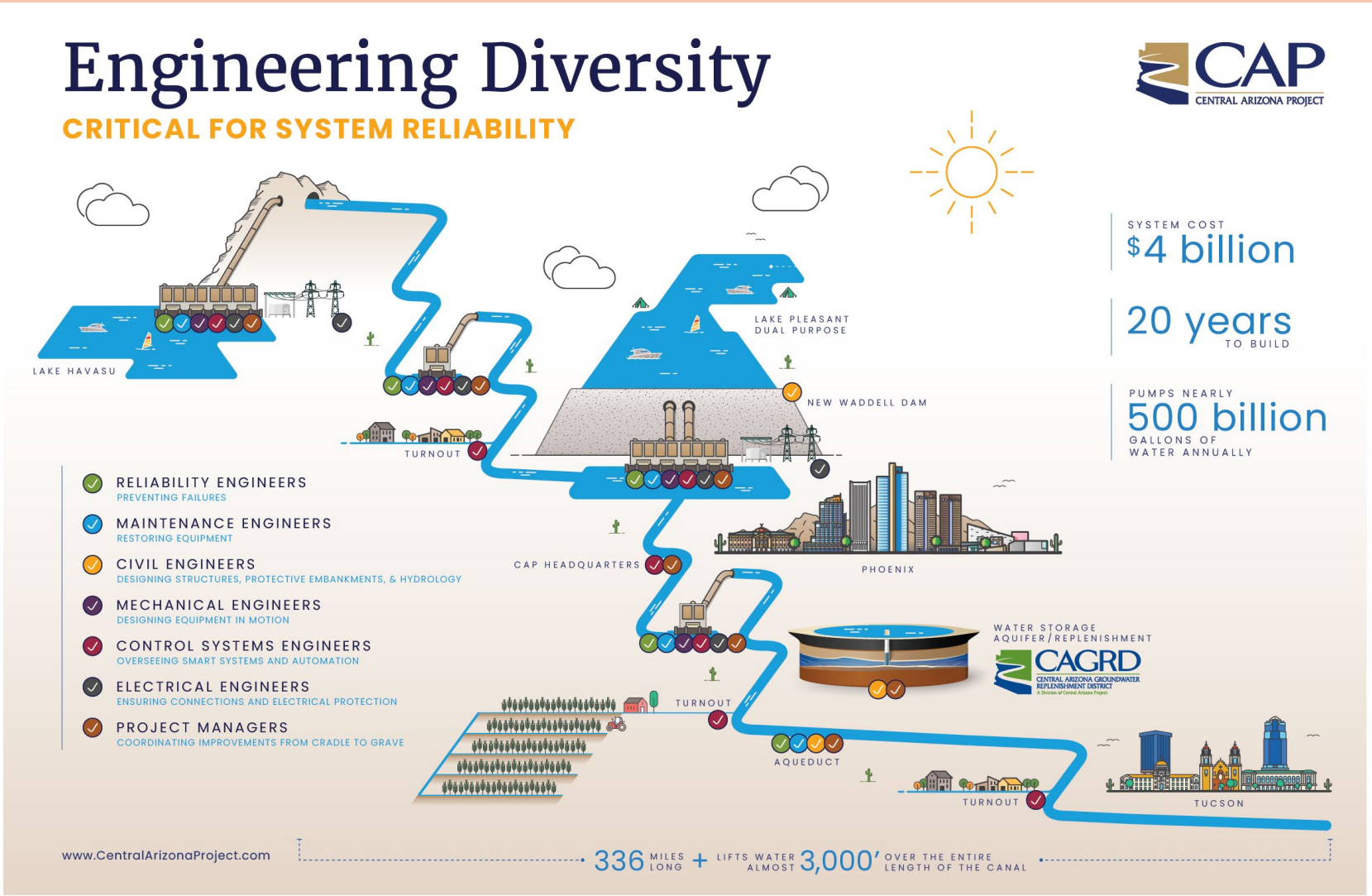
March 27, 2024

Facility Details

Conceptual Imagery:

- Proposed planned site plan layout. Building design will be required to meet Vistancia's design guidelines
- Height
  - Production: 35 ft
  - Utility: 54 ft
  - Office: 40 ft

Amkor Facility: Test, Package, Ship Semiconductor Chips from TSMC for Apple, etc.

