

PORA WATER COMMITTEE

Notes for
Meeting
06-17-2025



**Your PORA
Water
Committee
PowerPoint**

WWW.PORASCW.ORG/water



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

WWW.AMWUA.ORG

CAGR D Blog

Fugitive Water at Mercado Shopping Center

Reported by your
Fugitive Water Sheriff



Fugitive Water at Echo Mesa and Alta Loma Dr.

Reported by your
Fugitive Water Sheriff



Fugitive Water at R.H. Johnson and 132nd Ave.

MCDOT

**Reported by a new
Fugitive Water Deputy**



**Other Water
Issues
Facilitated
by PORA**

**Water meter leak at
144th Drive: Repaired
by EPCOR.**

**HOA Turf Removal
Request/Rebate:
Expedited by Tom
Harrel (EPCOR).**

EPCOR Data for Sun City West

Average Demand for Potable Water is 4.5 million gallons per day.

In the Summer it can Average 6.3 million gallons per day and Peak at 10 million gallons per day.

200 miles of Pipe, 1200 Fire Hydrants.

Wastewater System contains 180 miles of Pipe.

2700 Manholes

All is Treated and Sent to the Recharge System.

Some Areas of the System are 40 years old and Require close Supervision and Maintenance.

Conservation items: watch your Water Bill, Check for Leaks in Irrigation System and in the House.

Excess CAP Water = ZERO

Agricultural = ZERO

Municipal/Industrial = - 3%

Tribal = - 7%

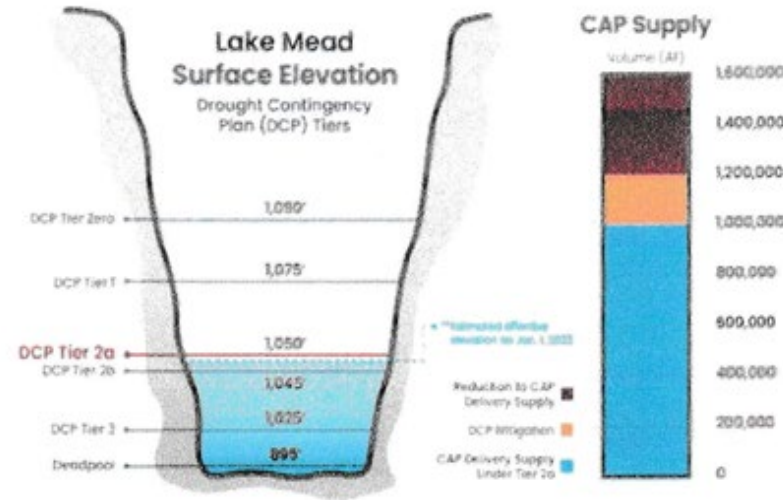
Tier 2a shortage: CAP reductions

SHARE THIS POST

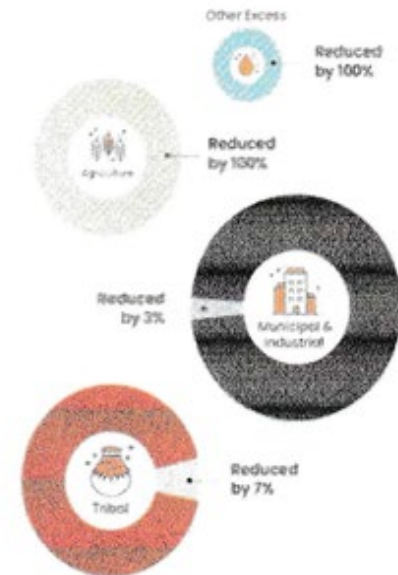


2023 Tier 2a Shortage

CAP Delivery System under Tier 2a



2023 Reductions to CAP Contract Categories



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

**The overflow elevation is estimated. Tier 2a is a 100% reduction in lake level. The proposed 2023 overflow elevation is 1,045'.

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

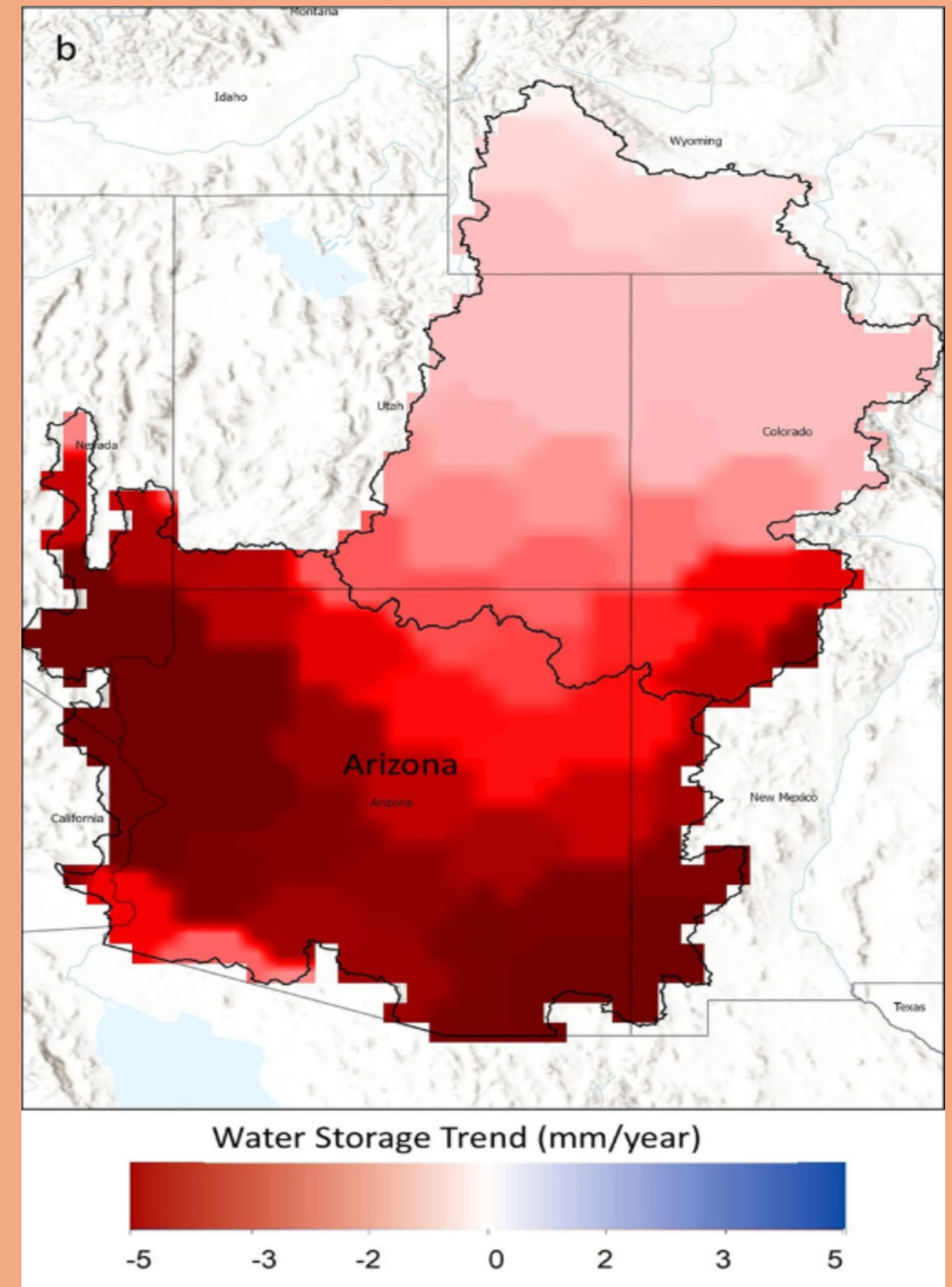
Lake Mead Projections: Tier 2a Allotments:

**Arizona relies on
Groundwater for 41% of its
Water.**

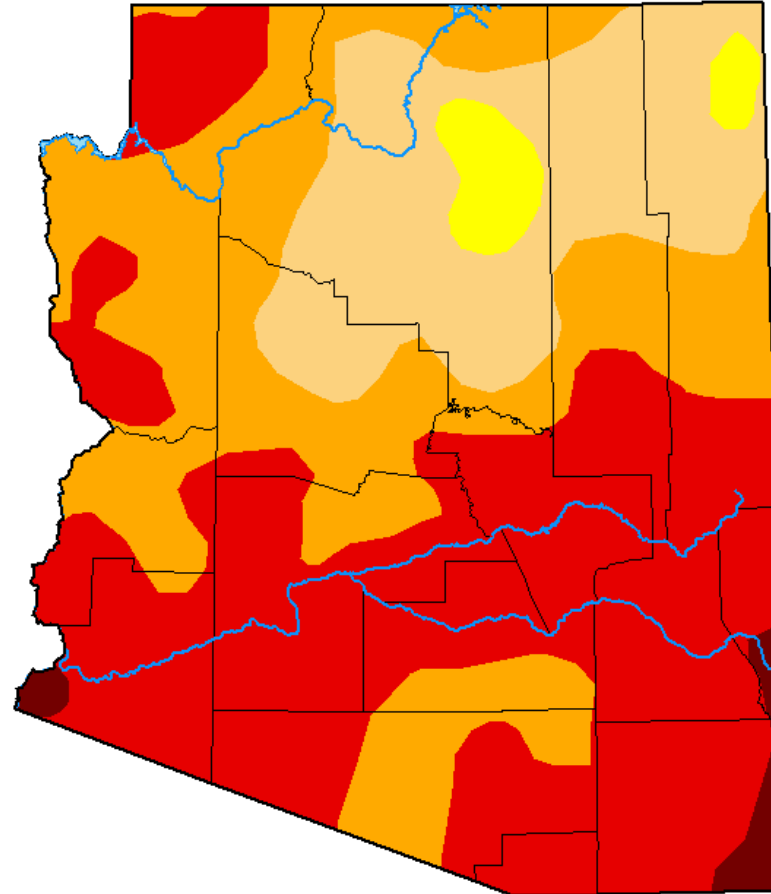
**In rural Arizona
Groundwater levels have
dropped significantly over
the past two decades.**

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..



U.S. Drought Monitor Arizona



June 10, 2025

(Released Thursday, Jun. 12, 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	97.33	77.85	47.08	1.70
Last Week 06-03-2025	0.00	100.00	97.33	79.20	54.91	2.15
3 Months Ago 03-11-2025	0.00	100.00	99.13	88.02	55.40	7.21
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 06-11-2024	28.69	71.31	19.98	3.12	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:

Lindsay Johnson
National Drought Mitigation Center



droughtmonitor.unl.edu

Arizona Weekly Drought Monitor

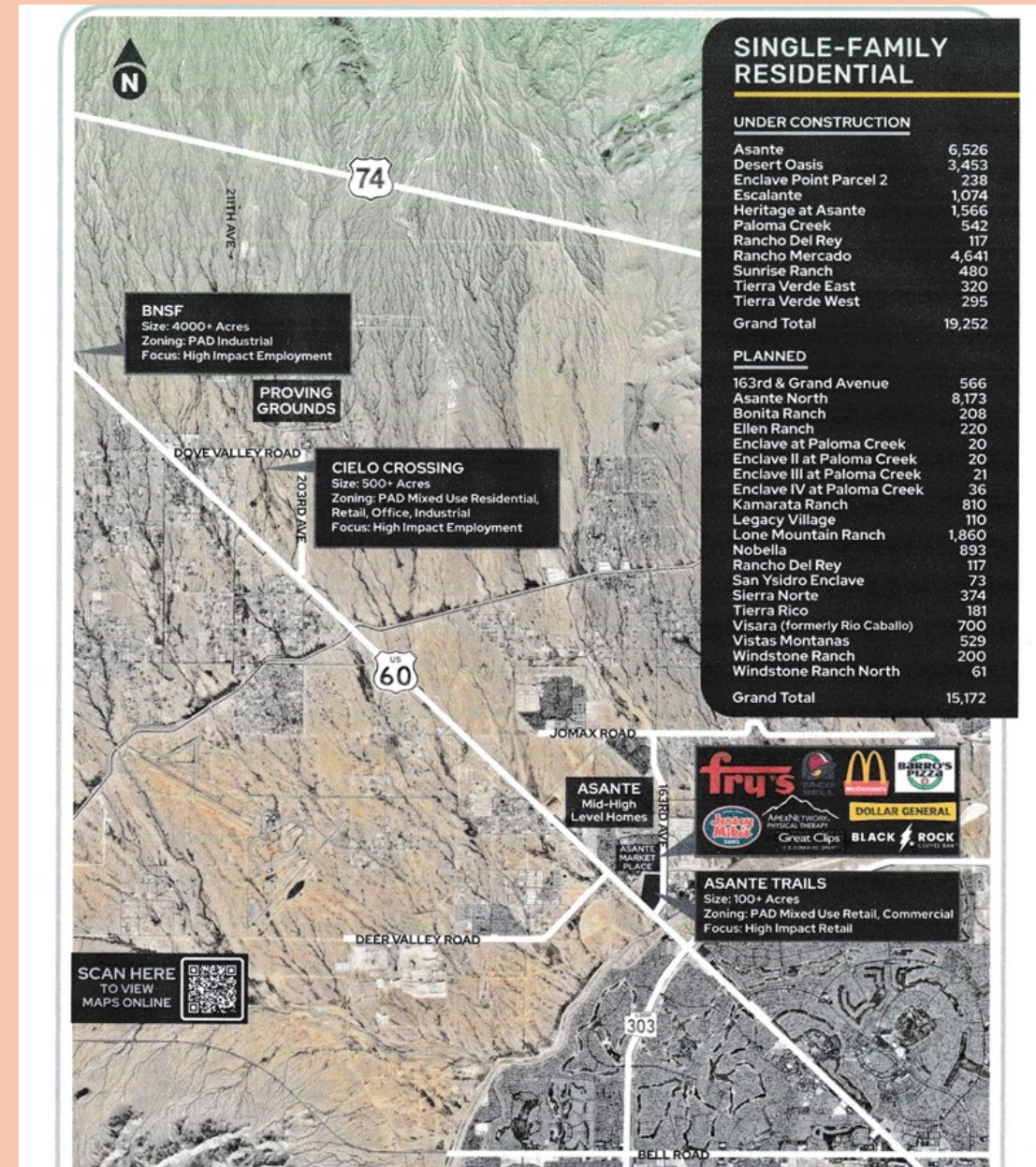
North Surprise Development Plans

19,252 Residences Under Construction

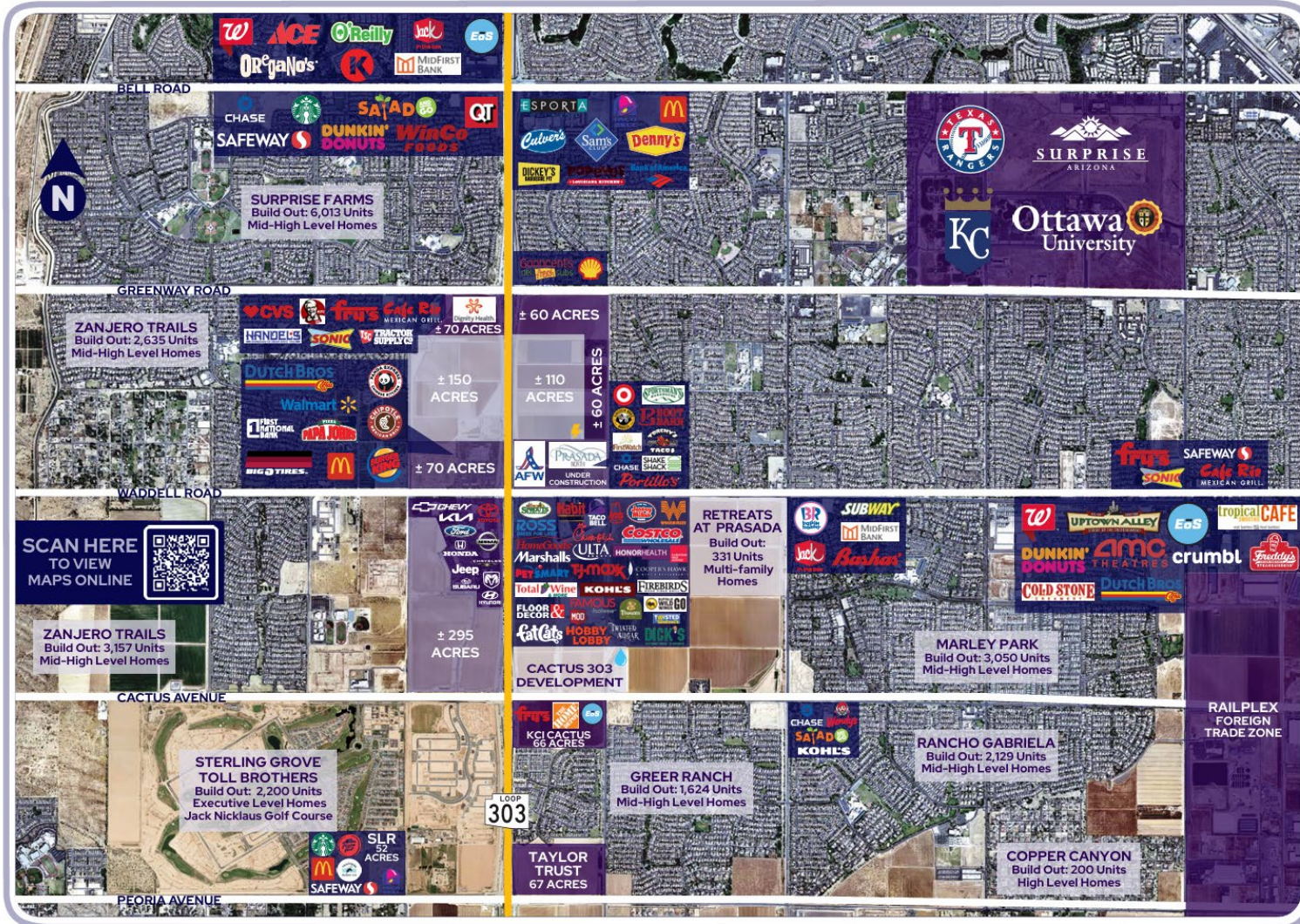
15,172 Additional Residences Planned

Estimate 2.5 persons per household = 86,060 people.

Maybe 86,000 cars???



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



SCAN HERE
FOR LOCAL
AND ONLY IN
SURPRISE DINING



CONNECT
&
FOLLOW



SURPRISE
ECONOMIC
DEVELOPMENT



@SURPRISECONDEV



SURPRISE
ECONOMIC
DEVELOPMENT



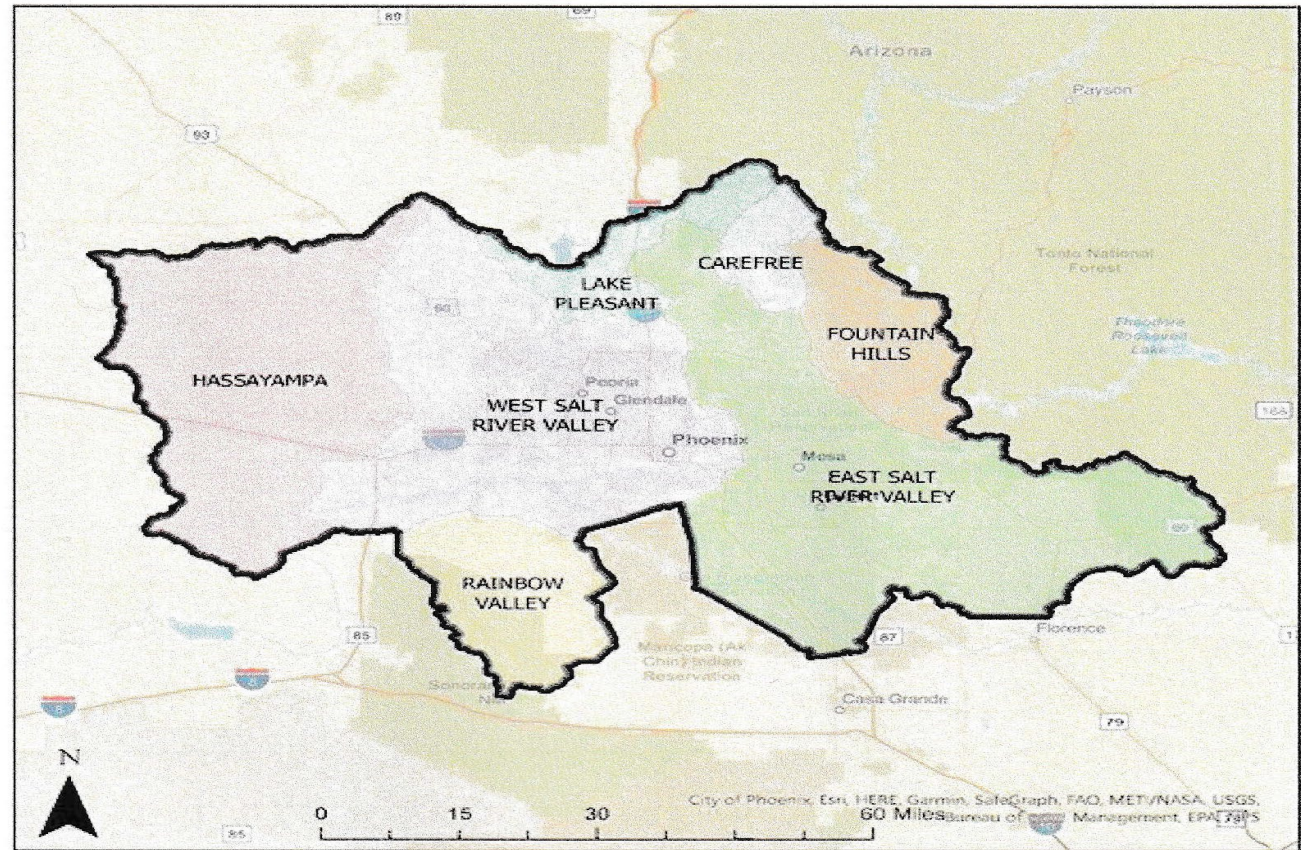
SURPRISE ECONOMIC
DEVELOPMENT



H₂O the Molecule that Made Us

Major Sub-Basins in Phoenix AMA

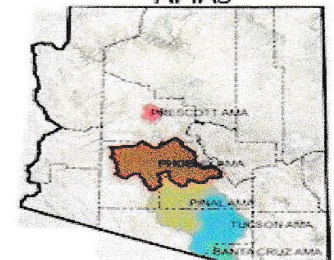
Figure 1-1 Phoenix Active Management Area and Sub-Basins



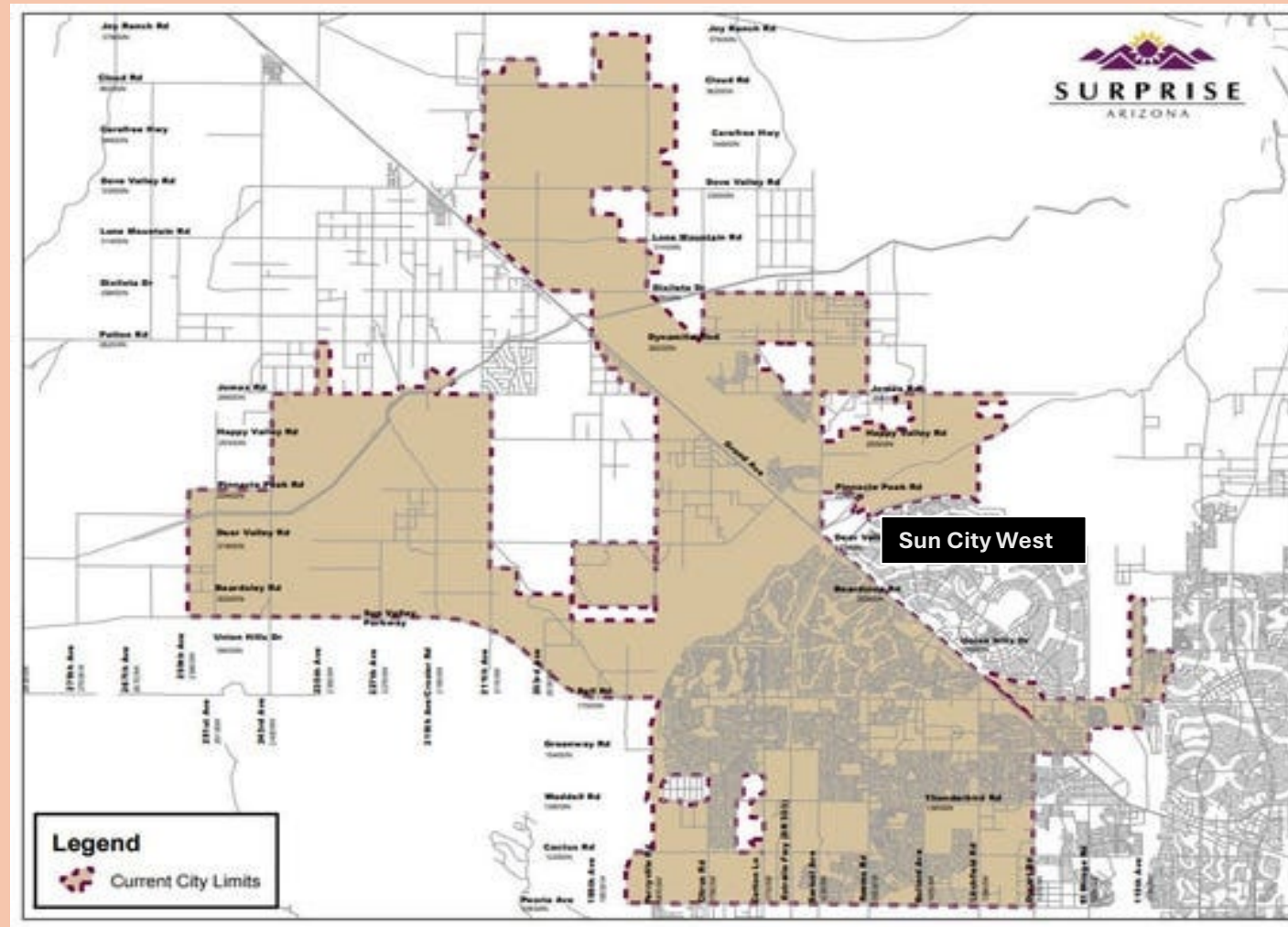
SUB-BASIN NAME

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

AMAs



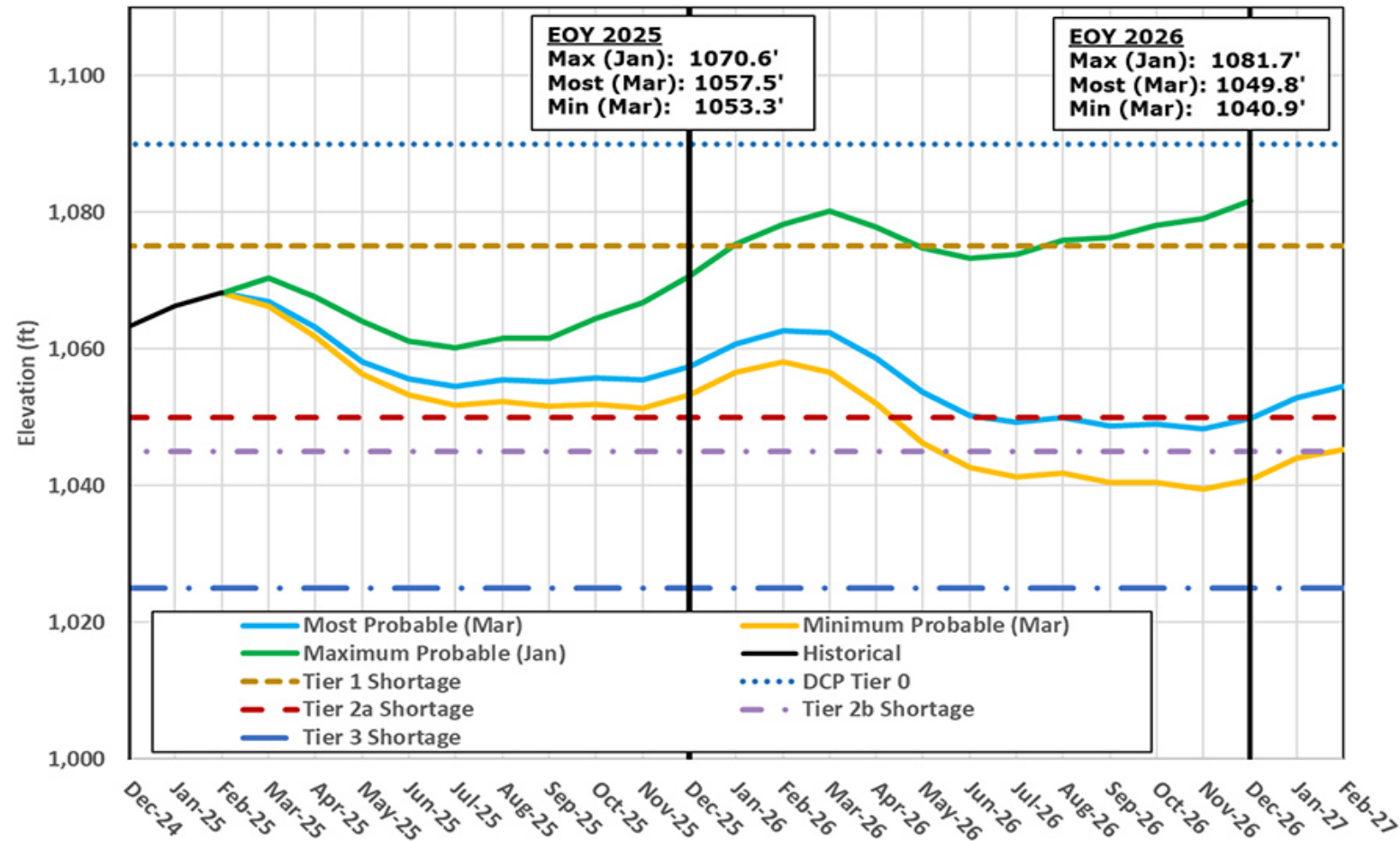
EXTRA SLIDES



City of Surprise.

