

Working Collaboratively for a Healthy Verde River

SUSTAINING FLOWS

RESTORING HABITAT

PROMOTING COMMUNITY

Working Collaboratively for a Healthy, Flowing Verde River

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SUSTAINING FLOWS

RESTORING HABITAT

PROMOTING COMMUNITY

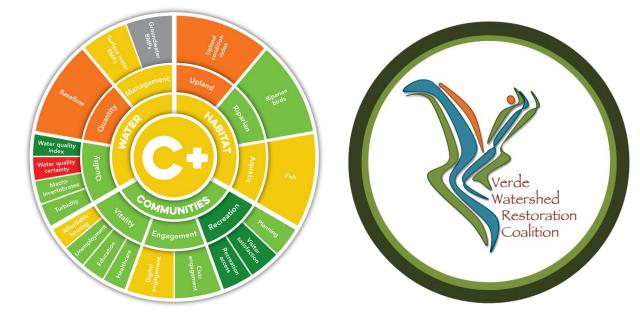
Mission Statement

Friends of Verde River works collaboratively for a healthy Verde River System.

Vision Statement

We envision a healthy, flowing Verde River and tributaries that support our natural environment, vibrant communities, and quality of life for future generations.





Why? Because we can't imagine a world without a healthy, flowing Verde River.

Water

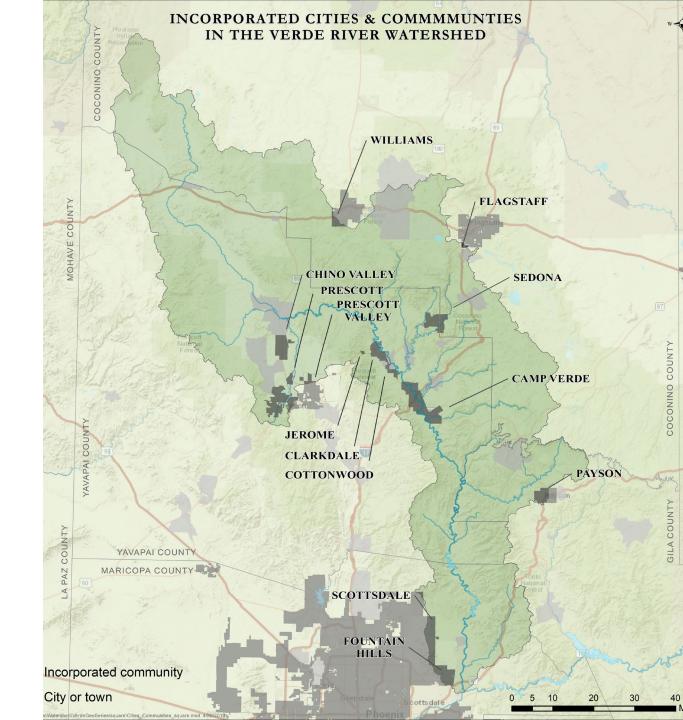
Land

Communities



Verde Basin

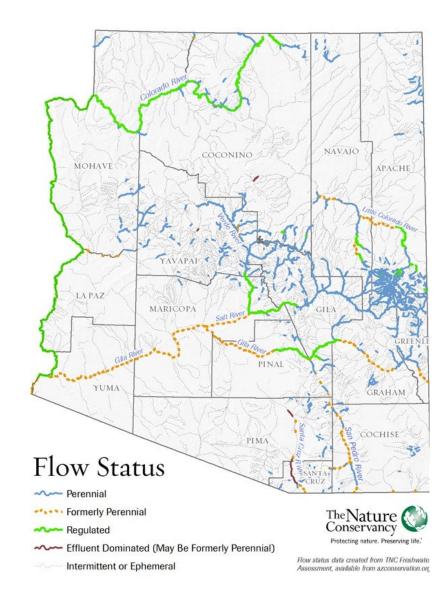
- 6 Indian Tribes/Nations
- 13 Cities
- 4 Counties
- 4 National Forests
- 13 Wilderness Areas
- 6 Important Bird Areas
- 3 Dark Sky Cities
- 2 Wild & Scenic Rivers



