

Saving Water in

Arizona

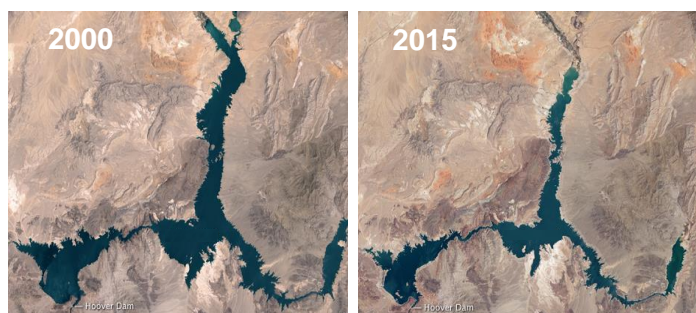
Like other southwestern states, Arizona has withstood many years of water shortages. With a naturally arid climate and a significant population increase in the last decade, Arizona will continue to be challenged by water supply issues. The state is focused on supply management, conservation programs, and water efficiency education to meet the challenge.

SOURCES OF WATER

- The Colorado River and other surface water sources provide 54 percent of Arizona's total water supply. Seven states share water from the Colorado River, including Arizona, Nevada, California, Colorado, Utah, Wyoming, and New Mexico. Arizona is allocated one of the largest shares, or 19 percent, of the total Colorado River apportionments. The remaining water supply comes from ground water, with a small portion from reclaimed wastewater.
- Northern Arizona draws Colorado River water from Lake Mead, a reservoir created by the completion of the Hoover Dam in 1935, and Lake Powell, a reservoir created by the Glen Canyon Dam in 1966. Lake Mead is partially located in Nevada, while Lake Powell is partially located in Utah.
- Central Arizona, which contains 80 percent of the state's population and five active management areas where groundwater use is regulated due to limited supply, draws Colorado River water through the Central Arizona Project (CAP)—a 336-mile water diversion system consisting of canals, pumping stations, and conduits.
- Reclaimed water provides about 3 percent of the state's water supply, and its use is growing for purposes such as irrigation and industrial cooling.

SUPPLY ISSUES

- Arizona, one of the driest states with average annual precipitation of about 13 inches, has experienced increasing temperatures and decreasing precipitation in recent years, which are projected to continue in the future.
- Winter precipitation plays an important role in recharging aquifers and sustaining streamflow. As of 2015, winters have been dry in the Verde and



Drought conditions have caused water levels in Lake Mead to decline, as the photographs above highlight the difference between 2000 and 2015. (Source: National Aeronautics and Space Administration Earth Observatory/U.S. Geological Survey)

Salt River watersheds for five consecutive years and in the Colorado River Basin for four consecutive years.

- In 2015, the Colorado River storage system was at 47 percent of total system capacity. Lake Mead, part of the Colorado River's storage system, has dropped by 130 feet, or to about 40 percent of its capacity. As water levels continue to drop, so does the amount of Colorado River water available to Nevada and Arizona.
- Reservoir water levels in the Salt and Verde River watersheds have also dropped. As of 2015, water levels were 43 percent below normal due to increased use of ground water to meet water demands.
- Runoff from the Colorado River, which is important for direct supply and groundwater recharge, is projected to drop 20 to 40 percent by 2050.
- With increased groundwater demand and pervasive drought conditions, groundwater sources have not been able to replenish at the rate they are being depleted.

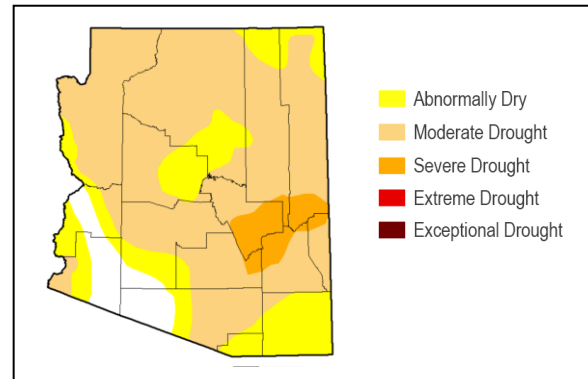
WATER USE CONCERNS

- As the fifth fastest-growing state in the nation, Arizona recorded more than 6.7 million residents in 2014, a number that has grown nearly 5.3 percent in the last four years.
- Water shortages impact Arizona's multi-billion-dollar tourism industry—it is estimated that for every one percent drop in reservoir level, Lake Powell visits drop by five percent.
- The U.S. Department of Agriculture declared 15 counties as disaster counties in Arizona in 2015 due to drought conditions, making the county's agricultural producers eligible for certain emergency aid. Arizona's agricultural industry has already suffered reduced yields due to drought.

WHAT ARE ARIZONANS DOING TO SAVE WATER?

Many municipalities, manufacturers, and utilities in Arizona are partners with WaterSense®, the U.S. Environmental Protection Agency program that offers people a simple way to identify products and homes that use less water and perform well. Some notable water conservation efforts by partners include the following:

- The Arizona Department of Water Resources provides residents, businesses, and water providers with tools about water-efficient products, landscaping techniques, and educational outreach. The agency has also encouraged state utilities to join the partnership, leading to 16 Arizona utility partnerships with WaterSense.
- As a long-time supporter of WaterSense's Fix a Leak Week campaign, the Arizona Municipal Water



In September 2015, more than 70 percent of Arizona was experiencing moderate to severe drought. (Source: U.S. Drought Monitor)

Users Association (AMWUA) hosted a four-mile race for several years in support of the campaign. AMWUA also developed a guide to educate residents about fixing leaks, using WaterSense labeled products, and increasing outdoor water use efficiency.

- The Salt River Project (SRP) hosts a Water Conservation Expo where it distributes WaterSense labeled showerheads. SRP partners with Ewing Irrigation, Inc., to offer a rebate on WaterSense labeled irrigation controllers. SRP also promotes water efficiency through presentations, signage, and social media posts.

For more information, visit www.azwater.gov/azdwr/, www.amwua.org, and www.cap-az.com/.

References available by request. Contact watersense@epa.gov for additional information.