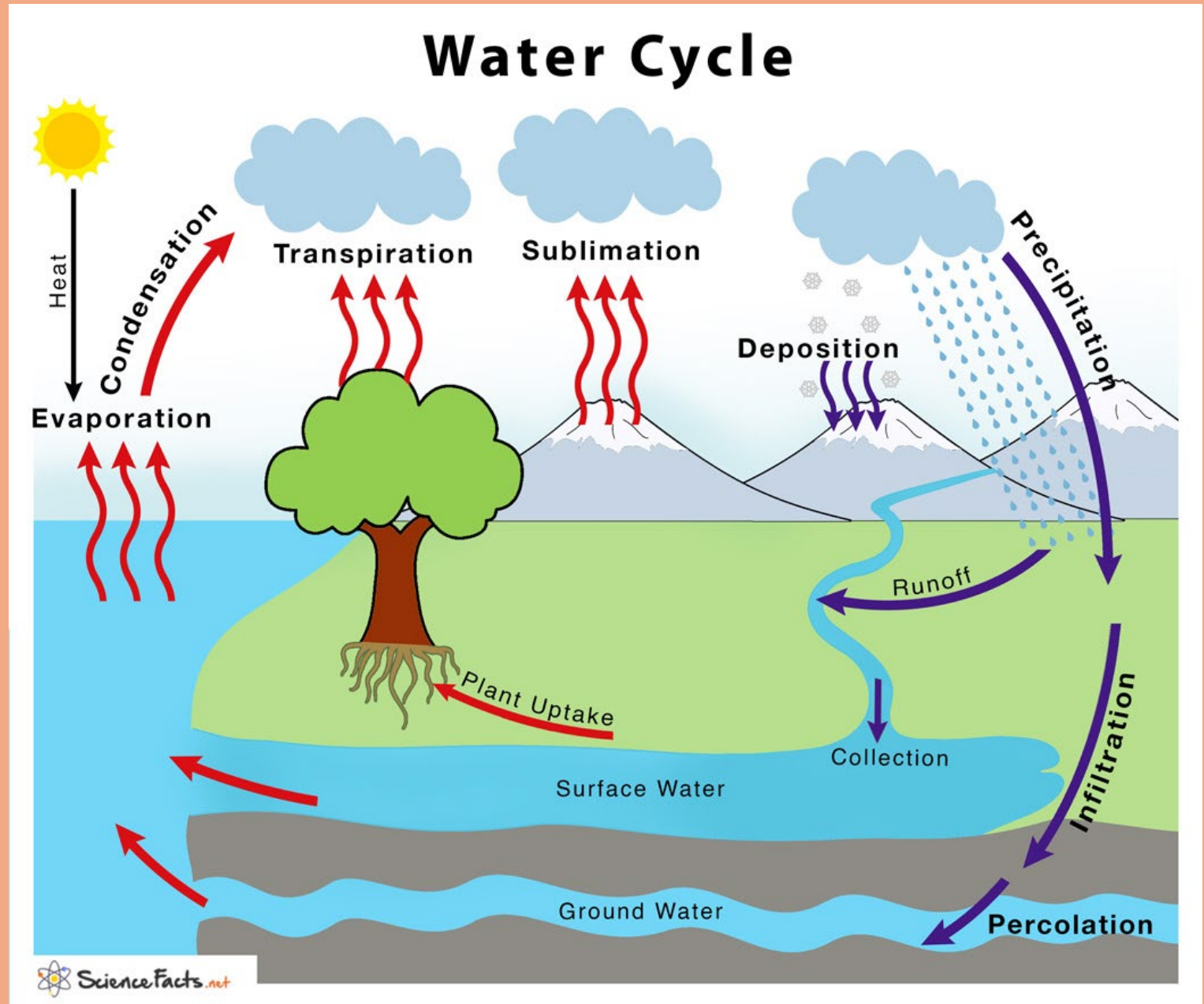


PORA WATER COMMITTEE

Notes for
Meeting
11-12-2025



Fugitive Water from Clinic Area



Fugitive Water from Clinic Area





Groundwater Gone
Swimming Pool Draining in SCW

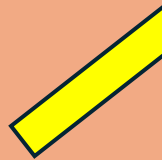


Groundwater Treatment

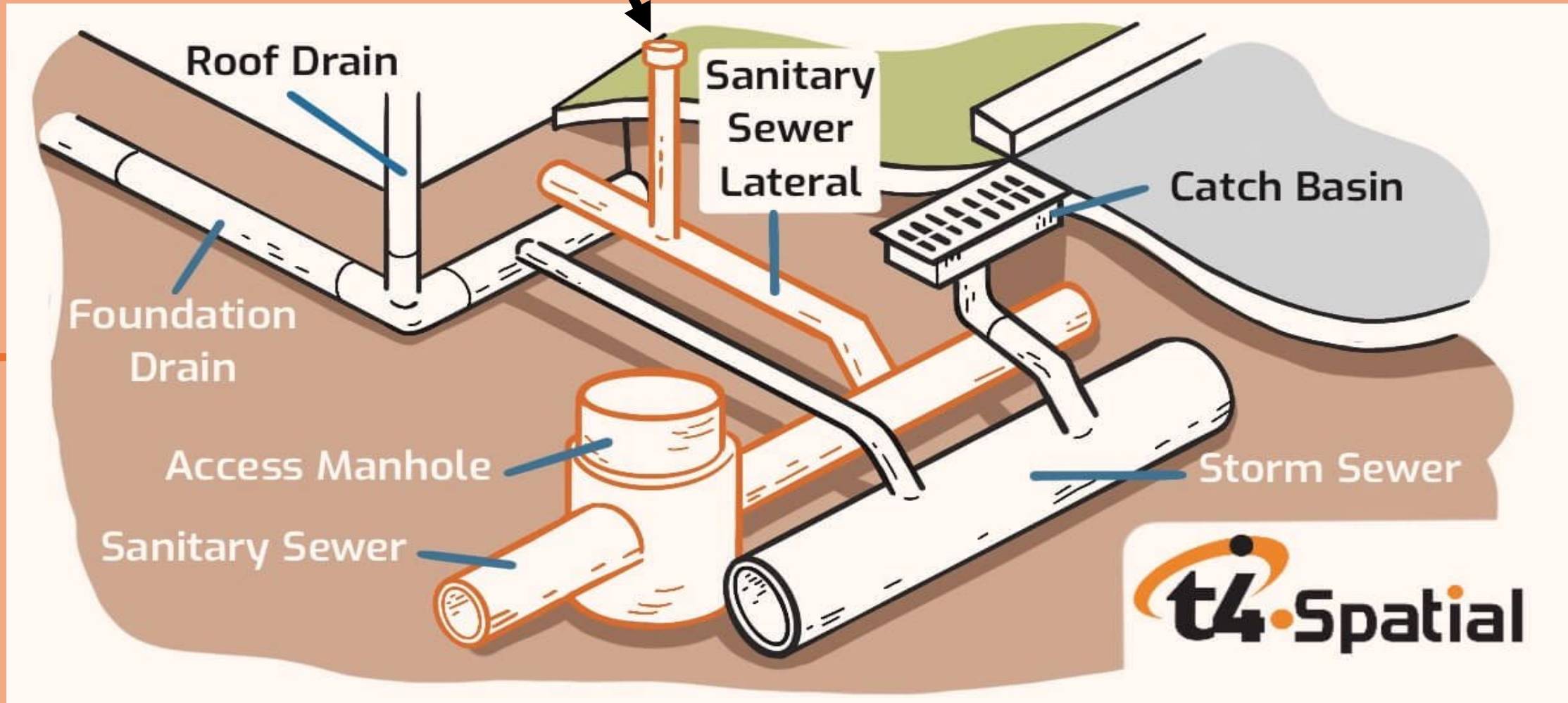
Use the Sewer Cleanout Piping to Send Water to the Wastewater System for Treatment and Recharge

Sanitary Sewer Connection

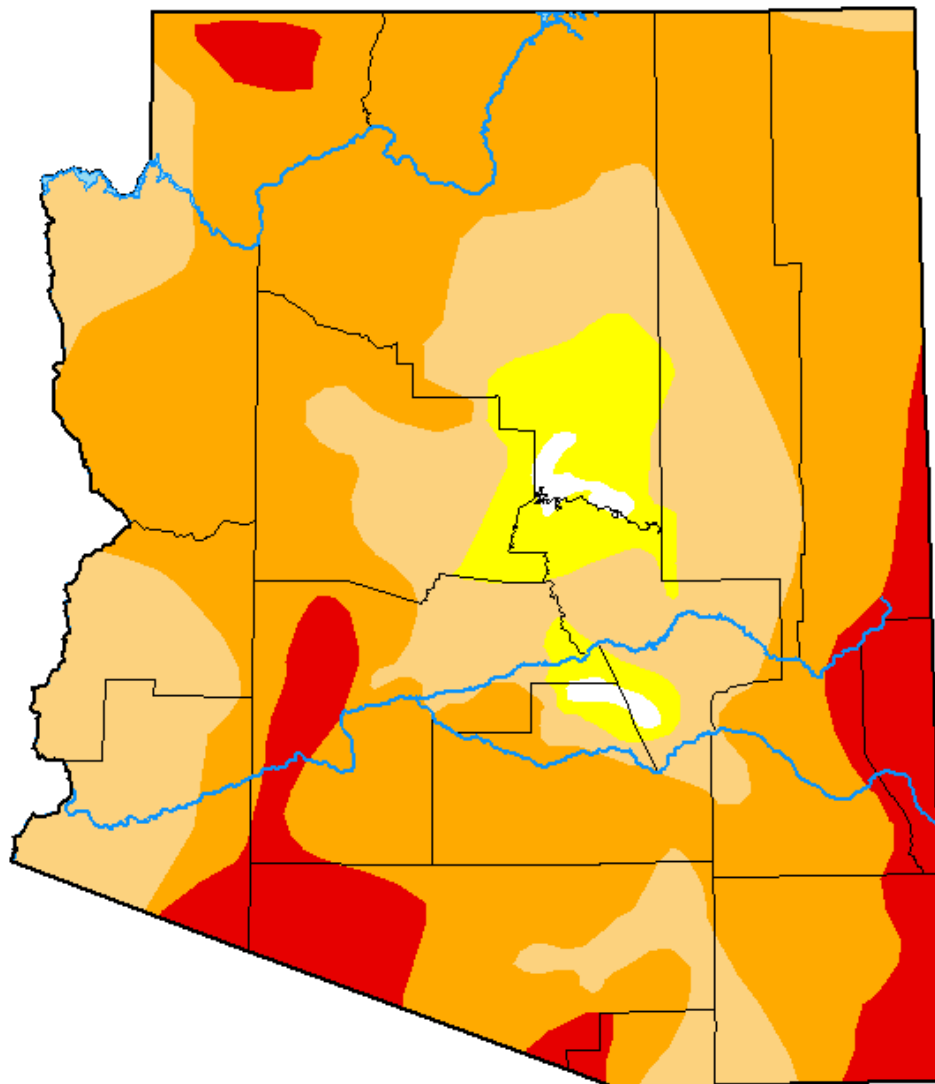
Drain Your Pool Here



Drain Your Pool Here



U.S. Drought Monitor Arizona



November 4, 2025

(Released Thursday, Nov. 6, 2025)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.66	99.34	94.07	66.75	10.44	0.00
Last Week <i>10-28-2025</i>	0.66	99.34	94.07	66.75	10.44	0.00
3 Months Ago <i>08-05-2025</i>	0.00	100.00	99.09	74.42	37.30	2.32
Start of Calendar Year <i>01-07-2025</i>	3.74	96.26	76.63	45.54	14.03	0.00
Start of Water Year <i>09-30-2025</i>	0.00	100.00	100.00	79.21	25.06	1.49
One Year Ago <i>11-05-2024</i>	14.45	85.55	52.56	26.89	0.00	0.00

Intensity:

None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate 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>

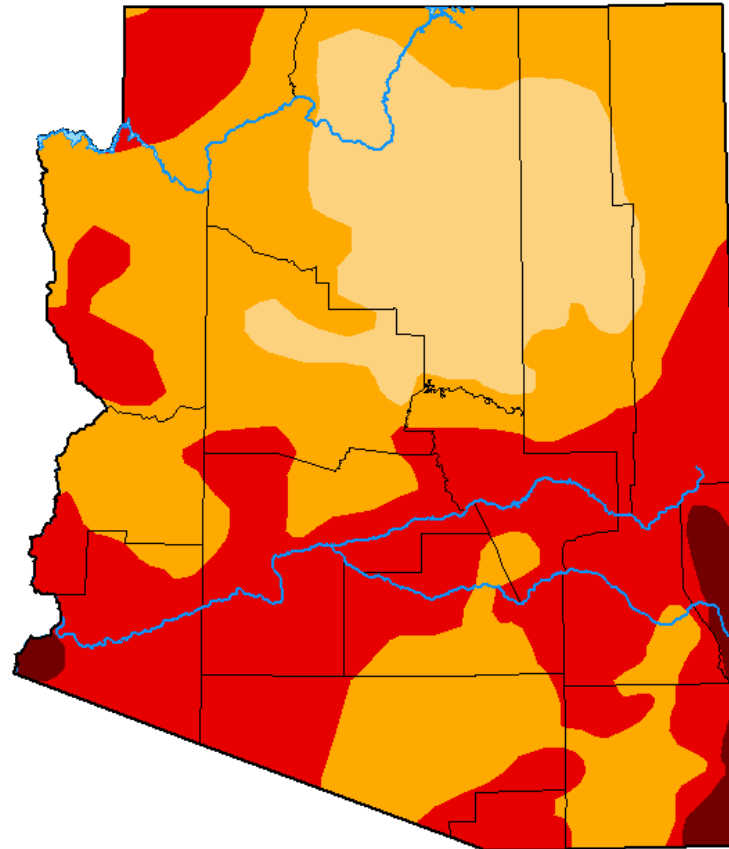
Author:

Richard Tinker
CPC/NOAA/NWS/NCEP



droughtmonitor.unl.edu

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	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate 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

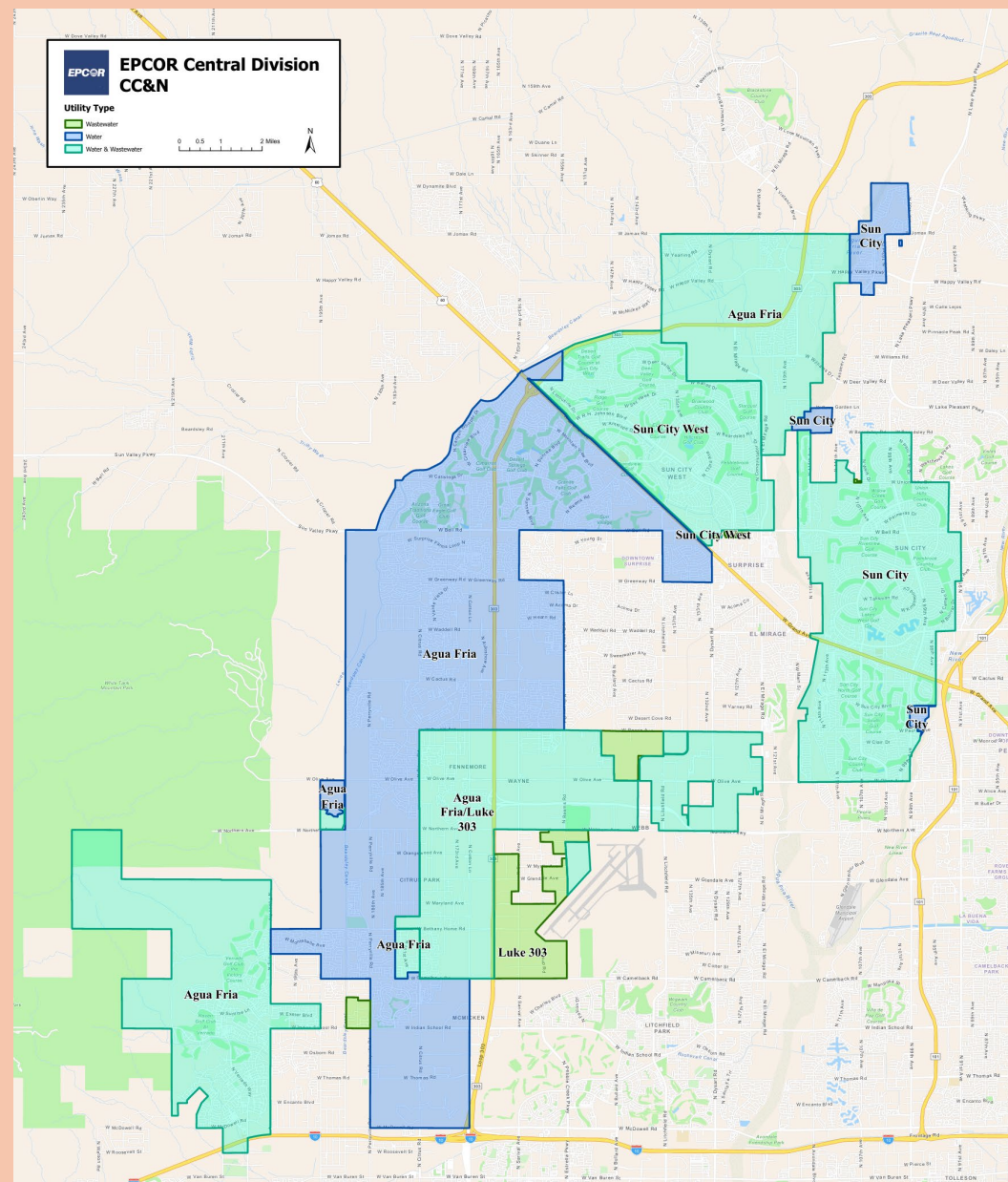
By Combining 3 EPCOR Water Districts it was possible to show water availability and recharge credits sufficient to qualify for ADAWS.