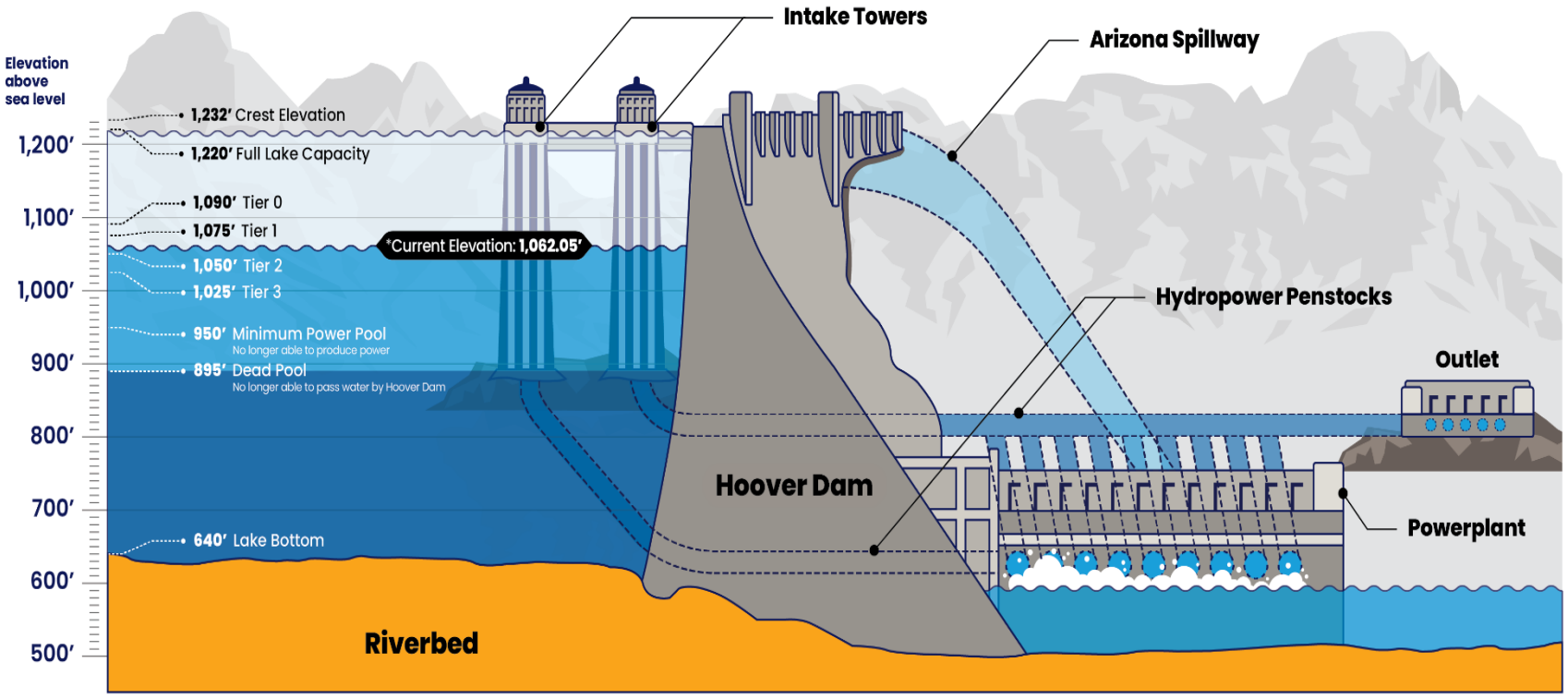


Central Arizona Project Canal – 336 miles.
Cost $4 Billion , Completed in 1993.

Central Arizona Project Canal – 336 miles. Provides 40% of the State's Water Needs. It is Subject to Lake Mead Fluctuations