Development Continues to the West and NW of SCW

Lake Mead End of Month Elevations
(March 2025 24-Month Study)



Lake Mead Projections: 2025-2027

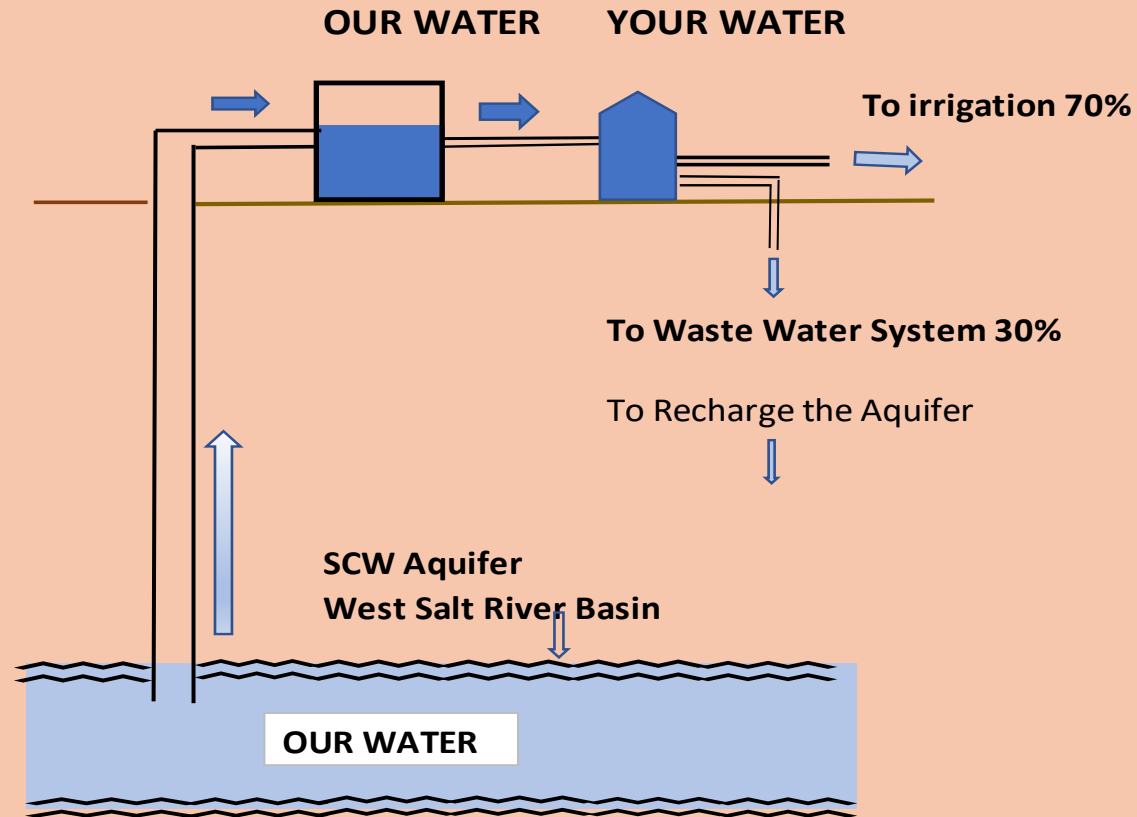
To Think About.....

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

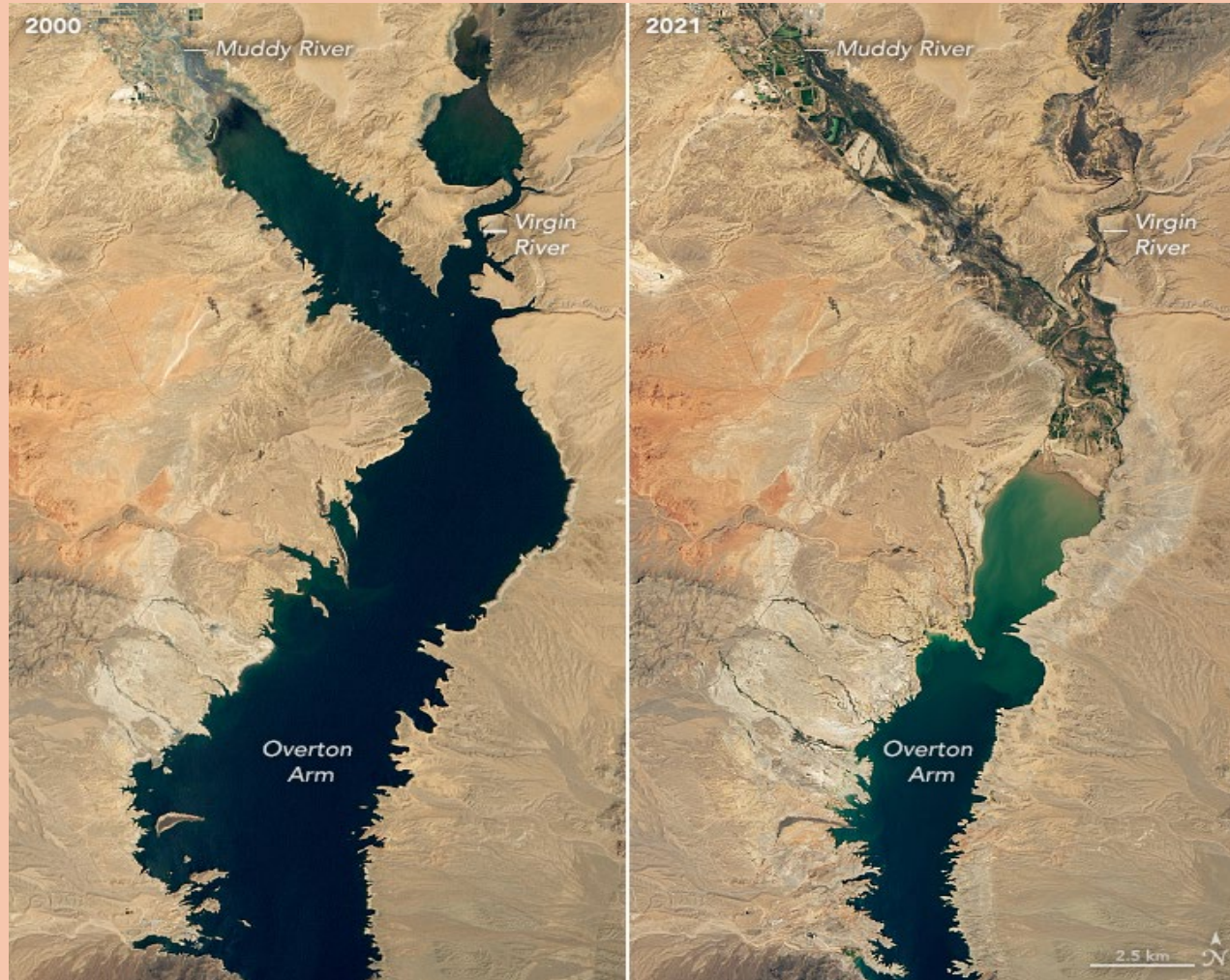
“Their profits depend on aquifer depletion. In other words, there is a multibillion-dollar corporate interest to prevent regulation and to pump the water until it’s gone.”

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

YOUR WATER IS OUR WATER



Groundwater Going



**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

Loop 303 – US 60 to ElMirage Interchange Study

LOOP 303, US 60 TO EL MIRAGE ROAD, TRAFFIC INTERCHANGE STUDY

ADOT and others are studying a new interchange location on the 303 to alleviate traffic issues for the Grand Avenue-303 and the Grand Avenue-163rd Avenue areas.

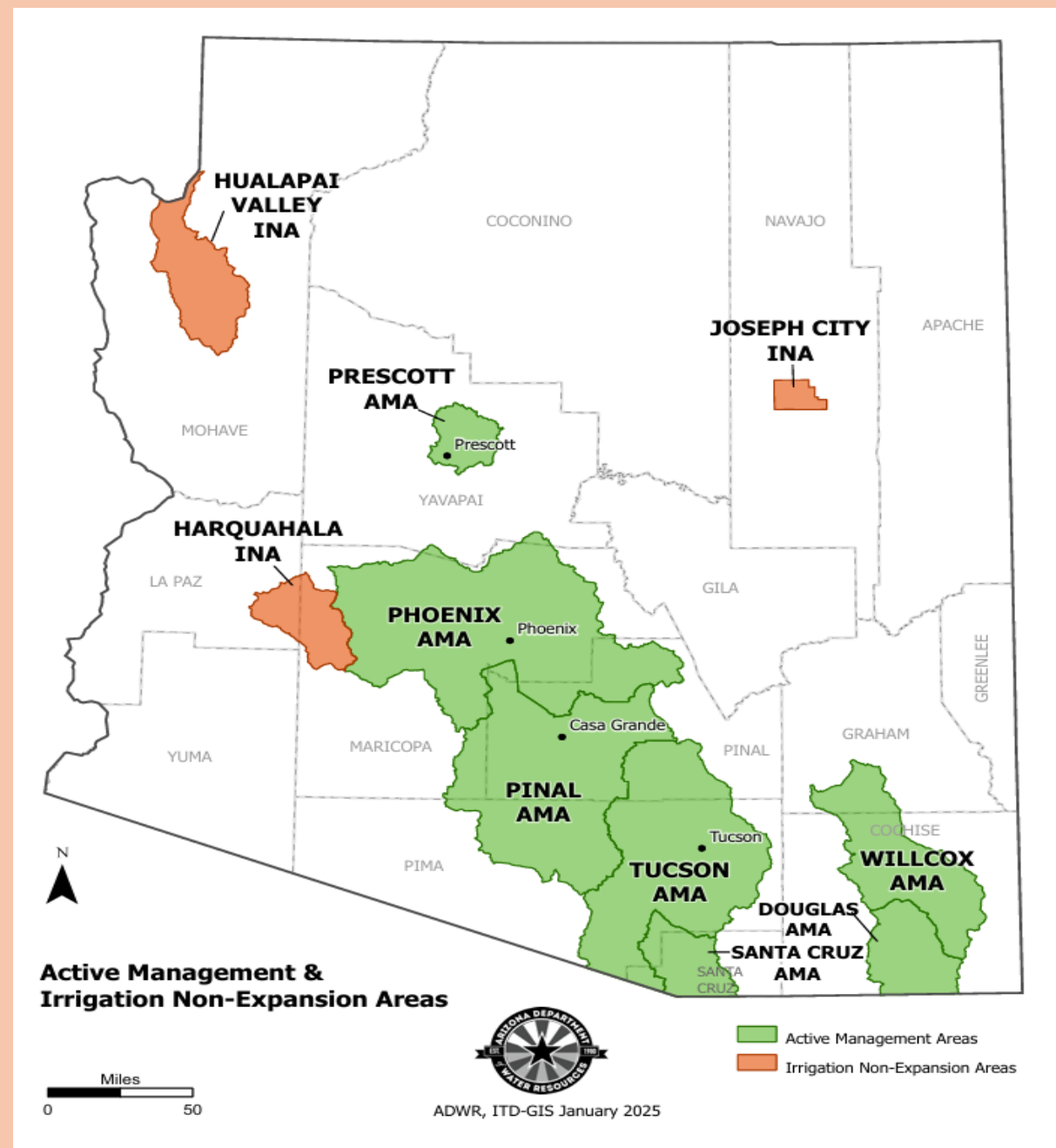
Presently 4 locations are proposed for study to serve the new communities north of the 303 and east of Grand Avenue. Traffic from these proposed locations will only go north. None will go south into SCW or Corte Bella. One of the alternatives will be selected in Spring 2025, however no timeframe nor funding for the selected interchange is currently available.

More information is available on the internet at <https://azdot.gov>.