Sun City, Sun City West and Agua Fria were approved to become the West Valley System by ADWR.

Projected demand for the 3 districts 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

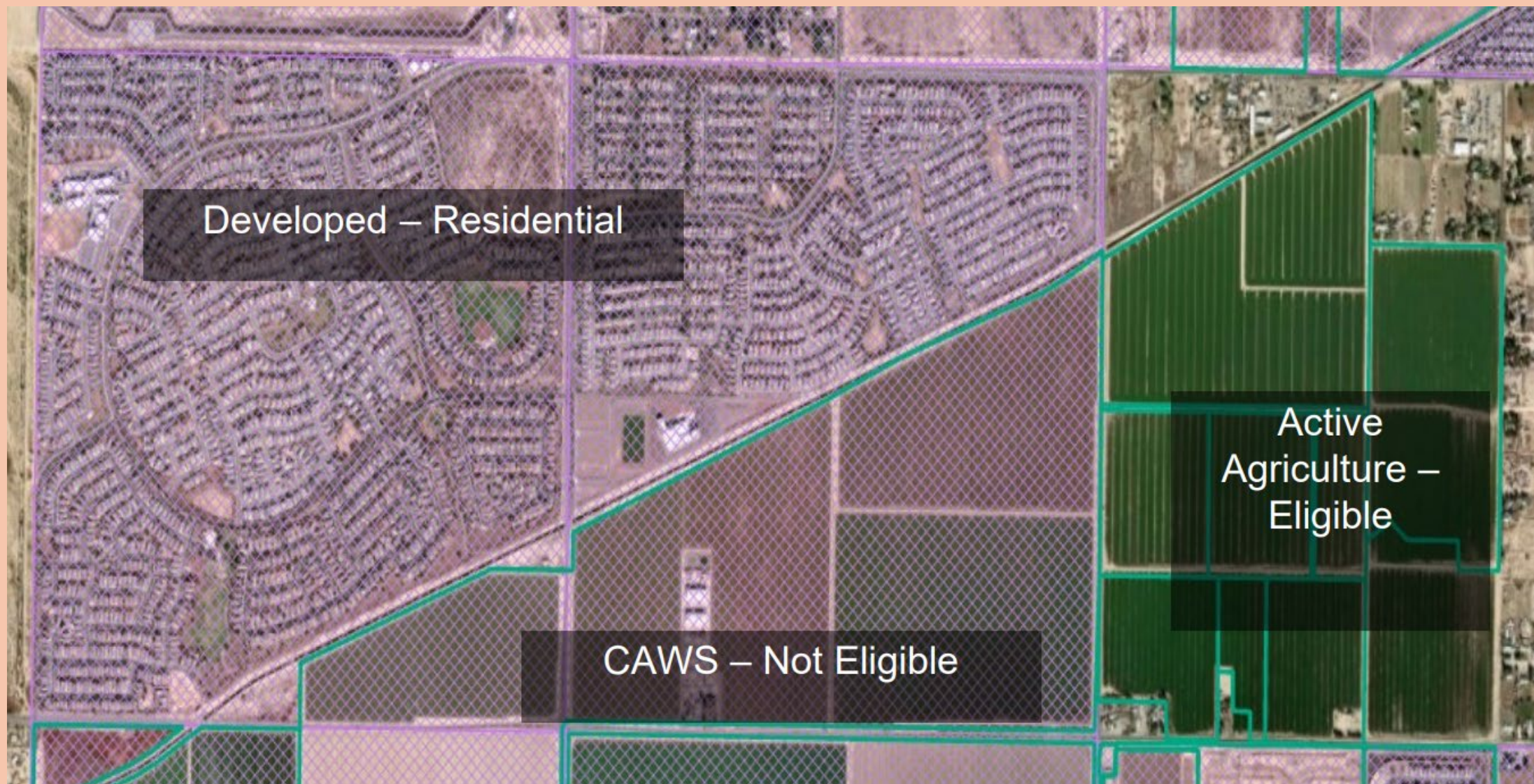


EPCOR ADAMS West Valley System

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

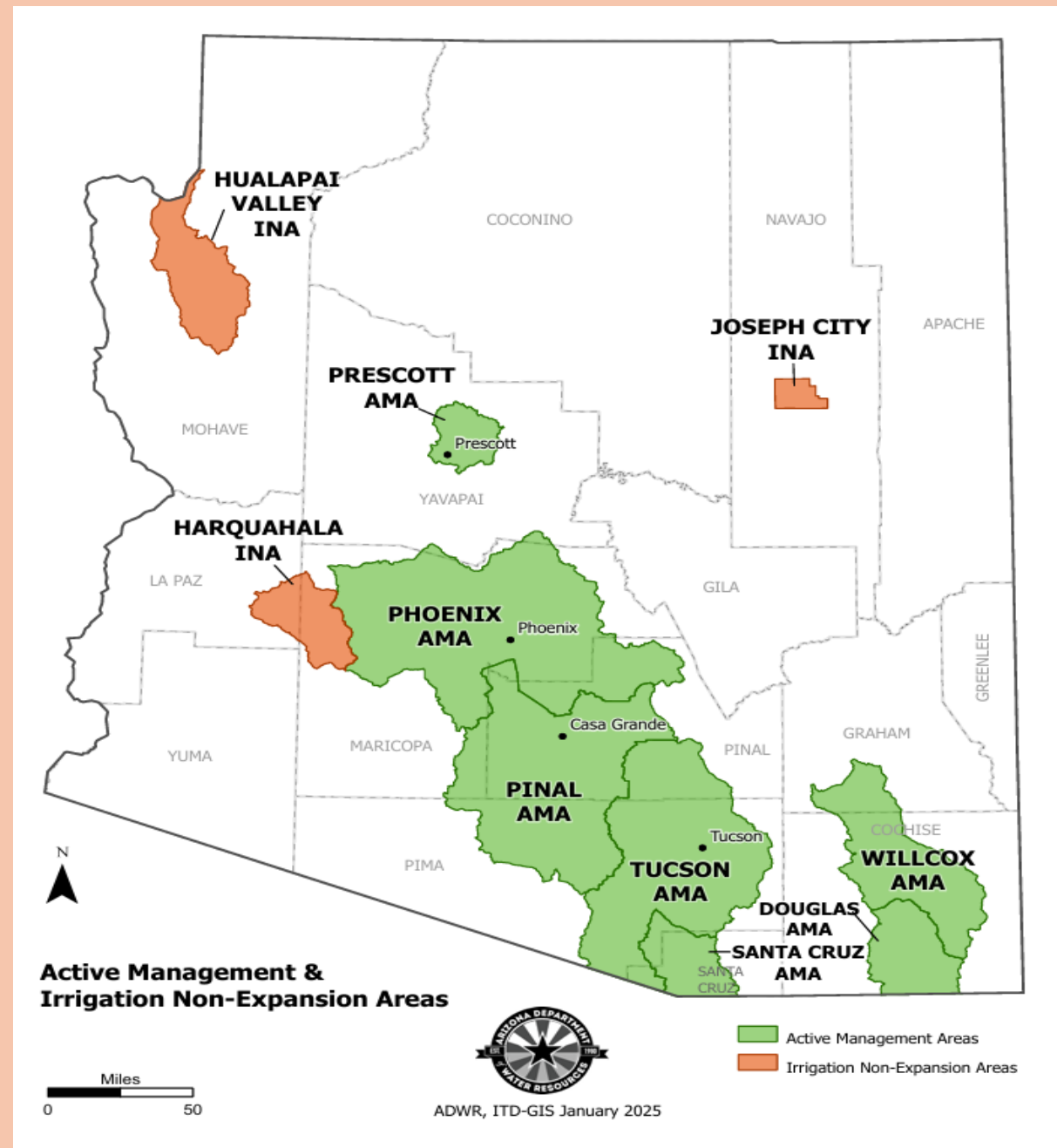


AG TO URBAN:

- **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 CAGR D.**
- **CAGR D is losing water required for replenishment**
- **Legislature modified the CAGR D to reduce replenishment requirement.**

Arizona Active Management Areas.

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



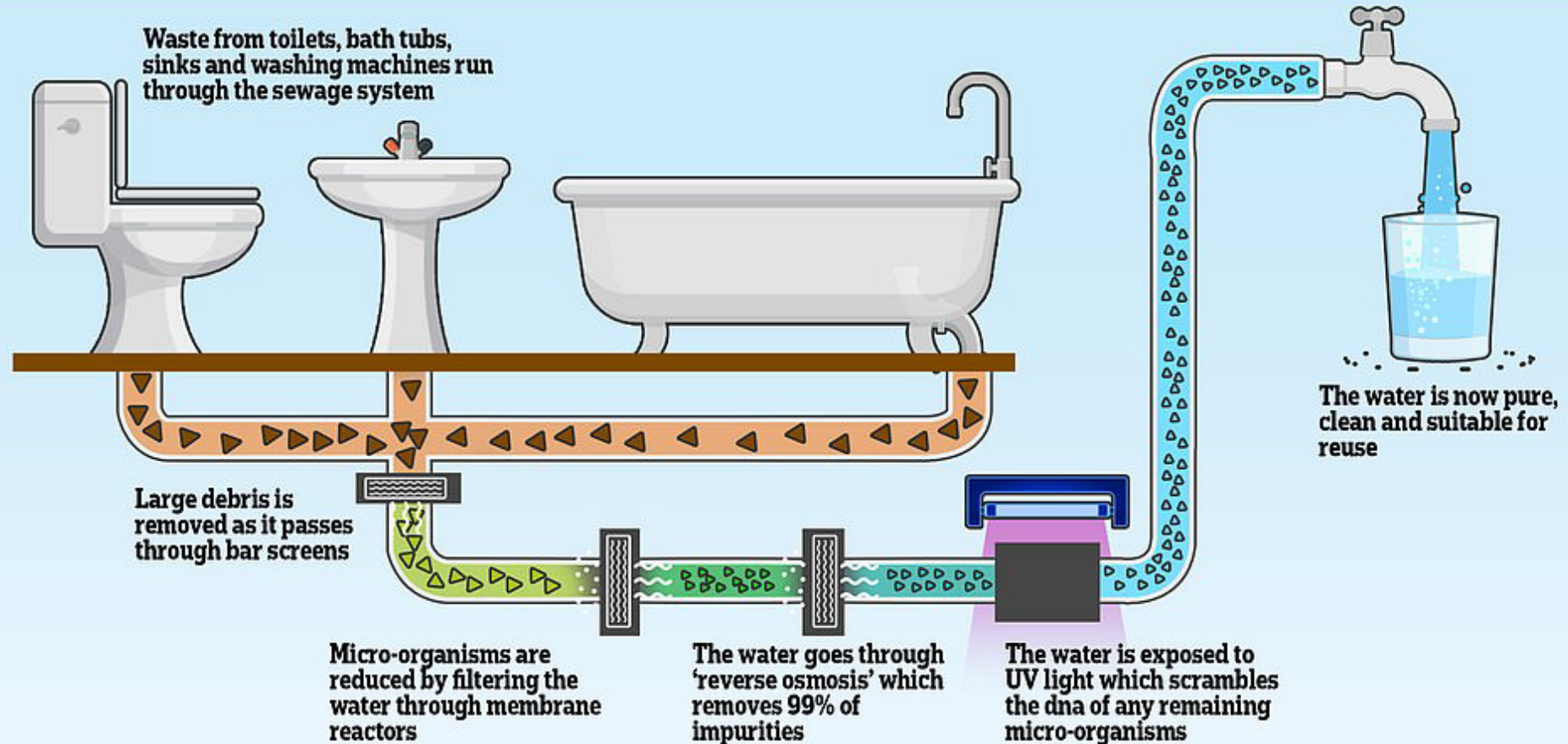
**A day ago this
was raw sewage!**

**Thanks to
filtration, reverse
osmosis and
ultraviolet
purification it can
be consumed
safely.**



Advanced Water Purification

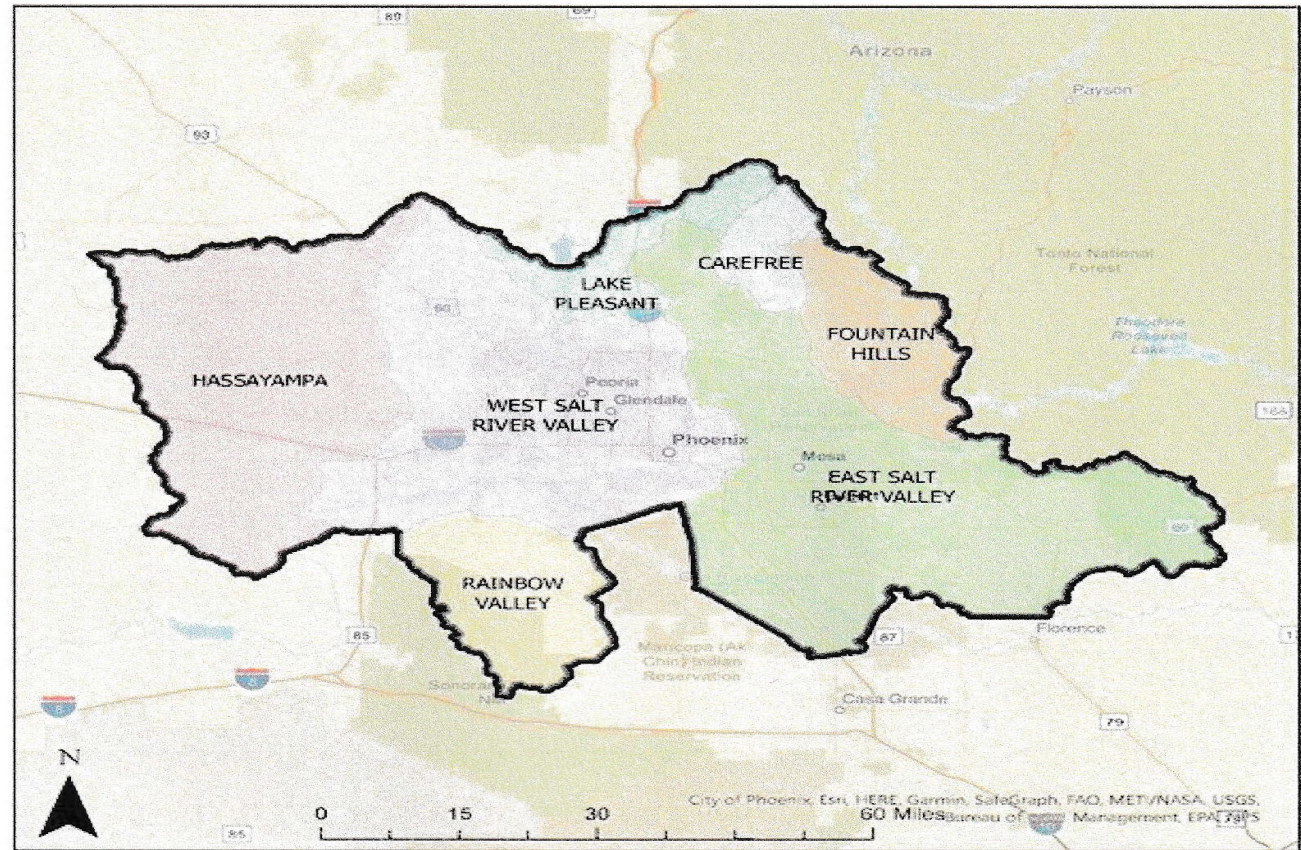
HOW THE 'TOILET TO TAP' SYSTEM WILL WORK