HOOVER DAM

Key Elevations

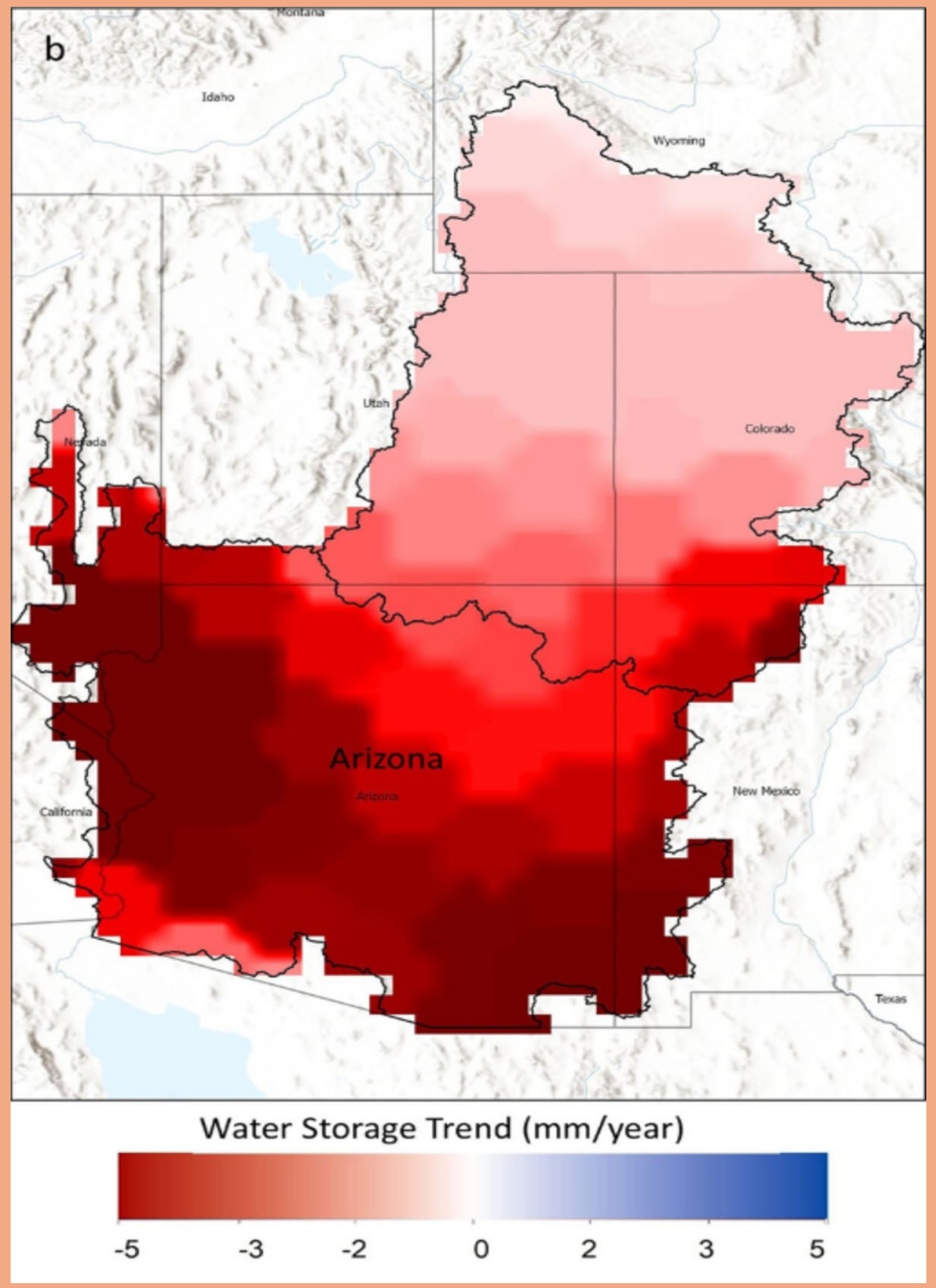


NOT TO SCALE: **Current Elevation as of August 8, 2023*

Arizona relies on Groundwater for 41% of its Water.
In rural Arizona Groundwater levels have dropped significantly over the past two decades.

Report from ASU Research at the School of Sustainability.

“Arizona is losing Groundwater at an alarming rate, study shows,” Phoenix New Times article June 12, 2025..



Repeat Offenders:

Medical Clinics-
Granite Valley Drive

Dry for over 3 Months!

Repeat Offenders:

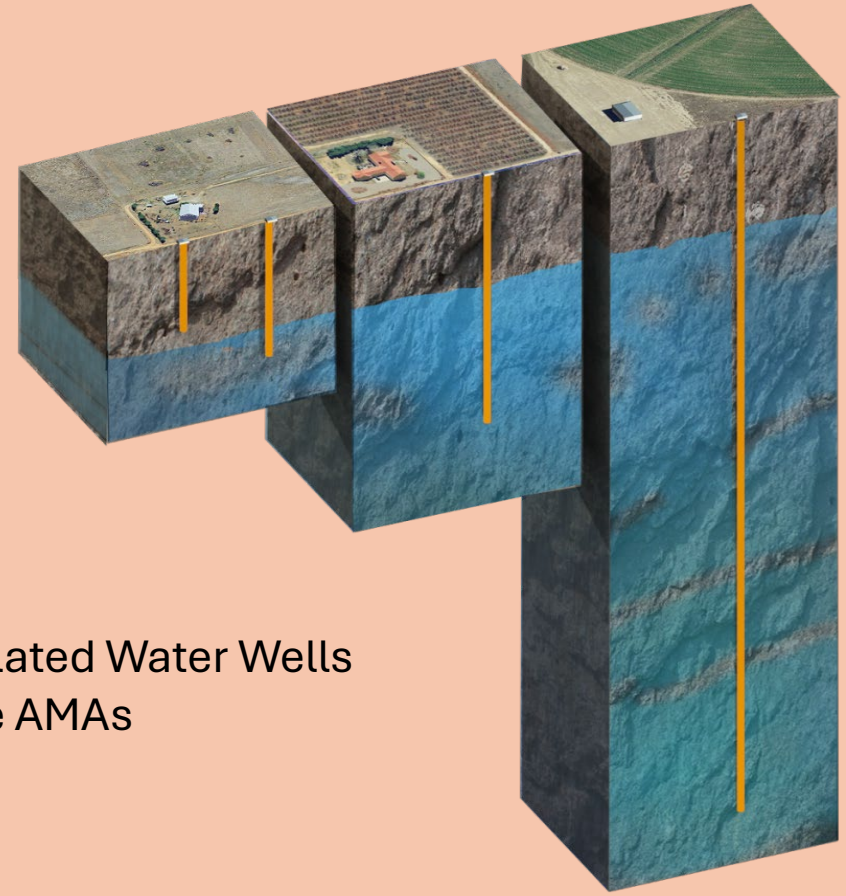
Sun West Choice or ??

