

# The Verde River Exchange



Water Offset Program

# The Verde River









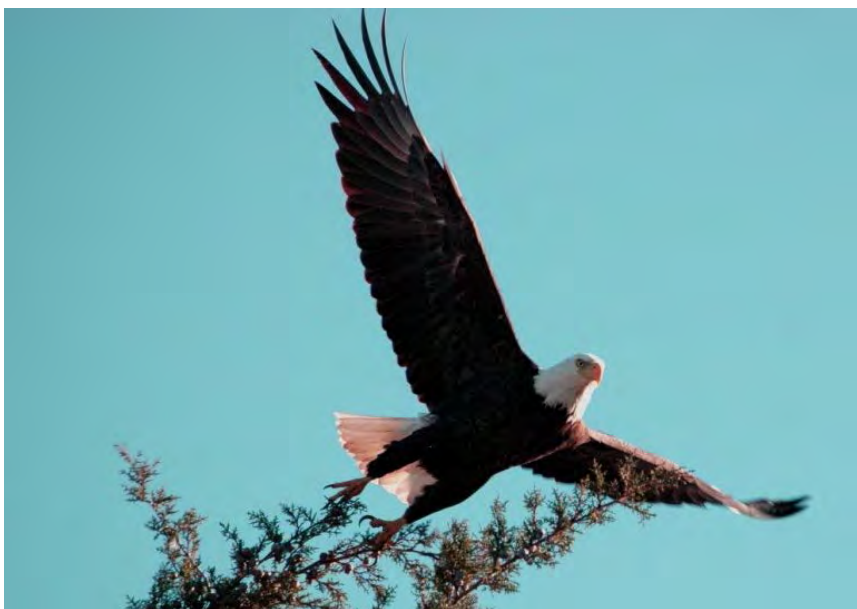


# The Value of the Verde River Water Supply





# 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.
- The Verde River is one of the last healthy, flowing river systems in Arizona.
- Two “Wild and Scenic” stretches, there are only 2 in AZ. They support 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.



