

The Verde River Exchange

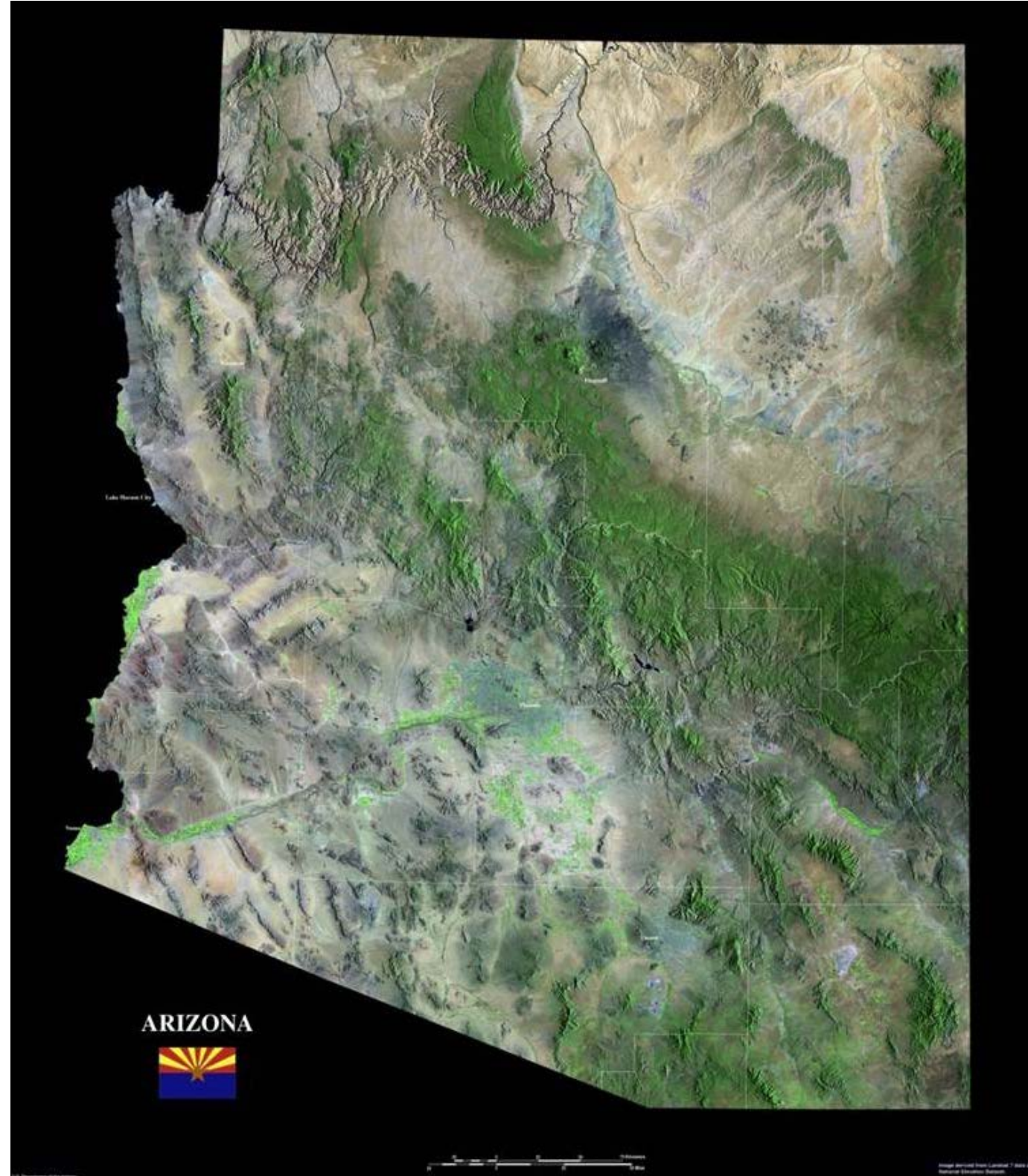


Water Offset Program

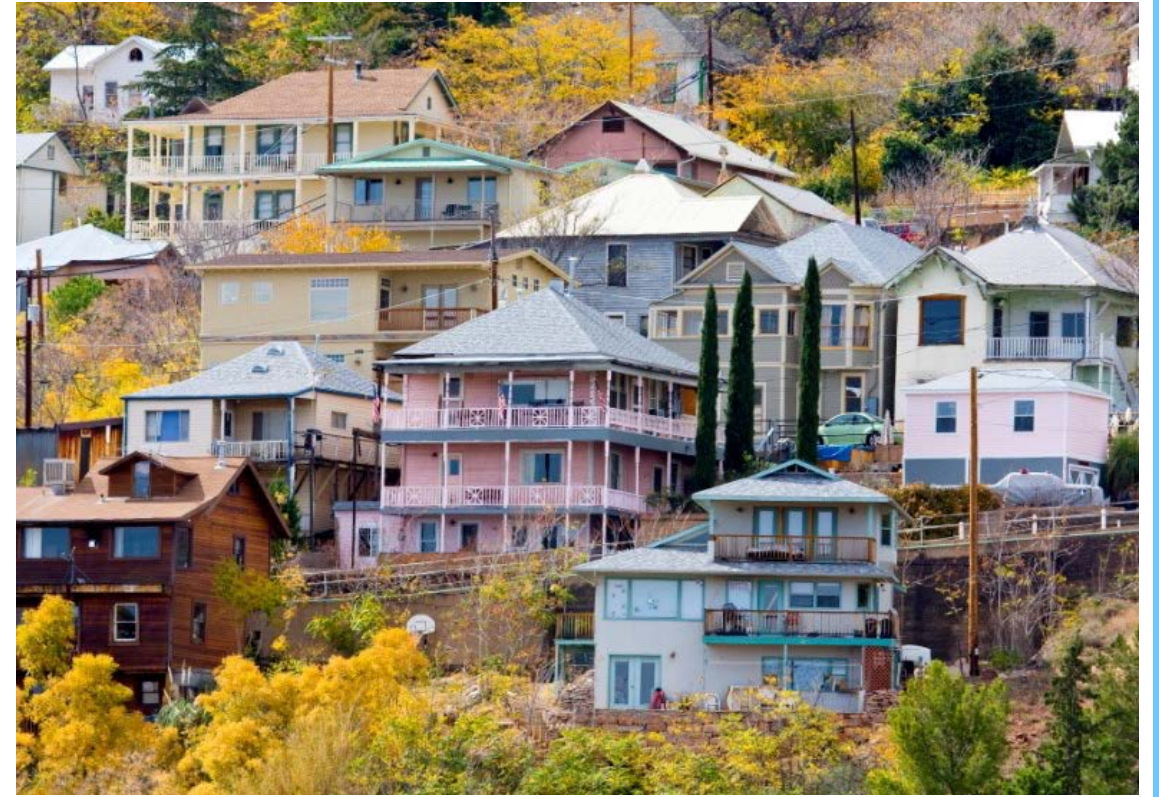
The Verde River



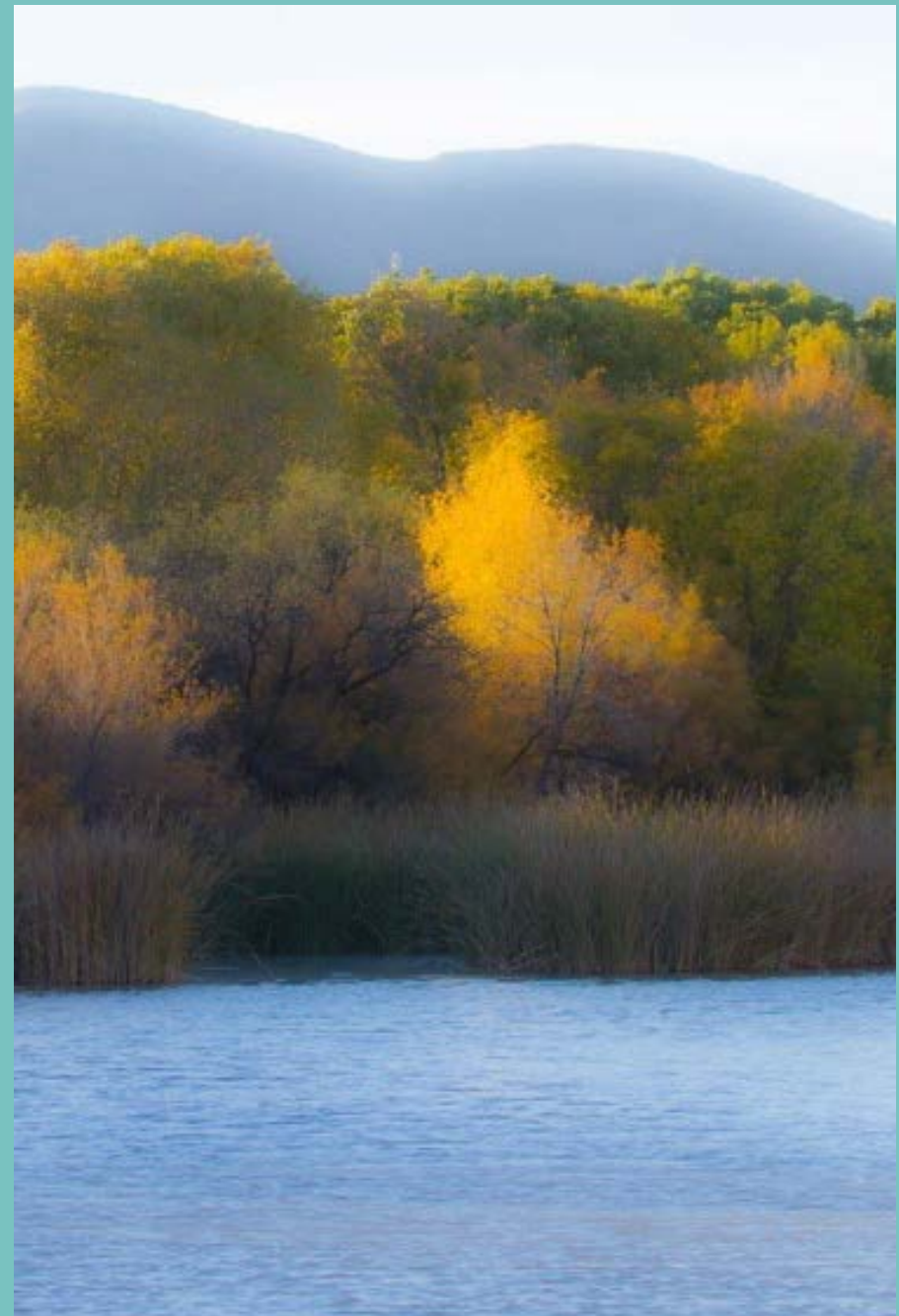




The Value of the Verde River Water Supply



The Value of the Verde River Lifeblood of the Ecological System

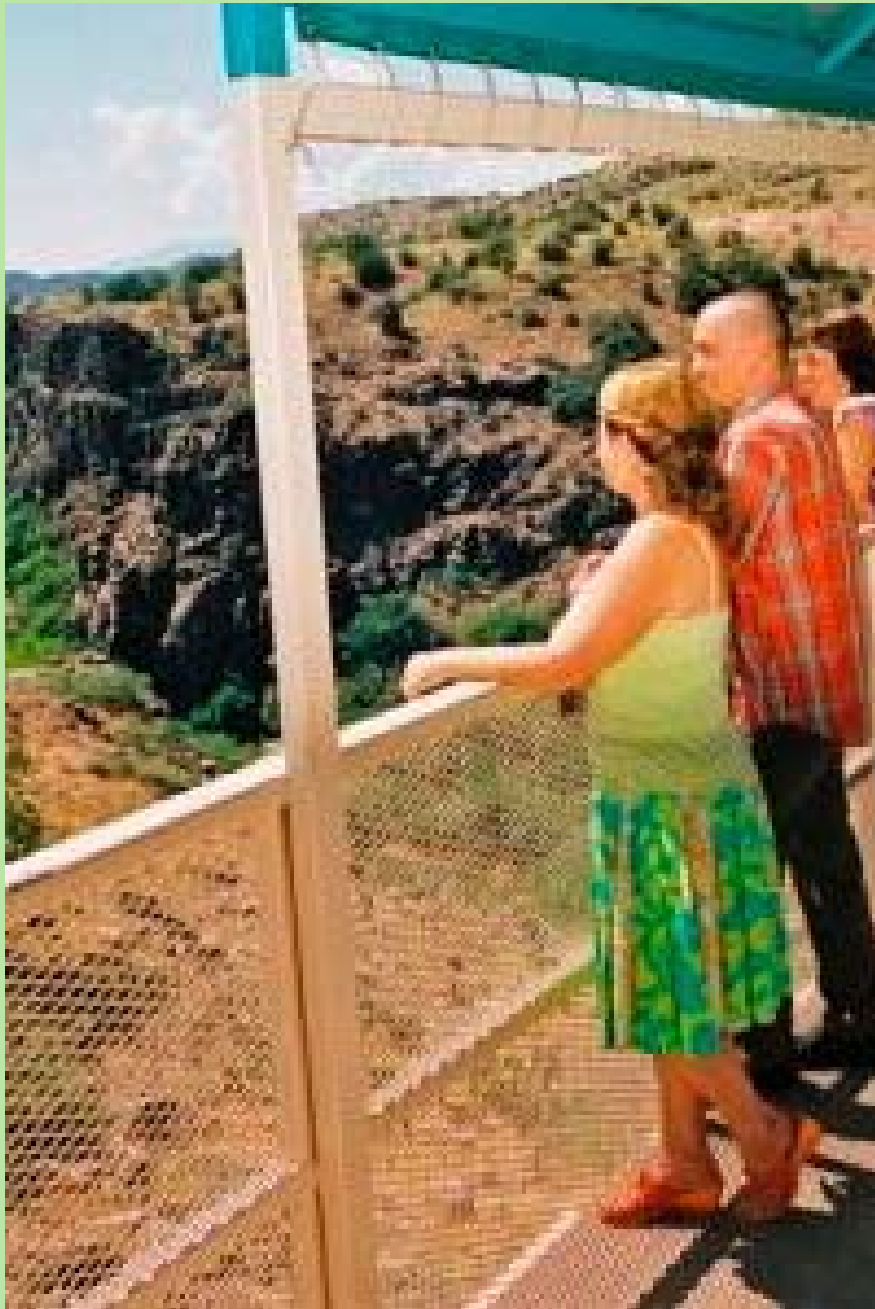


The Value of the Verde River Community Center



The Value of the Verde River

Tourist Destination, Economic Driver



The Value of the Verde River Solace for the Soul



The Verde System

- Water source for Verde Valley, Prescott area, and downstream cities.
- Two “Wild and Scenic” stretches, there are only 2 in AZ; Supports 1 of 20 Cottonwood-Willow Gallery forests in the world.
- Supports Property values.
- Generates \$88 million a year for tourism- related businesses and the total economic influence is even greater.

The Verde River is one of the last healthy, flowing river systems in Arizona.

Rivers in Arizona

- Nothing to systematically protect rivers from running dry.
- Throughout west, rivers have dried up or depleted.
- In Arizona 35% of the river miles that once flowed freely year-round no longer do.
- Particular ecological and human significance (desert state).