TOILET TO TAP SYSTEM

Major Sub-Basins in Phoenix AMA

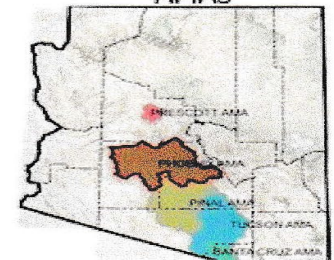
Figure 1-1 Phoenix Active Management Area and Sub-Basins



SUB-BASIN NAME

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

AMAs



Grundfos Hot Water Pump Attaches to Hot Water Heater



EXTRA SLIDES

**Your PORA
Water
Committee
PowerPoint**

WWW.PORASCW.ORG/water



**Your
Resource for
Arizona Water
Conservation
and
Legislation
Information**

WWW.AMWUA.ORG

CAGRD Blog

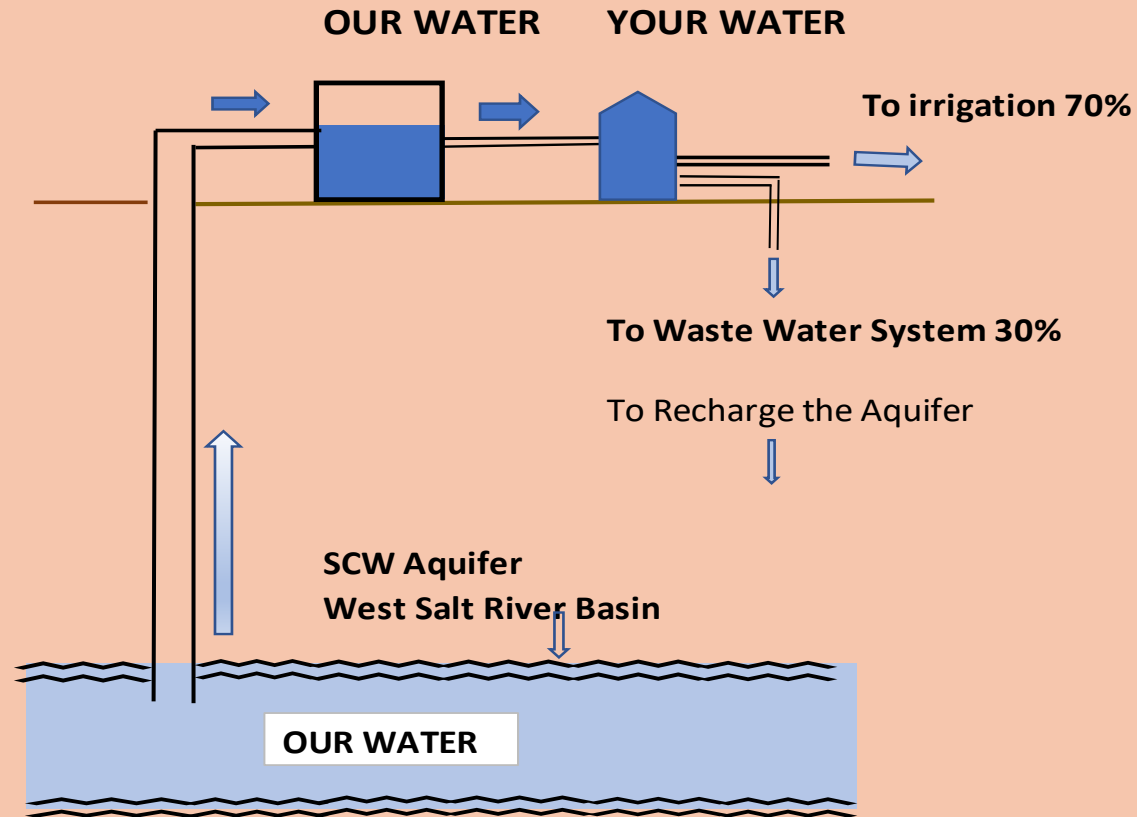
To Think About.....

“....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.”

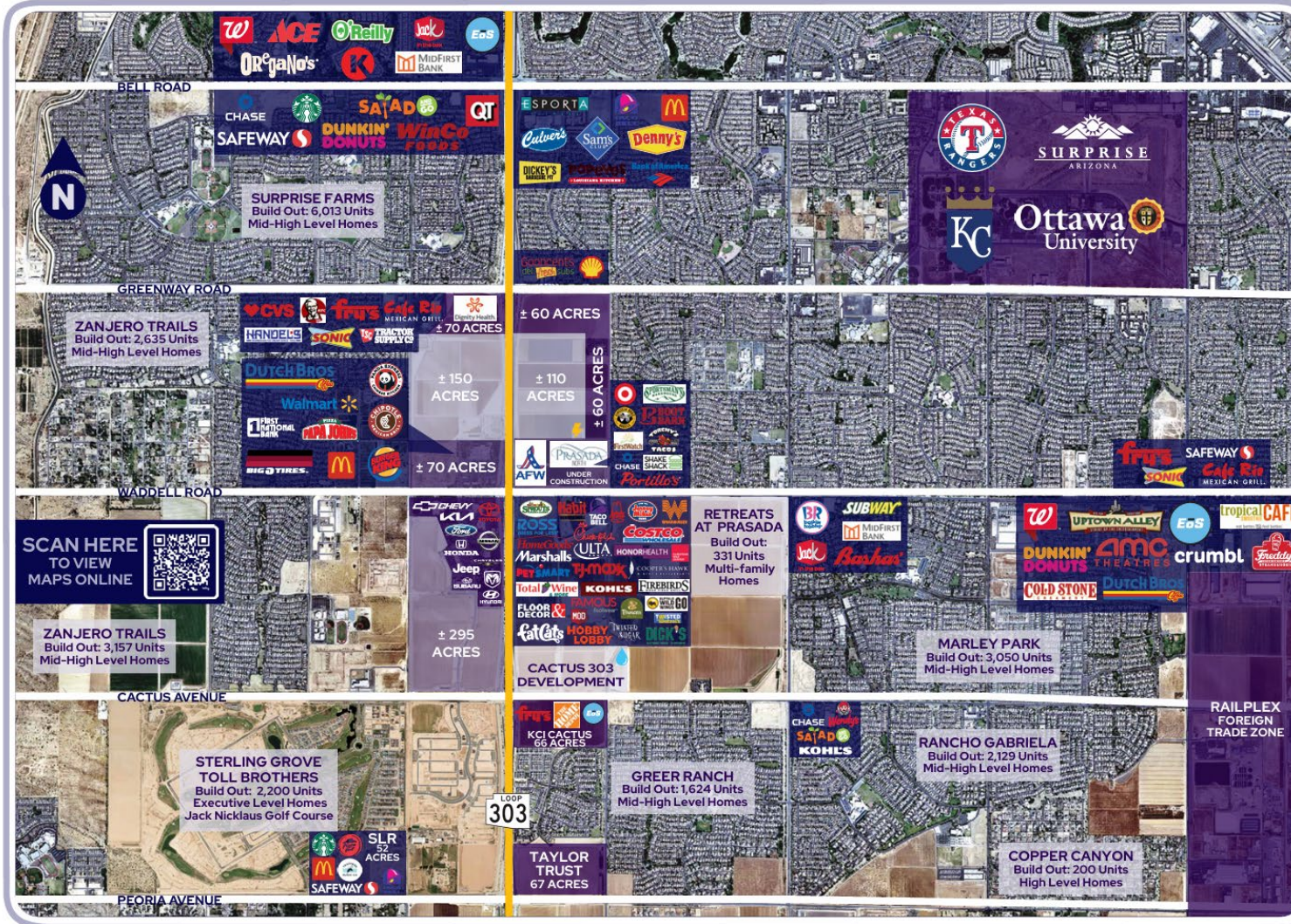
From the Book *“Running Out”*, by Lucas Bessire.
(Comments about the Ogallala Aquifer in Central
USA)

YOUR WATER IS OUR WATER



Groundwater Going

LOOP 303 DEVELOPMENT



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



@SURPRISECONDEV



SURPRISE
ECONOMIC
DEVELOPMENT



SURPRISE ECONOMIC
DEVELOPMENT

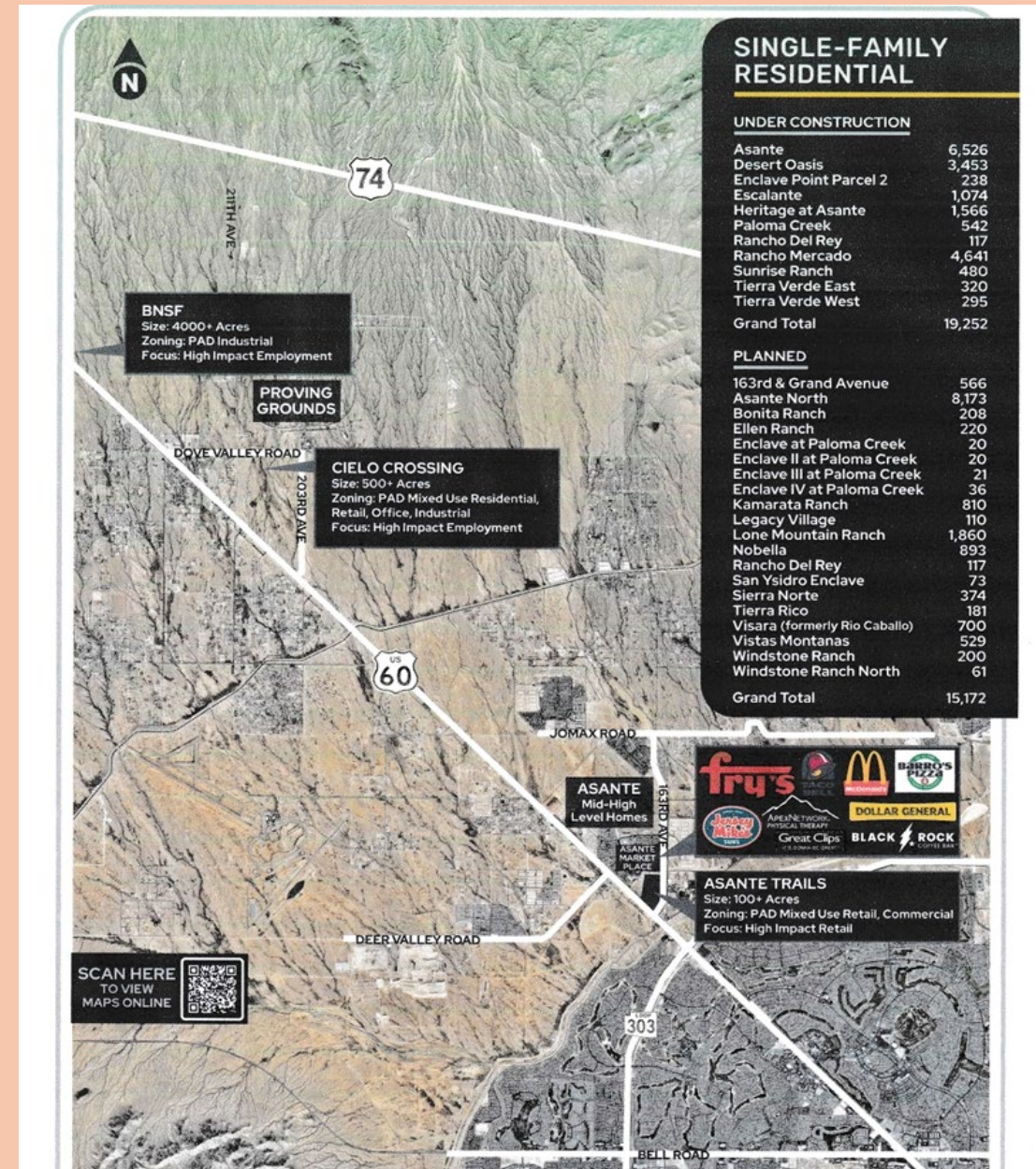
North Surprise Development Plans

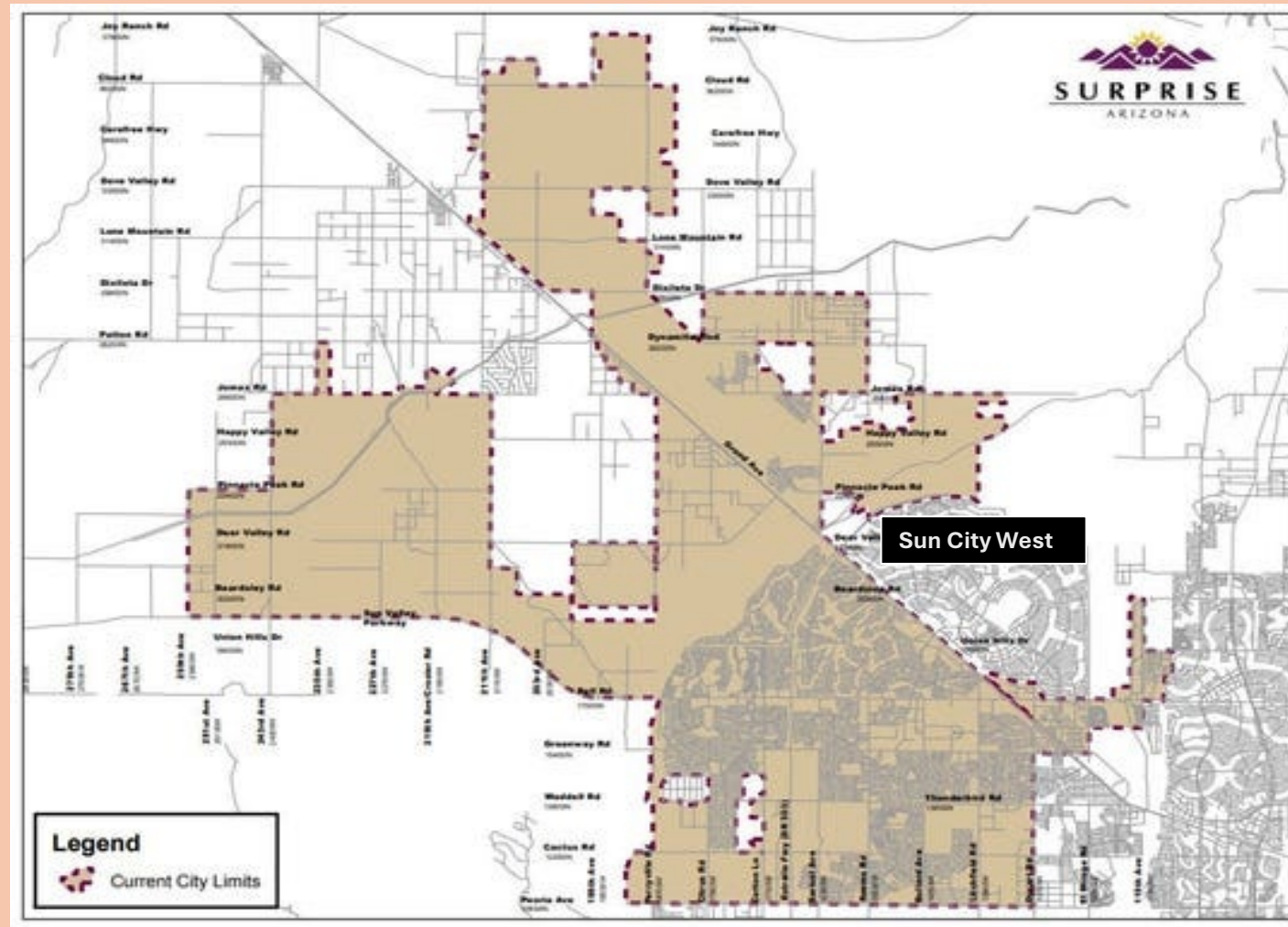
19,252 Residences Under Construction

15,172 Additional Residences Planned

Estimate 2.5 persons per household = 86,060 people.