# 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

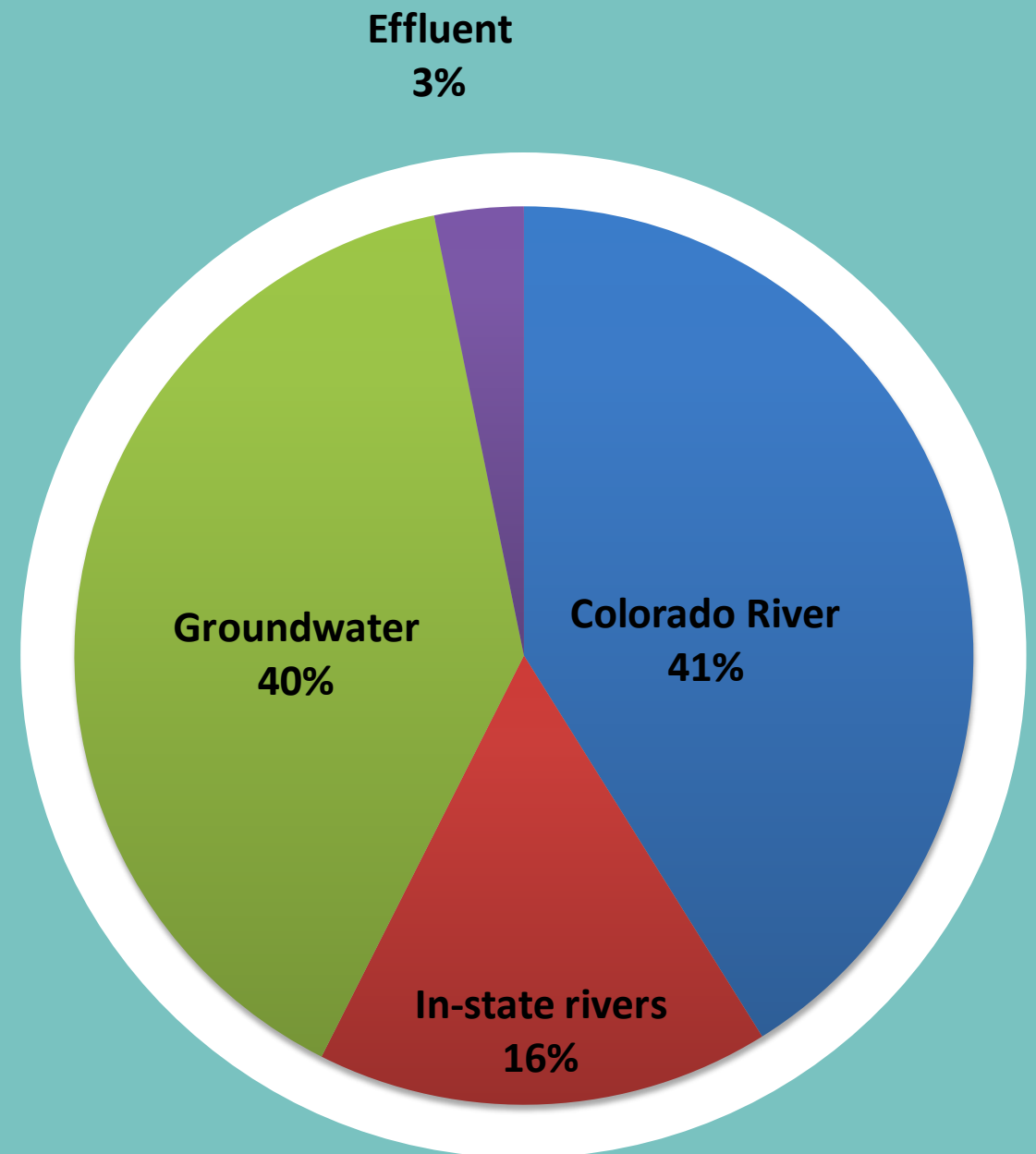




# Groundwater in Arizona

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

