

Arizona grows to edge of water crisis

By Shaun McKinnon
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If Arizona doesn't manage its water better, some of the state's shiny new cities could dry up like the deserts they sprang from.

Growth is pushing communities ever closer to water crises:

Prescott is running out. The rapidly growing city is depleting its groundwater and has no long-term surface water supply. Without another source, the increasing demand could begin to suck water from the Verde River, which serves Phoenix.

Tucson has stretched its groundwater nearly to the limits and still hasn't found a way to better use its share of the Colorado River delivered by the Central Arizona Project Canal. The Old Pueblo has stored most of its CAP share by pumping it into underground aquifers.

Pinal County's expected residential growth will compete with already hurting farmers, who hold onto a tenuous groundwater supply and face the loss of CAP water.

Phoenix faces reality

Even metropolitan Phoenix, with a remarkably stable long-term water supply, still pumps too much groundwater and could run into shortages because cities in

Cities drain groundwater with no backup plan

parts of the Phoenix area haven't built the infrastructure to use CAP water.

"We've been very careful about getting water, hoarding water, protecting water and fighting with other people about water. But now, we have to face up to the reality that we're not going to get any more," said Phoenix attorney Grady Gammage, a member of the CAP governing board.

"We have a lot, but it's finite. And now, we have to think about how we're going to use it in the future."

Toward that end, Gov. Jane Hull created a 20-member water commission and charged it with studying Arizona's water supplies, uses and what policy changes to recommend to the legislature by 2002.

Commission members will find plenty to talk about:

The state's groundwater basins are overdrawn.

Most of the rivers are tapped nearly to their limits.

Arizona now uses all of its non-CAP Colorado River water and will fully develop its CAP allocation by 2035.

Frank Welsh, a Phoenix activist and author of "How To Create a Water Crisis," said the commission should not only consider water sup-

ply, but water quality.

"It's an issue that's more sophisticated than Arizona's ever been," Welsh said. "We don't worry about getting the best drinking water for us."

Conservation and better management of agricultural use, he said, could improve the quality and safety of drinking water.

Groundwater threatened

On paper, Arizona shouldn't have a water problem. The state gets enough water from the Colorado River alone to serve nearly three times the state's current 5 million population.

But moving water from the Colorado to every corner of the state is expensive and impractical, which is why so many Arizonans get their water from the ground or from local rivers and streams, especially in rural areas. Groundwater has always been the cheapest and most readily available source; but now, it's the most threatened.

"With the population we have now, we are more than capable of pumping out the supply faster than it can be recharged," said Rita Pearson, director of the Arizona Department of Water Resources.

Overpumping not only depletes a

natural resource that will be needed by future generations, it leaves current users without a backup during drought, and it can lead to land subsidence and poor water quality.

Under the 1980 Groundwater Management Act, the state closely regulates groundwater in five mostly urban areas: Phoenix, Tucson, Prescott and parts of Pinal and Santa Cruz counties.

Each area has its own conservation goals and restrictions. In Phoenix, developers must prove they have an assured water supply for 100 years before they can build homes and businesses. By 2025, Phoenix users should be recharging back into the ground as much water as they take out.

A system of canals, pipelines, reservoirs and underground storage basins could allow the Phoenix area to support twice its current 3 million population.

Agriculture still uses 53 percent of the Phoenix area's water, and industry takes an additional 7 percent.

The Phoenix area's biggest cities rely mostly on the CAP and the Salt River Project, which manages water from the Salt and Verde rivers. But many smaller communities still use mostly groundwater because it's what they can afford.