You may email gluna2@azdot.gov to receive project updates



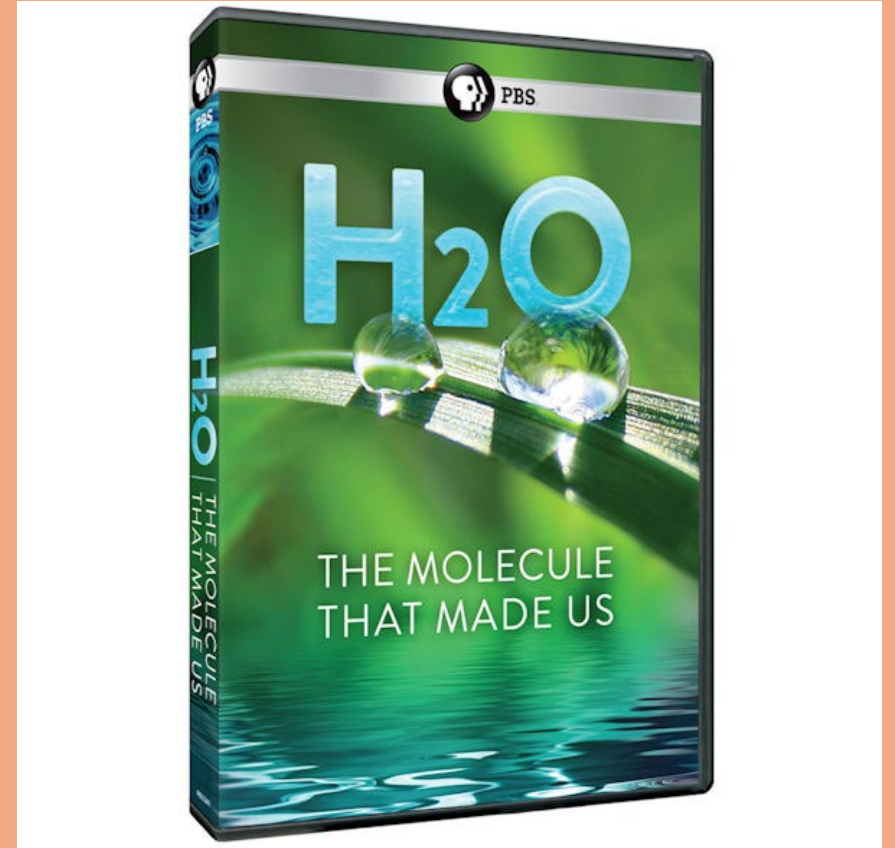
Arizona Active Management Areas



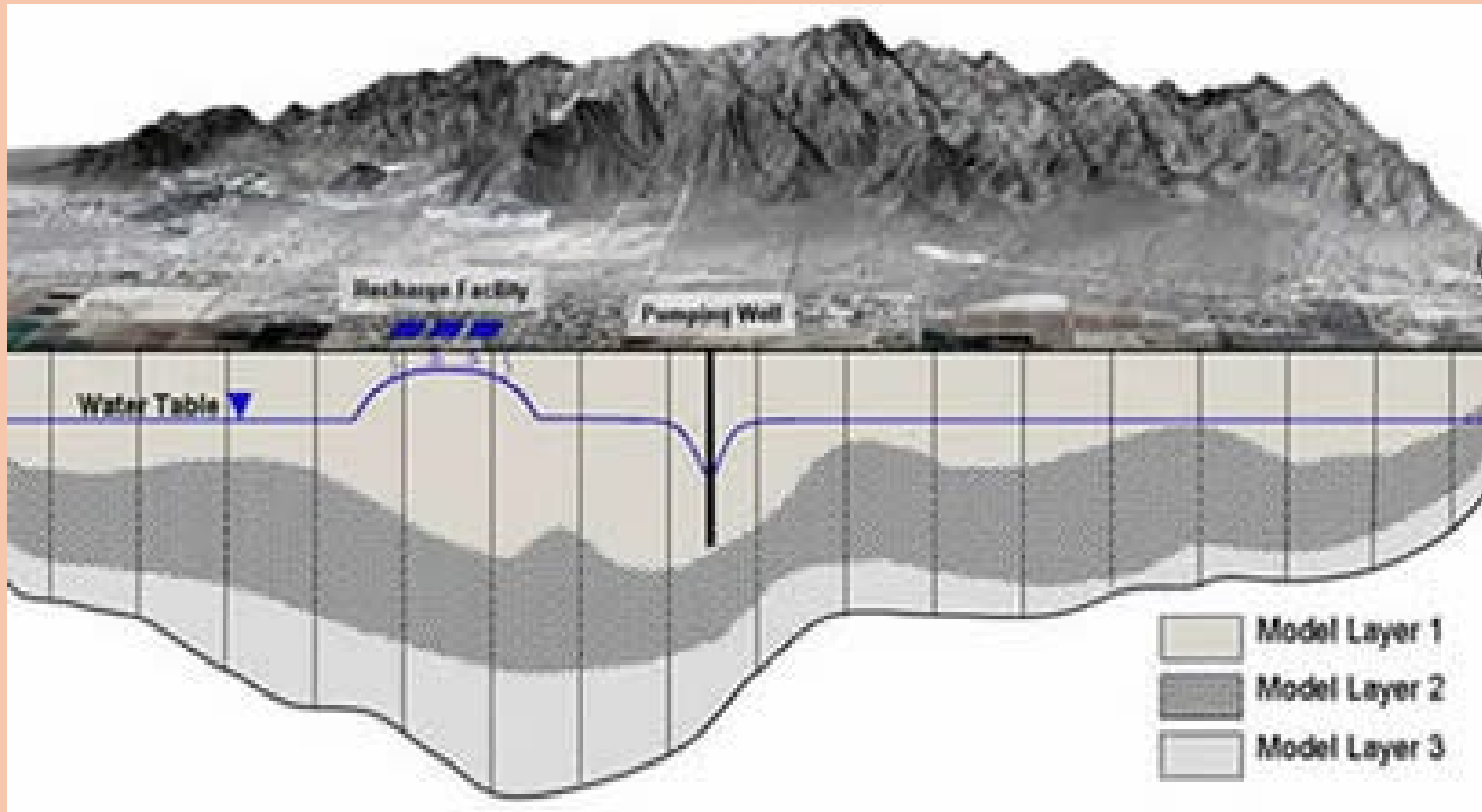
Water Presentations:



Beyond the Mirage- Feb. 11th



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



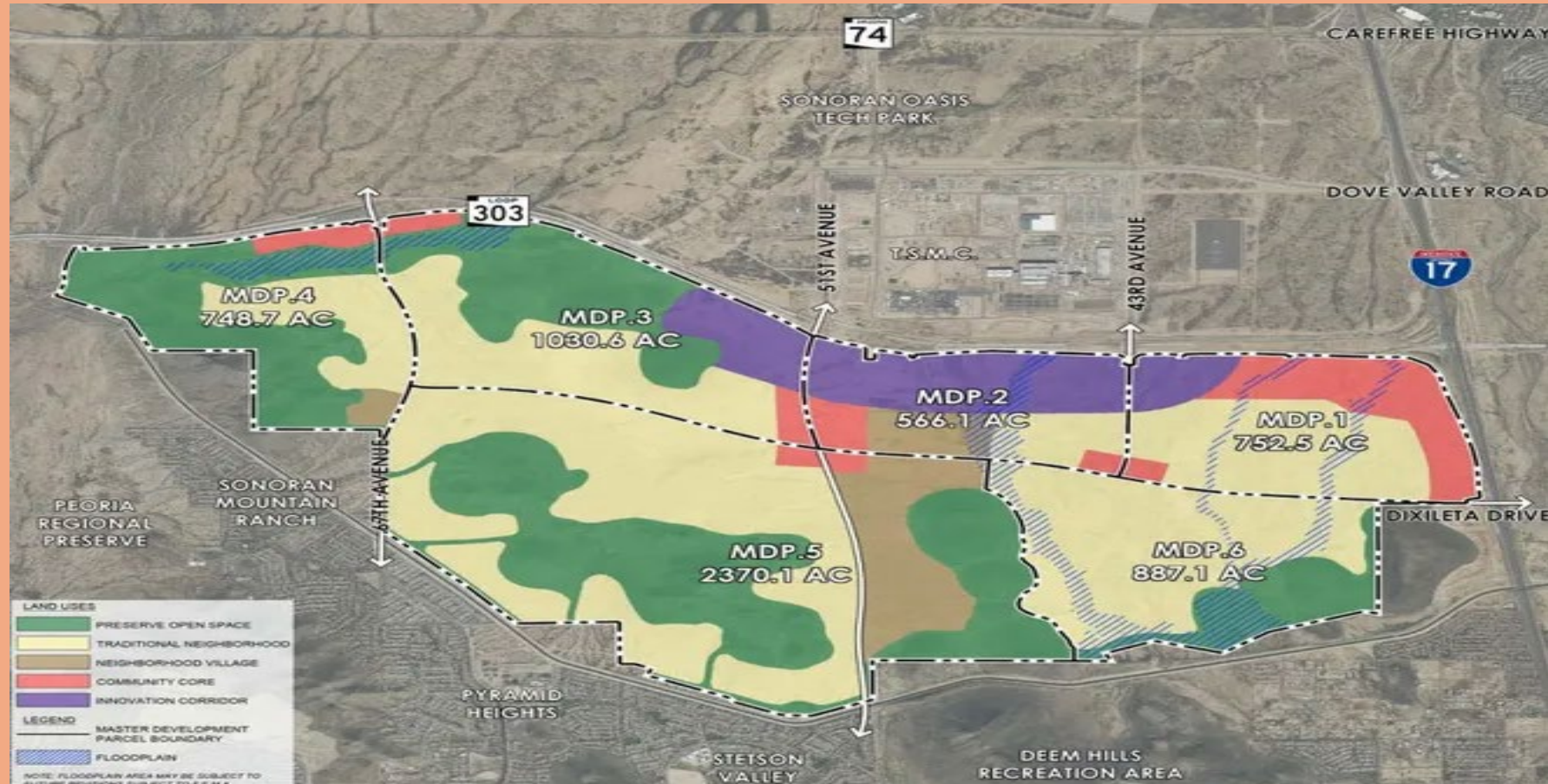
Groundwater with Recharge

Development Near TSMC



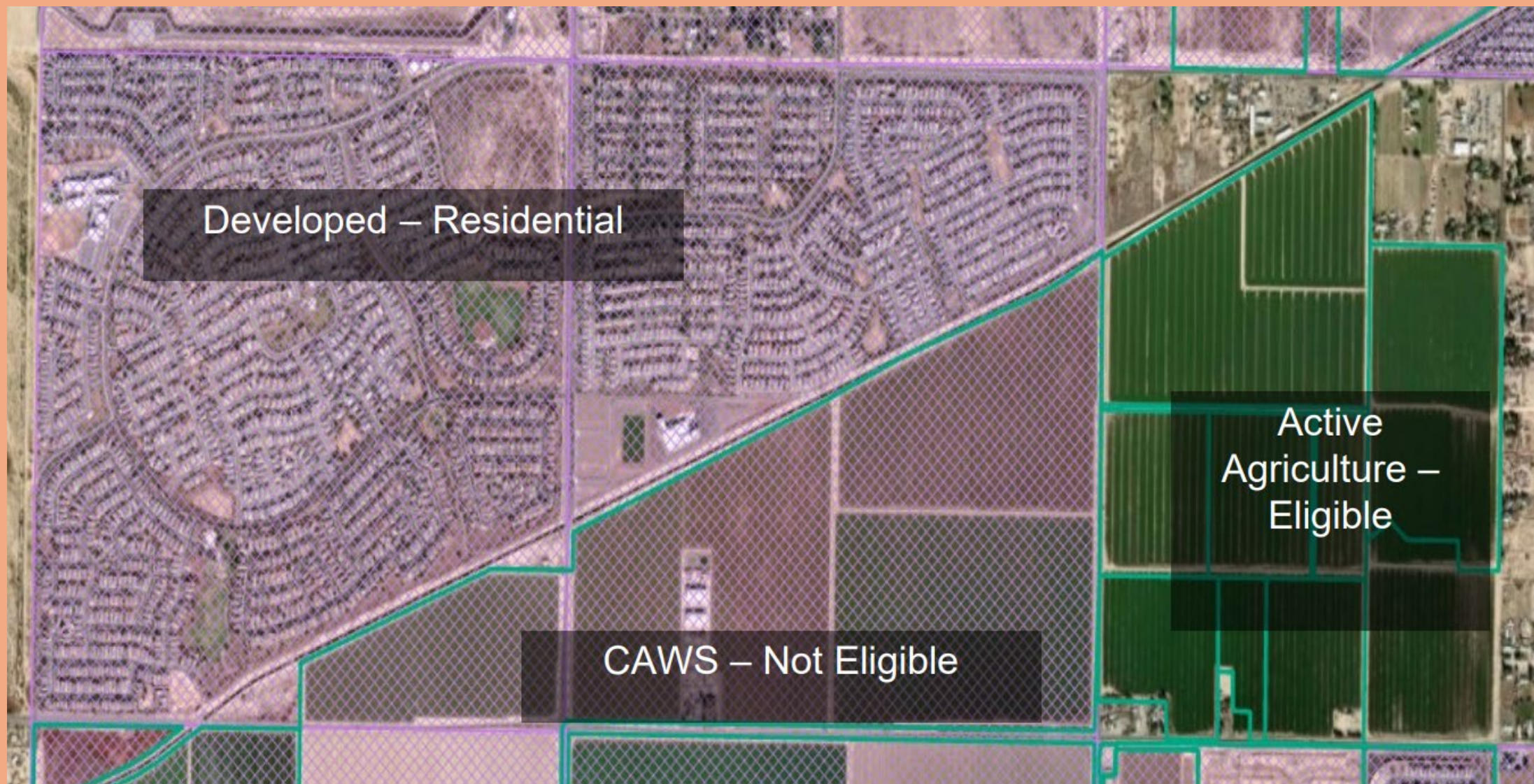
**Mack Real Estate Group: “Halo Vista” 2,300 acres
Industrial and Residential “silicon valley”**

