

## ARIZONA'S WATER SUPPLIES AND WATER DEMANDS

Arizona's desert climate directly affects our economy and quality of life. All economic activity, including mining, irrigated agriculture, and growth of cities occurs only where dependable water supplies are available. As a result, Arizona places a high priority on managing its limited water to ensure that secure water supplies are available now and well into the future.

### WHAT WATER SUPPLIES ARE AVAILABLE

There are basically four categories of water supplies available in Arizona: Colorado River water, surface water other than Colorado River water, groundwater and effluent. The utility of each type of water depends on its quantity, quality, reliability and economic feasibility.

## Surface water

Surface water from lakes, rivers and streams is Arizona's major renewable resource. However, because of our desert climate, the amount of surface water available can vary dramatically from year to year, season to season, and place to place. In order to make the best use of the surface water when and where it is needed, storage reservoirs and delivery systems have been constructed throughout the state. Most notable are the major reservoir storage systems located on the Salt, Verde, Gila and Agua Fria rivers. Almost all of the natural surface water in Arizona has been developed.

## Colorado River Water

A separate category of surface water in Arizona is the water supplied through the Colorado River. The federal government constructed a system of reservoirs on the River to harness its supplies for use in several states. Arizona, California, Nevada, New Mexico, Utah, Colorado, Wyoming and Mexico share the River's resources. Rights to use Colorado River water are quantified by a string of legal authorities known as the "Law of the River." Based on this body of law, Arizona has the right to use 2.8 million acre feet annually of Colorado River water. Mohave, La Paz and Yuma county water users rely on Colorado River as their principal water supply. When fully utilized, the Central Arizona Project will deliver on average 1.5 million-acre feet of Colorado River water to Maricopa, Pinal and Pima Counties.

## Groundwater

About 40 percent of the state's water use comes from groundwater sources. Groundwater is found beneath the earth's surface in natural reservoirs called aquifers. In most cases the water stored in these reservoirs has been in place for millions of years. Throughout this Century, groundwater has been pumped out more rapidly than it is being replenished, creating a condition called overdraft. Though a large amount of water remains stored in Arizona's aquifers, its availability is limited by location, depth and quality. By continuing to overdraft the state's groundwater supplies, we challenge our ability to ensure a secure water supply for the future. In recognition of this threat, Arizona implemented the Groundwater Management Code in 1980. The Groundwater Code promotes water conservation and long-range planning of our water resources.

## Reclaimed water

Reclaimed water, or effluent, is the one increasing water source in our state. As our population and water use grows, more treated wastewater will be available. Reclaimed water is treated to a quality that can be used for purposes such as agriculture, golf courses, parks, industrial cooling, or maintenance of wildlife areas.

## How Much Water Are We Using?

Arizona uses approximately 7.24 million acre-feet of water, under normalized conditions. One acre-foot equals 325,851 gallons. An acre-foot is enough water to serve the needs of a family of five for one year.



# How is the Water Being Used

The graph below shows the percentage of water used by each major use category.

Arizona Water Budget			
Water Source	Millio	n Acre-Feet	% of Total
SURFACE WATER			
Colorado River		2.8	<b>39 %</b>
САР	1.5		
On-River	<i>1.3</i>		21
In-State Rivers		1.4	19
Salt-Verde	1		13.8
Gila & others	0.4		5.2
GROUNDWATER		2.9	40
<b>RECLAIMED WATER</b>		0.14	2
Total		7.24 MAF	

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