

VERDE RIVER WATERSHED REPORT CARD NEWSLETTER

Apr. 4–5, 2019 Second stakeholder workshop summary

The Verde River flows through north-central Arizona and is a primary water source for Phoenix. As it works its way down from its headwaters in the Big and Little Chino Basins, the Verde provides excellent habitat for a wide array of plants and animals. Water from the river also supports small-scale agriculture, landscaping, and accessible groundwater for communities. Recreation on the river is an important economic and cultural resource—if you haven't yet visited the Verde River you are missing out on one of the gems of the southwestern US. Due to the many values we place on the Verde, management of the river is complicated and many stakeholders are engaged in the process. This is a perfect system to apply the Watershed Report Card method.

For two days, April 4–5, a diverse group of stakeholders assembled from around the region to continue the process of developing a Verde River Watershed Report Card. The report card will have three main themes: Water, Habitat, and Communities. The communities theme is a recognition that a healthy river requires thriving communities of people who value the river in multifaceted ways. The report card process is rewarding in part due to the incredible engagement of the different stakeholders and their determination to indicate the health of the watershed in relevant and meaningful ways. Over the course of two days, we further developed indicators, discovered data to score for each indicator, and discussed scoring approaches, in some cases, discussing the selection of thresholds. We also discussed narrative that might be appropriate for the report card—some of these stories are included in this newsletter.



Indicators are being developed for each of the three main report card themes: Water, Habitat, and Communities. Photos clockwise from top left: Sally May on Fossil Creek; View from Doe Mountain Trail No. 60; Waterfall Trail Fossil Creek. Deborah Lee Soltesz.

WATER IS LIFE

As many have said, “water is life.” Certainly, in an arid climate, water’s scarcity requires that we examine how we use and share this resource. In the Verde River system, people claimed water and built 42 ditches, each with an establishment date going back more than a century. Arizona’s system of water rights, along with reserved water rights for native peoples, means that the untangling Verde river water is destined for the courts. Adjudication—the process by which a judge hears all claims and decides who has the right to how much water—is expected to bring water-rights certainty to the Verde River, someday.

WATER IS HABITAT

The amount of water on the landscape strongly influences the type of habitat available for wild plants and animals. The Verde River winds through a transitional ecoregion, part of the Mogollon Highlands. This is the region of central Arizona where the Sonoran Desert meets the Colorado Plateau. With elevations ranging from 12,000 ft in the San Francisco Mountains to 1,600 ft at the confluence of the Verde with the Salt River near Phoenix, climate is variable. More rain falls in the Verde Watershed than in other parts of the state, feeding perennial streams. The forested areas alongside the rivers and creeks support diverse bird communities, and attract characteristic animals such as otters, beavers, white-tail deer, javelina. The river itself supports native and introduced fish that feast on abundant insect life.

But changes in water flows and climate change threaten to reduce water flows and shift the location and spatial extent of the many habitats. Human impacts are changing, also, as more people move to cities in, or that impact, the watershed, such as Cottonwood, Sedona, and Prescott. Therefore, tracking and protecting the biodiversity of the Verde watershed over time is an important challenge for the many stakeholders here. Questions such as: “How much water does a fish need for healthy habitat?” are more than academic, especially if the answer will be applied in a rigorous way to water management throughout the basin.

WATER IS COMMUNITY

Thriving communities that are economically stable and within which the children are healthy and well-educated, have the best chance of succeeding in conserving the values we place on the Verde River. Many businesses in the basin depend on water from the Verde River, either directly through water for agriculture and recreational boating, or indirectly through tourism. People who live here value the river for itself. But the river supports and depends on these communities, therefore threats to healthy communities are closely tied to threats to the river itself. Continued engagement throughout the community is the most promising tool of conservation. Groups in the Verde watershed hold many events throughout the year and host volunteer efforts to clean up and conserve the river. The success of these initiatives is one indicator of engagement, useful to tracking the health of this river community.



Workshop participants brainstorming indicators. Andrew Elmore.



Project construction in the Verde watershed. Andrew Elmore.

REPORT CARD REPORTING REGIONS

The Verde River watershed is complex, spanning 190 miles of mountains, plains, and valleys. To evaluate the health of the Verde as accurately as possible, the watershed must be divided into reporting regions. These smaller regions are geographically specific and will highlight the unique differences between regions in this watershed. Factors that determine reporting regions include data density and availability, the overall biogeography of the watershed, and social and political issues in the region.

