

TRACKING WATER IN COBRE VALLEY

UA WRRC Research & Outreach Activities since 2016

Cobre Valley communities rely 100% on groundwater, which is a largely unregulated resource that is susceptible to climate and industry trends. Located in one of the fastest warming and drying regions in the nation, long-term water projections pose questions about the economic risks that could stunt community resilience and disrupt the natural beauty of the region. In order to take steps to increase rural community resilience to rising temperatures and increasing drought, the University of Arizona's Water Resources Research Center, in cooperation with Gila County Cooperative Extension, began the Cobre Valley Water Research Initiative in 2015 through funding from FMI and the US Bureau of Reclamation.



COLLEGE OF AGRICULTURE & LIFE SCIENCES
COOPERATIVE EXTENSION

WATER RESOURCES RESEARCH CENTER

TRACKING MILESTONES

Community Assets Assessment

2016 - 2017

- Completed in 2017, this preliminary report set the stage for the WRRC's recommendations for research and partnership in the Cobre Valley, highlighting information gaps and the fragmentation of data and water management knowledge in the region.
- WRRC recommended the formation of a watershed partnership to connect partners around land and water issues at a regional scale (and the Cobre Valley Watershed Partnership is now a reality!).

First Water Forum: Setting Priorities

September 6, 2018

- 50 local and regional partners gathered to support the long-term sustainability of the region by sharing ideas and transferring knowledge about water.
- Established working groups to make progress on regional water management priorities and watershed vision decided at the forum: Create and maintain vibrant and healthy communities, environment, and economy in Cobre Valley by fostering collaboration, transparent decision-making, and cooperative projects that will benefit the watershed for generations to come.

Second Water Forum: Updates and New Initiatives

April 9, 2019

- 70 community members and regional partners came together to build on objectives decided at the First Forum.
- Partners and funders, such as the Arizona Department of Environmental Quality, Bureau of Reclamation, WIFA, and Babbitt Center for Land and Water Policy, were introduced in addition to the introduction of the new watershed partnership.
- Set the stage for upcoming phases of the project, which focuses on the relationship between ecosystem services and the future of the region.

Creation of a Working Water Budget

- Developed estimates for municipal, agricultural (ranching), private wells, and industrial demands. Water demand also includes non-human uses, such as by trees and vegetation in the area, referred to as Evapotranspiration (ET).
- Defined water supplies, including groundwater, surface water, reclaimed water (high quality treated wastewater).
- Based on findings, human demands outstrip annual groundwater recharge (supply) in the Cobre Valley.

This work was supported by a wide range of partners and stakeholders in the region. We appreciate the input, time, and effort of many community members.





CONNECTING THE COBRE VALLEY TO UA

College of Architecture, Planning & Landscape Architecture (CAPLA)

Spring 2019

- As part of a capstone course at UA CAPLA, six graduate planning students assessed the region and developed a framework to increase economic development in the Cobre Valley through the lens of environmental stewardship. The results, which manifested into “Cobre Valley CHEER: 5-4-3 Framework” were presented at the Second Cobre Valley Forum on Water.
- The planning project group also worked with Landscape Architecture graduate students to develop a design proposal for a Cobre Valley Rail Trail - 9.4 mile multi-use trail connecting Miami, Globe, and the Tri-Cities area.



College of Architecture,
Planning & Landscape
Architecture

University of Arizona Law School Natural Resources Clinic

2018

- The University of Arizona James E. Rogers College of Law Natural Resource Use and Management Clinic partnered with the WRRRC to prepare an overview of water rights adjudication, groundwater management, and potential Clean Water Act jurisdiction as they relate to rights and activities in the Cobre Valley.



James E. Rogers
College of Law



LOOKING TOWARD THE FUTURE

Cobre Valley's Water Future: Scenario Planning & Ecosystem Services Analysis

2019-2021

- WRRRC research will seek to demonstrate the impact of ecosystem services on the community health and economy of Cobre Valley, taking into consideration the many and varied benefits derived from the natural environment. Looking into the future, how might these benefits be diminished or affected by drought? How might local decisions and industry support help increase the resilience of these resources? Over the next two years, we will work with community members and the Cobre Valley Watershed Partnership to develop in-depth answers to these difficult questions.

For immediate queries please contact the Water Resources Research Center at (520) 621-8252, or email Project Manager, Ashley Hullinger at hullinger@email.arizona.edu

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