Rivers in Arizona



The Colorado River

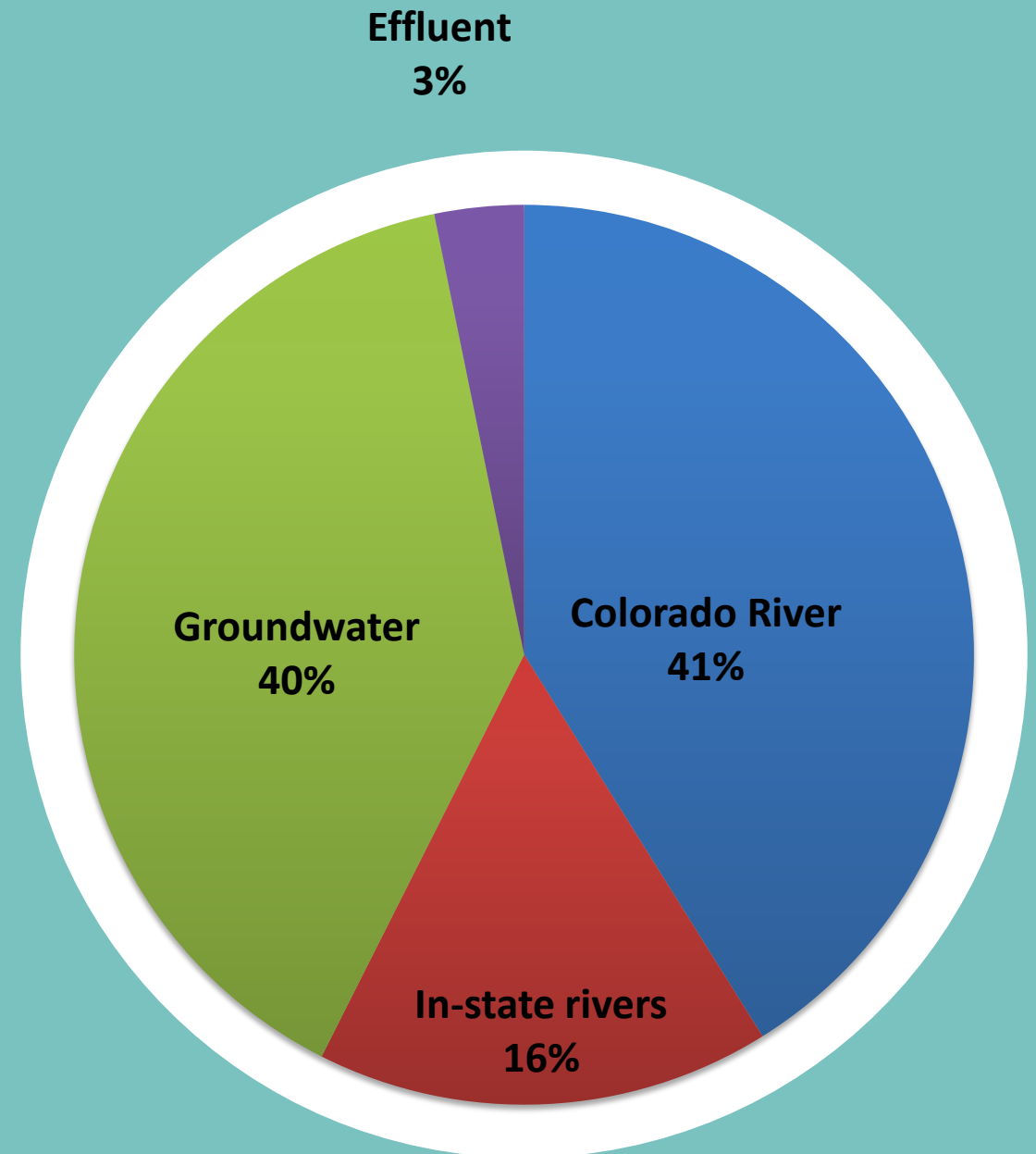
The Salt River

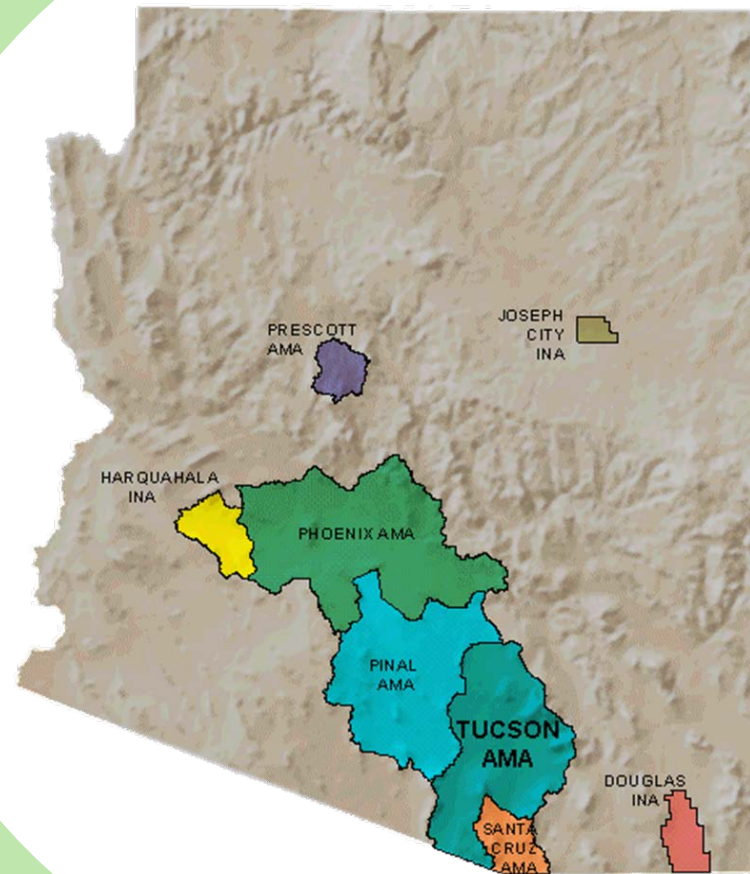


Groundwater in Arizona

AZ Water Supply
Source (2006)

Source: ADWR





Groundwater in Arizona

Groundwater in Arizona

- AZ surface water and groundwater use treated as separate.
- Groundwater use outside of AMAs not limited to what's available long-term.
- Surface water users and groundwater users using the same water, legal pretense that it's different → conflict

Groundwater in Arizona

- Rural AZ developing on groundwater in excess of what's recharged.
- Subsidence, wells being deepened.
- TNC study: 7 additional significant river stretches will go dry from municipal groundwater pumping in our lifetime.

Statewide Problem



The screenshot shows the azcentral website with a navigation bar at the top containing links for LOCAL, SPORTS, THINGS TO DO, BUSINESS, TRAVEL, POLITICS, OPINION, HOMES, ARCHIVES, and NATION NOW. The main headline reads "Parched: Arizona's shrinking aquifers" with the subtitle "CHARTING HOW WE USE WATER, ONE MAP AT A TIME" and the byline "Caitlin McGlade, The Republic | azcentral.com". Below the headline is the KJZZ 91.5 logo. A navigation bar at the bottom of the article section includes links for Program Schedule, Support KJZZ, Inside KJZZ, Music, Contact KJZZ, and E-Mail. The article title "Arizona Community Reckons With Loss Of Groundwater" is visible at the bottom of the screenshot.