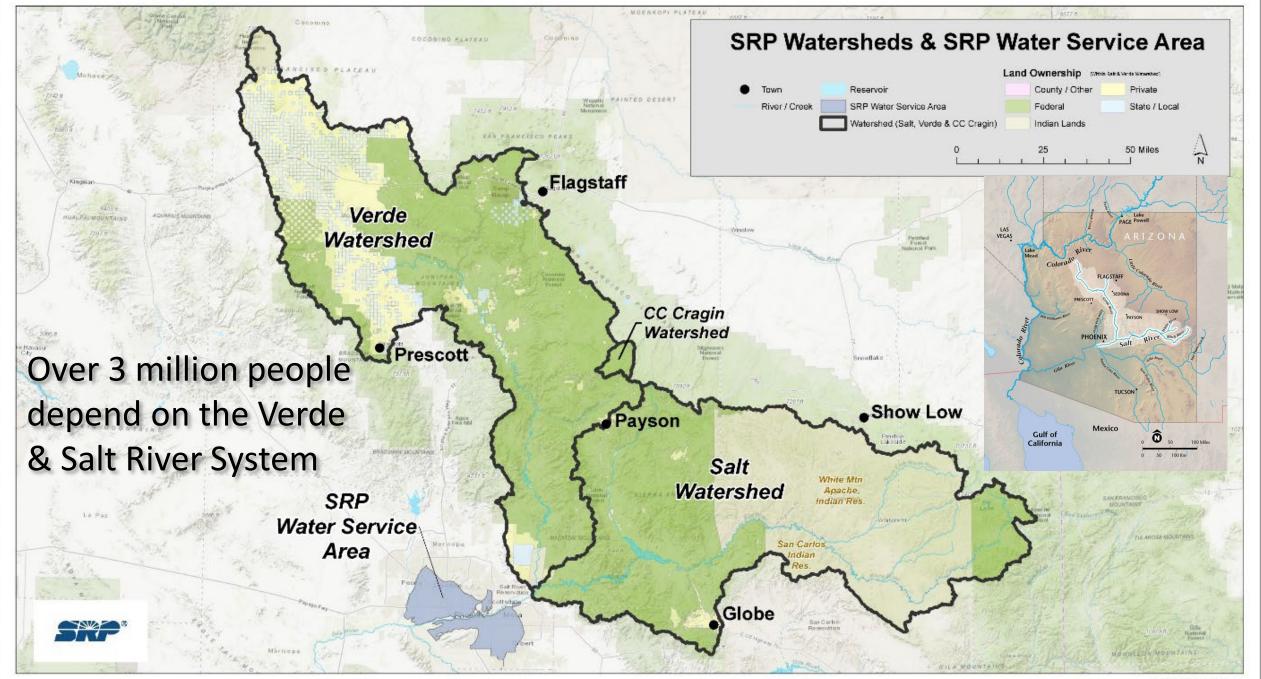
The Verde River

One of the last perennial rivers in AZ

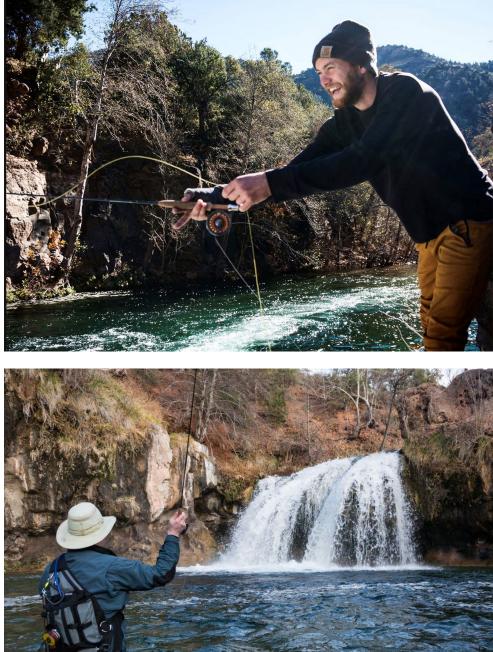




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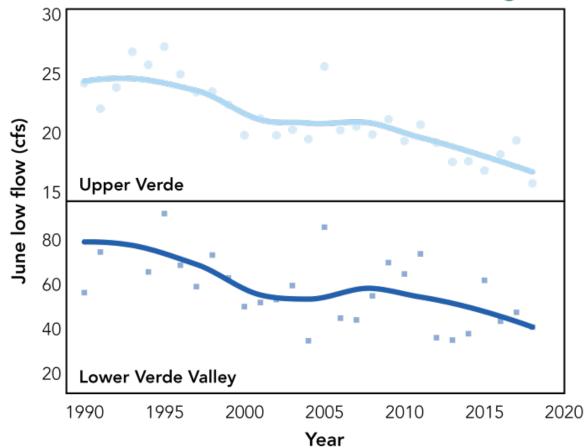




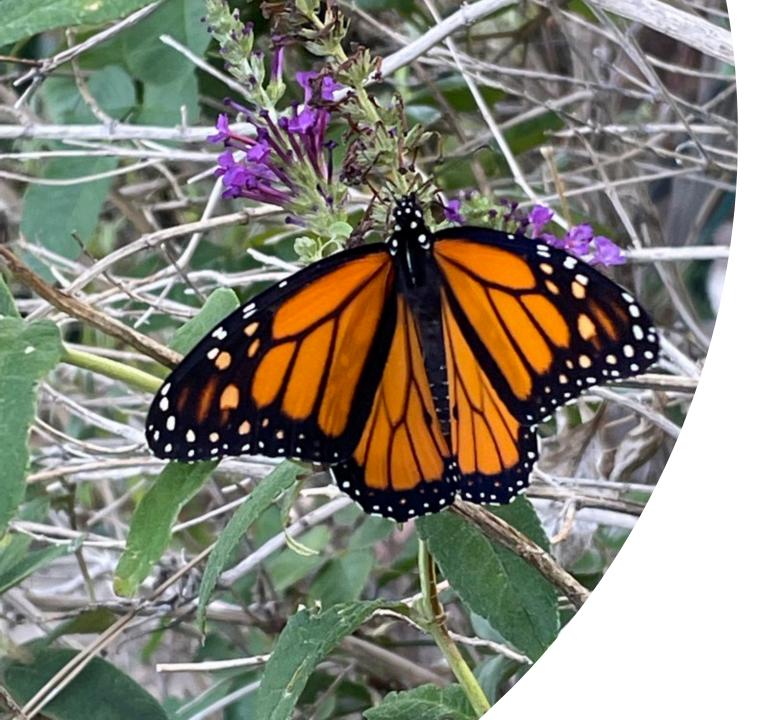


The Verde River is in trouble

Verde River flow is declining



Since 1990, flow in the Verde River and its tributaries has been steadily declining. From 1990 to 2018, Verde River June low flow declined 32% in the Upper Verde (top panel) and 46% in the Lower Verde Valley (bottom panel). Trends are based on the mean June 7-day low flow in cubic feet per second (cfs), measured by the U.S. Geological Survey.

