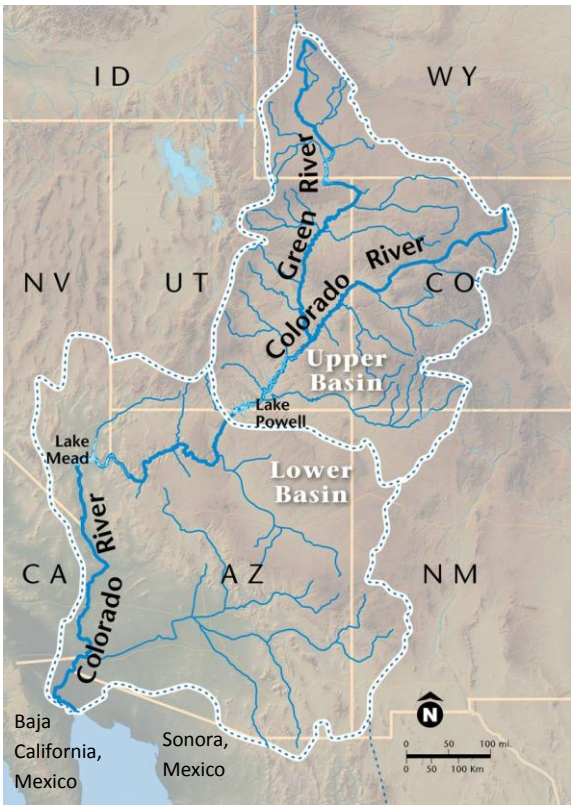
Celebrating Arizona's Rivers

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.

March 2012: The Colorado River

Often called the "lifeblood of the West," the Colorado River drains areas of seven U.S. and two Mexican states, and has shaped nearly every aspect of Arizona's history. As early as 700 A.D., the Colorado River supported the indigenous people who first called Arizona home. Today, visitors to the Grand Canyon explore stunning tributary canyons and world-class rapids while admiring two billion years of geologic history revealed by the river's forces. Further south, the canals of the Central Arizona Project carry Colorado River water 300 miles across the desert to Phoenix, Tucson, and important agricultural lands.

The Colorado has enabled the development that has shaped the Arizona we enjoy today. Although much of its water is diverted for urban and agricultural use, the river also nourishes vital habitat for diverse plant and animal species and is a place for recreation and refuge for many Arizona residents. Since Arizona lies almost entirely within the Lower Colorado River Basin, nearly all of the state's waterways – from the largest rivers to the smallest perennial streams – eventually flow to the Colorado.



The Upper and Lower Colorado River Basins. Tributaries throughout these regions flow to the Colorado River.

Geography. The Colorado flows 1,450 miles from its headwaters in the Rocky Mountains to Mexico's Sea of Cortez. Before entering Arizona, it is joined by the Green River flowing south from Wyoming and traverses the mountains of Colorado and canyonlands of Utah. In southern Utah, the river flows into Lake Powell, created by Glen Canyon Dam just south of the Arizona-Utah border.

Below Glen Canyon Dam, the Colorado flows through the Grand Canyon for more than 200 miles before reaching Lake Mead and Hoover Dam. The river then passes through four more major dams and reservoirs as it meanders south.

Along Arizona's western border and north of Yuma, the river's channel broadens, creating rich habitat for birds and other riparian species before crossing into Mexico.

Left: The view upstream from Toroweap Overlook, Grand Canyon. Photo courtesy of the National Park Service.

Arizona's rivers flow to the Colorado.

Ecology. The Colorado and its tributaries are rare water sources in a dry region that support a rich variety of wildlife, including:

- Desert bighorn sheep, mountain lions, and the successfully reintroduced California Condor;
- At least 30 species of native fish;
- Rare species such as the Kanab amber snail and desert pupfish, found in only a few tributary springs;
- 150 species at risk due to human impacts; and
- Critical habitat for dozens of rare and endangered birds.

Use. Colorado River water, allocated to seven states by the 1922 Colorado River Compact, supports nearly 35 million people and about 4 million acres of irrigated agricultural land in the western U.S. and northwestern Mexico. The entire Southwest region is dependent on the Colorado and its tributaries for drinking water, hydroelectric power, agriculture, and many other uses.

- The Colorado is "over-allocated" – more water has been divided among the U.S. states and Mexico than flows in the river in a typical year. Some states aren't yet using their full allocations, but more water is already removed from the river system and its reservoirs than is replenished in an average year.
- 40% of Arizona's water supply comes from the Colorado. (Additional water comes from tributaries and groundwater.)
- Dozens of state and national parks, recreation areas, and wildlife refuges throughout the Southwest, including many in Arizona, depend on healthy flows from the Colorado.

Threats to the Colorado include:

- Impacts of existing dams and diversions that have resulted in changes to river flows and ecosystems;
- Extinction of native species and loss of biodiversity;
- Population growth and continued increases in use; and
- Potential impacts of extended drought and climate change.

What You Can Do... For Arizona's Rivers

- Join a local watershed group
- Participate in restoration, monitoring, or advocacy activities
- Visit our organizations' websites for information and action alerts
- Enjoy an Arizona river—and tell your state legislator about it

As increased demand is placed on the Colorado's diminishing supply, the challenge will be to meet water needs while maintaining healthy river flows and the Basin's rich ecology, recognizing that ultimately, human well-being is deeply connected to the health of rivers and the landscapes and communities they support.

The Colorado no longer reaches the sea; however, plans are underway to restore the Colorado River Delta, which once supported 3,000 square miles of wetland habitat. Similar projects are being undertaken throughout the Basin, including habitat conservation plans to protect endangered species and experimental flow management at Glen Canyon Dam to imitate pre-dam seasonal flooding. These efforts can ensure that the Colorado River will remain the lifeblood of the region's landscapes, both urban and natural, and one of Arizona's most defining and splendid natural features, for many years to come.

EDF Environmental Defense Fund — Finding the ways that work
H2O Sentinels — Sierra Club
Grand Canyon Trust
Sonoran Institute
Western Resource Advocates

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