Advance planning crucial to CAP water sustainability

By Pamela Pickard Special to the Arizona Daily Star

The Central Arizona Project (CAP) is the primary steward of Central and Southern Arizona's Colorado River water resources. As such, we have an important role to play in supporting the health and sustainability of the river.

For the past 14 years, the Colorado River basin has been experiencing severe drought, causing levels in the river's primary reservoirs to drop. We are often asked how, if the drought continues, CAP will be able to meet its customers' needs.

Our answer is through long-term planning and cooperative investment in programs and technologies that store water for the future, reduce demand through increased water use efficiency and augment the river supplies delivered by CAP.

The seven states and two countries that share the Colorado River have long known that the river is vulnerable to drought or long-term reductions in flow as a result of heavy demands and a changing climate. That our collective access to the river has not been curtailed in the past is a tribute to the work of our predecessors who constructed storage reservoirs capable of storing four years of normal river flows.

But there will be Colorado River shortages in our future, perhaps as early as 2016 or 2017. When a shortage is declared on the Colorado River, the impacts will first be felt by CAP's agricultural customers, who could lose more than half of their CAP water deliveries.

CAP has been working with the agricultural community as they have prepared for anticipated reductions. For many farmers, a CAP shortage will mean a return to groundwater pumping.

But a shortage on the Colorado River in the coming years will not require any reduction in CAP water deliveries to cities, towns or other municipal water providers or Native American Tribes. That is because those customers enjoy a higher priority to water, meaning that those uses are among the last to be cut when CAP supplies are reduced.

Over the longer term, growing water demands — both within the CAP service area and along the Colorado River — and more severe shortages will likely reduce the amount of water available from the river for delivery to CAP's municipal customers.

But CAP has prepared for that, working with the Arizona Water Banking Authority (AWBA) to store Colorado River water in underground aquifers in Central Arizona where it can be recovered during shortage.

So far, the AWBA has stored about 3 million acre-feet (nearly 1 trillion gallons) to protect CAP municipal supplies. CAP has been working for several years with the AWBA, the Arizona Department of Water Resources and stakeholders to develop a plan for the recovery of that water.

Addressing the long-term challenges of reduced river supplies will require a combination of improved efficiency, increased supply and demand reduction. To that end, CAP has invested in a number of programs within our service area and our region — building additional storage facilities, operating the Yuma Desalting Plant and funding conservation in Mexico to preserve Colorado River supplies in Lake Mead.

CAP also supports research into potential methods of increasing flows in the Colorado River.

For example, CAP and others have funded promising cloud seeding programs in Wyoming, Colorado and Utah designed to increase snowfall during storm events. Also, the use of desalination to recover water from the ocean or brackish (salty) groundwater basins is among many other technologies under investigation.

Drought preparedness is a shared responsibility among all water users in the Southwest. There is no one program or technology that can resolve all of these issues.

Importantly, individual efforts to use water more efficiently and local efforts to develop alternative supplies are every bit as critical to our water future as the larger, regional projects.

At CAP, we are committed as individuals and as an organization to doing our part to address the great challenges ahead.

Pamela Pickard is the board president of the Central Arizona Project.