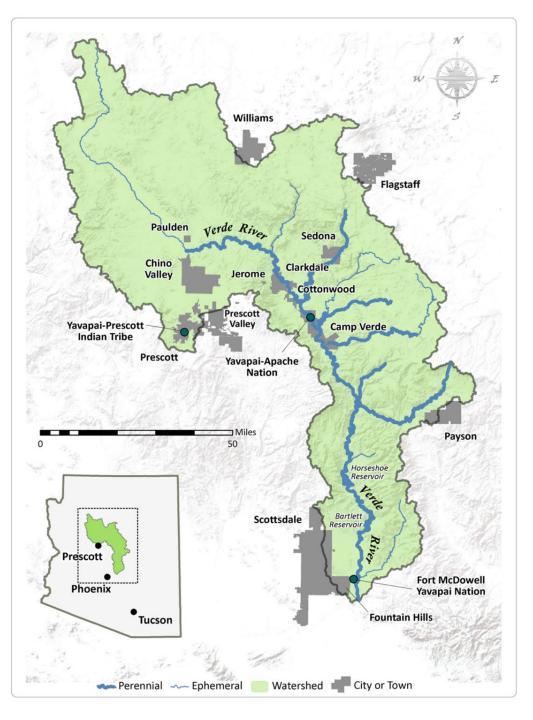


How Do You Save A River?

Verde Watershed Restoration Coalition

Work to restore the Verde River system to provide habitat for wildlife, support healthy watershed function, and contribute to the economy of the region





Verde Watershed Restoration Coalition (VWRC - "Vee-Work")



Stakeholder-driven

- >30 organizations (federal, state, municipal, tribal, non-profit)
- >250 private landowners

• Watershed-wide approach to restoration

- Mission: VWRC, functioning as a collaborative, ensures that conservation efforts are effectively implemented by being strategic and focused on project development and adaptive management.
- Vision: The members of the Verde Watershed Restoration Coalition envision a healthy, flowing Verde River system that sustains the natural environment and its communities with vibrant economies.

Cooperative Invasive Plant Management

- Tree of heaven (Ailanthus altissima)
- Giant reed (Arundo donax)
- Russian olive (Elaeagnus angustifolia)
- Saltcedar (Tamarix spp.)









Moving beyond the weeds

- Initial plans complete
 Invasive targets achieved
 - ~12,000 acres
 - >\$5 million
- Now what?



Partner feedback

- What's changed?
- Who is VWRC?
- What do we value?
- How do maximize collective impact?



Shared Vision

- Native aquatic, riparian, and uplands
- Resilient and diverse native species
- Wildlife corridors and habitats
- Self-sustaining and natural ecosystem functions in the watershed



Shared Goals

- Habitat improvement
- Aquatic resources
- Soil conservation
- Monitoring
- Education
- Stewardship
- Sustainable funding



VWRC Conservation Objectives

- Habitat restoration
 - Riparian plant management
 - Habitat connectivity and corridors
- Reduce accelerated erosion
- Address water quality drivers
- Provide volunteer and educational opportunities



Riparian Invasive Plant Management

Restore and maintain ecosystem function and habitat connectivity for fish and wildlife to facilitate self-sustaining natural processes and linkages between terrestrial and aquatic systems.

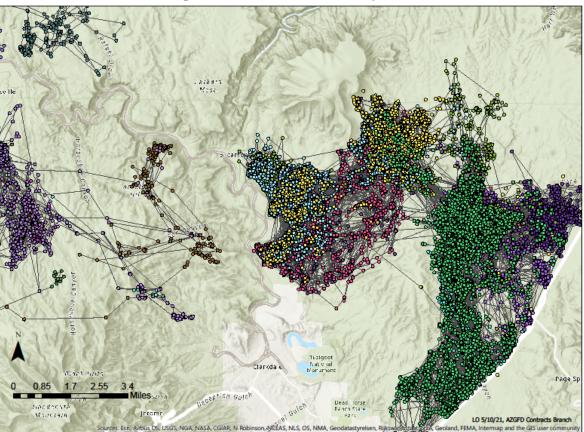
- Over 12,000 acres restored
- Target species: Giant Reed, Salt Cedar, Tree of Heaven, and Russian Olive
- Wildland restoration is a skilled job for youth (Conservation Corps) and veterans



Habitat Connectivity and Corridors

Restore and maintain ecosystem function and habitat connectivity for fish and wildlife to facilitate selfsustaining natural processes and linkages between terrestrial and aquatic systems.