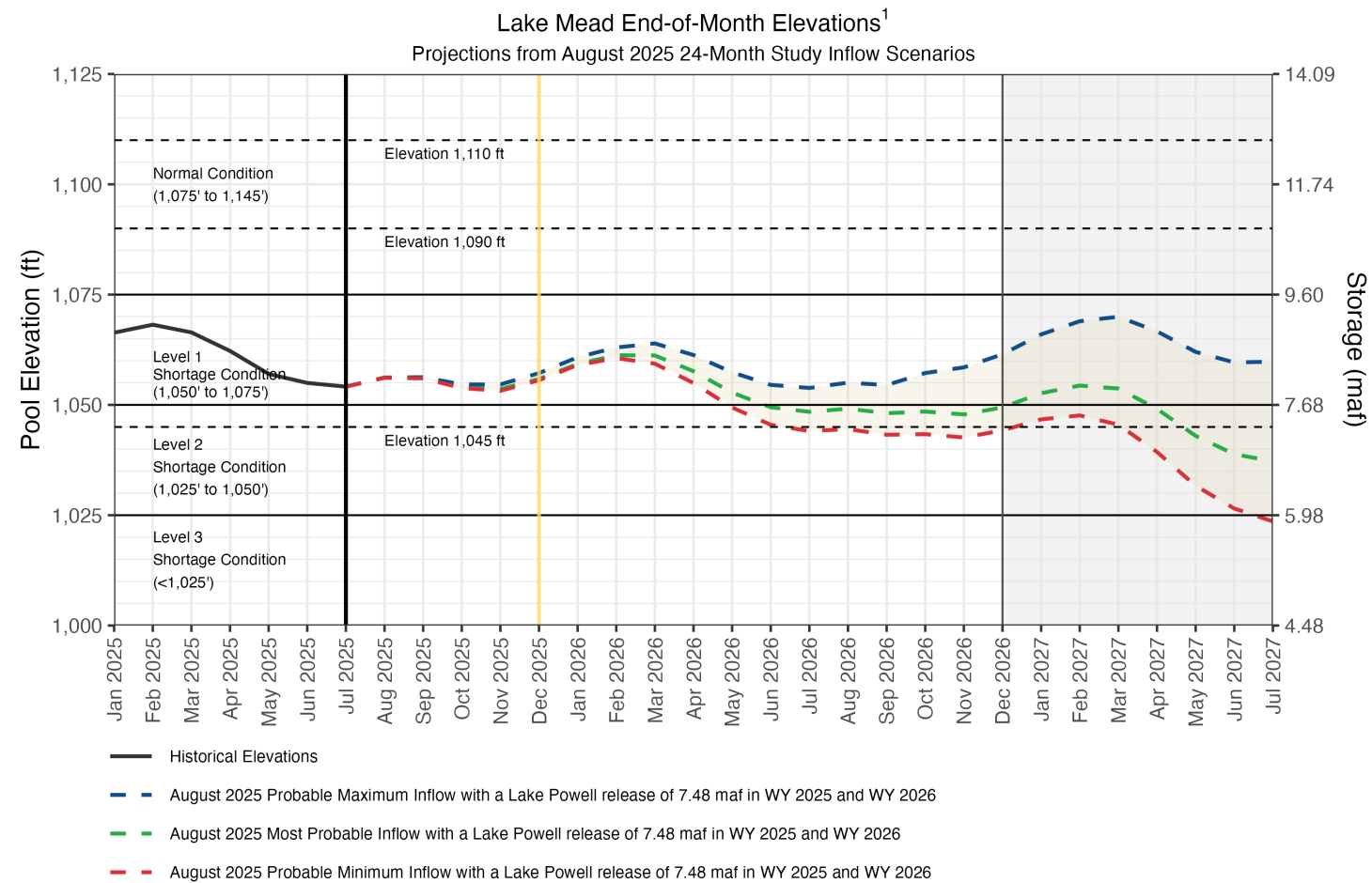
Maybe 86,000 cars???





City of Surprise.

Development Continues to the West and NW of SCW

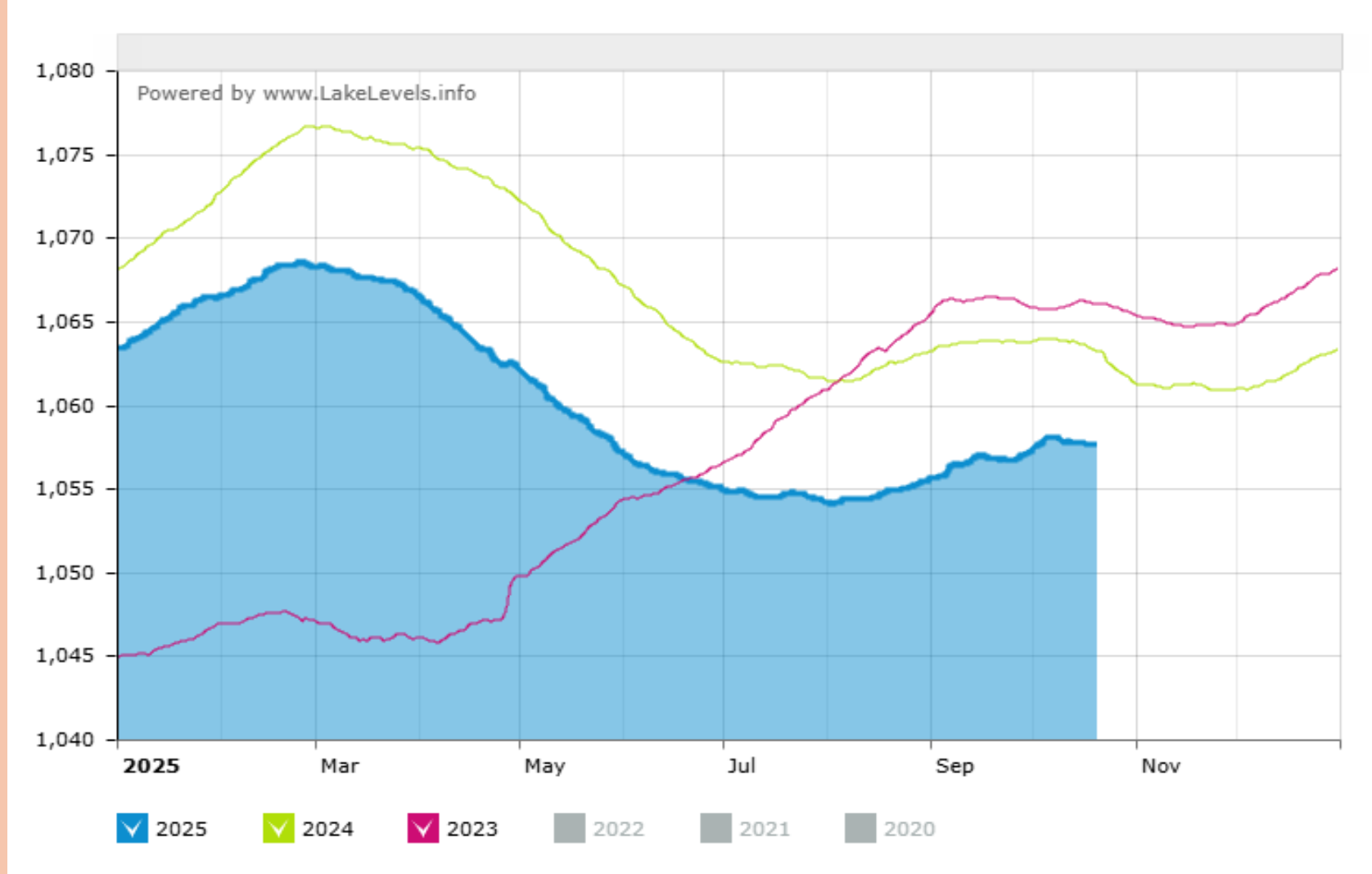


The Drought Response Operations Agreement (DROA) is available online at <https://www.usbr.gov/dcp/finaldocs.html>.

¹For modeling purposes, simulated years beyond 2026 assume a continuation of the 2007 Interim Guidelines including the 2024 Supplement to the 2007 Interim Guidelines (no additional SEIS conservation is assumed to occur after 2026), the 2019 Colorado River Basin Drought Contingency Plans, and Minute 323 including the Binational Water Scarcity Contingency Plan. With the exception of certain provisions related to ICS recovery and Upper Basin Demand management, operations under these agreements are in effect through 2026.



Lake Mead Elevations 2025, 2026, 2027



Lake Mead Water Levels 2023, 2024 and 2025
1057.62' on October 20, 2025

Excess CAP Water = ZERO

Agricultural = ZERO

Municipal/Industrial = - 3%

Tribal = - 7%

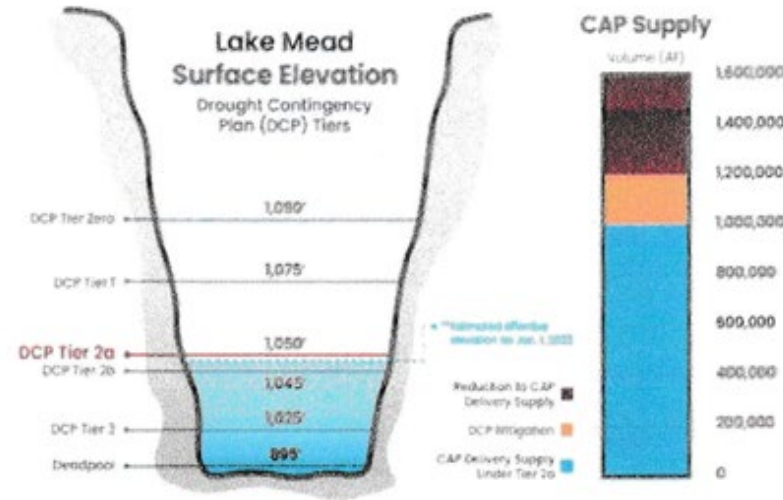
Tier 2a shortage: CAP reductions

SHARE THIS POST

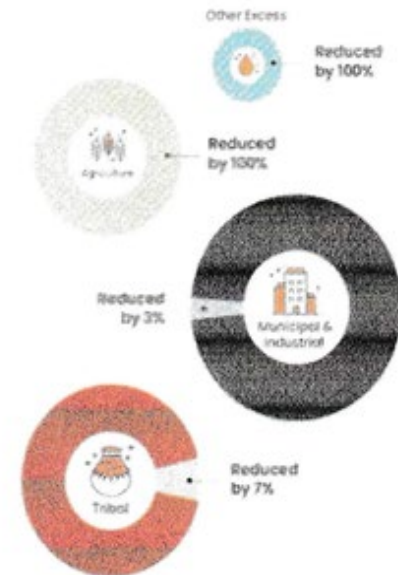


2023 Tier 2a Shortage

CAP Delivery System under Tier 2a



2023 Reductions to CAP Contract Categories

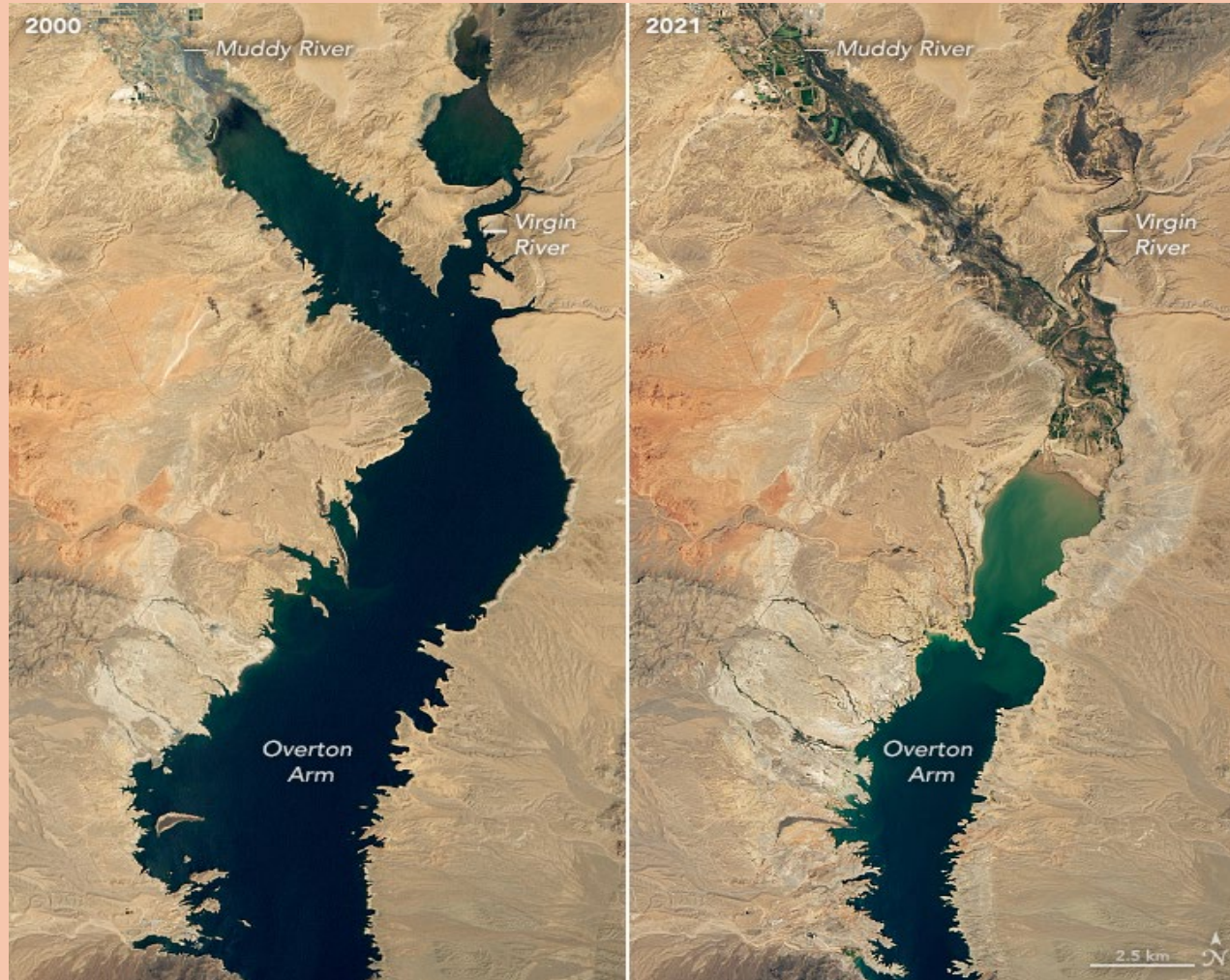


*Elevations are not to scale and are only for a representative purpose.

**The overflow elevation is estimated. The actual overflow is subject to the lake level. The proposed Tier 2a overflow is 1,050'.

To learn more, please visit: www.cap-az.com/colorado-river-shortage

Lake Mead Projections: Tier 2a Allotments:



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

Proposed Extension of El Mirage Rd from SR 303 to Jomax Rd.