Repeat Offenders:

Medical Clinics-
Granite Valley Drive

PORA Water Committee

- Saved MILLIONS of Gallons of Water through the Efforts of the Community, Epcor and the Fugitive Water Initiative!



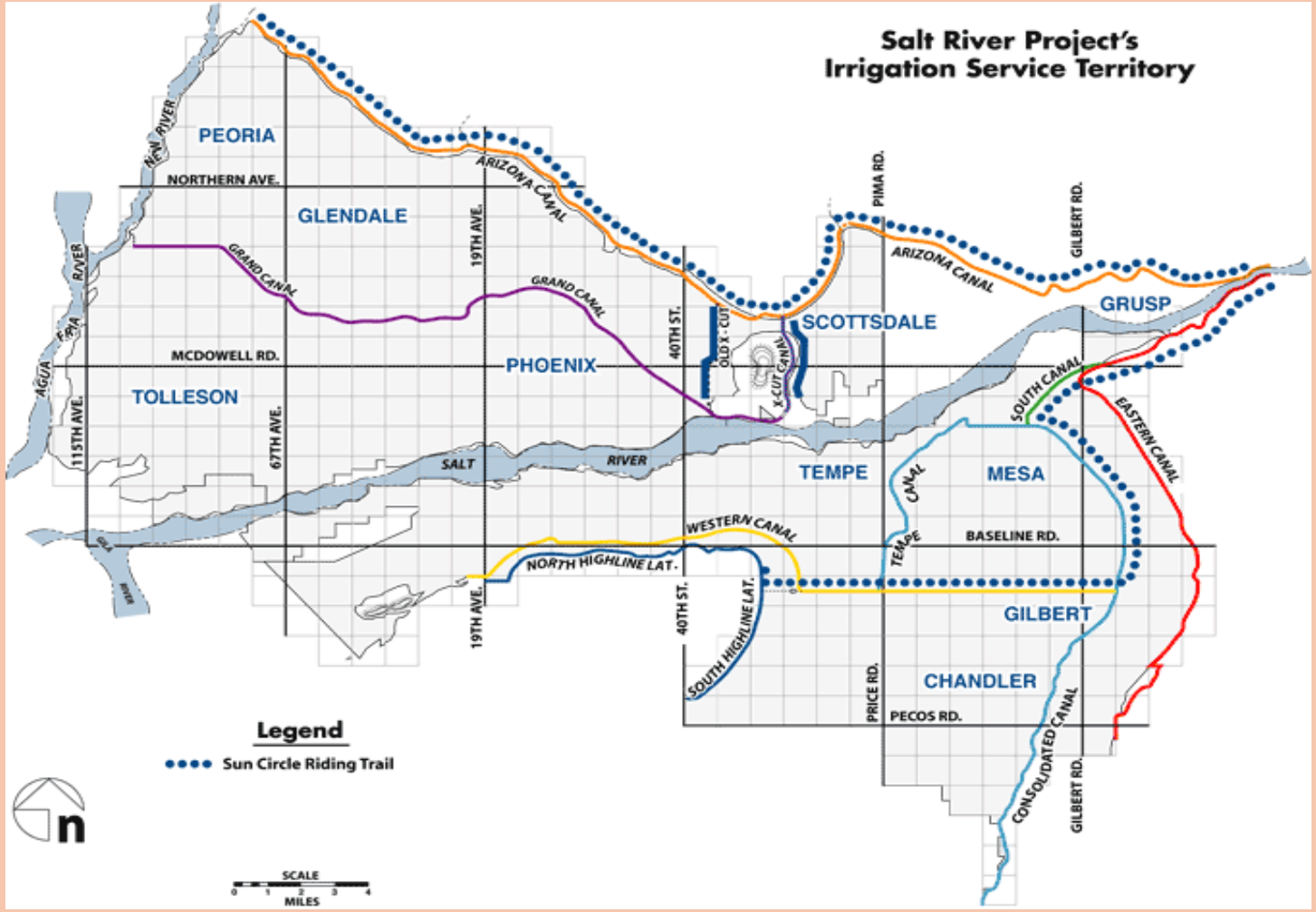
Unregulated Water Wells
Outside AMAs

Groundwater Pumping

Water Wells for: Small Farmer (400'-600') versus Big Farmer (1010') and Mega Farmer (2500')

