

Celebrating Arizona's Rivers

Each month during Arizona's centennial year, we will profile a different river in celebration of the state's precious natural resources. From the mighty Colorado to the smallest ephemeral streams, these waterways have supported Arizona's people and places for thousands of years. With good stewardship and thoughtful planning, they will continue to flow into Arizona's next 100 years.

January 2013: Aravaipa Creek

Passed by Congress in 1964, the Wilderness Act protects areas "where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain." Encompassing rugged terrain and a remote, spectacular canyon in southeastern Arizona, the Aravaipa Creek watershed is just such a place, with its 10-mile long central canyon designated as a wilderness area in 1984. Access to Aravaipa Canyon is subject to a permit system that limits use to fifty people per day, offering a secluded experience of the canyon's scenery and wildlife.

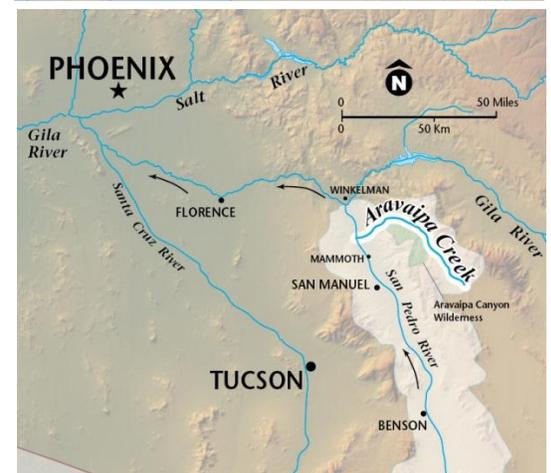
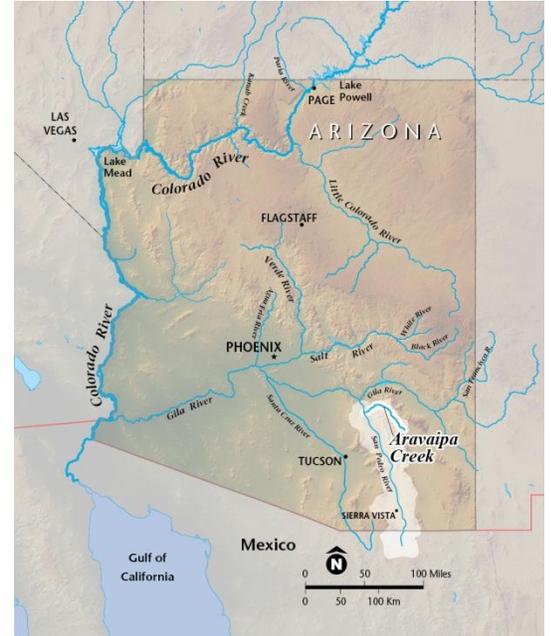
Aravaipa Canyon has been home to humans since prehistoric times, including to the Hohokam, Mogollon, and Salado people, who hunted game and grew a variety of crops supported by the river's flows. Evidence suggests that by the 1500s, the Sobaipuri people were irrigating and farming near the confluence of Aravaipa Creek and the San Pedro River. In the 1800s, the Aravaipa band of Apaches clashed on multiple occasions with the United States Cavalry as the development of mining and agriculture drew more settlers to Arizona.

By the late 1800s, ranching and mining had become well-established in the Aravaipa watershed. Today, The Nature Conservancy (TNC), which owns and protects the 9,000-acre Aravaipa Canyon Preserve on the east and west ends of the canyon, runs a limited number of cattle in the watershed.

Geography. About fifty miles northeast of Tucson, Aravaipa Creek originates in the Pinaleño, Santa Teresa, and Galiuro Mountains, where surface runoff creates the main creek channel at an elevation of around 3,000 feet. In its upper reaches, Aravaipa Creek is intermittent, and only flows during certain times of the year.

However, as the creek flows westward, it becomes perennial, flowing year-round due to seeps, springs, and tributaries, and supports lush streamside vegetation and habitat.

The creek's main gorge, Aravaipa Canyon, twists and turns along a generally northwestern course. The majority of the canyon itself is designated as the 19,700-acre Aravaipa Canyon Wilderness Area, and is overseen by the federal Bureau of Land Management. The walls of Aravaipa Canyon rise over 1,000 feet above the creek, and the canyon ranges from 100 to 30 feet wide, often forcing hikers to walk directly in the creek as



Top image: Watershed of the San Pedro River in relation to other Arizona rivers. **Bottom image:** Detail showing Aravaipa Creek in the San Pedro watershed.



Aravaipa Creek. Image courtesy of Hannah Stitzer.

they explore this beautiful area. Frequent flash floods are a key feature of this canyon and hikers are cautioned to be wary of this possibility.

After emerging from Aravaipa Canyon, the lower five miles of the creek become ephemeral, as water often disappears from the surface and sinks into the stream bed. Aravaipa Creek joins the San Pedro River upstream of the San Pedro's confluence with the Gila River, near the community of Winkelman.

Ecology. Aravaipa Creek's year-round flows and healthy riparian forest of cottonwood, willow, walnut, alder, and sycamore trees provides 17 miles of habitat for a wide variety of species, including:

- One of the most diverse populations of native desert fishes remaining in Arizona, including the endangered spikedace and loach minnow, as well as roundtail chub, speckled dace, and desert sucker;
- 228 recorded species of birds, including peregrine falcon, many hawk species, elf owls, and migratory songbirds such as the vermilion flycatcher, black phoebe, canyon wren, white-throated swift, yellow warbler, and Bell's vireo;
- A healthy population of desert bighorn sheep; and
- At least nine species of bats, as well as multiple other mammals, reptiles, and amphibians.

Use. Given the protected status of much of the Aravaipa watershed, human use of the creek is relatively limited. It includes:

- A limited amount of groundwater pumping for farming and livestock grazing in privately owned areas of the watershed, which occasionally dries short sections of Aravaipa Creek; and
- Recreational uses, such as backpacking, hiking, and bird- and wildlife-watching.

Threats to Aravaipa Creek include:

- Soil contamination, including substances such as lead and arsenic, from the Klondyke tailings site, a former mining operation. Soil tested by the Arizona Department of Environmental Quality has been shown to contain these contaminants, and remediation activities are ongoing. While soil contamination presents a potential threat to the overall health of the watershed, tests of well water in the area have not shown evidence of these contaminants.
- Regional drought and climate change, which may reduce annual rainfall and streamflow in the watershed.

Aravaipa Creek offers a glimpse of relatively untrammelled wilderness where visitors can explore one of Arizona's most pristine watersheds. The creek's wilderness designation ensures that human use of the area will be managed in order to preserve this experience for generations to come.