azcentral LOCAL SPORTS THINGS TO DO BUSINESS TRAVEL POLITICS OPINION HOMES ARCHIVES NATION NOW 84° MORE

Parched: Arizona's shrinking aquifers

CHARTING HOW WE USE WATER, ONE MAP AT A TIME

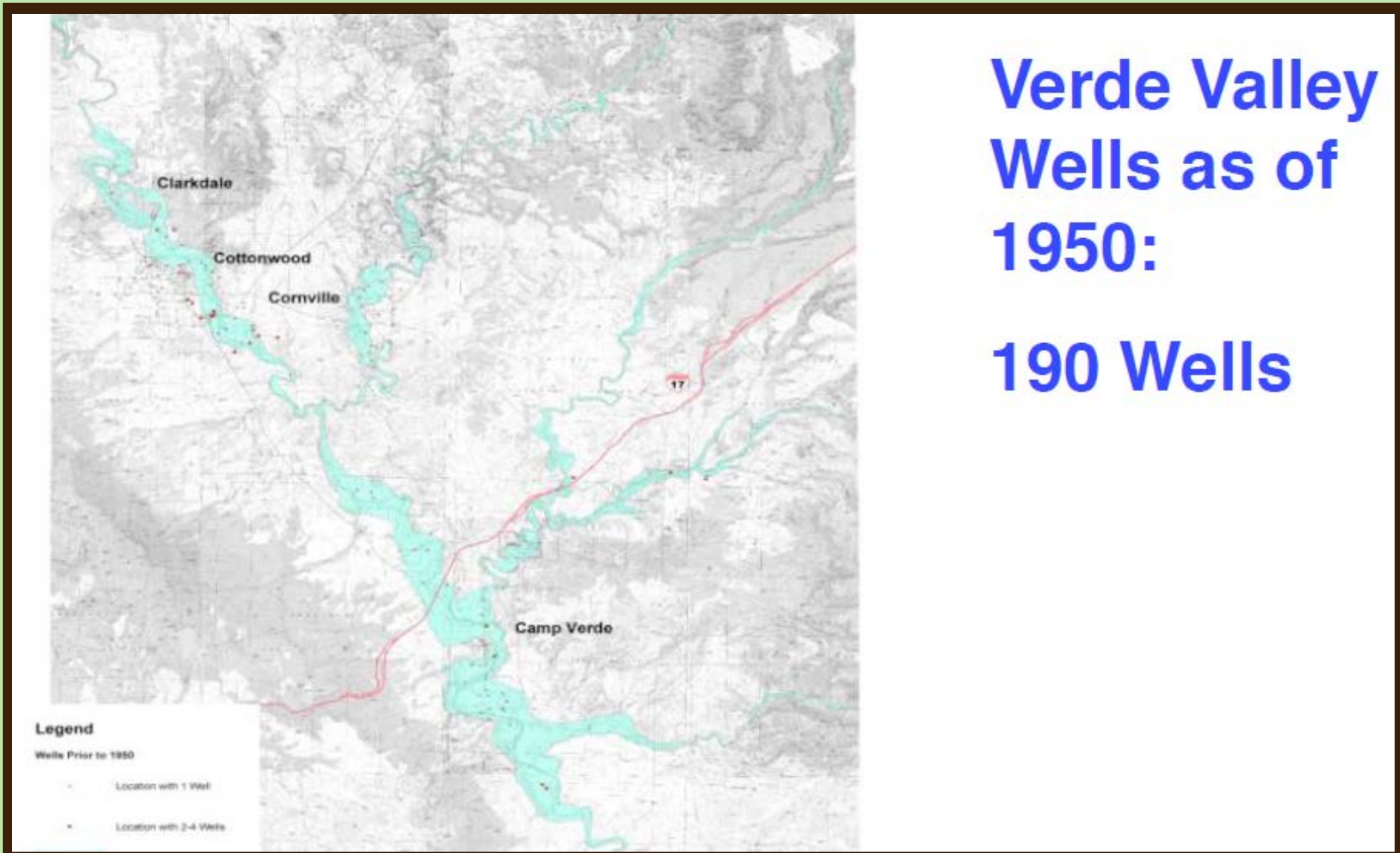
Caitlin McGlade, The Republic | azcentral.com

91.5 KJZZ

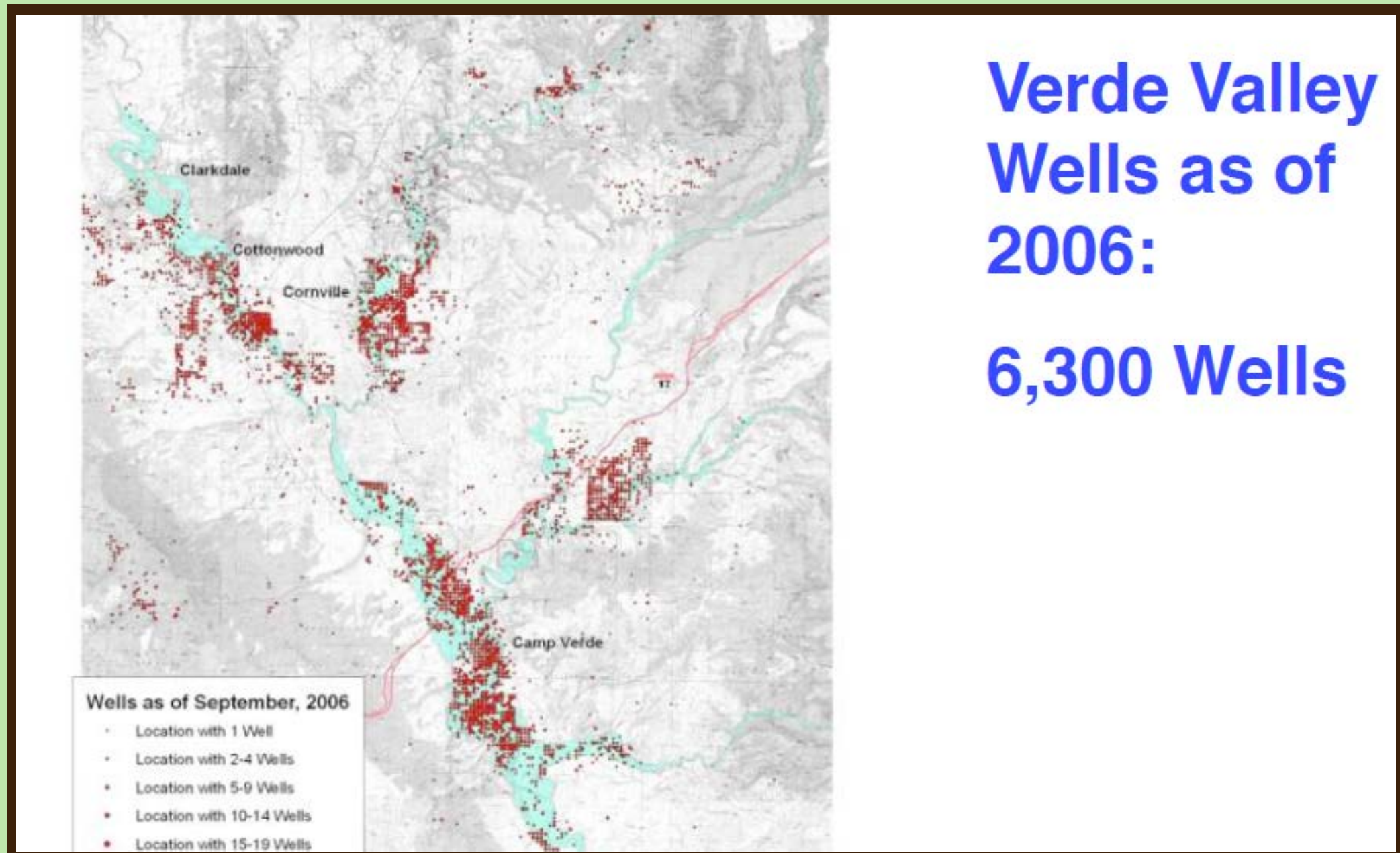
[Program Schedule](#) [Support KJZZ](#) [Inside KJZZ](#) [Music](#) [Contact KJZZ](#) [E-Mail](#)