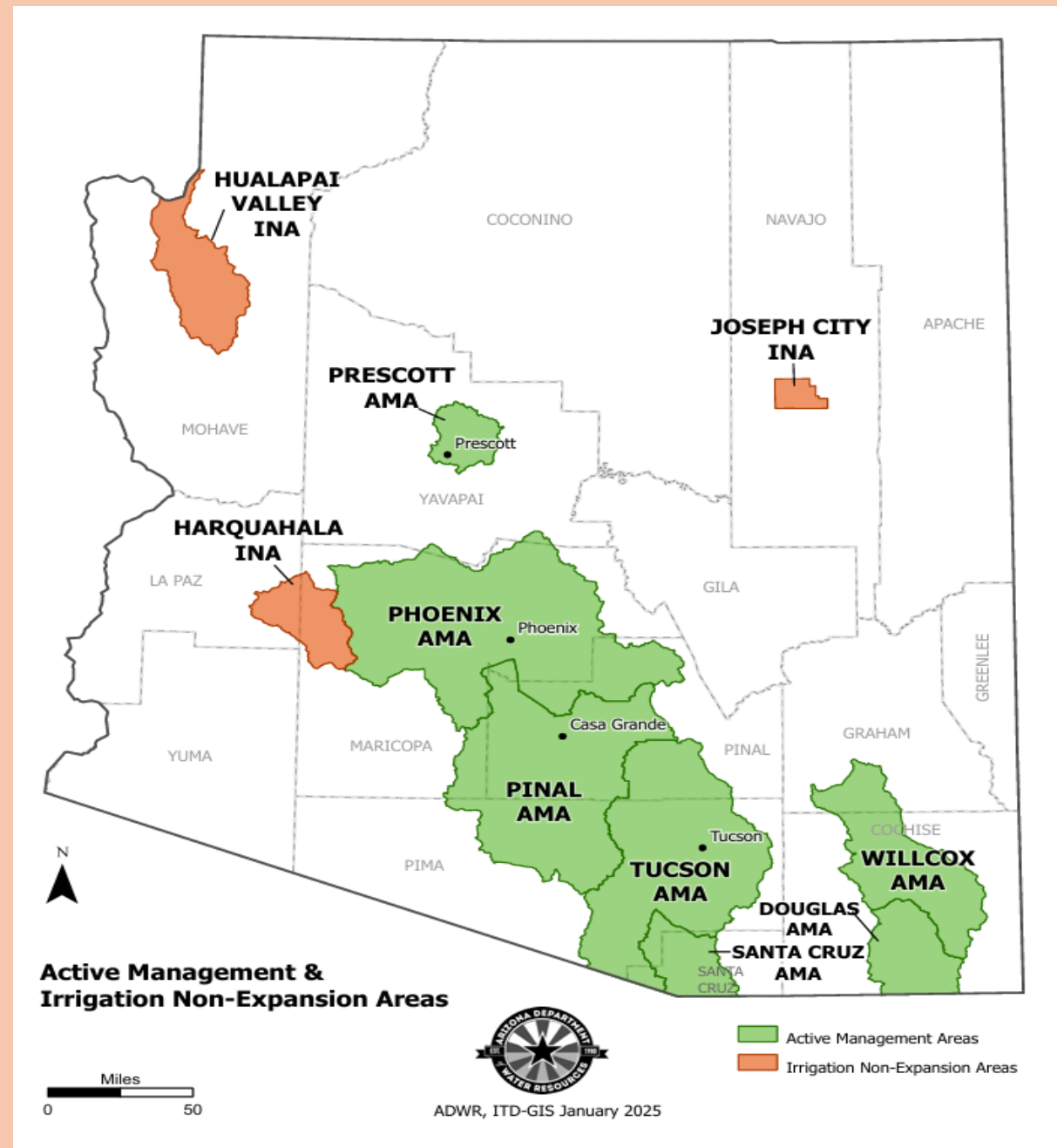
Figure 1: EA Study Area



As Figure 1 illustrates, the study area is a half-mile wide, beginning at Loop 303 to the south and extending north of Jomax Road for about one-third of a mile. Although the study area includes some residential areas, impacts to these areas are not anticipated.

Study Area Boundary

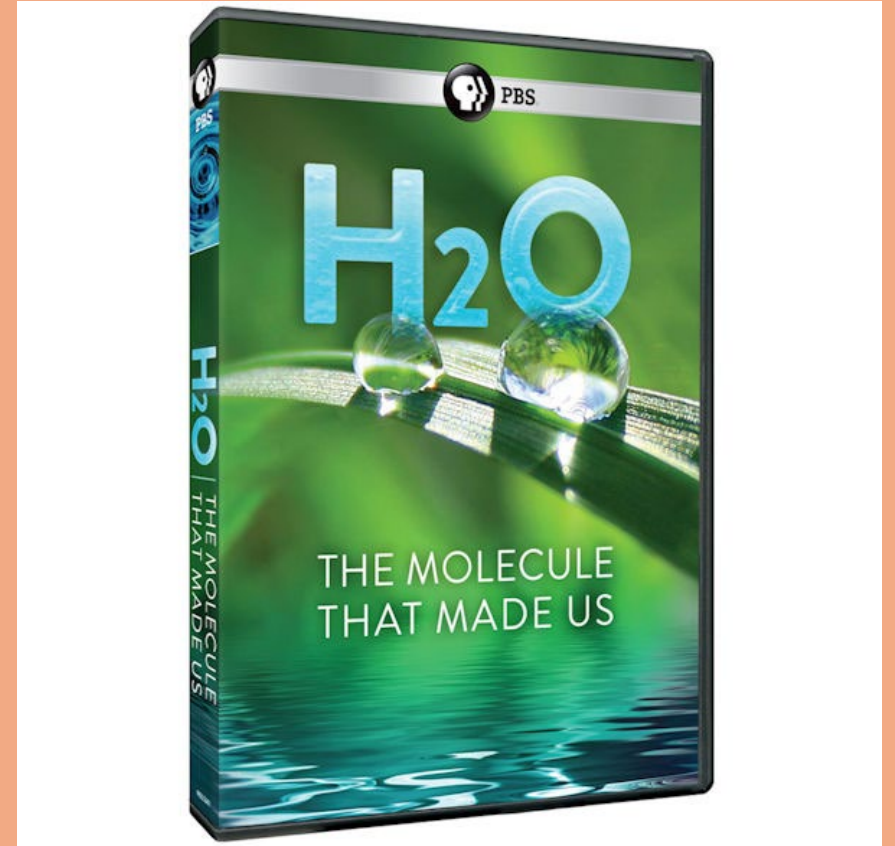
Arizona Active Management Areas



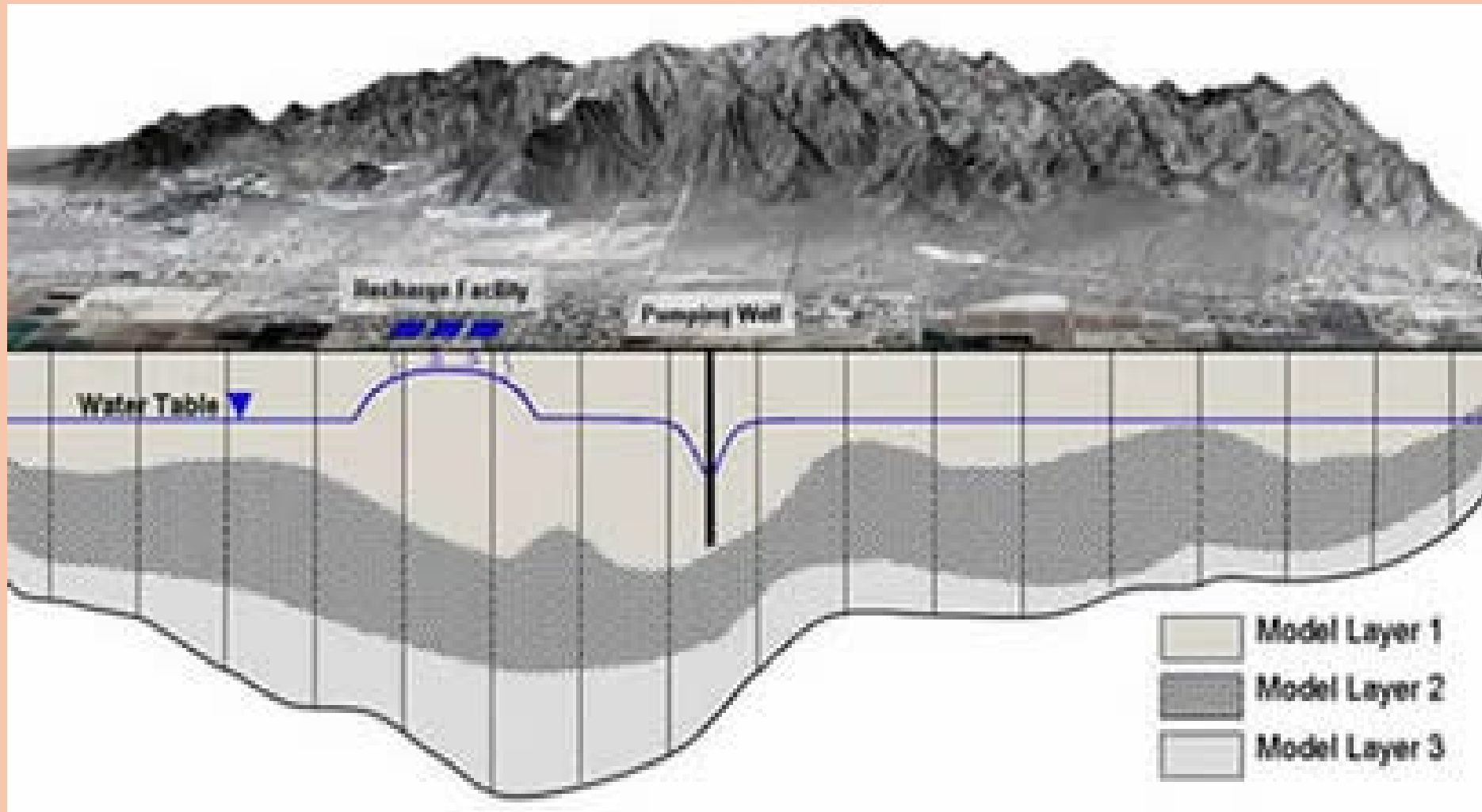
Water Presentations:



Beyond the Mirage- Feb. 11th



H2O, The Molecule....Feb. 25th



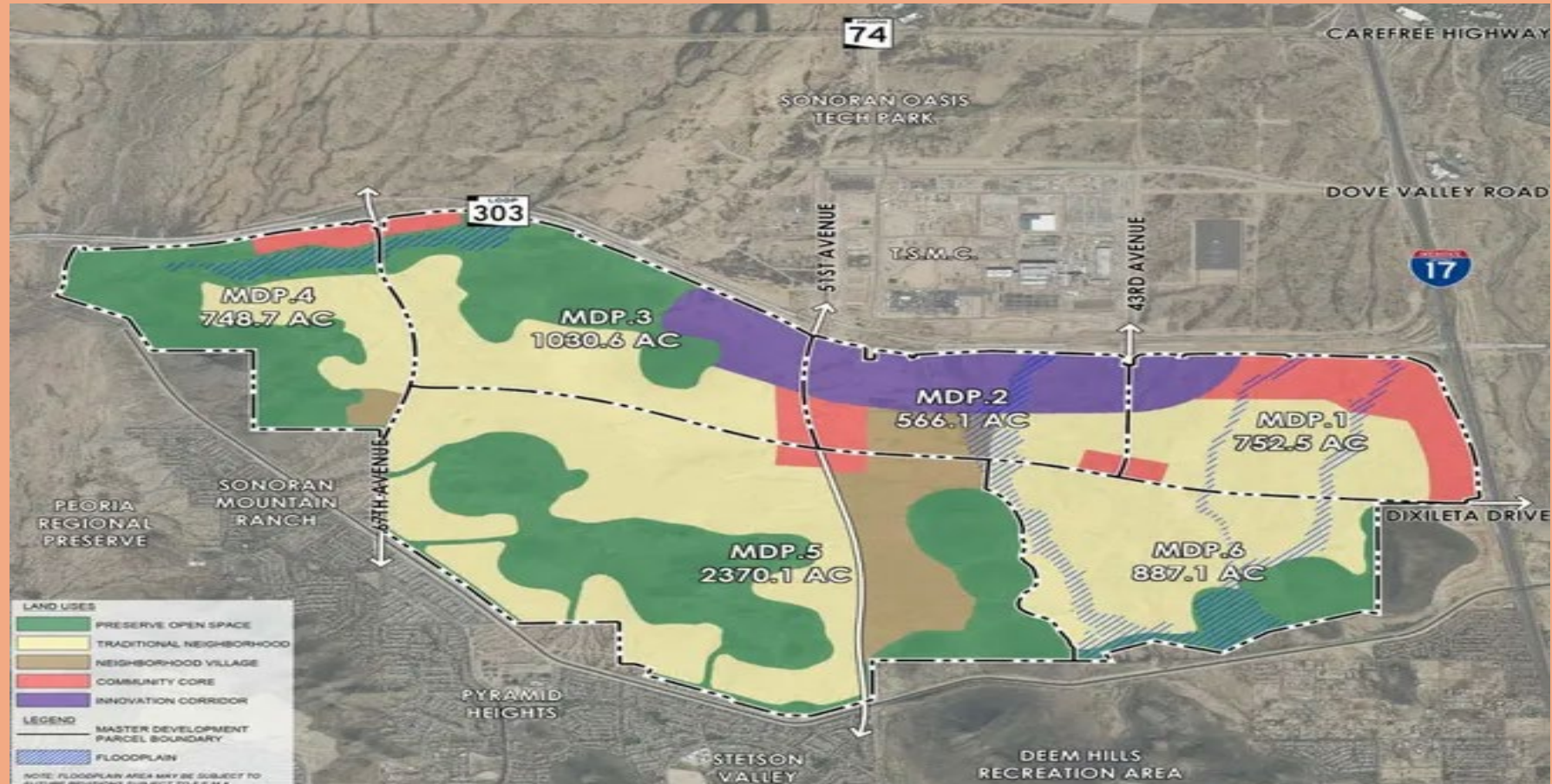
Groundwater with Recharge

Development Near TSMC



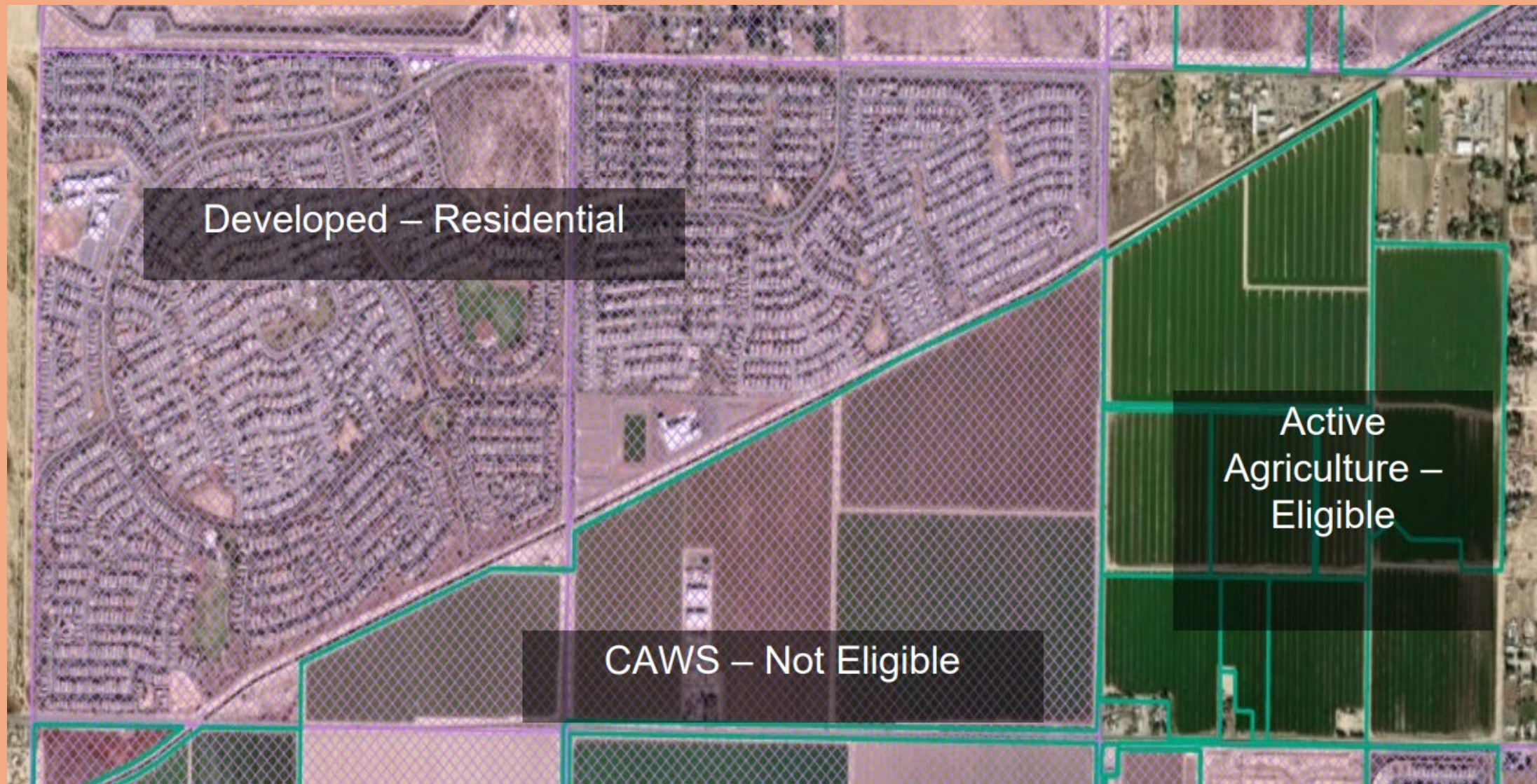
**Mack Real Estate Group: “Halo Vista” 2,300 acres
Industrial and Residential “silicon valley”**