Development Near TSMC



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

AG TO URBAN



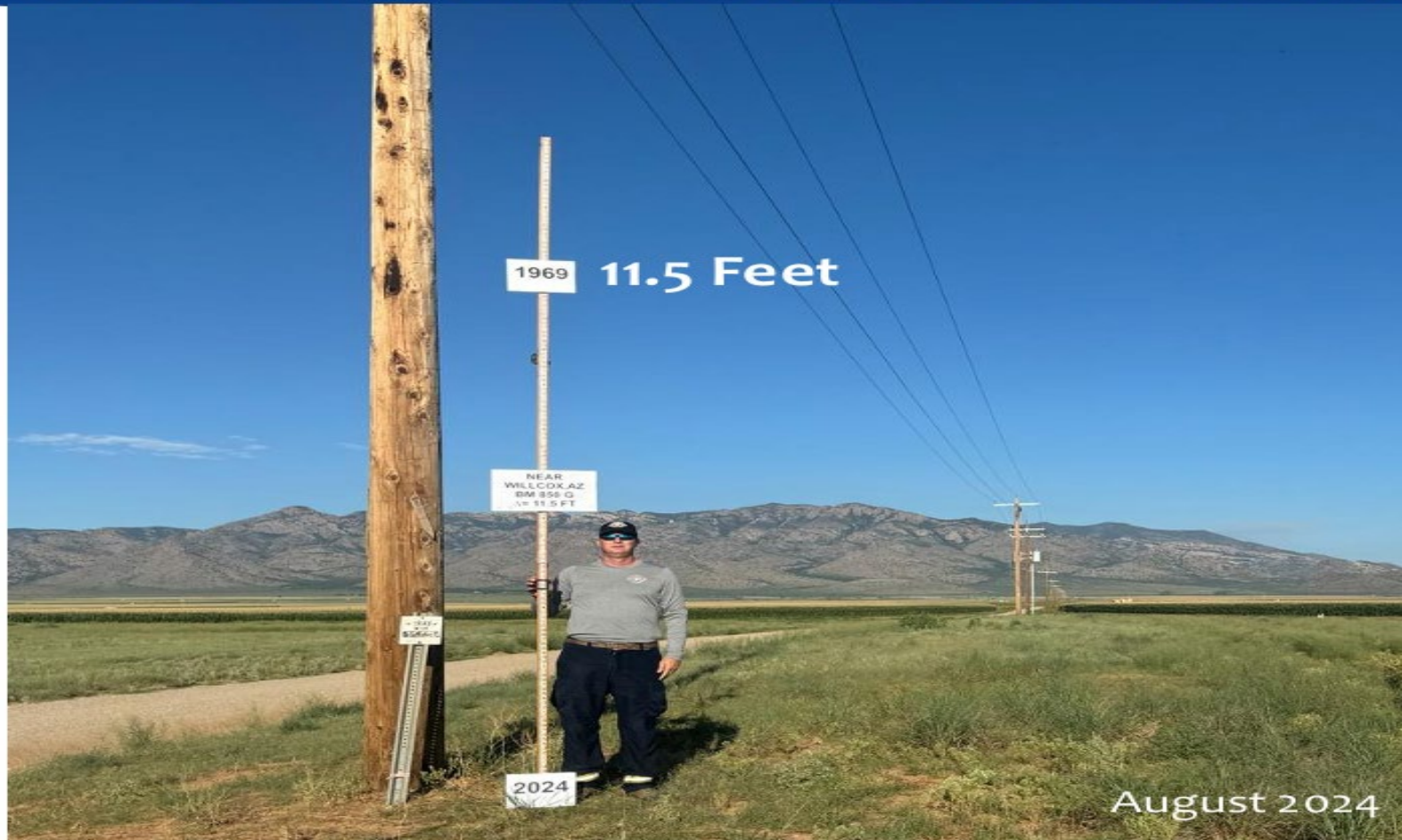
Earth Fissures in Willcox



**Willcox Subsidence
Causes Fissure Growth.**

Fifty miles of Fissures mapped in the Willcox Basin

Land Subsidence in Willcox Basin



35

Willcox Subsidence - Causes Fissure Growth.

Fifty miles of Fissures mapped in the Willcox Basin

March 27, 2024

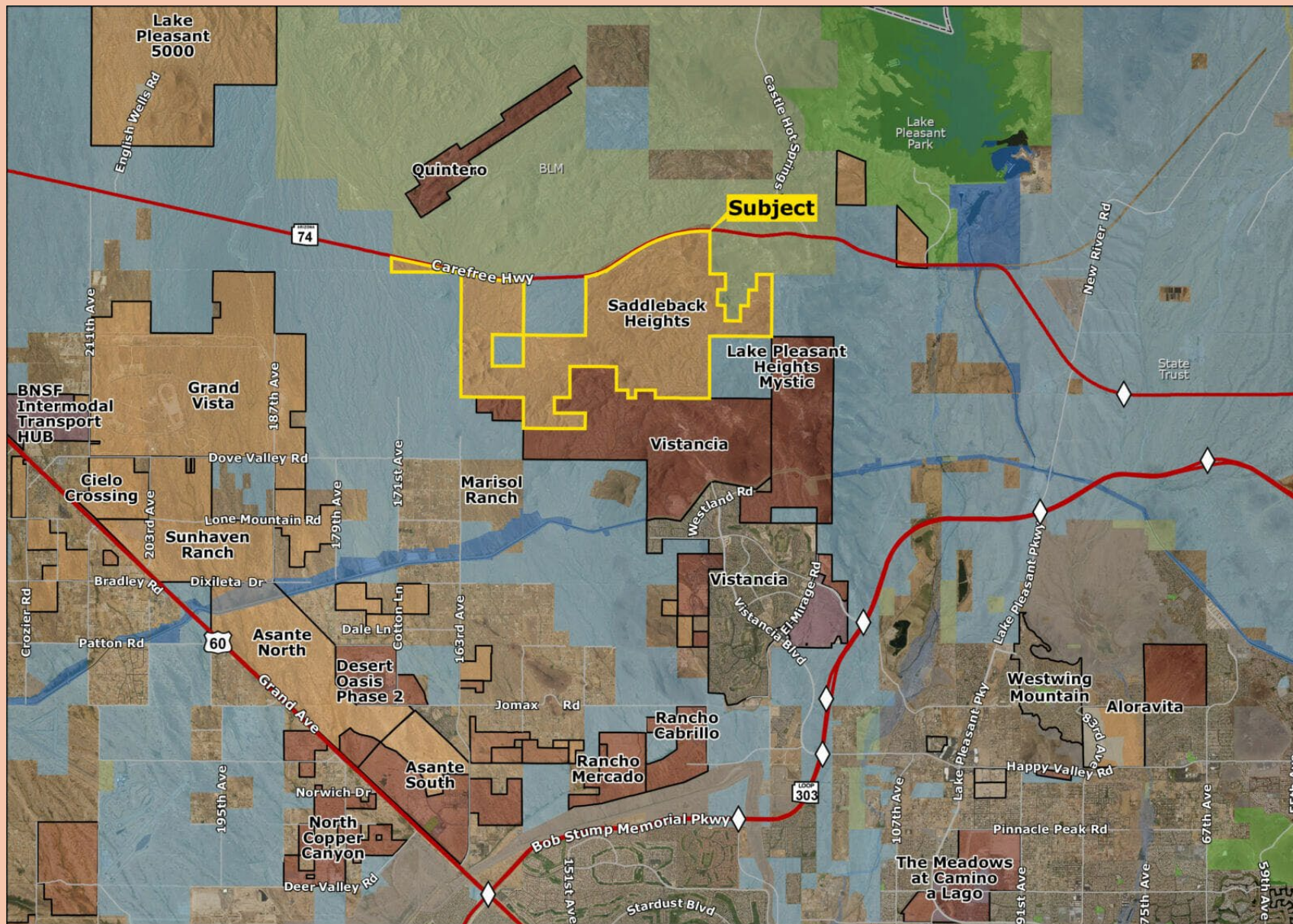
Facility Details



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

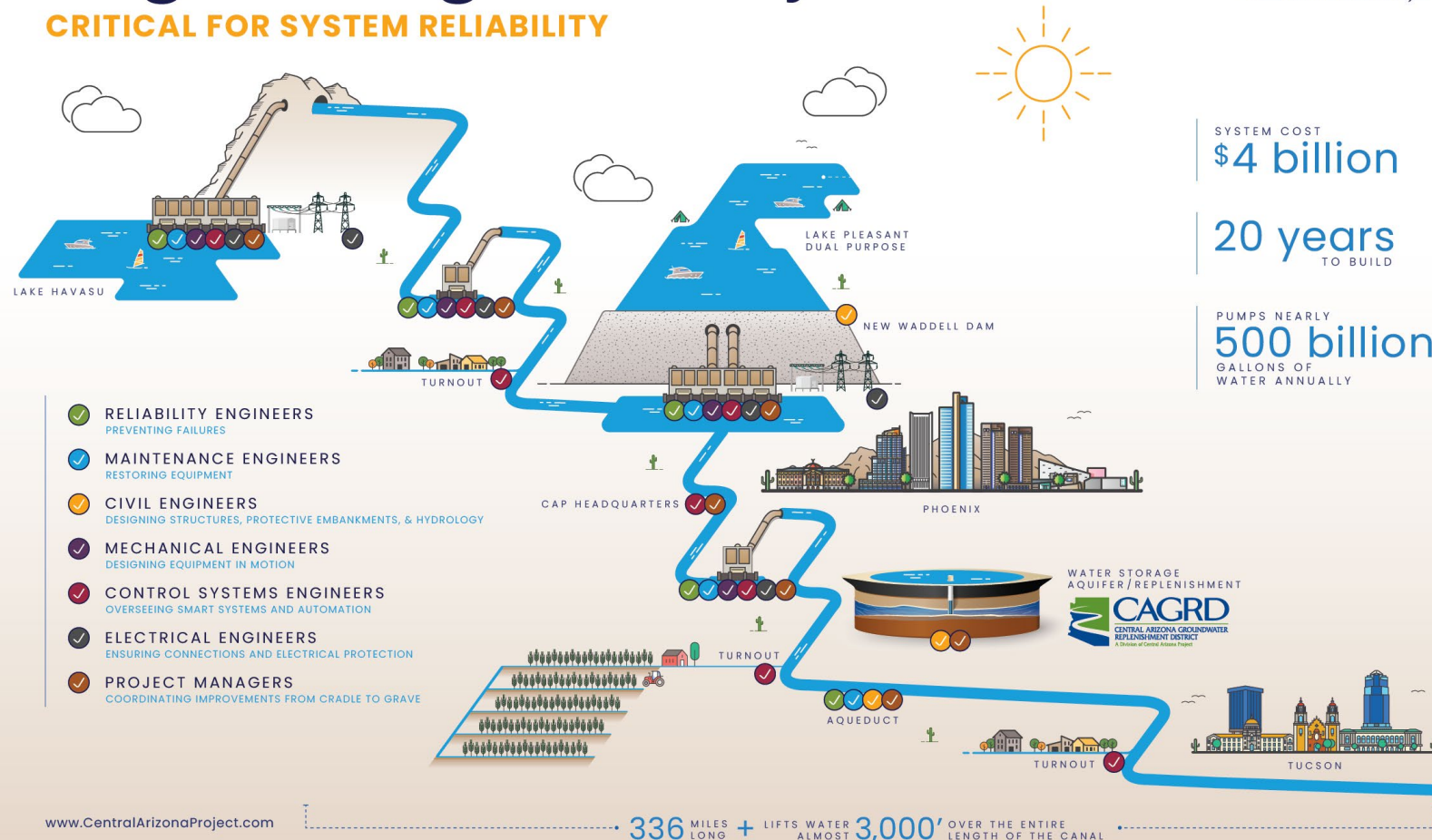
Amkor Facility: Test, Package, Ship Semiconductor Chips from TSMC for Apple, etc.