Arizona Community Reckons With Loss Of Groundwater

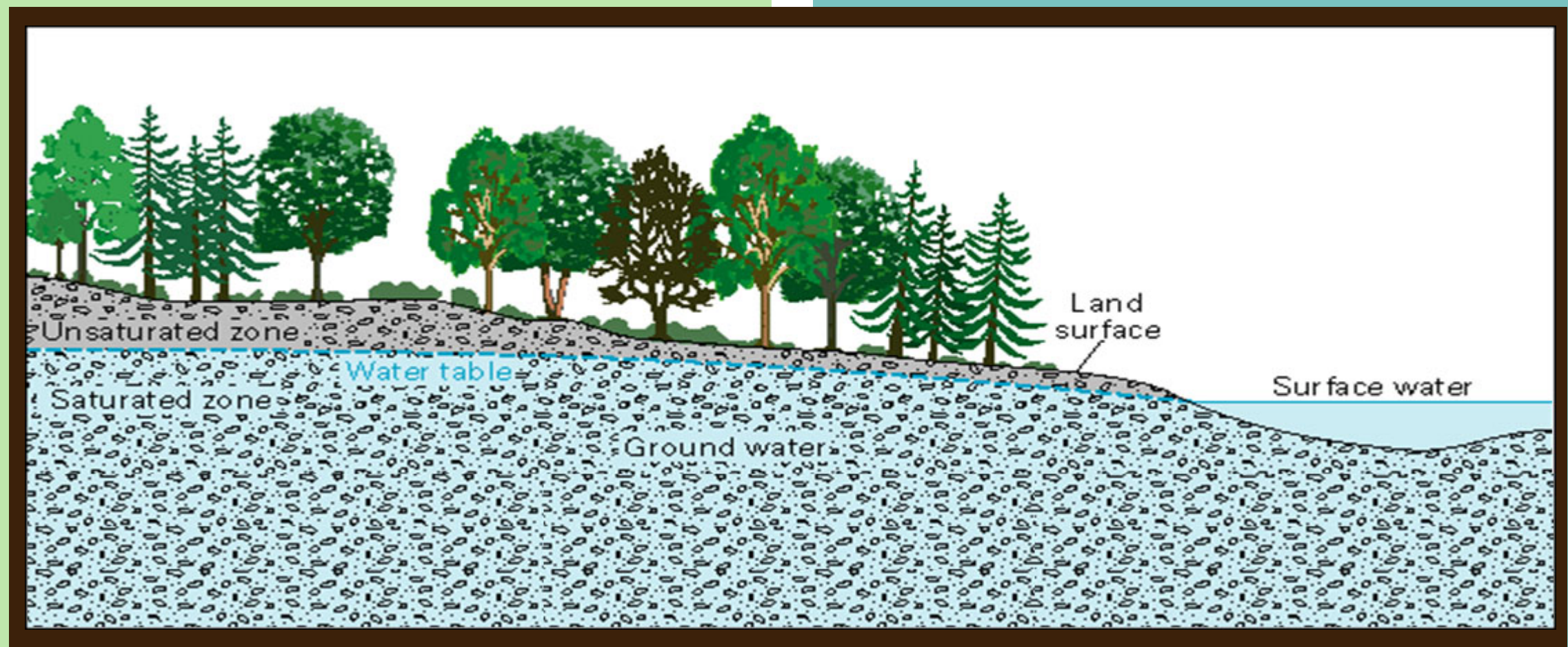
Verde Valley Wells as of 1950: 190 Wells