The seven reporting regions in the map to the right were conceptualized at the two stakeholder workshops. Reporting regions will continue to be revised as indicators are developed and data become available.

From top left to bottom right, the reporting regions are: Big and Little Chino, Upper Verde, Upper Verde Valley, Oak Creek, Lower Verde Valley, Wild and Scenic, and the Lower Verde.



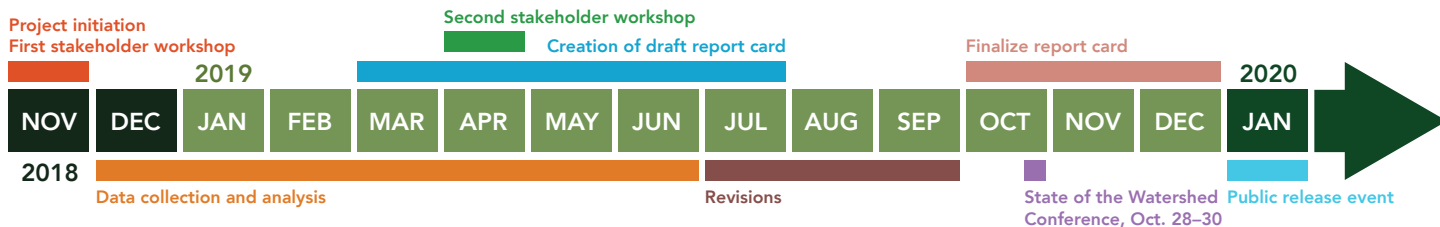
REPORT CARD PROCESS

The first step in developing a report card is engaging stakeholders to describe the watershed graphically, with the goal of creating a shared understanding of the basin as a whole. This step was completed at the November workshop. The next two steps, Choose Indicators and Determine Thresholds, are currently underway by the project team. Physical, biological, and social indicators are being evaluated against scientifically-derived thresholds to determine the overall health of the Verde watershed. Between now and October 2019 the remaining two steps, Calculating Grades and Communicate, will be completed. Indicator scores will be summarized, converted to grades, and shared in the final report card document.



NEXT STEPS AND PROJECT TIMELINE

The development and production of the Verde River Watershed Report Card is estimated to take 15 months, with the release planned for January 2020. Following the initial stakeholder workshop in November 2018, the next seven months entail collection and analysis of data for the identified indicators. The second stakeholder workshop was held in Camp Verde, AZ on April 4–5, 2019. A draft report card will be created from April to July 2019 based on the discussion and feedback from the second stakeholder workshop. From July to November, the Verde River Watershed Report Card will be revised and finalized, with a soft-release during the State of the Watershed conference in October 2019.



Workshop participants



Participants of the second stakeholder workshop held at the Camp Verde library in April 2019. Kim Schonek.

Steve Ayers, Town of Camp Verde
 Keith Ayotte, Arizona State Parks and Trails
 Gary Beverly, Sierra Club; Citizens Water Advocacy Group
 Brent Bitz, Friends of the Verde River
 Nicole Branton, Coconino National Forest
 Steve Chesterton, US Forest Service National Office
 George Christianson, Arizona State Parks and Trails
 Ron Corbin, City of Cottonwood
 Scott Deeny, The Nature Conservancy
 Shaula Hedwall, US Fish and Wildlife Service
 Darcy Hitchcock, The Sustainability Alliance
 Roy Jemmison, US Forest Service
 Mckenzie Jones, City of Sedona

Kyung Kho, US Forest Service
 Greg Kornrumpf, Salt River Project
 Karon Leigh, Friends of the Verde River
 Melissa McMaster, River's Edge West
 Kelly Mott-Lacroix, Tonto National Forest
 Terri Nelson, Yavapai County
 Tom Palmer, Prescott National Forest
 Selena Pao, The Nature Conservancy
 Holly Richter, The Nature Conservancy
 Kim Schonek, The Nature Conservancy
 Morgan Scott, City of Cottonwood
 Lucas Shaw, Salt River Project
 Albert Silas, Prescott National Forest
 Nancy Steele, Friends of the Verde River
 Tracy Stephens, Friends of the Verde River
 Tom Thurman, Yavapai County Board of Supervisors
 Ron Tiller, Arizona Department of Environmental Quality
 Dave Weedman, Arizona Game and Fish Department
 Max Wilson, Friends of the Verde River
 Chad Yocum, Prescott National Forest

Science communication

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Cover photo: Mazatzal on Fossil Creek. Deborah Lee Soltesz.