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

Engineering Diversity

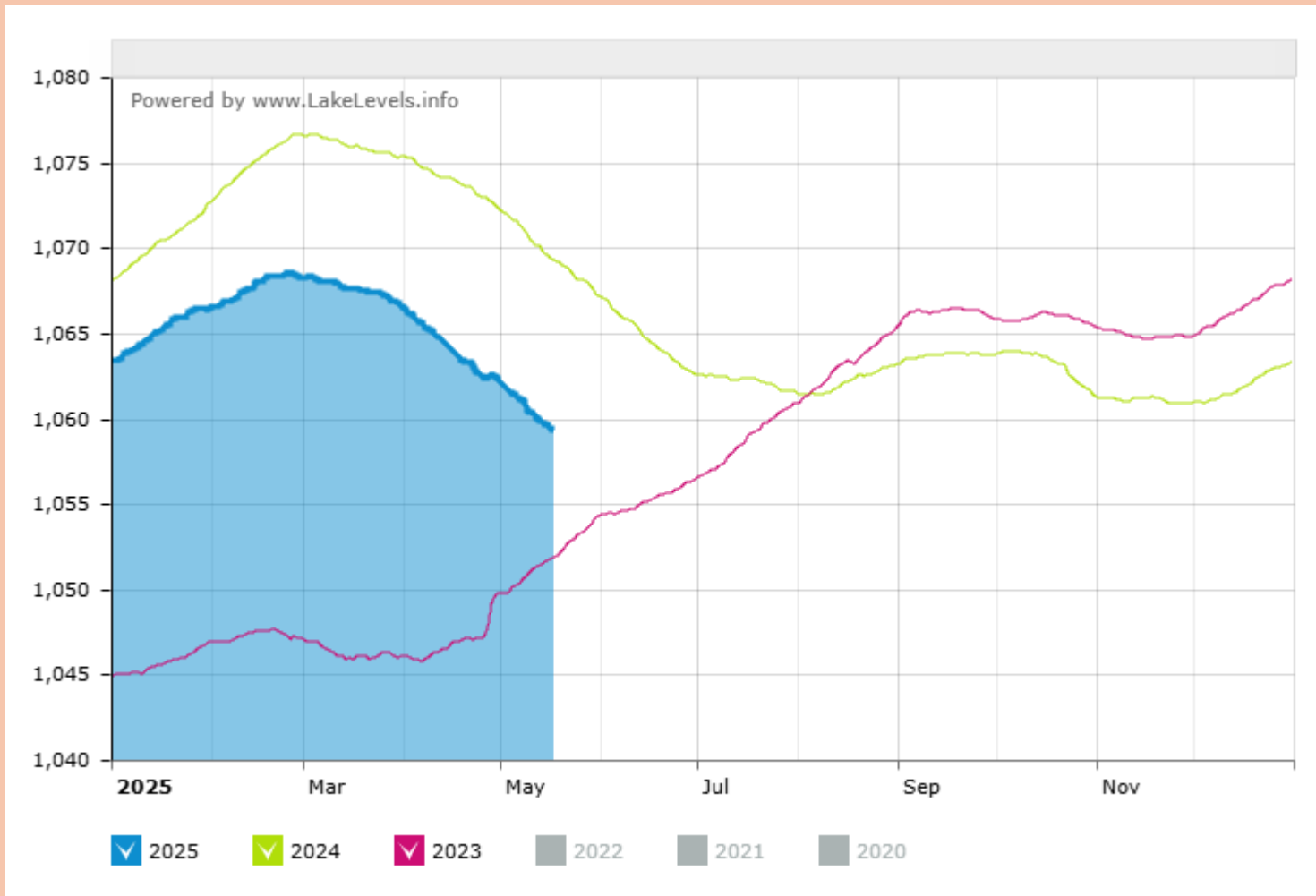
CRITICAL FOR SYSTEM RELIABILITY



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



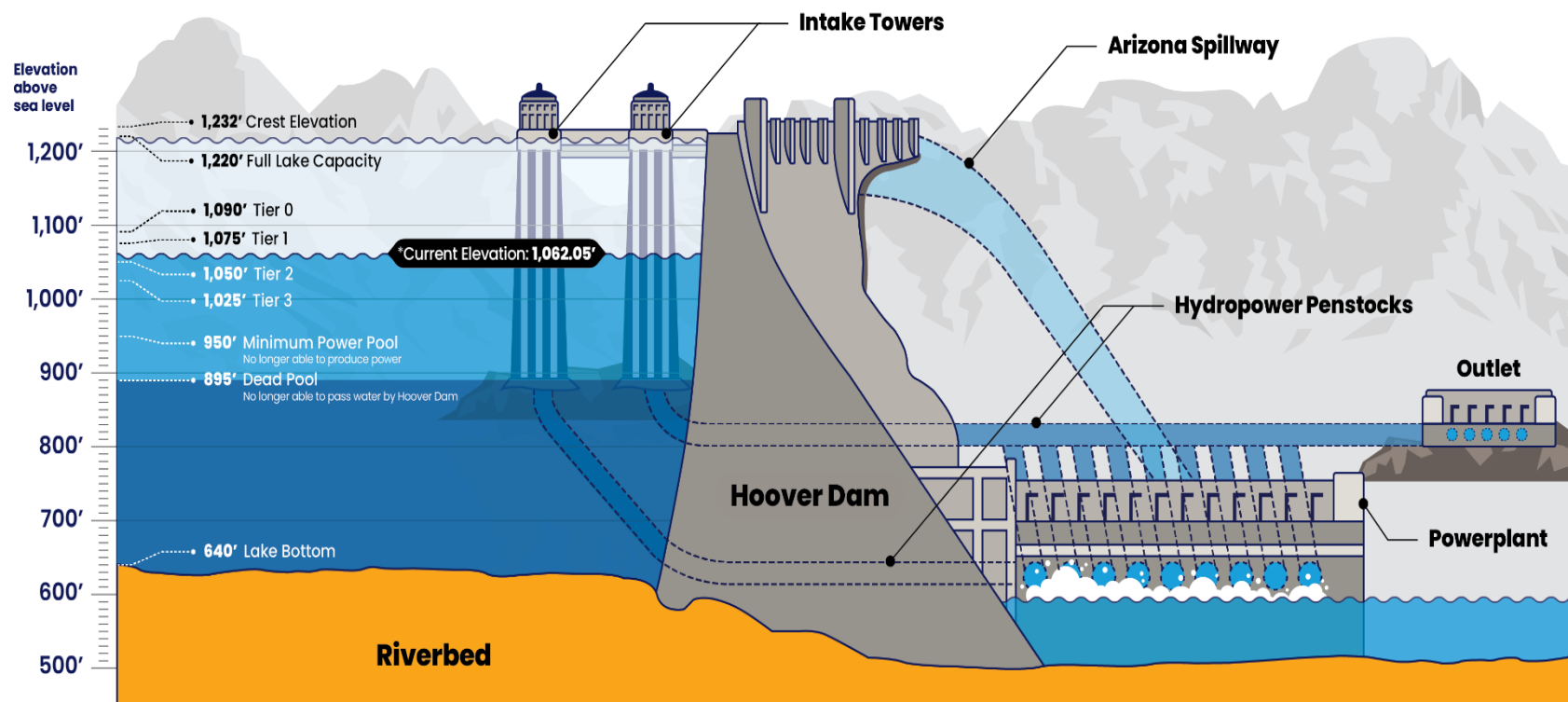
**Central Arizona Project Canal - 336 miles.
Provides 40% of the State's Water
Needs. It is Subject to Lake Mead
Fluctuations**



Lake Mead Water Levels 2023, 2024 and 2025
1059.37' on May 17, 2025

HOOVER DAM

Key Elevations



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



**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**

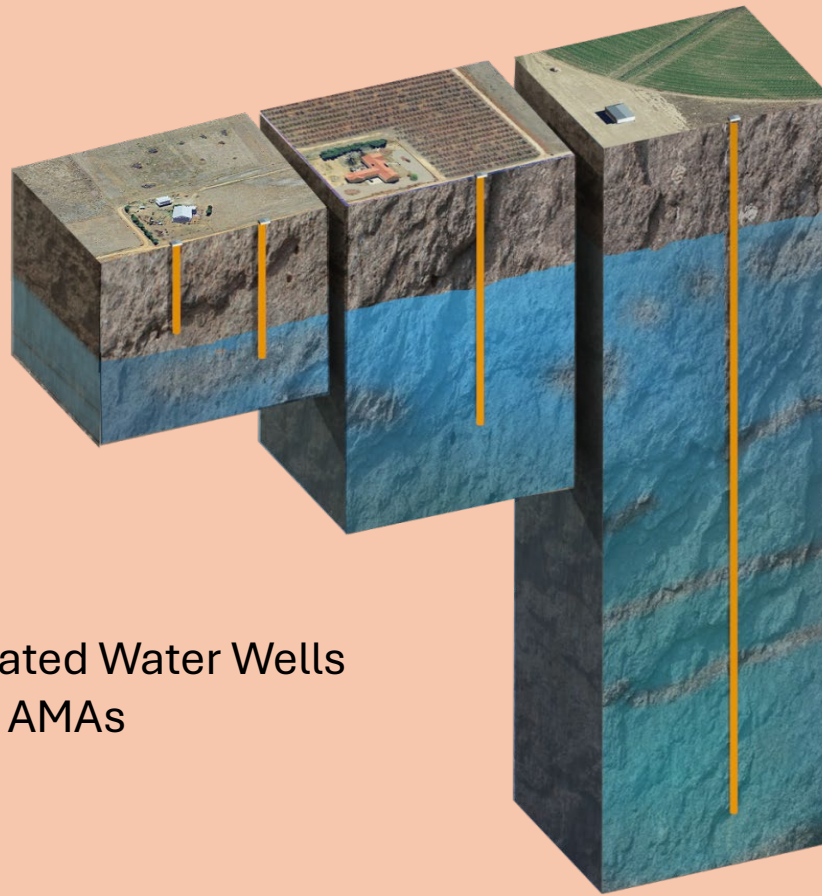


PORA Water Committee

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

Fugitive Water Offenders

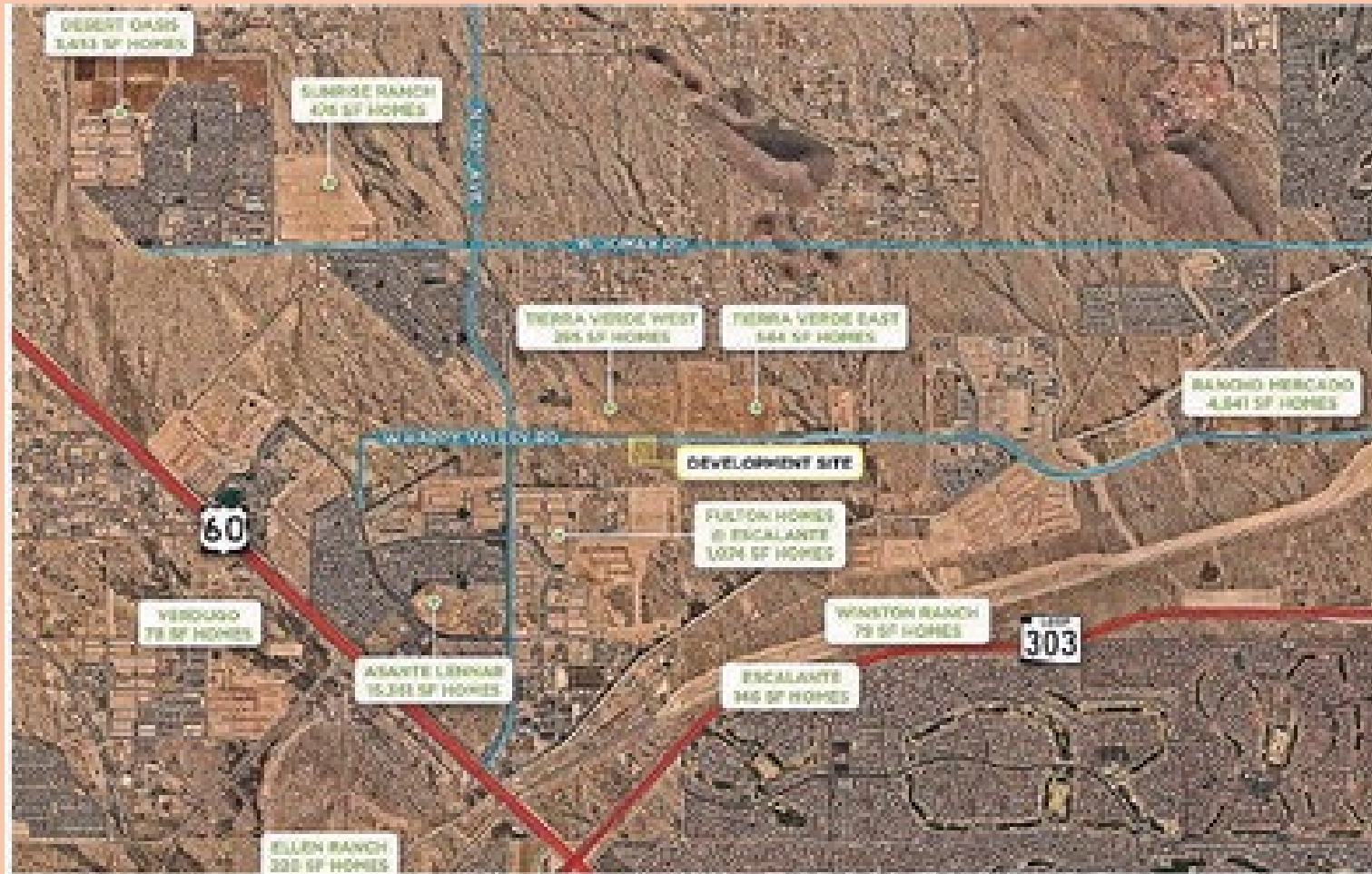
- Banner Health, Clinic “C”: 2 letters, 3 phone calls/messages
- MMAC 23 SCW: New owner for Clinic “C”
- Healthcare Realty: 3 emails + photo, 2 phone calls
- Mercado DSSC: Letter +photo
- Rec Center CC&R: Phone call
- AZ Eye Institute: Delivered Letter + photo
- Chase Bank: Personal visits (2) with Letter
- 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