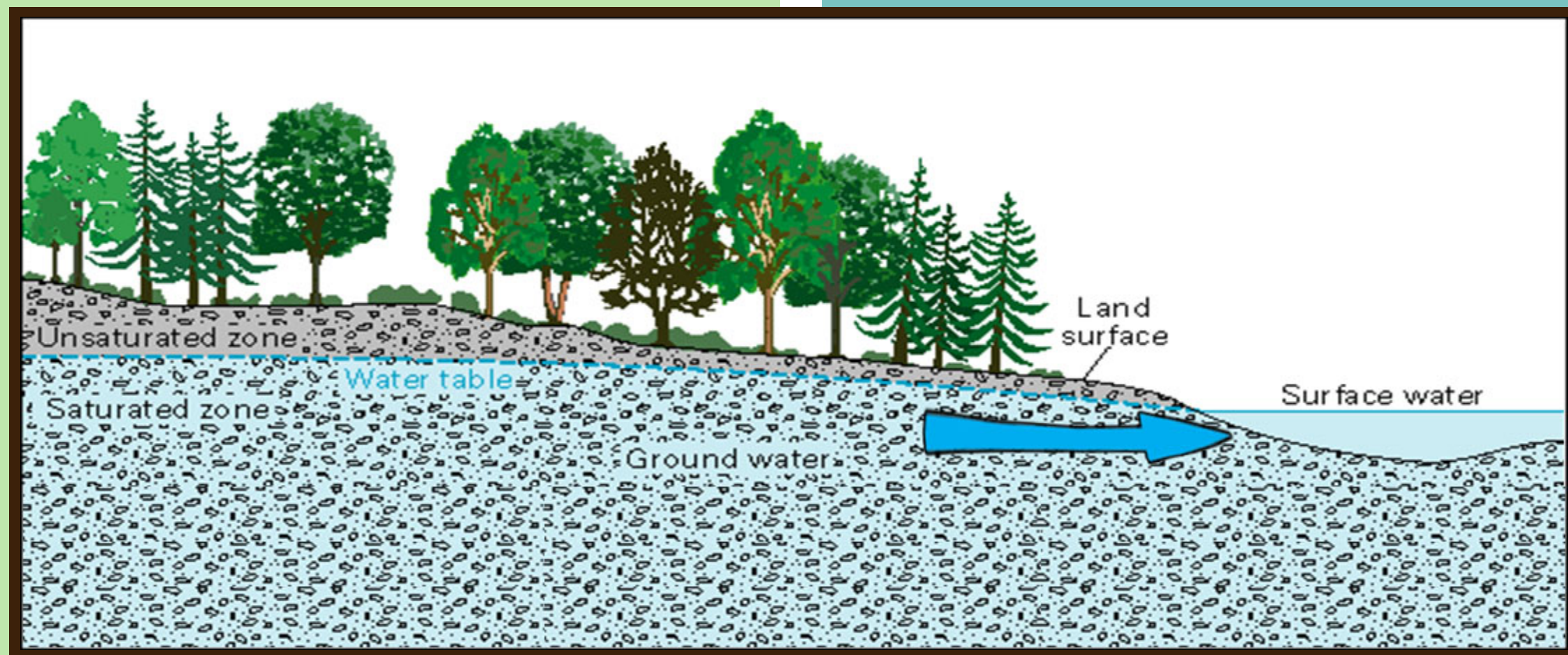


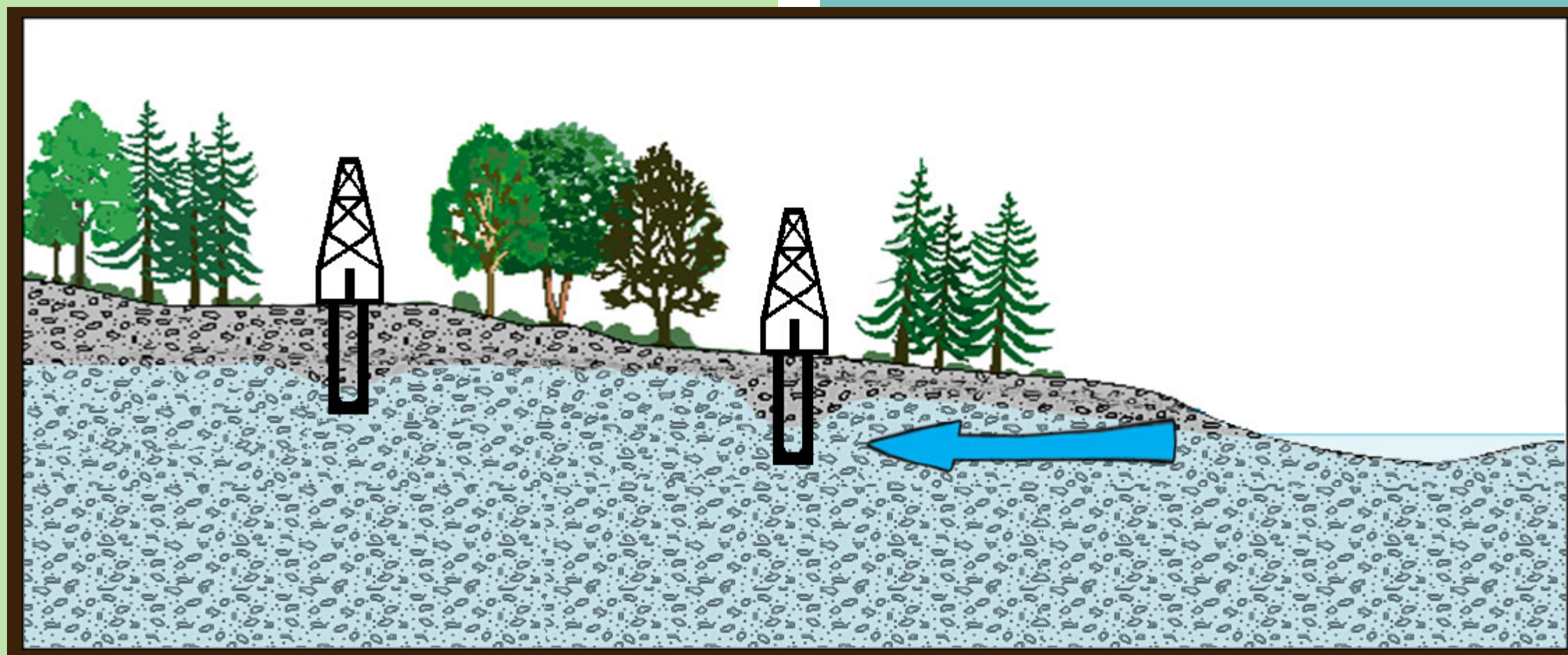
Local Consequences

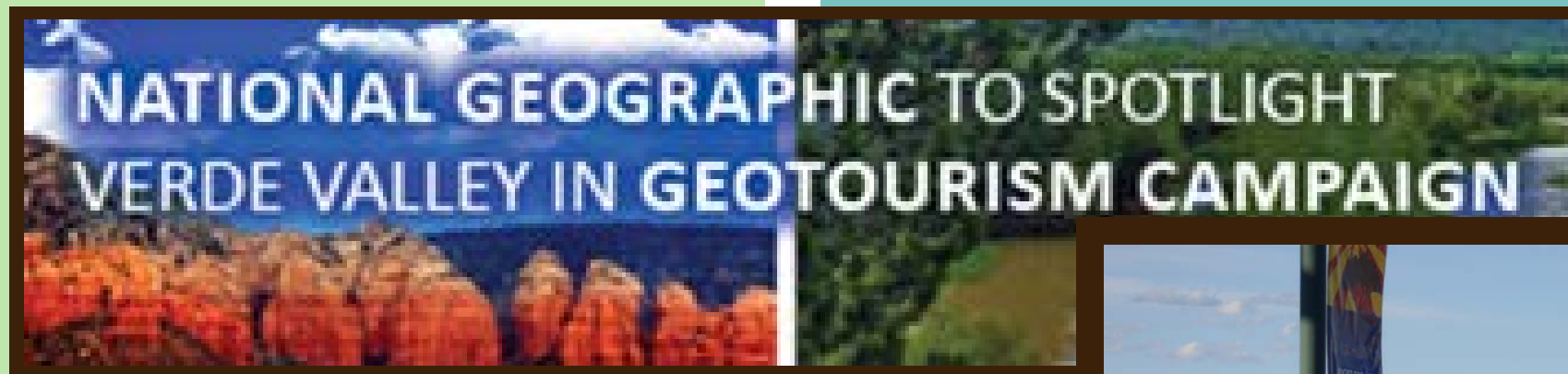


Local Consequences









Verde Independent

home : latest news



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12/6/2012 2:31:00 PM

Verde Valley cracks list for Top 10 U.S. Travel Destinations

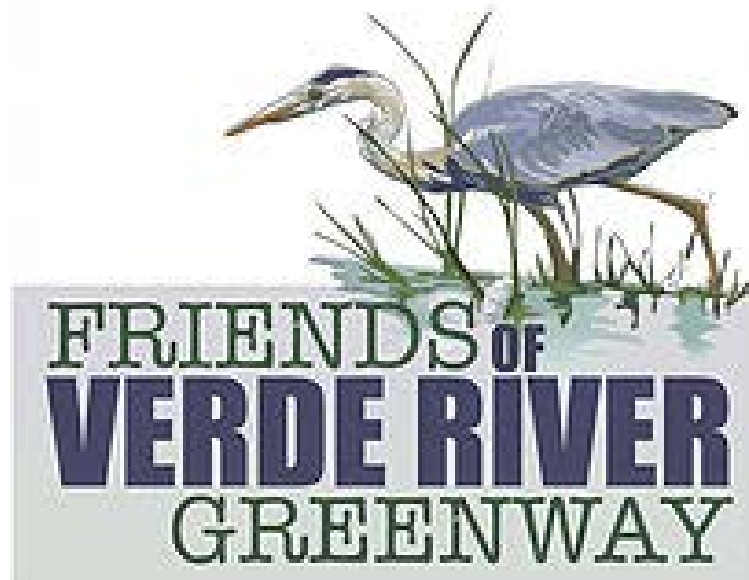
Lonely Planet is the world's leading travel publisher and holds the No. 1 spot in guidebook sales in the world.

The Verde Valley

Verde River Threats

- Habitat compromised by invasive species.
- Diversion from ditches → stretches of the river system already dry or nearly dry.
- Proliferation of wells → long term threat to aquifer and flow levels.

FVRG Mission and Vision



Friends of Verde River Greenway (FVRG) restores, preserves and promotes the natural, cultural, scenic and recreational resources of the Verde River and its tributaries.

We envision a healthy, free-flowing river and tributaries that support the environment, our thriving economy and the quality of life for current and future generations.



FVRG Role in Watershed Restoration



“Boots-on-the-Ground” Collaborative projects and to promote and implement watershed stewardship.



Building a Local Solution



Credit
for
creative
water
use

Program Genesis

- Implement actionable local solutions that work in the larger AZ water rights and water politics picture.
- Respect local economic, environmental and social values.
- Preserve property rights and individual water users' autonomy.

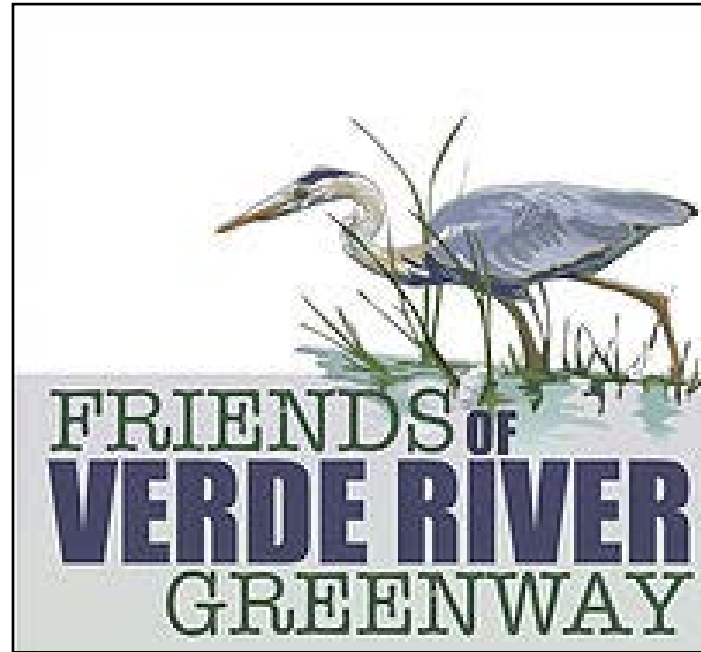
Program Genesis

- Ensure collaboration and shared stewardship among water users and community members from different sectors.
- Focus on a positive, voluntary and proactive approach.
- Address underlying long-term issues.

What is the Verde River Exchange?

Provides a mechanism for groundwater users to “offset” the impact of their groundwater pumping on the Verde River





Partners

How Does it Work?



1. Well pumping lowers Verde River water levels.



2. A Seller (usually a private landowner) voluntarily agrees not to consume a certain amount of water.

How Does it Work?