Development Near TSMC



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

AG TO URBAN



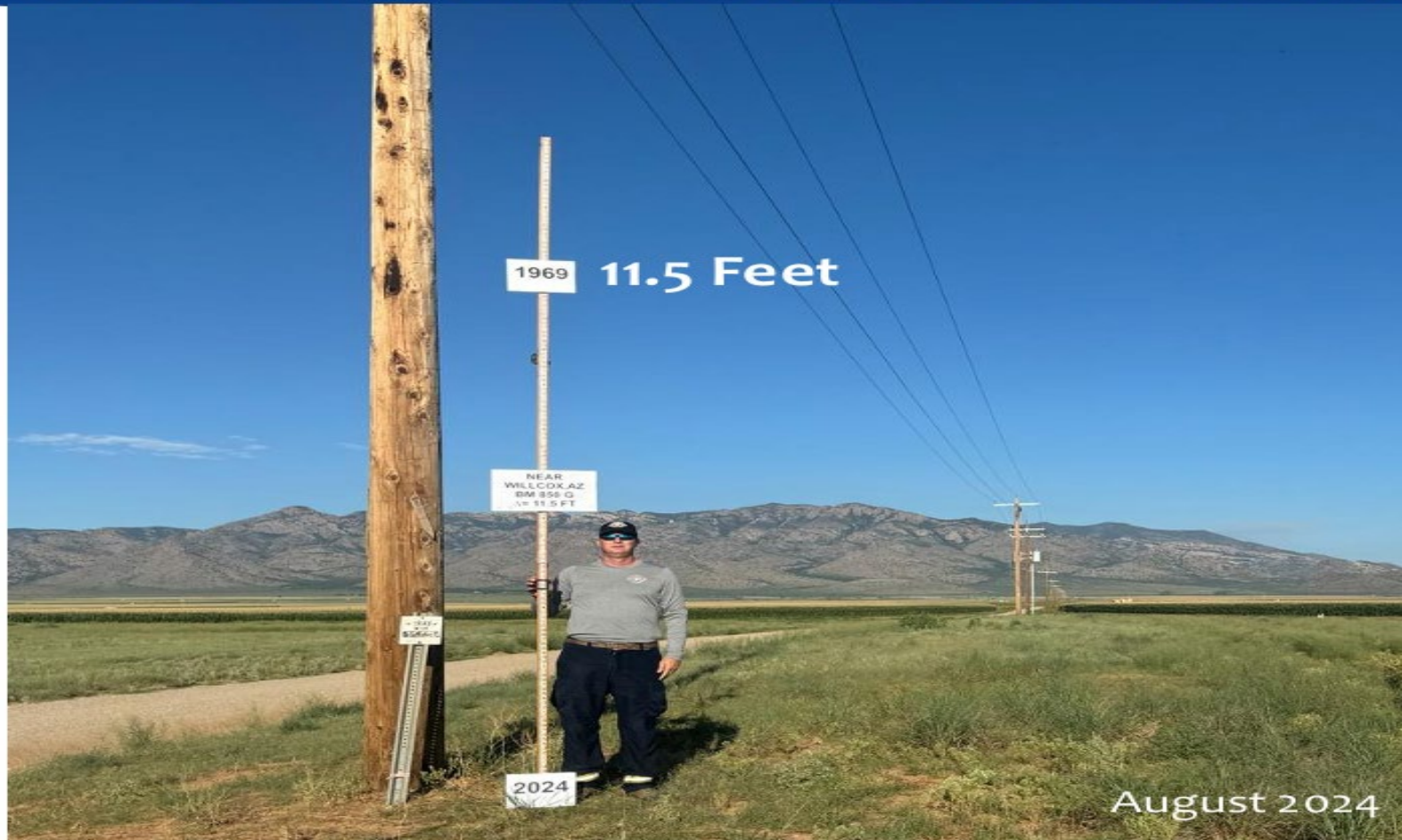
Earth Fissures in Willcox



**Willcox Subsidence
Causes Fissure Growth.**

Fifty miles of Fissures mapped in the Willcox Basin

Land Subsidence in Willcox Basin



August 2024

35

Willcox Subsidence - Causes Fissure Growth.

Fifty miles of Fissures mapped in the Willcox Basin

March 27, 2024

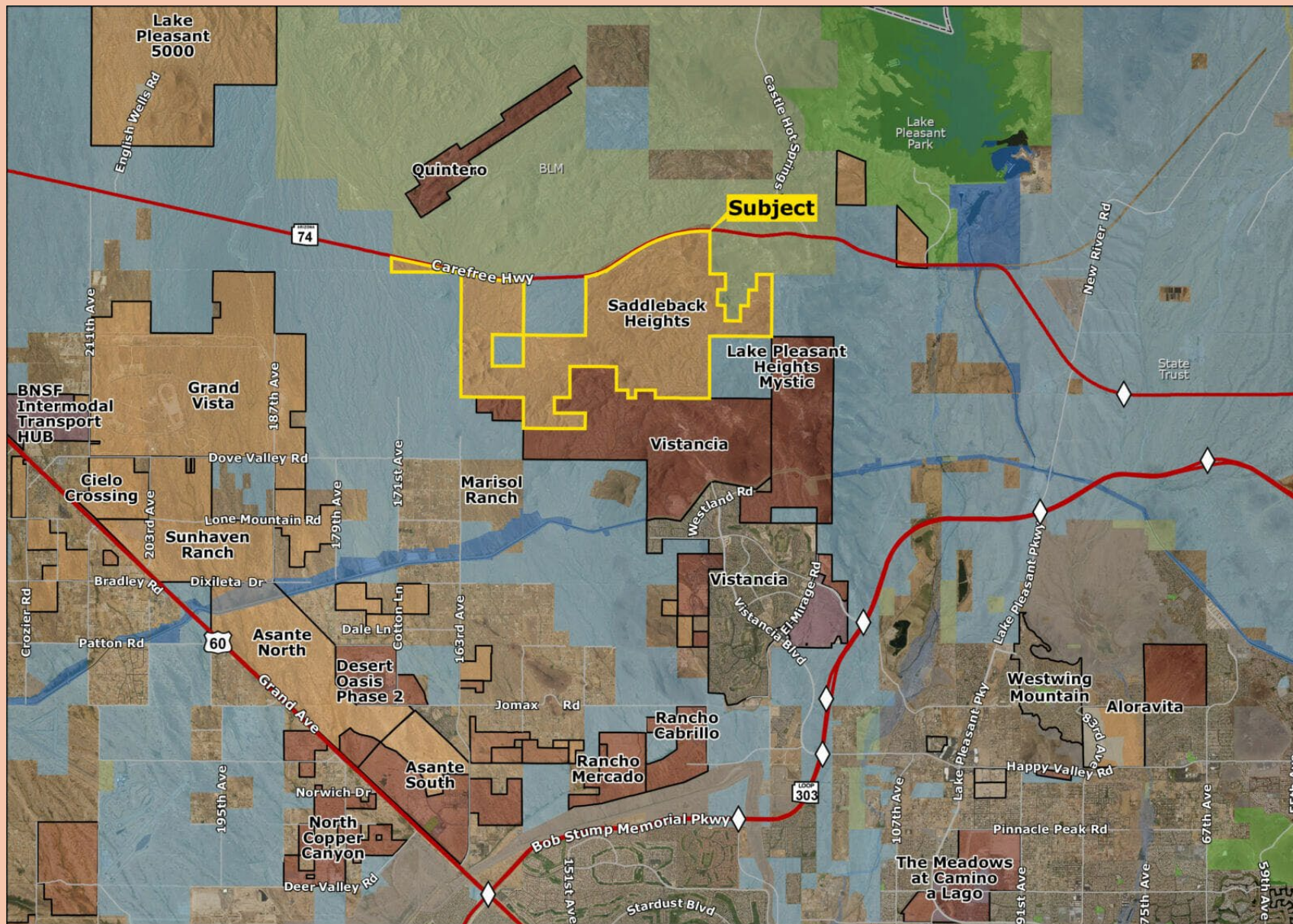
Facility Details



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

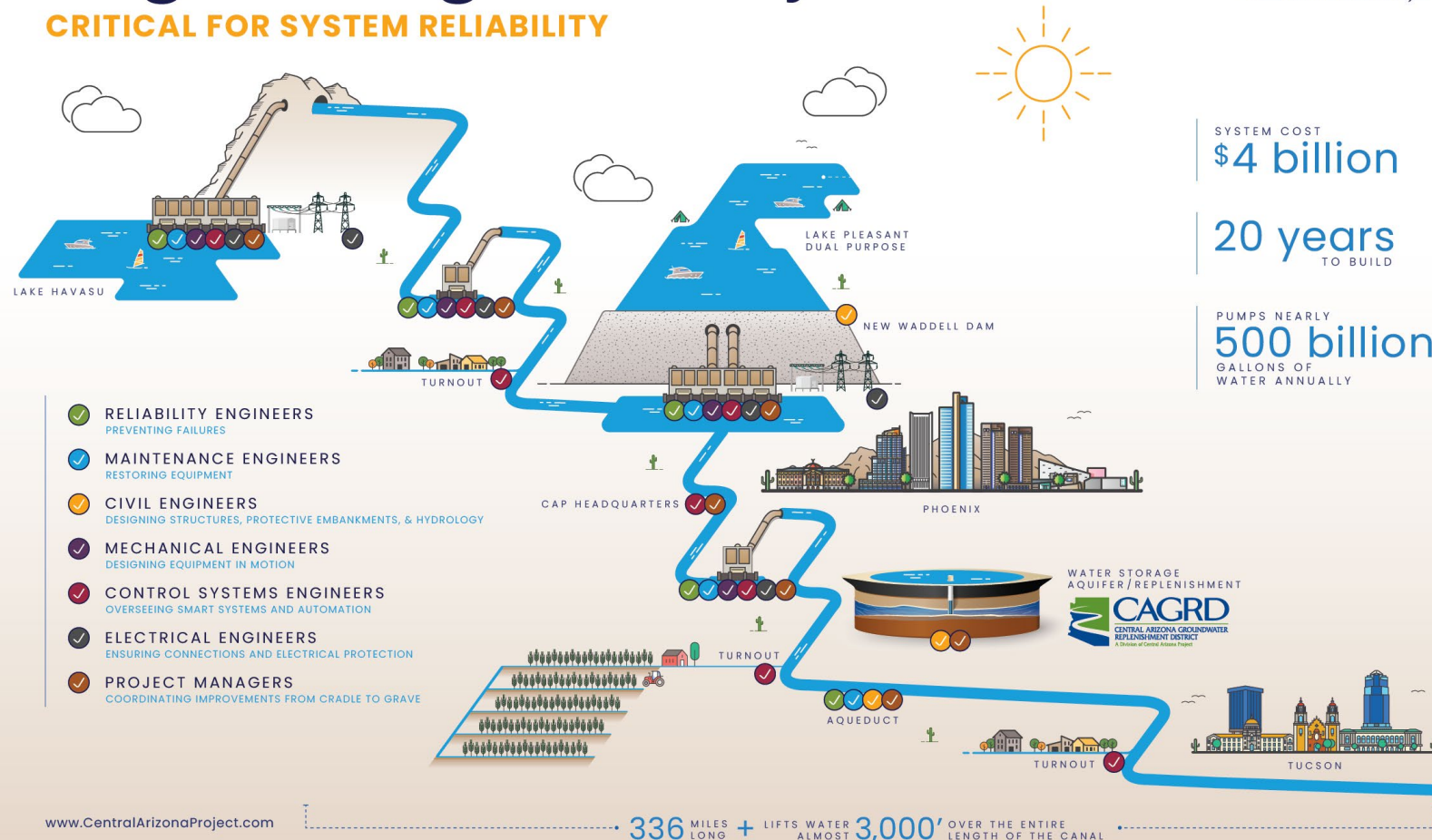
Amkor Facility: Test, Package, Ship Semiconductor Chips from TSMC for Apple, etc.



Saddleback Heights: 5,261 acres. Proposed Master Planned Community

Engineering Diversity

CRITICAL FOR SYSTEM RELIABILITY



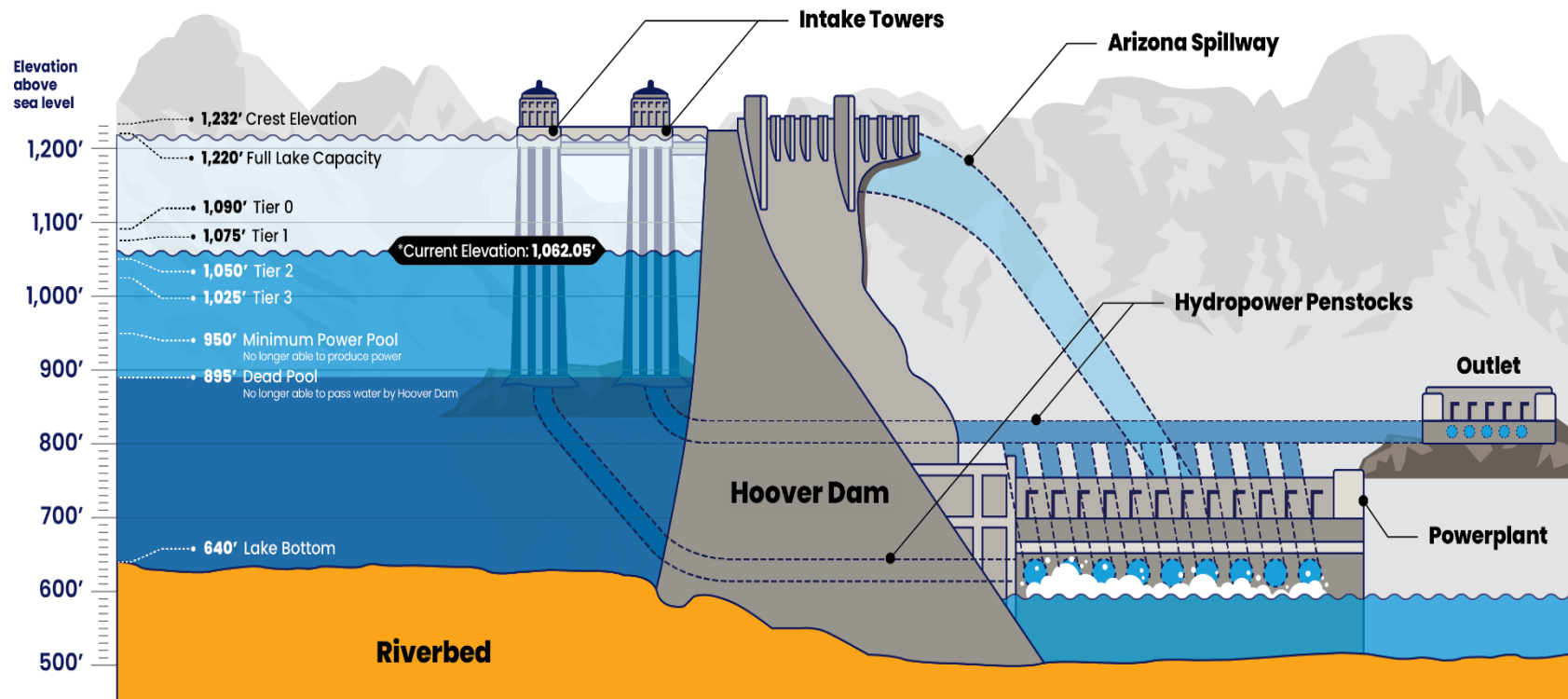
Central Arizona Project Canal - 336 miles.
Cost \$4 Billion , Completed in 1993.