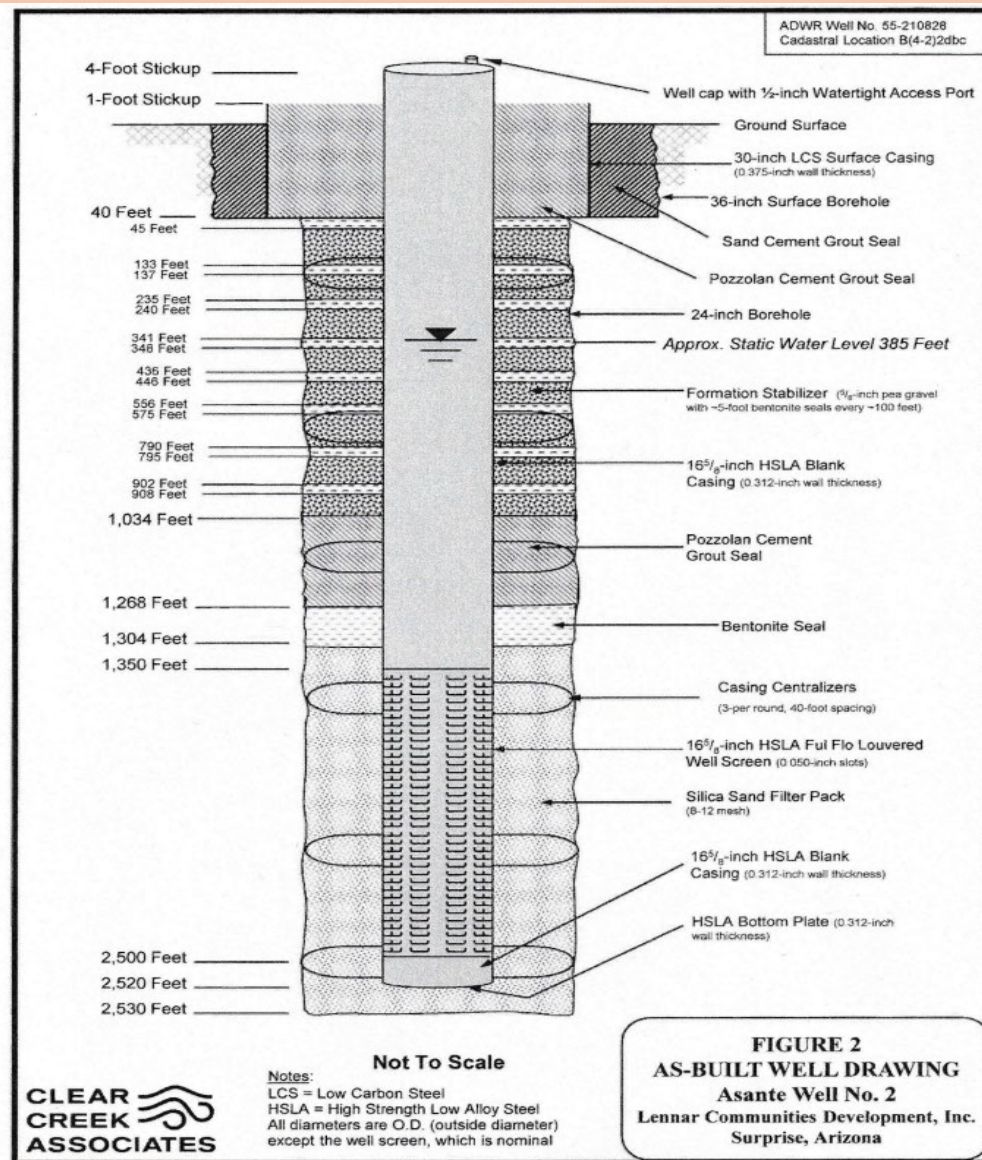
Unregulated Water Wells
Outside AMAs

Groundwater Pumping

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



**City of Surprise - 26,000 New Homes
Development Continues to the West and
North of SCW**



North Surprise - Asante Water Well

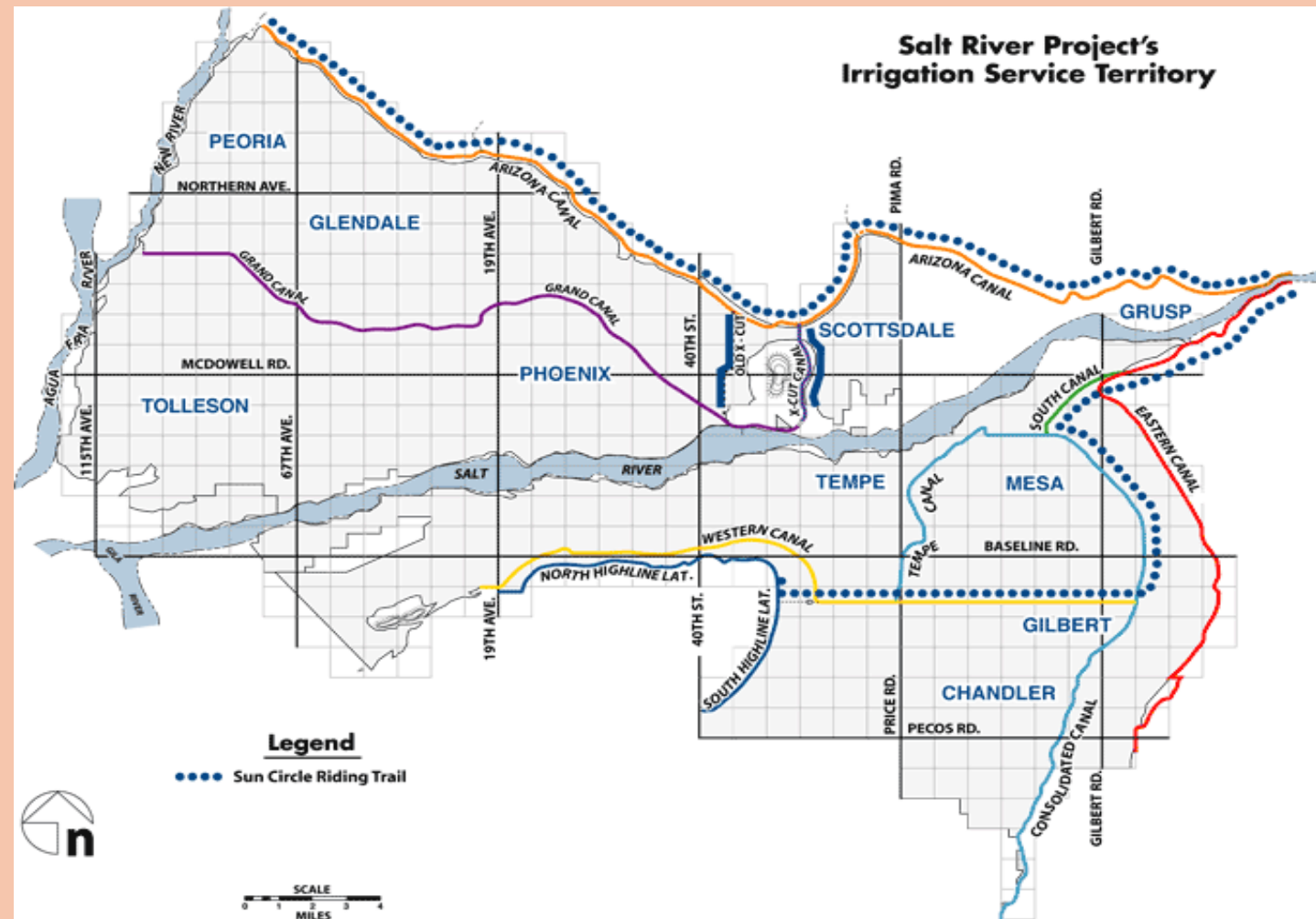


Lake Powell
Reaching Historic Low Level



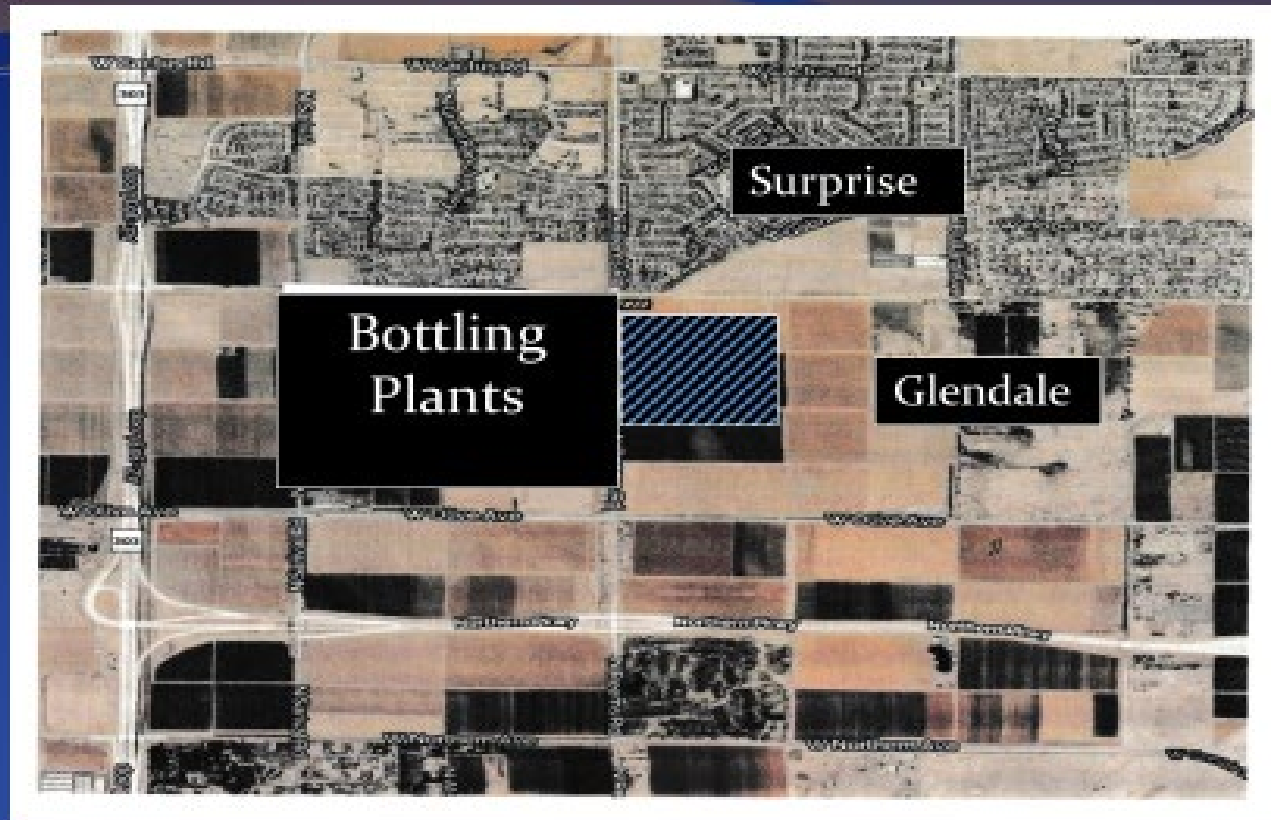
Beyond the Mirage

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



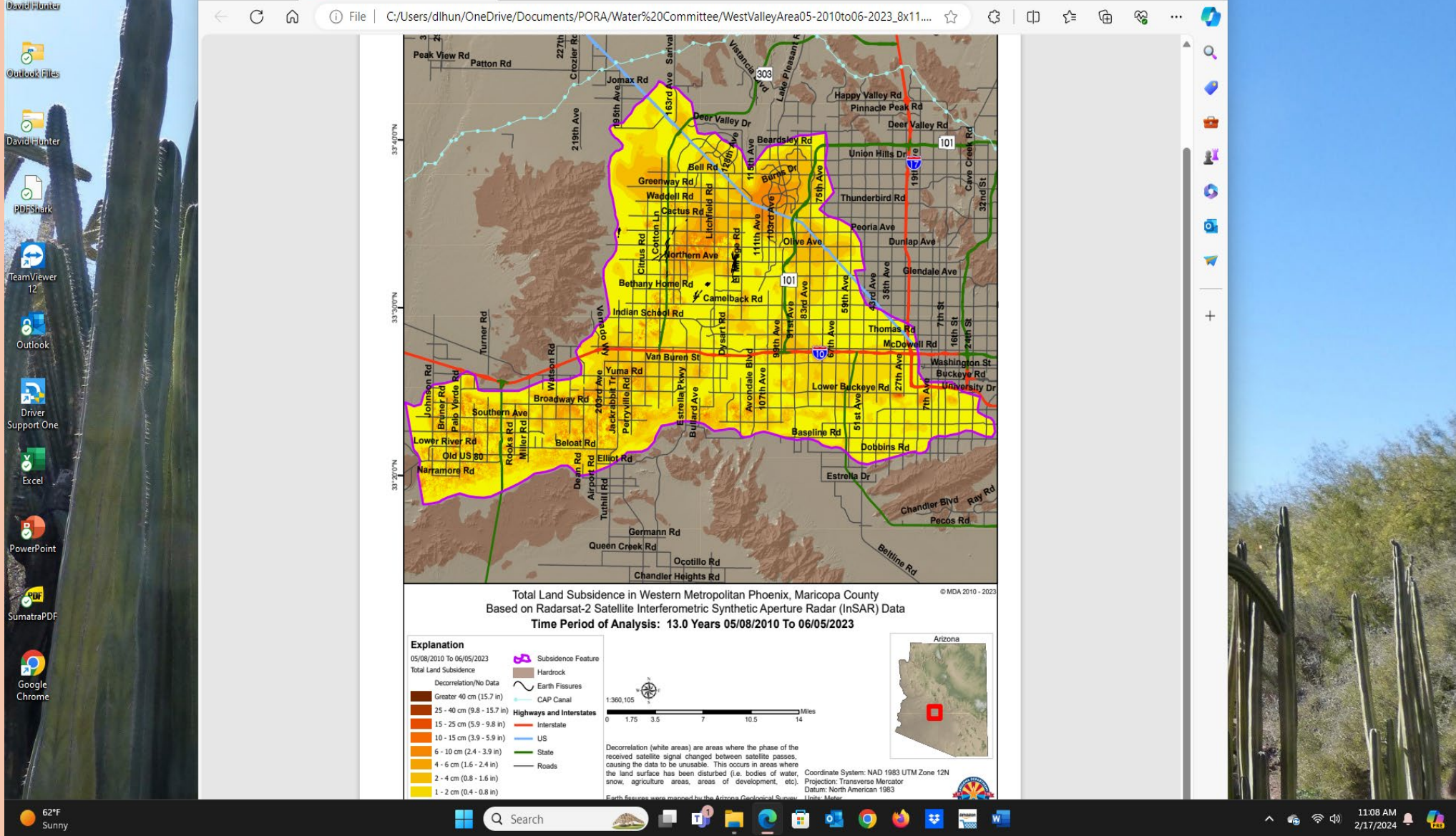
Surface Water – Arizona Canal

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



Surface Water & Groundwater

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

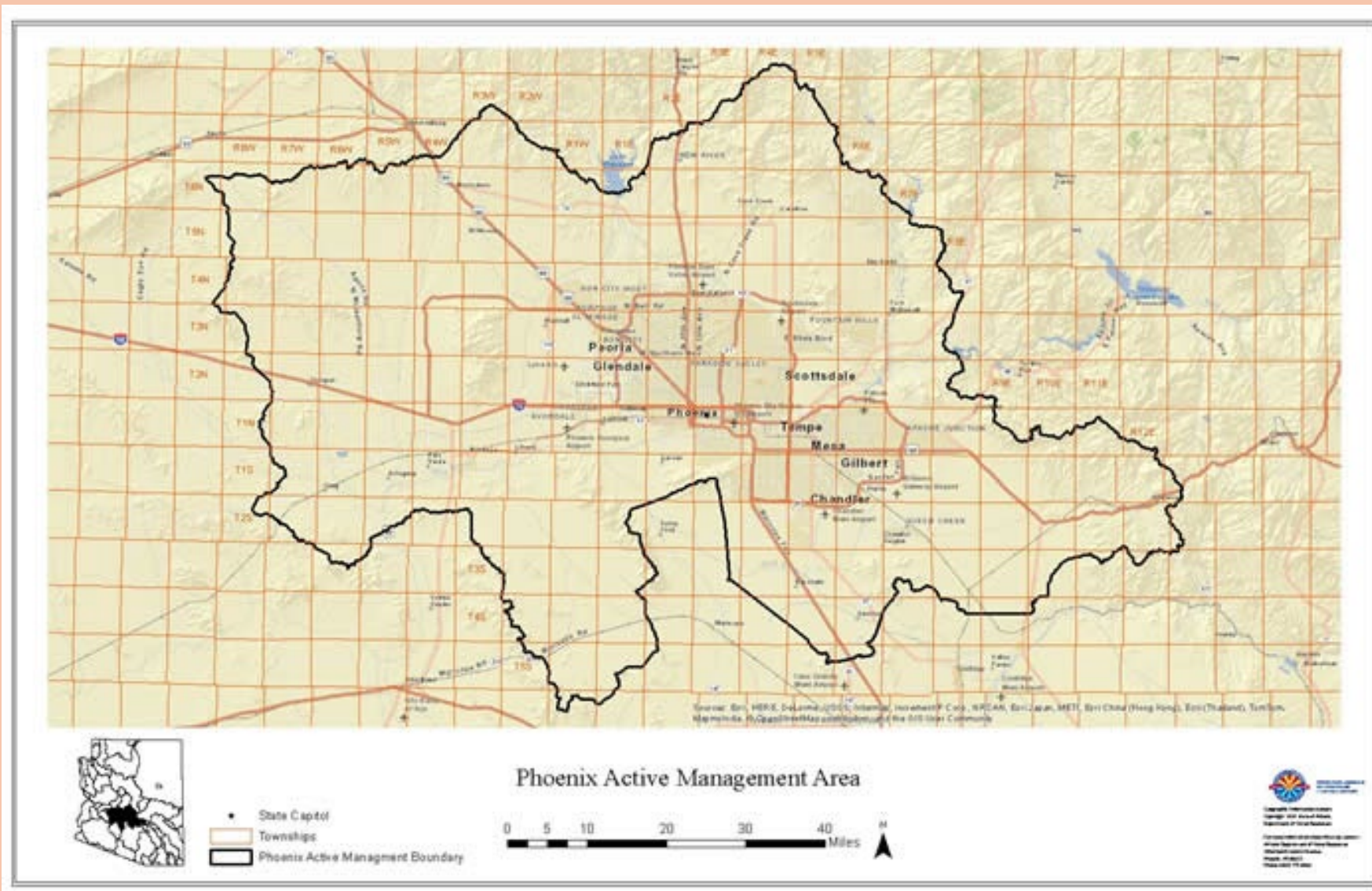


Phoenix Area Subsidence 1993 - 2023

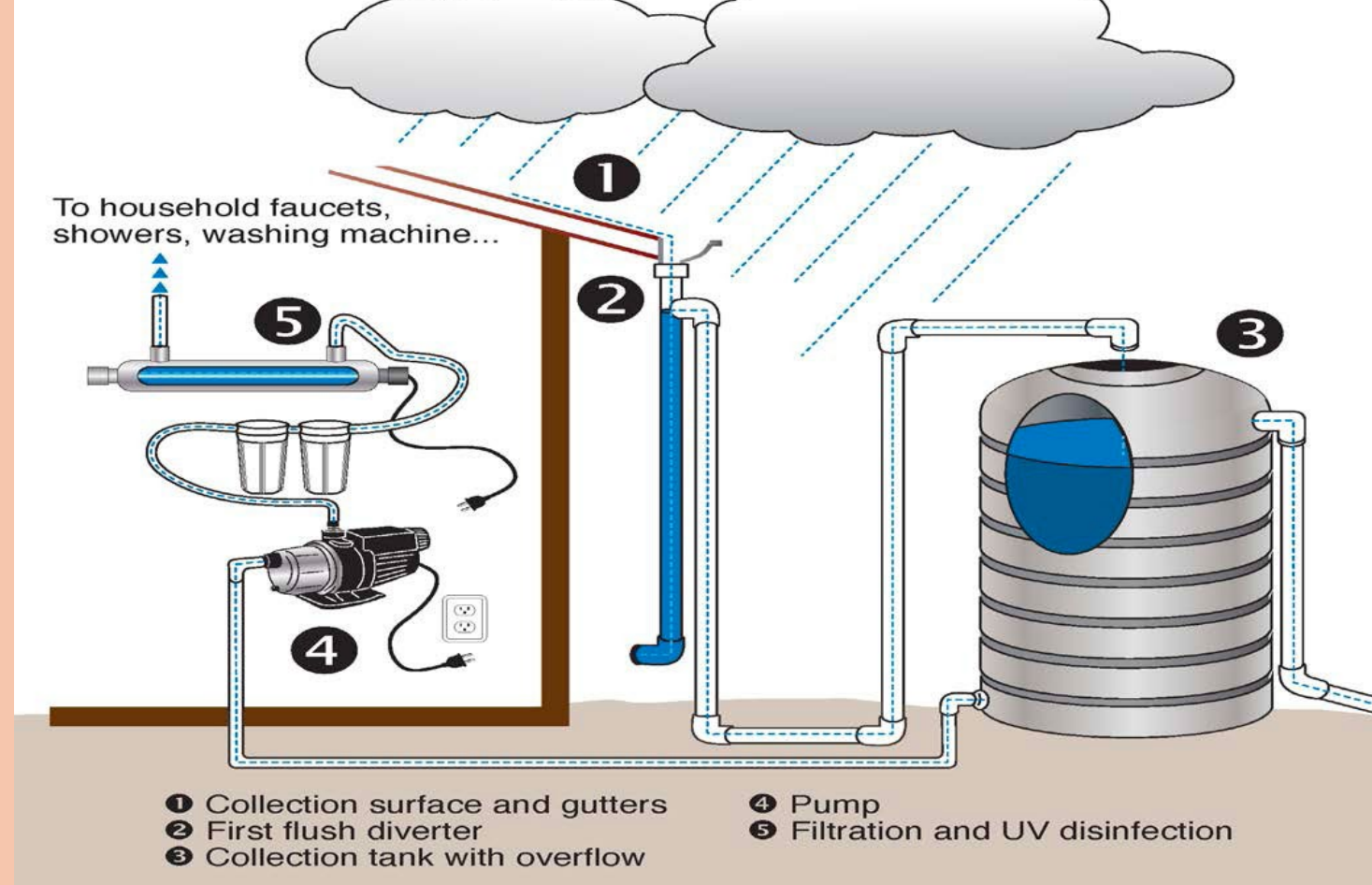


Water Conservation Kit

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



Phoenix AMA Model



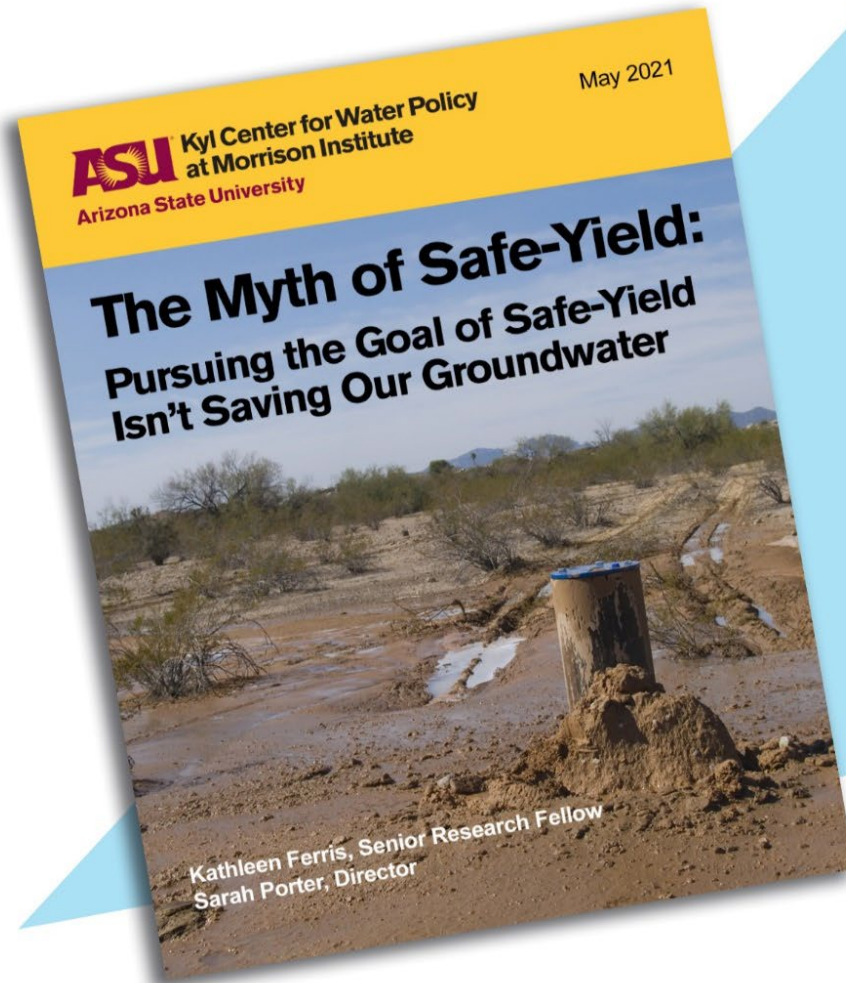
Rainwater for Potable Use

Basic Capture and Treatment System

PFAS:

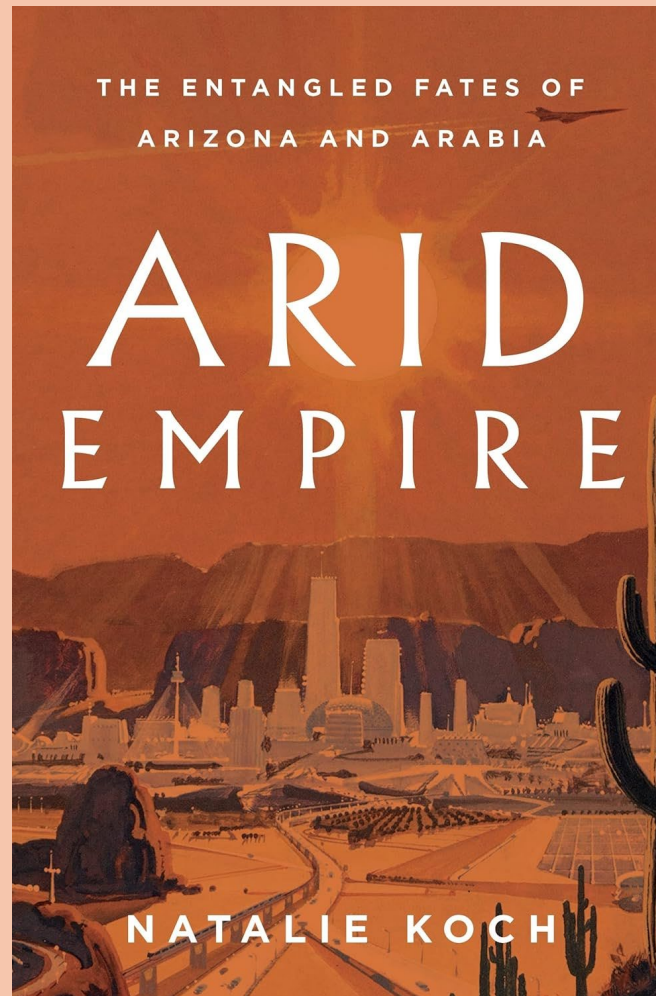
One part per trillion (ppt) denotes one part per 1,000,000,000,000 (10^{12}) parts, and a value of 10^{-12} .

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:

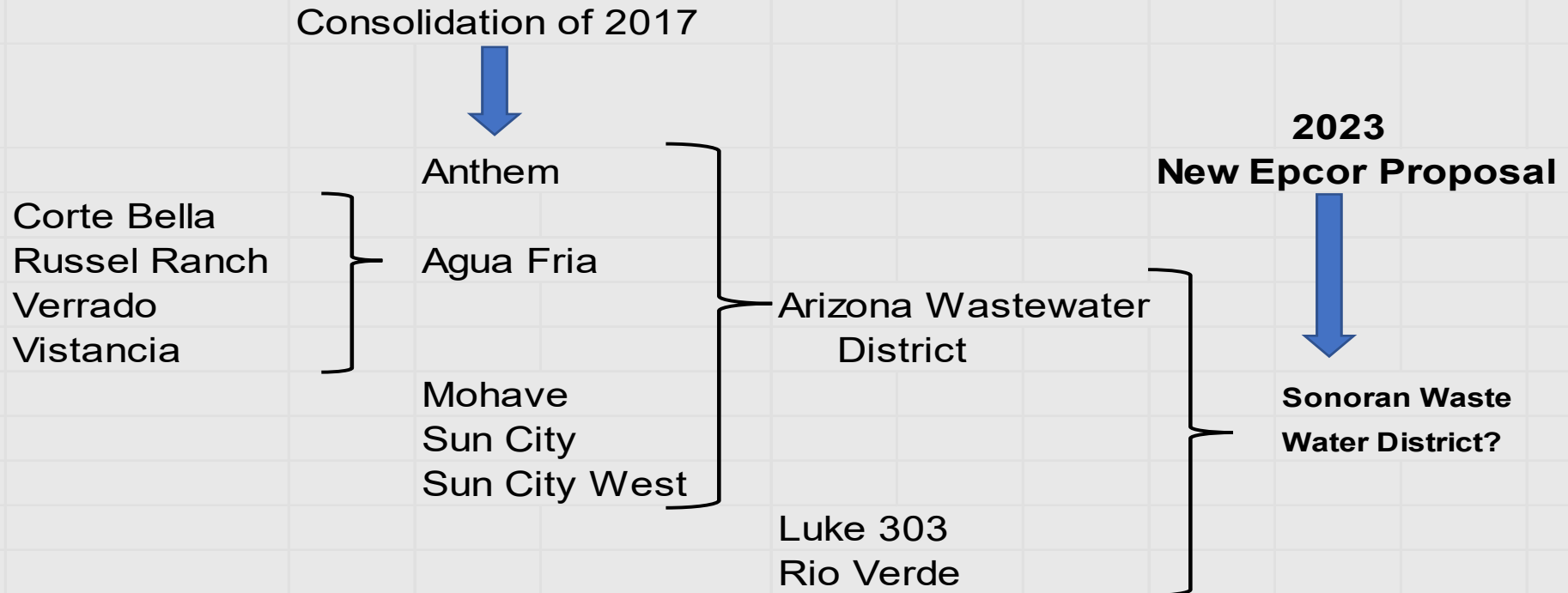
- ✓ **Began preparing for water scarcity in the 1930’s.**