3. The seller's reduced consumption is converted into Water Offset Credits that may be purchased by Buyers.



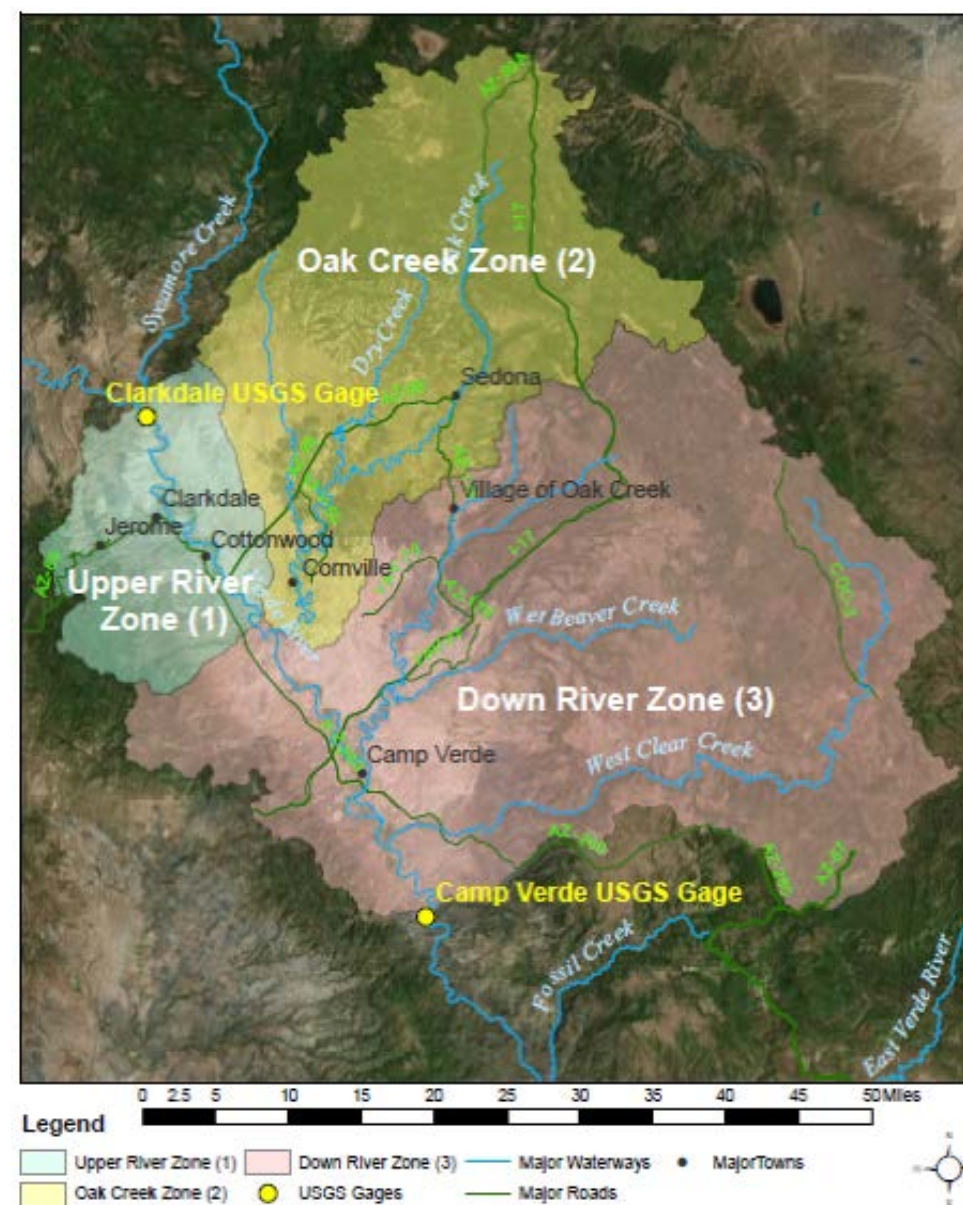
4. A Buyer purchases Water Offset Credits, reducing their 'water footprint' and the impact of their groundwater use.

How Does it Work?



5. The result: Through this balancing mechanism, total water use, and its impact on the river system is reduced.

Project Area



“Buyers”

“**Buyers**” in the Verde River Exchange program are businesses, farms, or homes that continue to use the water they need—but **purchase “Water Offset Credits” to help offset the impact of their water withdrawal.**

Buyers purchase Water Offset Credits for a given year, allowing others to be paid to use less. They receive a **Water Offset Certificate** commemorating their participation in the Exchange and documenting their purchase of Water Offset Credits.



*Reduce Your
Water Footprint*



“Sellers”

“**Sellers**” in the Verde River Exchange program are water users in the Verde Valley that have recently and historically been using water but **agree to cease or reduce their use for a year, in return for a modest payment.**

Sellers sign a contract and agree to change their water use for a year (usually by “fallowing,” or not irrigating, a portion of land that had been irrigated). In return, they are paid for the temporary non-use of water—which allows the Verde River Exchange to create Water Offset Credits



*Reduce Your
Water Footprint*



Why Might a Buyer Participate?

Potential buyers might be motivated to purchase Water Offset Credits because the credits offer:

- The opportunity to promote **sustainable water supply** for the future of the Verde Valley's communities and its economic health;
- The opportunity to **enhance the Verde River** as an environmental, recreational, and scenic asset; and
- The opportunity for businesses to **reduce their water footprint** and share the story of their part in promoting a sustainable water future.



Launched July 21, 2016



Verde River Exchange Water Offset Program
CERTIFICATE

THIS CERTIFICATE IS PROUDLY PRESENTED TO

Page Springs Vineyards & Cellars

FOR OFFSETTING

1,369,000
GALLONS OF WATER

2016

4.2
ACRE-FEET

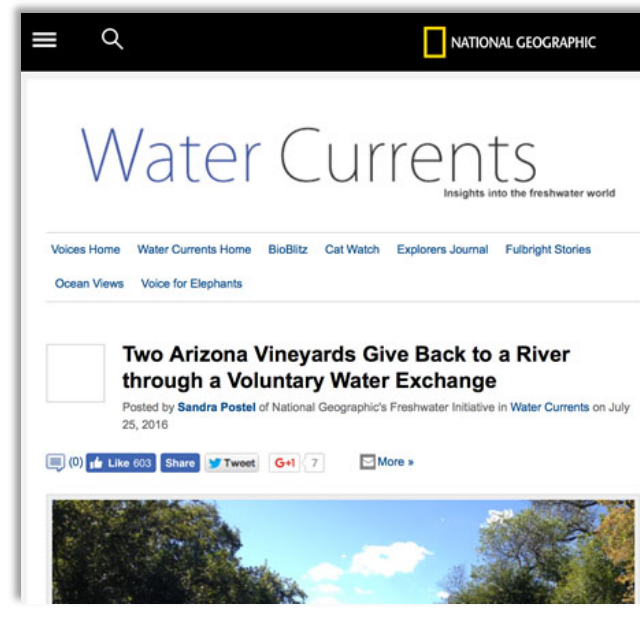
TYPE OF USE OFFSET:
Irrigation of Vineyard

Our livelihoods and quality of life depend on ensuring a healthy river system for all. This Water Offset Certificate is helping to preserve a flowing Verde River and to protect the local water supplies that sustain our community by reducing our collective use of the river and its connected groundwater systems. The Verde River is treasured by the Arizona communities that rely on it, and your participation in the Verde River Exchange Water Offset Program demonstrates your commitment to preserving the flowing waters and the green heart of the Verde Valley.

CERTIFICATE NO. 1

July 15, 2016
DATE

Chip Norton, President



Verde River Exchange Water Offset Program
CERTIFICATE

THIS CERTIFICATE IS PROUDLY PRESENTED TO

Caduceus Cellars & Merkin Vineyards

FOR OFFSETTING

1,369,000
GALLONS OF WATER

2016

4.2
ACRE-FEET

TYPE OF USE OFFSET:
Irrigation of Vineyard

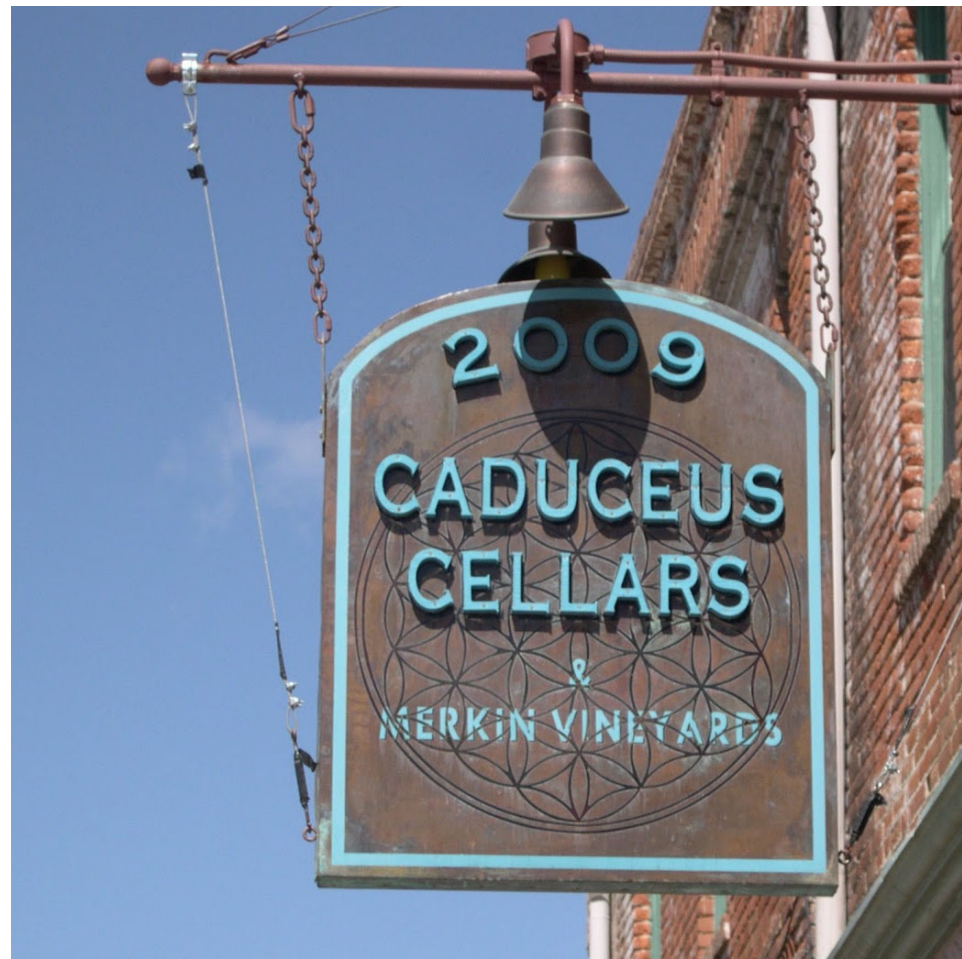
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CERTIFICATE NO. 2