- Reconnecting pronghorn corridors
- Inventorying and modifying fences



AZGFD Pronghorn Locations October 2018 - May 2021

Healing Erosion Gullies to Reduce Sediment Loading

Reduce accelerated erosion and associated landscape drivers along perennial river floodplains, ephemeral washes, upland gullies, and springs

Human-caused erosion damages aquatic habitat and reduces groundwater supplies









Water Quality Monitoring and Evaluation

Address water quality drivers to maintain and improve water quality to attain state clean water standards for healthy fish and wildlife and sustainable recreation



ARIZONA WATER WATCH MOBILE APP

Submit waterbody photos and data and become a Citizen Scientist in less than three minutes!

Download the Mobile App >



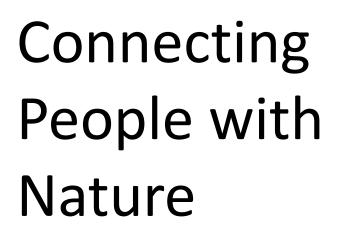


Water Quality Monitoring – Volunteer-powered















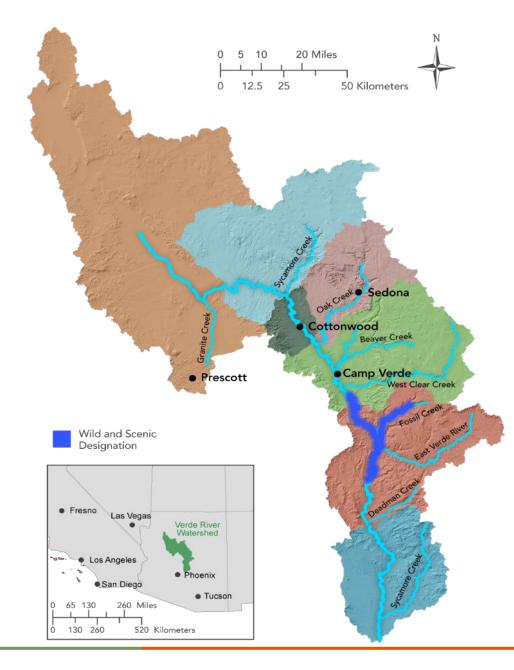


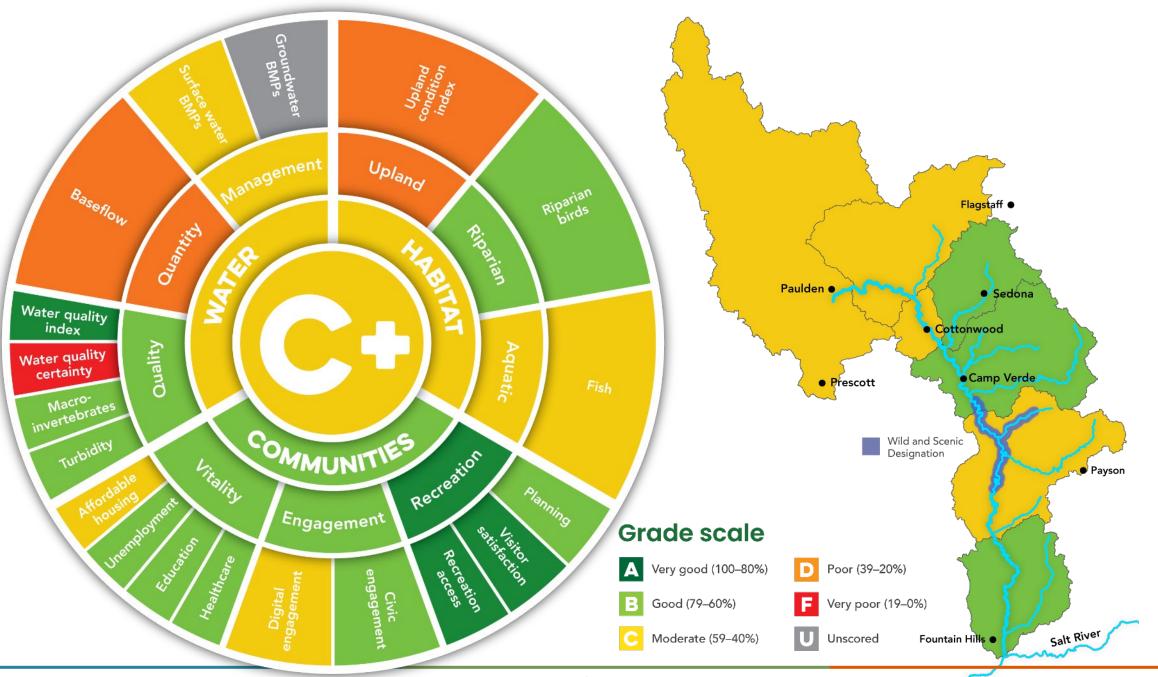
Upstream Solutions to Downstream Problems

