

H₂O Arizona Water Sentinels

Sentinels



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To see upcoming Water Sentinels opportunities, please visit <http://bit.ly/SCAZevents>. For more information, contact Jennifer Martin-McLeod at jennifer.martin@sierraclub.org or (602) 254-8362.

Who are the Arizona Water Sentinels?

Water Sentinels are people of all ages and backgrounds who volunteer to do hands-on conservation work to protect Arizona's rivers and streams. Our mission is to protect, improve, and restore Arizona rivers and streams.

What do the Arizona Water Sentinels do?

Water Sentinels measure water quality parameters such as pH, dissolved oxygen, conductivity, and total dissolved solids concentrations in the Verde and San Pedro rivers. We collect water samples to determine concentrations of *E. coli* bacteria in the water. These data help decision-makers properly manage these amazing rivers. There is no special training needed. We provide it. You can be a Water Sentinel!

Water Sentinels conduct stream clean-ups and work to restore riparian areas. For example, Sentinels also are working in the Rio Salado Habitat Restoration Area near downtown Phoenix to remove buffelgrass, an invasive grass which poses a wildfire danger and crowds out native plants in the Salt River riparian corridor, as well as other nonnative invasive plants. Every month, Water Sentinels pick up trash and litter and remove invasive nonnative plants in the restoration area. At various times, we also plant native trees, shrubs, and grasses to provide habitat for wildlife, including monarch butterflies and beavers, and to provide a respite area for city dwellers.



Figure 1. Water Sentinels sampling the San Pedro River. Photo Credit: Tiffany Sprague

Why These Rivers?

The Verde River is one of the largest perennial rivers in the Southwest and has one of Arizona's most important riparian corridors, providing key habitat for many species, including threatened and endangered species. The Verde River offers a multitude of recreational opportunities and is an important source of drinking water for the Phoenix metropolitan area. This river faces significant threats from excessive groundwater pumping to feed growth and development, plus there are water quality concerns with certain stretches of the river. They include bacteria, excessive sediment, and elevated arsenic concentrations. Water Sentinels go to three sampling sites on the Verde River, plus one on Spring Creek (a tributary of the Verde) to monitor the river's water quality. We hope to gain enough data to have the Arizona Department of Environmental Quality (ADEQ) designate a portion of the river as an Outstanding Arizona Water.

The San Pedro is one of the southwestern United States' last undammed rivers. Water Sentinels monitor water quality at five sites within the San Pedro National Riparian Conservation Area near Sierra Vista. We're also monitoring groundwater levels in wells near the river. We share water quality data that Water Sentinels collect with the Bureau of Land Management, the agency responsible for managing the National Riparian Conservation Area and with ADEQ.



Figure 2. Water Sentinels sampling the Verde River
Photo Credit: Sandy Bahr

How can I get involved?

Join us! If you are interested in clean water or hands-on conservation work to protect streams and watersheds, then the Water Sentinels program is for you!

This year's Water Sentinels Activities dates are:

Verde River: May 9, June 13, July 11, August 8, September 12, October 24

San Pedro River: May 15, June 12, July 13, August 10, September 14, October 26

Rio Salado: April 26, May 14, June 11, July 12, September 13, October 25, November 8, December 6.