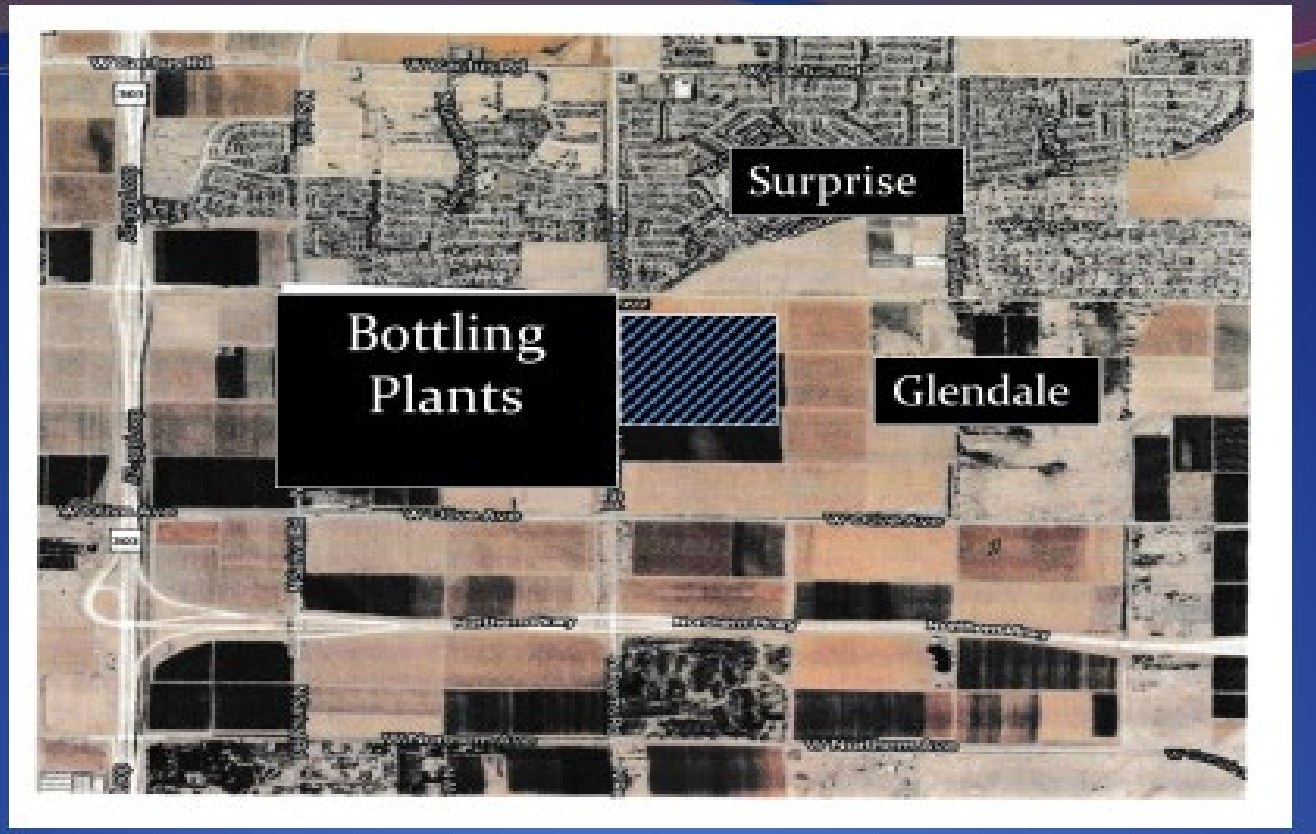
Beyond the Mirage

"The Future of Water in the West." A PBS Documentary about the Colorado River: beyondthemirage.org