July 15, 2016
DATE

Chip Norton, President





“You can’t plant and watch grow something like a vine and not have it affect you at some core level. To be a truly gifted grape farmer you have to be connected and present. That level of focus, compassion and care can become the heartbeat and driving economic and artistic life-force of a place.”

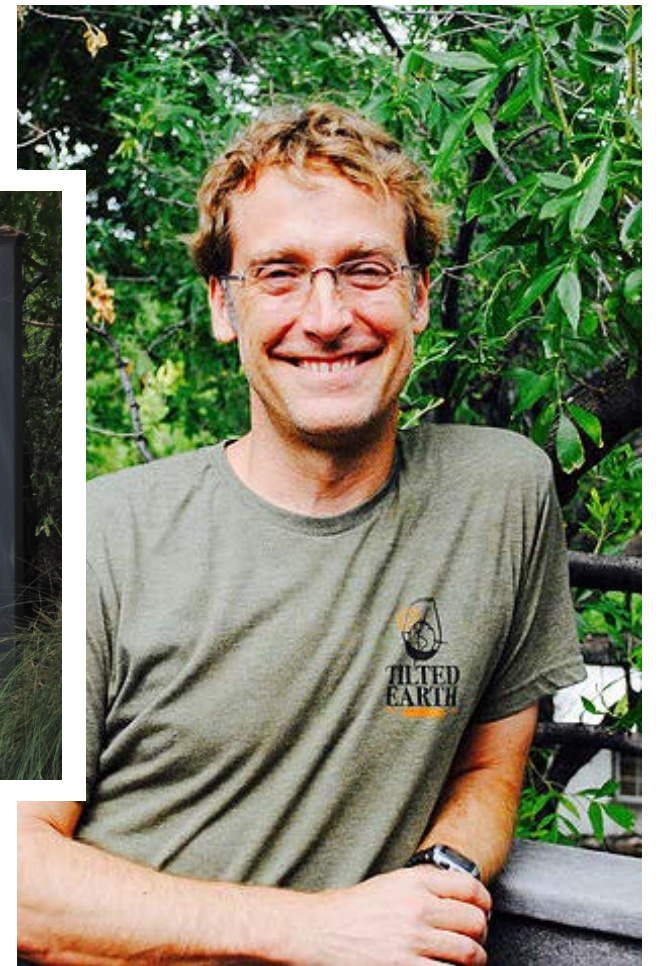
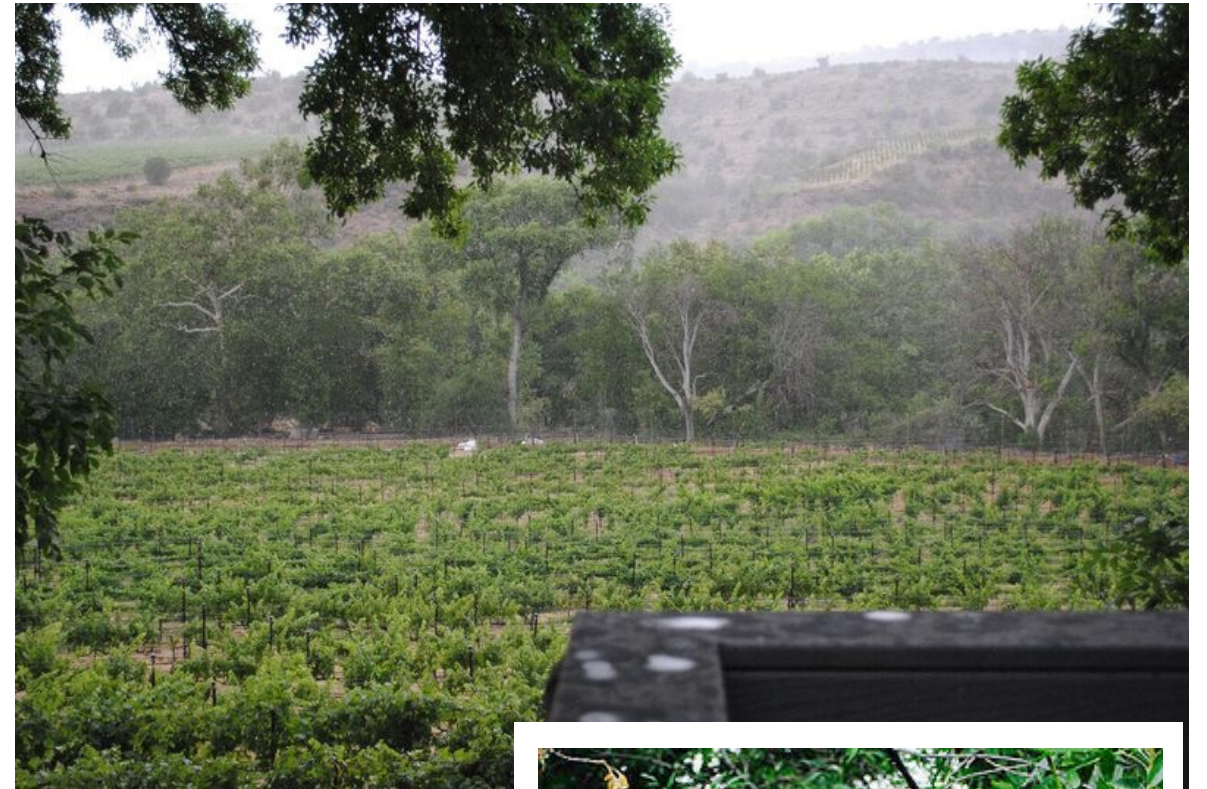
—Maynard James Keenan, Caduceus Cellars and Merkin Vineyards

Caduceus Cellars/Merkin Vineyards

Page Springs Cellars & Vineyards

"We are such a visually oriented culture. If I ask somebody to describe different shades of red and pink, people can conjure up descriptions from their crayon collections as a kid. But if you ask people to describe taste or smell it's quite underdeveloped. So for me wine has always been... a liquid landscape and a way of expressing the earth and the landscape through your sense of smell or taste rather than visually or dictatorially or otherwise."

—Eric Glomski, Page Springs Cellars and Vineyards





REPUBLIC MEDIA

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for Public Policy

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The End Goal?

Healthy flowing waterways

Water supply for future generations

Sustainable economic development



Building Our Program

- Increase number of projects
- Expand scope and duration of offsets
- Incentivize participation



www.verderiverexchange.org

Questions?



Special Thanks for Images:

Doug Von Gausig

Friends of Verde River Greenway

Sedona Chamber of Commerce & Tourism Bureau

Town of Camp Verde

Environmental Defense Fund

Arizona Department of Water Resources

Salt River Project

Freshwater Policy Consulting

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