## Rural Arizona needs to join team 'water regulation'

Editorial board, The Republic | azcentral.com 7:11 p.m. MST June 9, 2015



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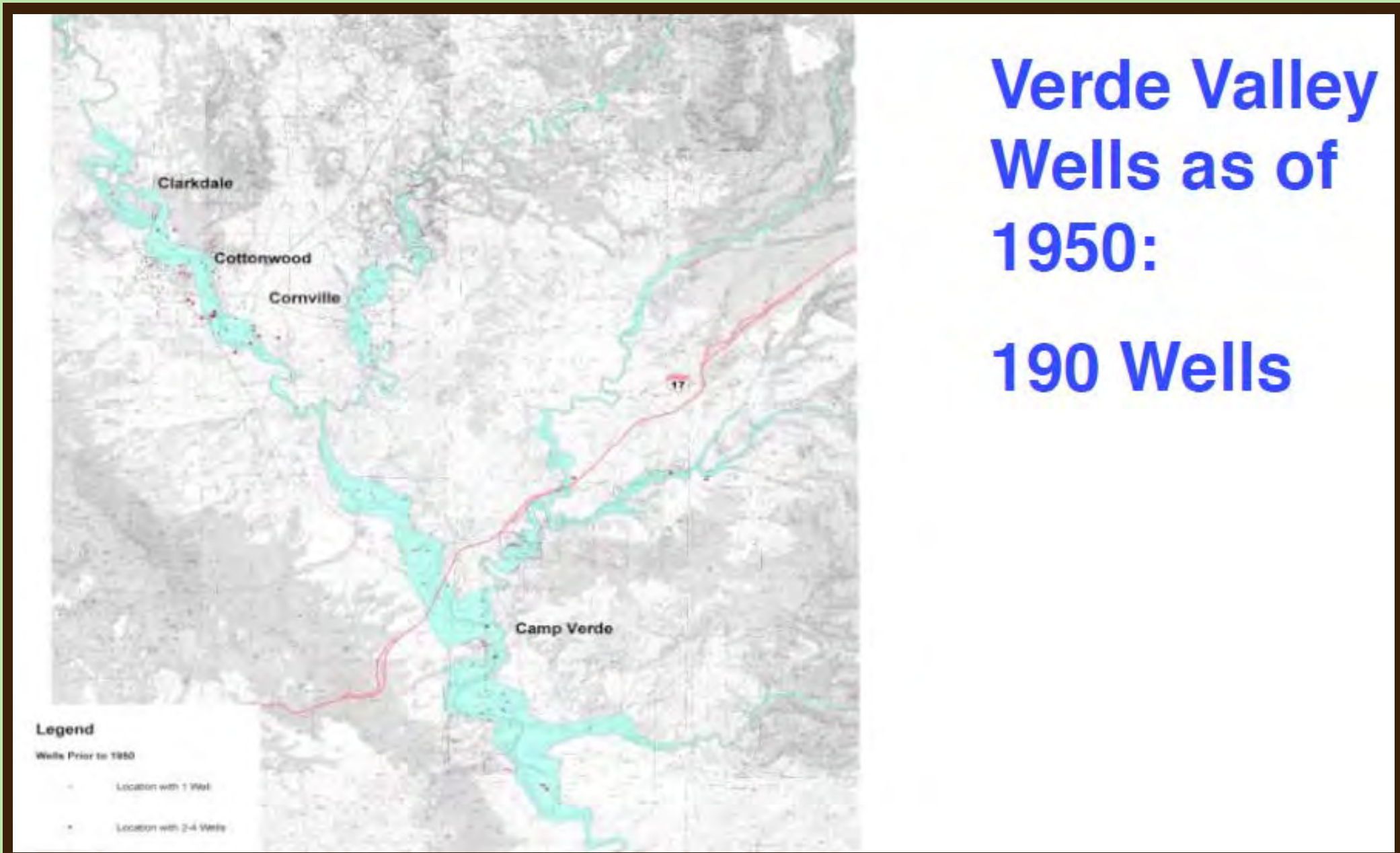