**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



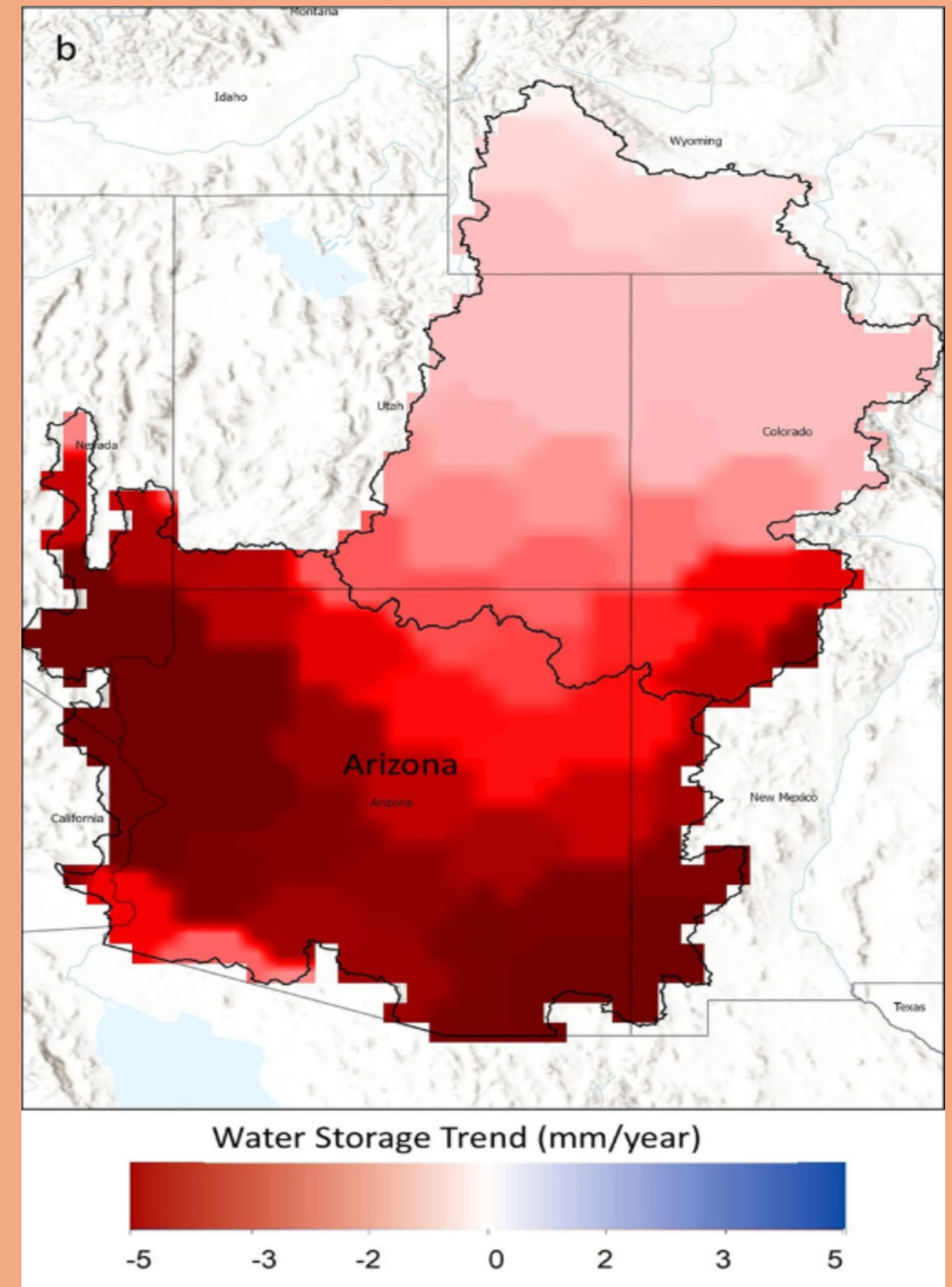
NOT TO SCALE: *Current Elevation as of August 8, 2023

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..





**Groundwater Gone
Irrigation Failed to Shut-Off**

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**

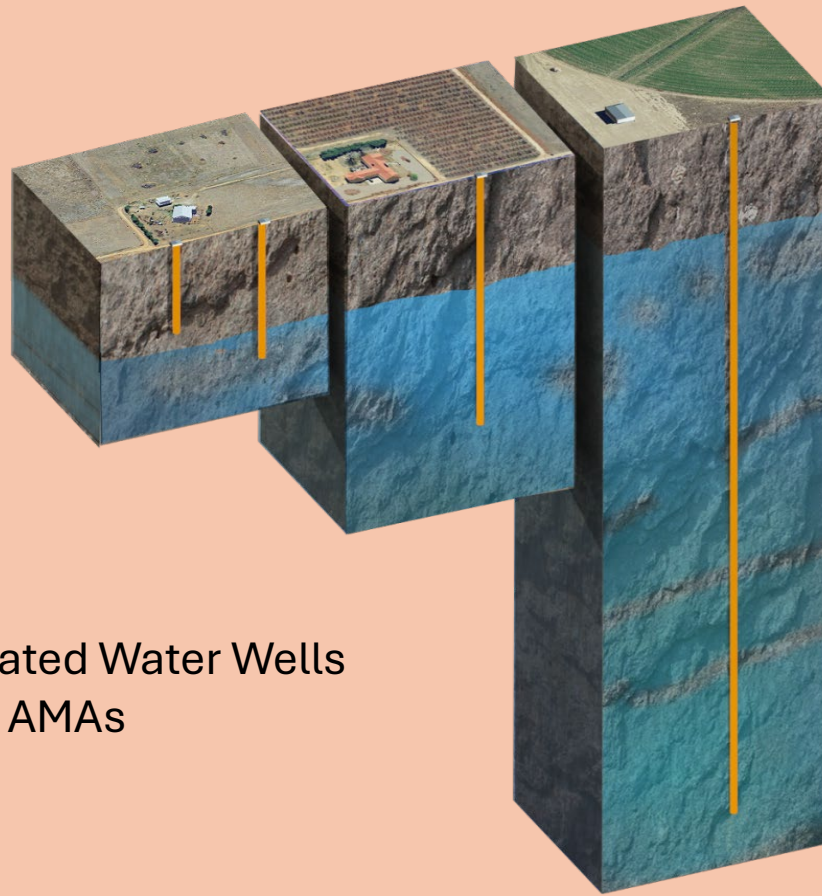


PORA Water Committee

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

Fugitive Water Offenders

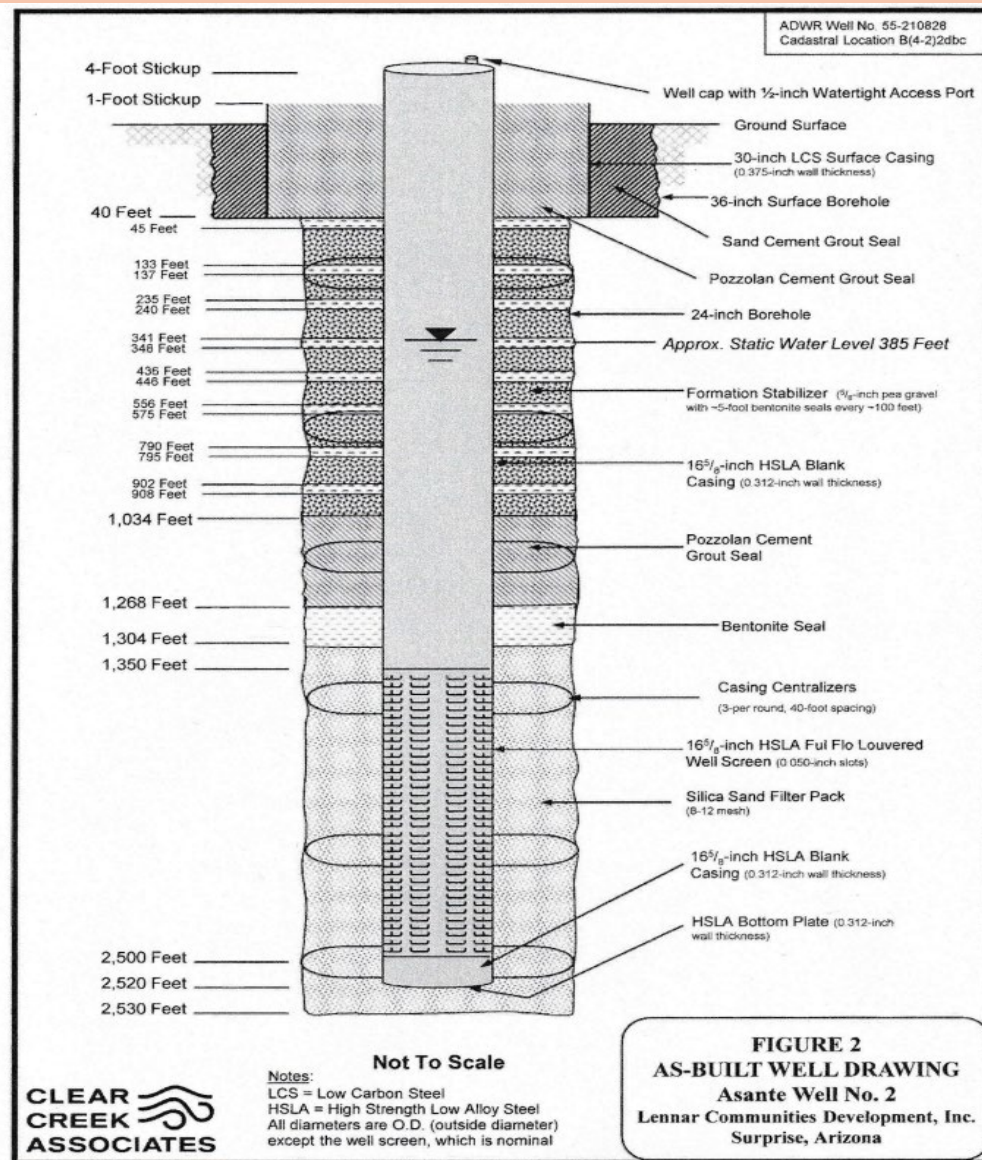
- Banner Health, Clinic “C”: 2 letters, 3 phone calls/messages
- MMAC 23 SCW: New owner for Clinic “C”
- Healthcare Realty: 3 emails + photo, 2 phone calls
- Mercado DSSC: Letter +photo
- Rec Center CC&R: Phone call
- AZ Eye Institute: Delivered Letter + photo
- Chase Bank: Personal visits (2) with Letter
- Solstice Senior Living: Personal visits (2) with Letter
- Sun West Choice: Personal visits (2) with Letter
- Bank of America: Personal visits (2) with Letter
- Heritage Traditions: Personal visit
- Phone calls and drive-by's: Many