- ✓ **Is a democracy, however water management is entirely a socialist commodity with the state controlling all water ownership and usage.**
- ✓ **Utilizes drip irrigation for 75% of its irrigated fields, reducing water use and improving crop 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**

Summary of Epcor Wastewater Consolidation Proposals



The Epcor Districts of Corte Bella, Russel Ranch, Verrado and Vistancia were combined into the Agua Fria District.

That district was consolidated with the districts of Anthem, Mohave, Sun City and Sun City West to become the Arizona Wastewater District.

Now the new proposal from Epcor wants to combine the Arizona Wastewater District with the Luke 303 and Rio Verde districts.

Proposed Standalone Rates			
Service Area	Current Rates	Proposed Rates	Percent Change
Arizona Wastewater	\$38.59	\$42.41	+ 9.9%
Luke 303 Wastewater	\$60.00	\$210.00	+250%
Rio Verde Wastewater	\$63.95	\$88.89	+39%
Proposed Consolidation Rates			
Service Area	Current Rates	Proposed Rates	Percent Change
Arizona Wastewater	\$38.59	\$46.31	+20%
Luke 303 Wastewater	\$60.00	\$46.31	-22.8%
Rio Verde Wastewater	\$63.95	\$46.31	-27.6%



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



Groundwater Treatment

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