Surface Water – Arizona Canal

Transports Salt River Water to Glendale, Peoria, Phoenix, Scottsdale

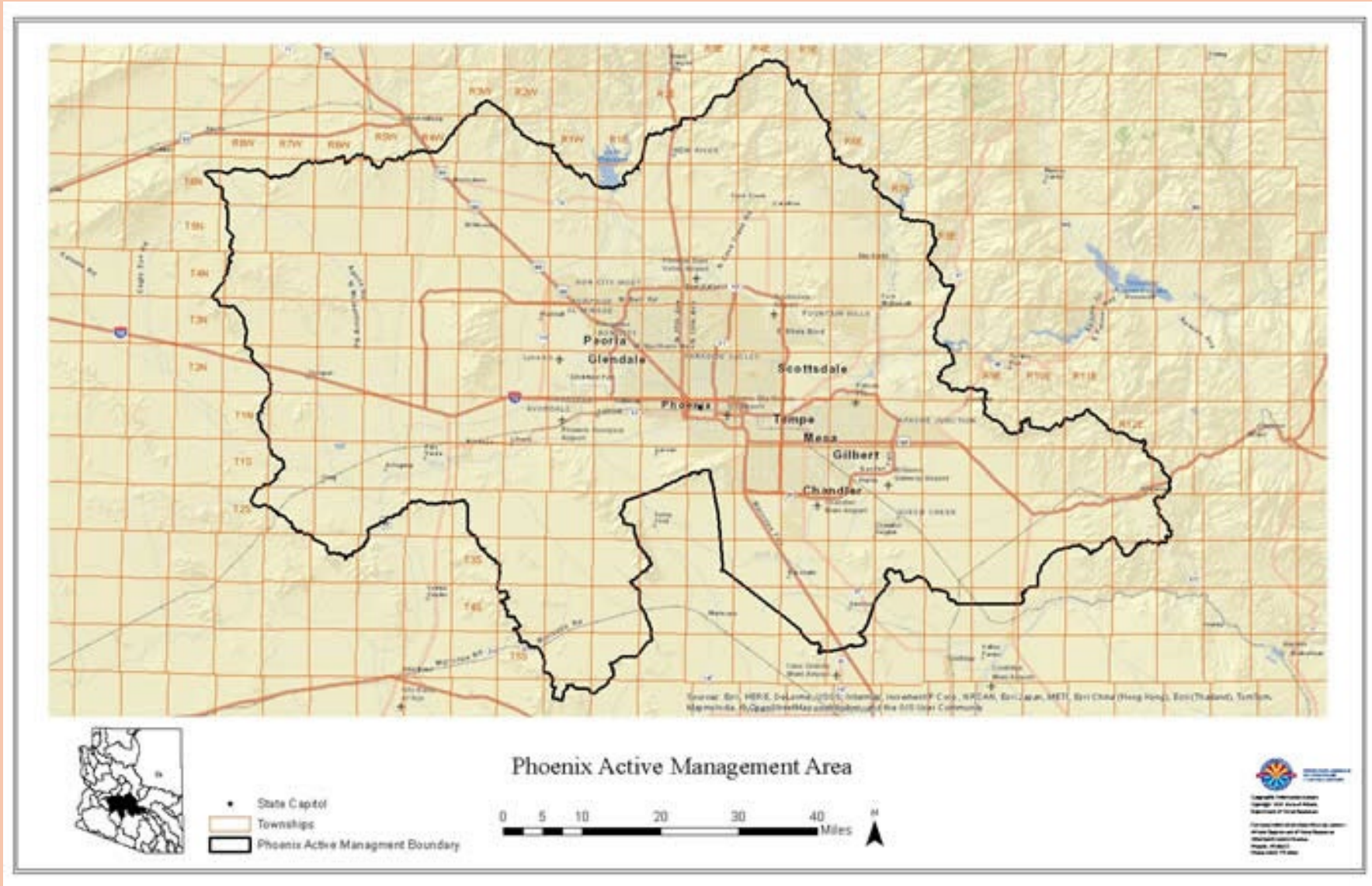


Surface Water & Groundwater