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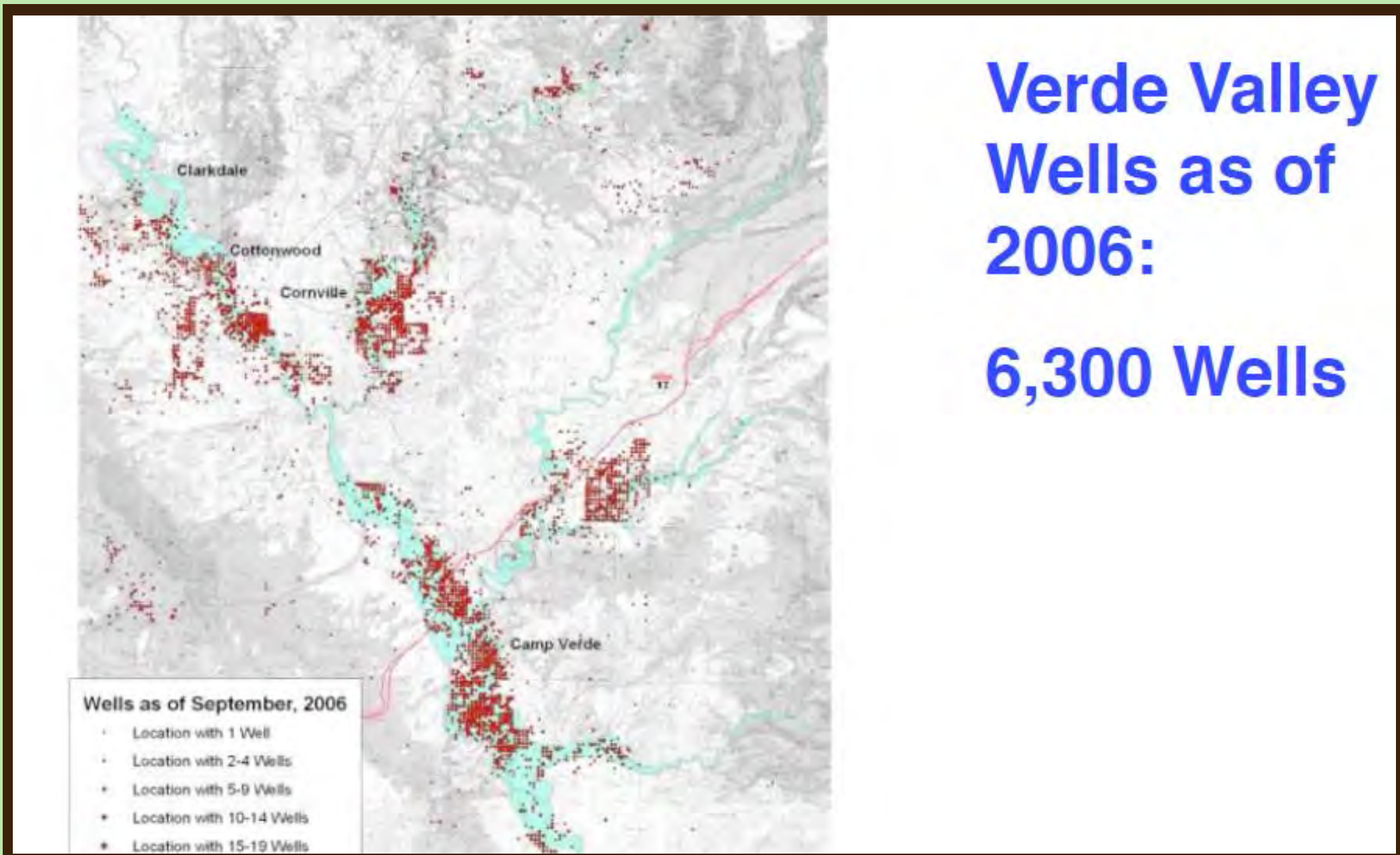
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Arizona Community Reckons With Loss Of Groundwater