Unregulated Water Wells
Outside AMAs

Groundwater Pumping

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



North Surprise - Asante Water Well

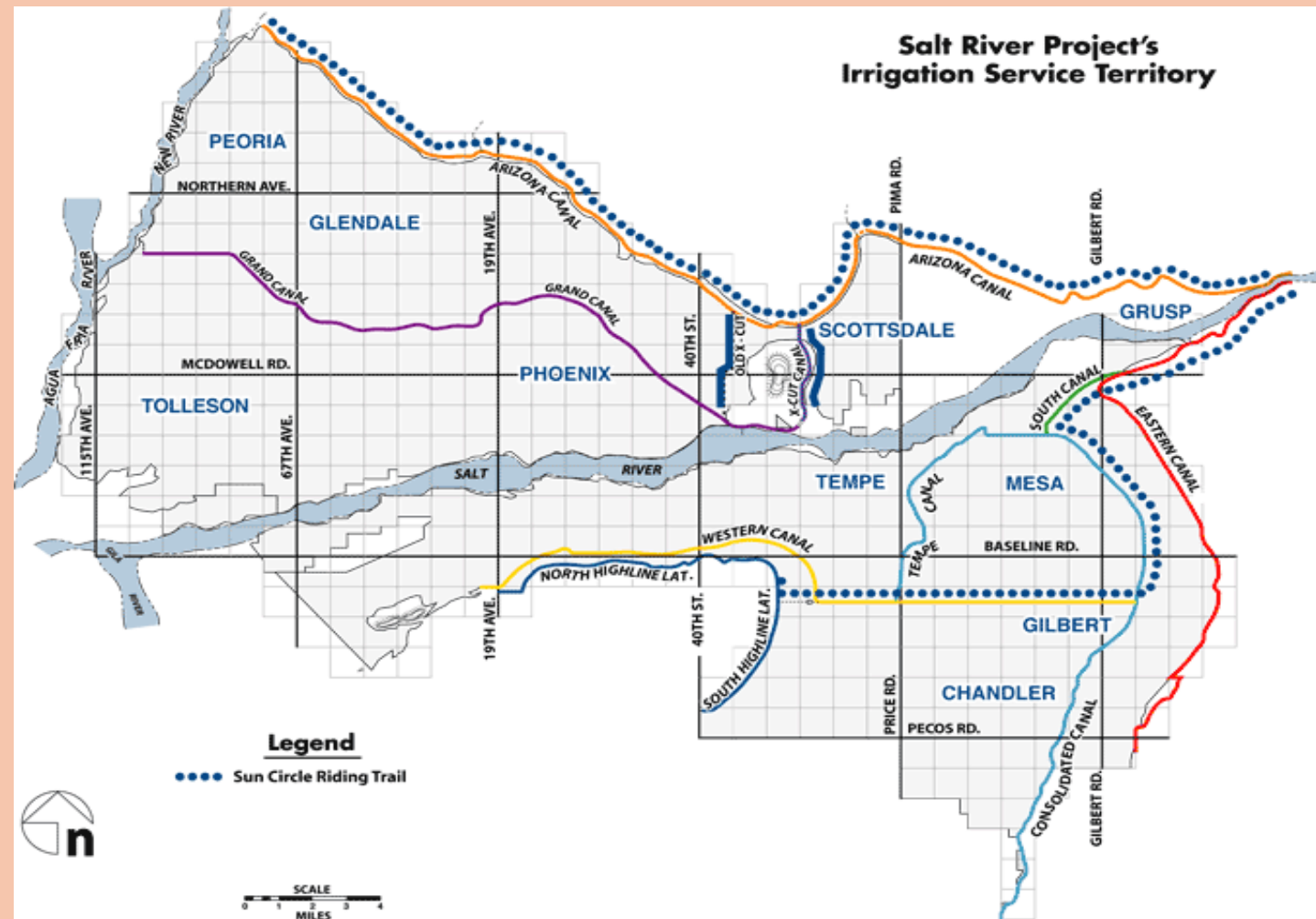


Lake Powell
Reaching Historic Low Level



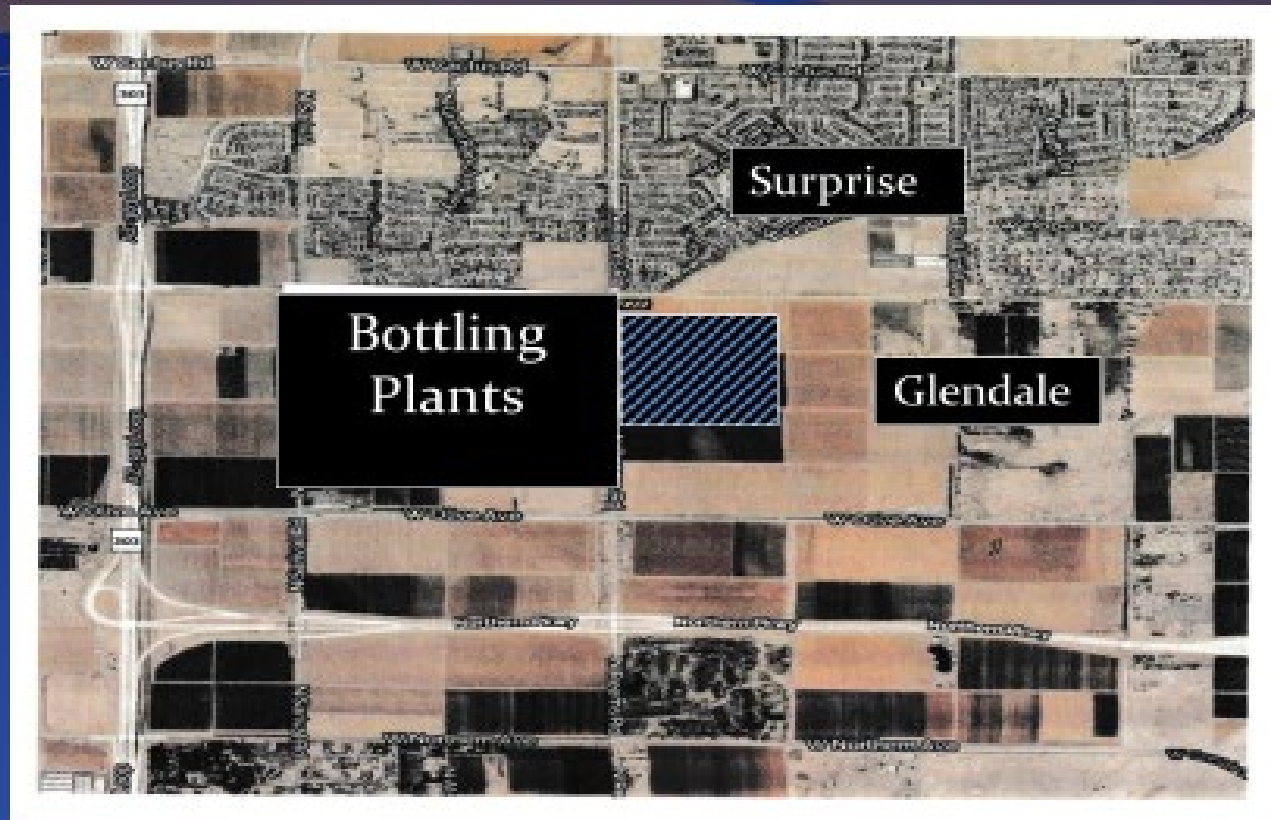
Beyond the Mirage

**"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



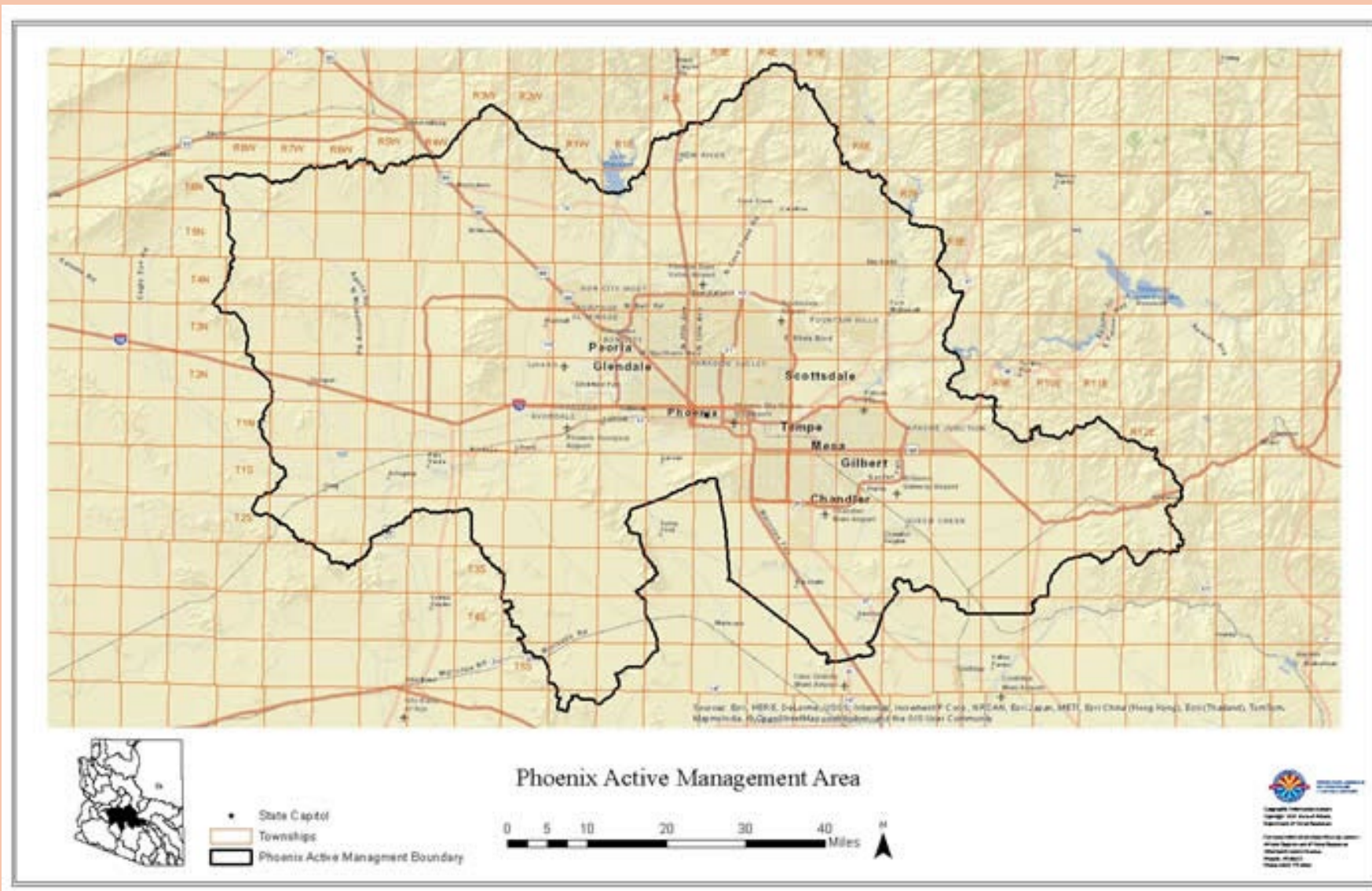
Surface Water & Groundwater

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

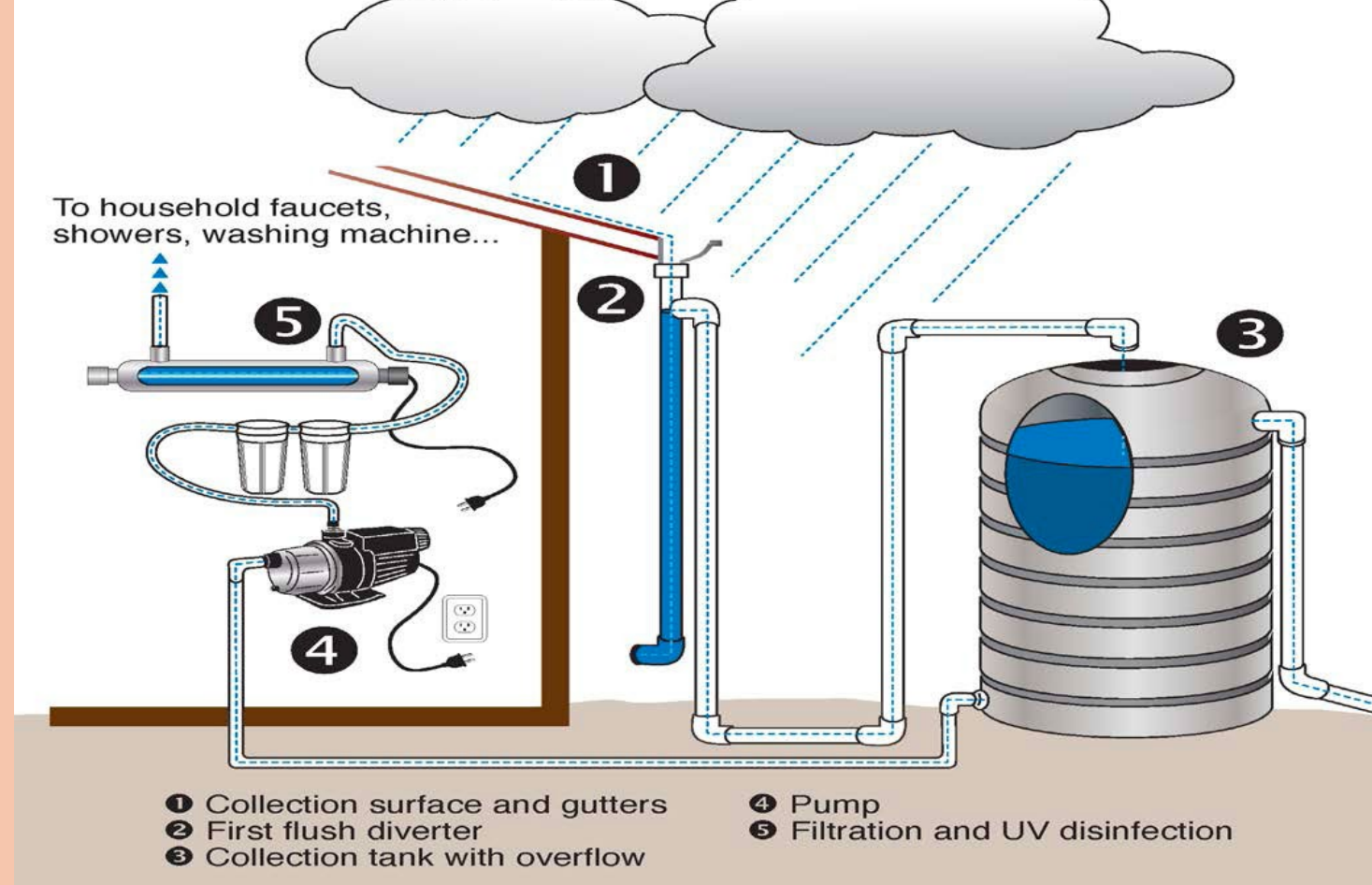


Water Conservation Kit

Available by Request on Internet At
“Water Conservation Kit-Epcor”



Phoenix AMA Model



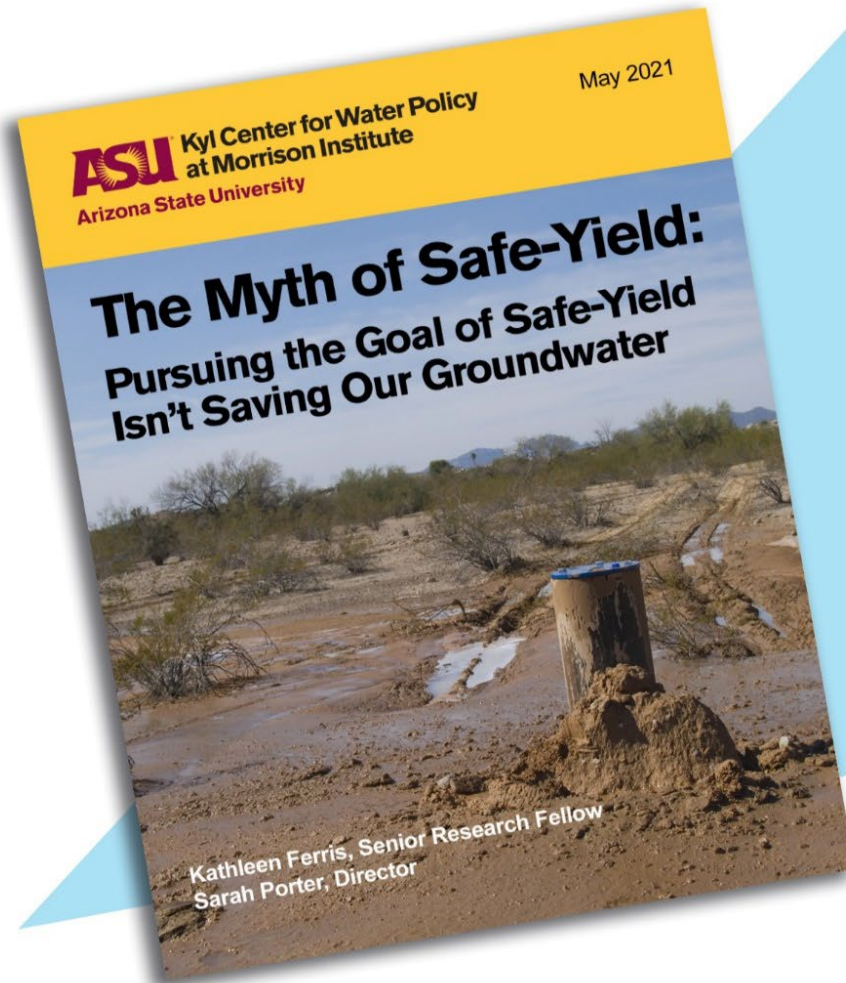
Rainwater for Potable Use

Basic Capture and Treatment System

PFAS:

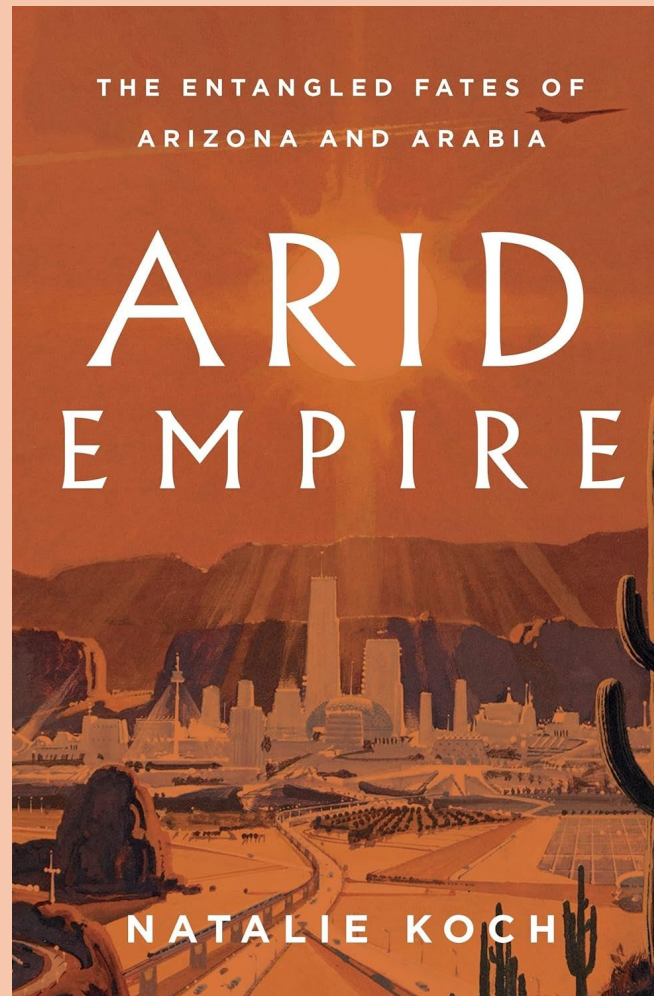
One part per trillion (ppt) denotes one part per 1,000,000,000,000 (10^{12}) parts, and a value of 10^{-12} .

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 its 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.**

CREDITS

Information Presented in this Document has been Researched and/or Supplied by:

- **Arizona Department of Water Resources (ADWR):** *new.azwater.gov*
- **AZ Municipal Water Users Assoc.** *amwua.org*
- **Arizona Republic:** *environment.azcentral.com*
- **Joanna Allhands:** *joanna.allhands@azcentral.com*
- **Water Resources Research Center:** *wrrc.arizona.edu*
- **Cap-az.com; Central Arizona Project**
“knowyourwaternews.com”.
- **Beyond the Mirage, documentary by Arizona Public Media, PBS, U of A:** *beyondthemirage.org*
- **H2O, The Molecule that Made Us:** *PBS documentary*
- **Kyl Center for Water Policy at ASU**



Water Recharge

**Recharge Basin for Reclaimed
Wastewater or Excess CAP Water**



Groundwater Pumping

Typical SCW Water Well-200+ Hp Motor.
Approximately 1000 feet deep. These wells provide
100% of SCW water.



Groundwater Depletion

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



Groundwater Gone
Irrigation Leak in SCW



Groundwater Gone
Irrigation Leak Continued



Groundwater Gone
Swimming Pool Draining in SCW



Medical Clinics – Leak Area