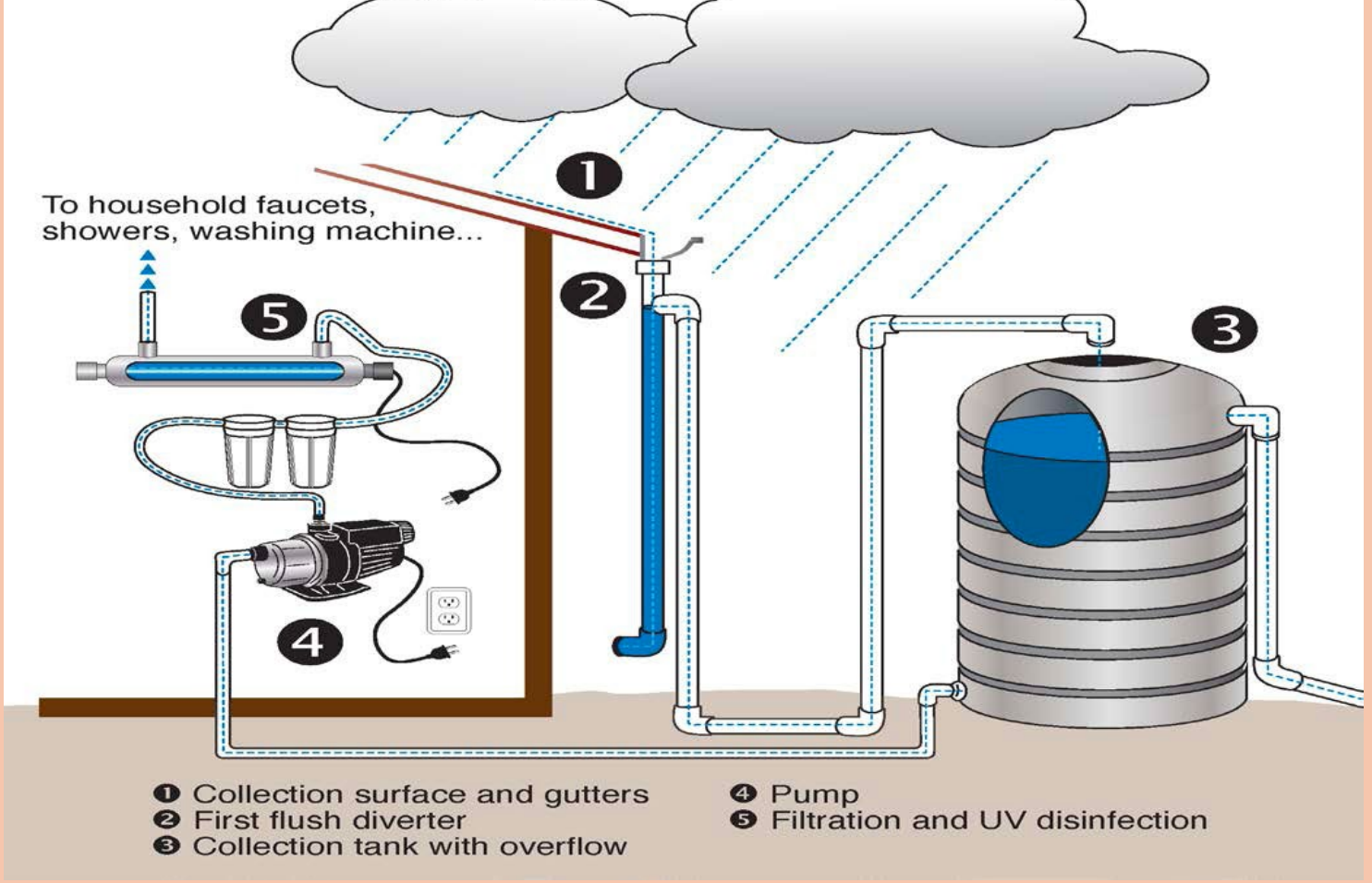
Bottling Plants: Surprise to the North, Glendale to the South

Water Conservation Kit

Available by Request on Internet At "Water Conservation Kit-Epcor"