Keeping water in the river

Scoring the Watershed

- 7 sub regions
- Metrics for each region are scored according to the methodology described
- The score for each region is aggregated up to the score for the whole watershed
- Some regions are really big
- Some have more people than others.
- Metrics are area weighted or population weighted as is relevant for the indicator.





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SOLUTIONS FOR A HEALTHY VERDE RIVER

We want a healthy, flowing Verde River and tributaries that support our unique environment, vibrant economy, and quality of life for future generations – let's take action!

FOREST RESTORATION

Restoring the health of fire-adapted ponderosa pine ecosystem will reduce the risk of unnaturally sever wildfires and improve wildlife habitat. Healthy forests provide better recreation and sustainable forest-related industries.

SMART AGRICULTURE

Investing in modern infrastructure to manage water efficiently from the river to the farm and develop new agriculture markets to choose crops that make money but use less water.

HEALTHY UPLAND HABITATS

Reversing human-caused erosion reduces the excess sediment and debris that clogs our rivers while improving wildlife habitat and recreational opportunities.

RIVER-FRIENDLY LIVING

There are many things you can do to be "river-friendly." Among them are reducing your water use, being an active member of your community, and volunteering for or donating to river-focused organizations.

COLLECTIVE ACTIONS

Engage agencies, organizations and community members including upstream and downstream water users to work together to shape our shared future from sustainable recreation to infrastructure investment.

PLAN OUR WATER FUTURE

Through integrated land and water planning, utilize effluent and stormwater effectively to recharge aquifers and balance water demand through water offset markets.

RESTORE RIPARIAN FORESTS

Our native riparian forest plants and animals work best together to support healthy rivers. By removing pest plants such as Tamarisk, Arundo, and Tree of Heaven, we can keep rivers accessible for humans and full of native animals.

VERDEREPORTCARD.ORG

VerdeRiver.org

How can we help the Verde River?

You can practice a river-friendly lifestyle!

- Certify your home, business, or development through River Friendly Living to help offset your water use, implement water conservation strategies on your property, learn about innovative ways to keep water in the watershed, and more. VerdeRiver.org/River-Friendly-Living.
- Volunteer with Friends! Visit VerdeRiver.org/Volunteer for more information.
- Every donation helps keep the Verde flowing. VerdeRiver.org/Donate



Reduce your water use to protect the river, lower costs, and use less energy.



Be a part of your community, stay informed, attend meetings, and make your voice heard.



Volunteer and donate with one of the many river-focused organizations.