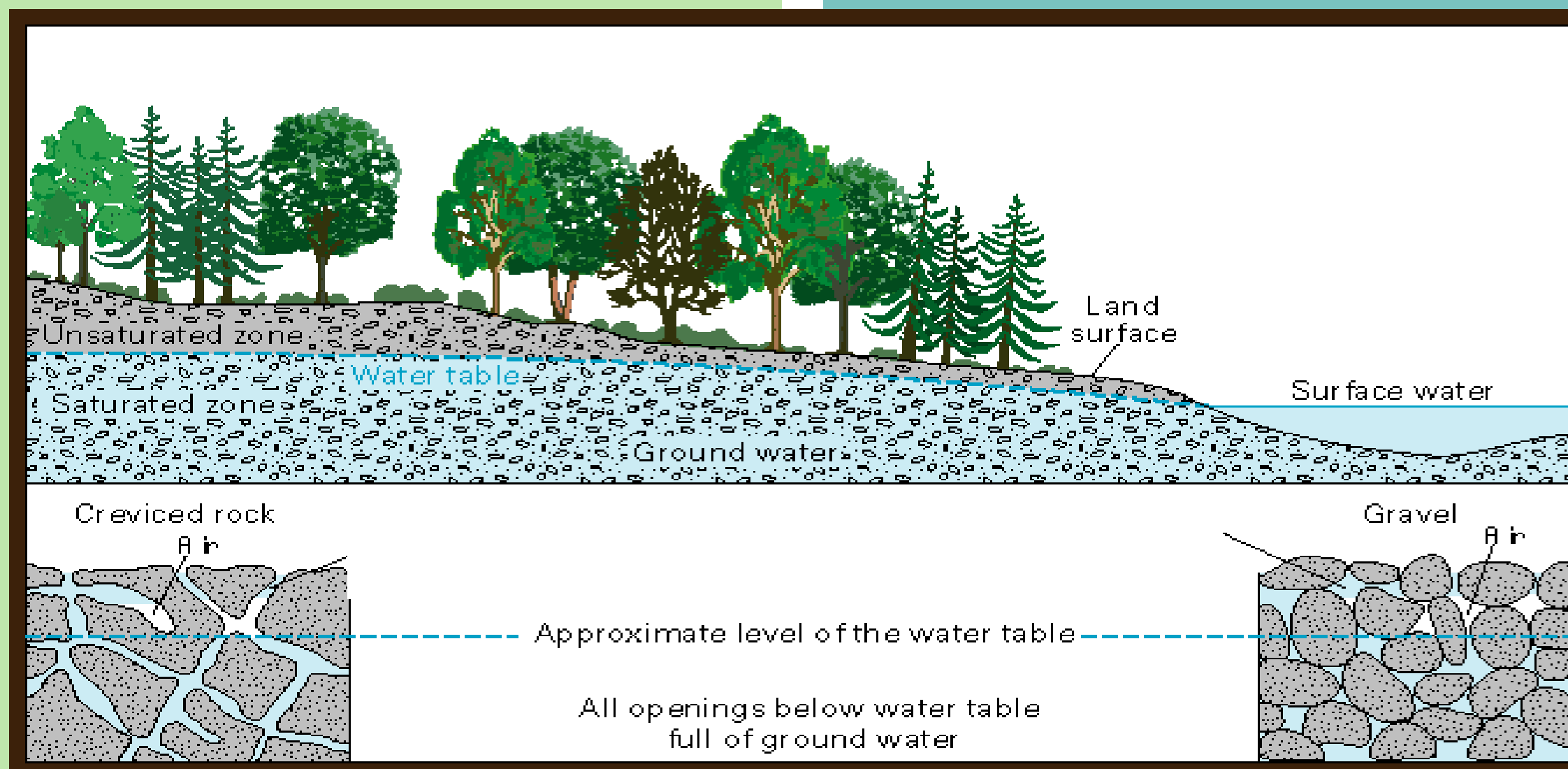


# Local Consequences

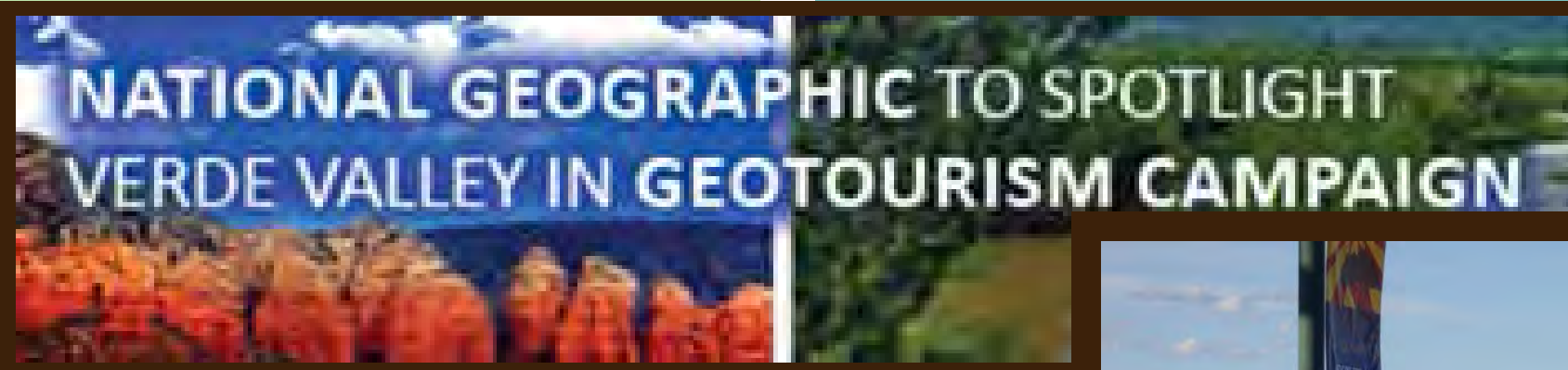




# Local Consequences







## 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.
- Diversions 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



# 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





# Pilot Projects







*“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



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Two Arizona Vineyards Give Back to a River through a Voluntary Water Exchange

Posted by Sandra Posner on July 25, 2016

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AZ Local Water Conservation Effort: Verde River Exchange

JULY 23, 2016 by GREENLIVINGAZ

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Conservation Program Launches to Reduce Water Usage in Verde Valley

By JUSTIN REGAN • AUG 2, 2016

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Conservation groups say Arizona's Verde River is being overused and the area's water needs are expected to double in the next 30 years. As Arizona Public Radio's Justin Regan reports, a new program is designed to decrease the demands on the river.

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# The End Goal?

Healthy flowing waterways.

Water supply for future generations.

Sustainable economic development.



# How Do I Participate?

To be a **BUYER** and reduce your water footprint:

**“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** are currently pumping or using groundwater in the Verde Valley, are conscious of their water “footprint,” and in addition to using only what they need, want to help reduce the overall “draw” on the system by making up for part of what they take out.

**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.

[www.verderiverexchange.org](http://www.verderiverexchange.org)

# How Do I Participate?

To be a **SELLER** and stop using some of the water that you have been putting to use:

“**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** have typically been using surface water (water diverted from a stream or river, usually through a ditch) but may have been pumping groundwater. They have used water for a beneficial purpose in recent years—for example, to irrigate lawn or pasture—but are willing to stop using that water for a year.

**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.

[www.verderiverexchange.org](http://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

[www.verderiverexchange.org](http://www.verderiverexchange.org)