Phoenix AMA Model



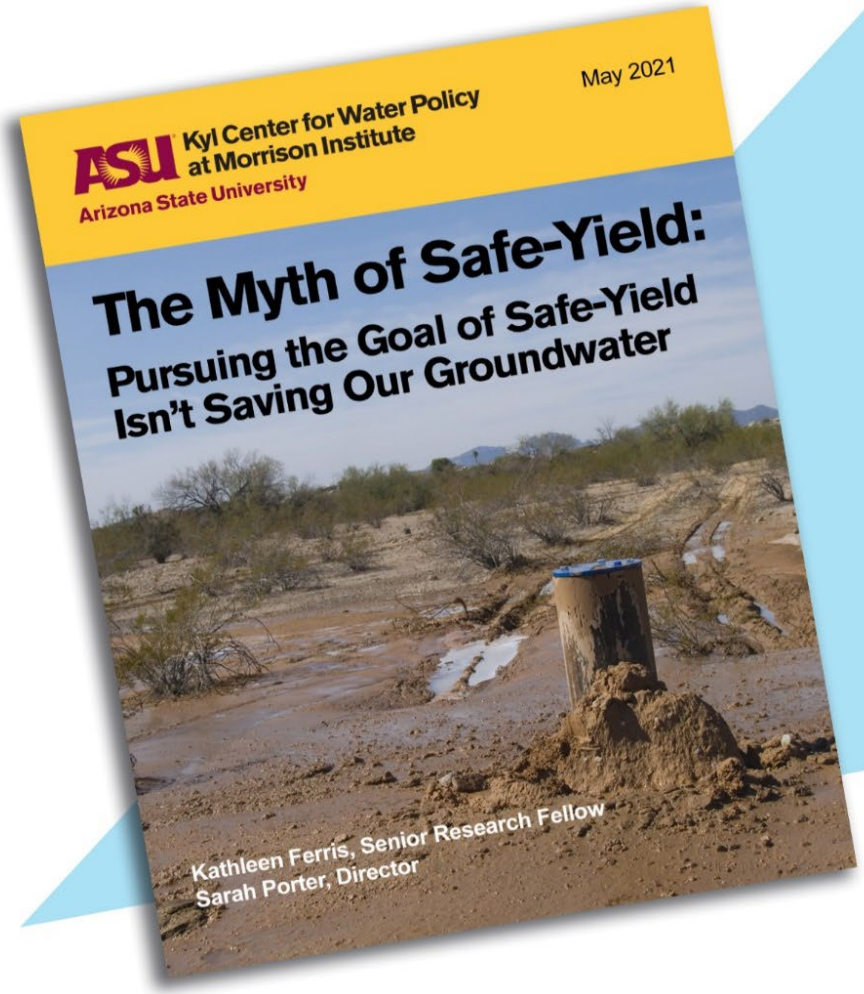
Rainwater for Potable Use

Basic Capture and Treatment System

PFAS:

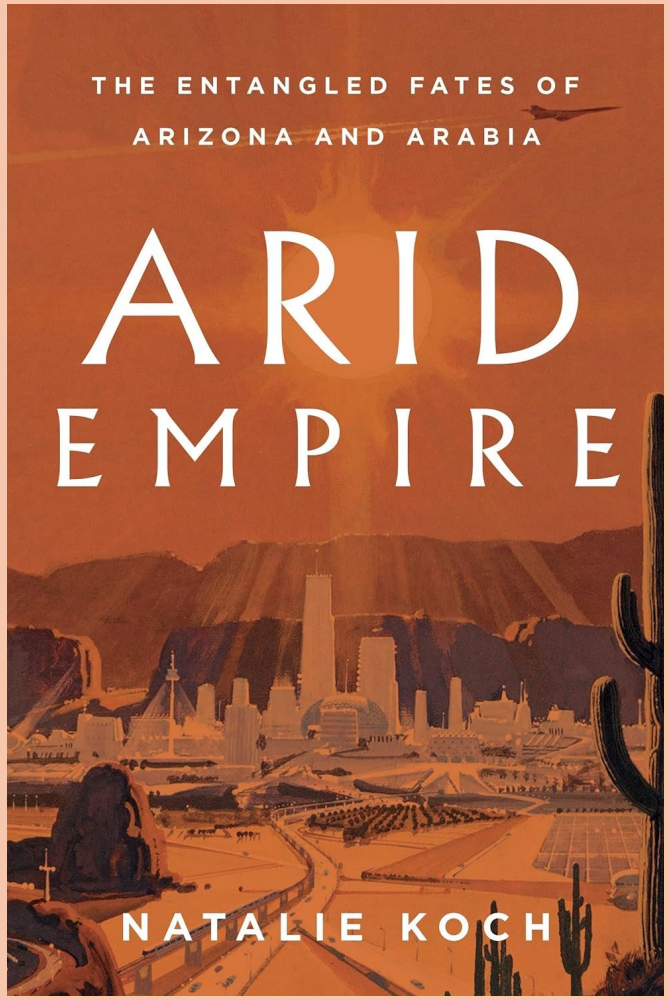
One part per trillion **(ppt) denotes one part per 1,000,000,000,000 (10^{12}) parts, and a value of 10^{-12}.**

This is equivalent to about thirty seconds out of every million years.



If Arizona is to prosper into the next century, our focus needs to turn to what is essential for our future: The preservation of our groundwater and our increasingly fragile aquifers.

Read This Report to Learn All About Groundwater Management in Arizona



Explores the Dual Relationship between Colonization of the U.S. Southwest and Diplomatic Relations in the Middle East

Notes from “Let There Be Water,” a book by Seth M. Siegal

Israel:

- ✓ Began preparing for water scarcity in the 1930’s.
- ✓ Is a democracy, however water management is entirely a socialist commodity with the state controlling all water ownership and usage.
- ✓ Utilizes drip irrigation for 75% of it irrigated fields, reducing water use and improving crop yield.
- ✓ Notes that the cost of drip irrigation equipment is expensive, but should not impede its use.
- ✓ Uses eighty-five percent of the country’s sewage for treatment and reuse.
- ✓ Built 5 coastal desalination plants in less time than it took California to overcome legal issues in order to build the Carlsbad desalination plant.
- ✓ Has a culture that accepts and admires water conservation.
- ✓ Grows water efficient crops.
- ✓ Believes a global water crisis is looming, the time to act is now.

Groundwater Depletion

Ground Fissure from Overpumping &
Subsidence in Eastern Pinal County, Arizona

Groundwater Gone

Irrigation Leak Continued

Groundwater Gone

Swimming Pool Draining in SCW