Building a Legacy of Community Grantmaking since 1998

RIVERFRIENDLY L I V I N G



A Vibrant Verde Starts Here

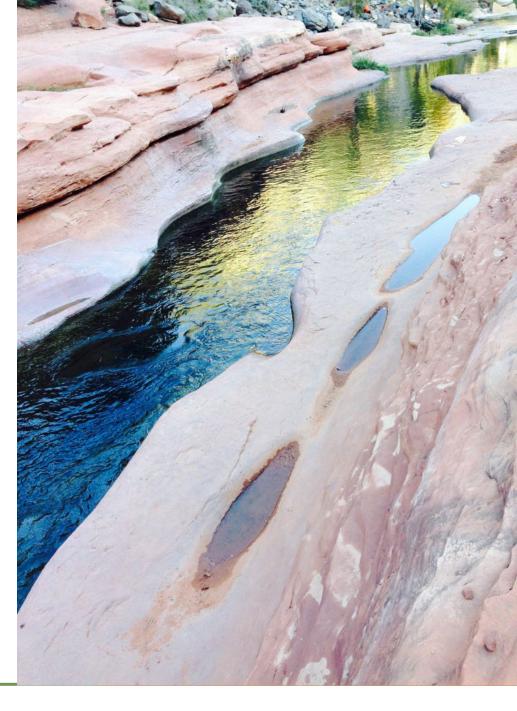
River Friendly Living Pillars

Sustainable Water Supply

Clean Water

Healthy Upland & Riverside Habitats

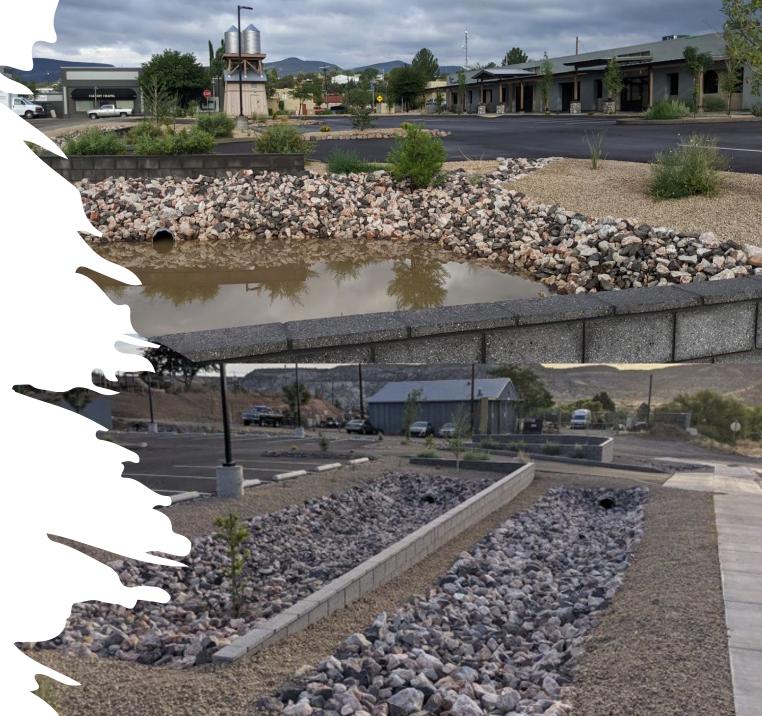
Connected and Supportive Communities



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Harvest the Rain

- Capture and infiltrate
- Restores aquifers, keeps the river clean, and reduces dangerous flooding
- Example: Rio Verde Plaza, Camp Verde



TinyCamp Cottonwood Resort

- Silver Certified River Friendly Development 2022
- Greywater & Rainwater capture systems capture up to 20,000 gallons of water per year
- Systems provide water for a pollinator garden that acts as an infiltration basin
- Keeps the river clean





 Greywater diversion for pollinator garden





Eyelash berms slow down water on your land

To keep the Verde River system healthy & flowing, we need to:

Restore

• Restore 10,000 more acres and keep already cleared lands healthy

Connect

• Reconnect pronghorn herds that are currently isolated

Heal

• Restore six to nine badly eroded gullies

Clean Up

• Implement watershed-wide river health monitoring

To keep the Verde River system healthy & flowing, we need to:

Improve Grades

• Improve watershed report card grades from a C+ to a B+!

Inspire and Educate

- Inspire and engage 1,000s of youth and adults each year
- Expand Community Science throughout the watershed
- Continue to educate and inspire the millions of people who live and recreate in the Verde

Coming together is a beginning Keeping together is progress; Working together is success.

Edward Everett Hale



Thank You!

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