RESEARCHERS AT ODDS WITH GOVERNMENT

Independent review sought of Colorado River management

13 HOURS AGO • BY TONY DAVIS

The federal government’s research of the over-tapped Colorado River may well have overstated how much water the river will have and how much people will demand from it, says a group of 23 scientists, including three University of Arizona researchers.

Those concerns and others have led the researchers to call for an independent review by the National Academy of Sciences of how the federal government is researching the river’s problems, issues and management needs.

In a letter this week to Interior Secretary Sally Jewell, the scientists say federal research neglects a wide range of concerns about the Colorado River ecosystem and the massive population that depends on it. Those concerns include water quality, impacts on groundwater supplies from river use, climate change, flood management, survival of native fish and other issues. A poorly researched and managed river will lead to more vulnerabilities and expenses, they say.

The letter underscores the broad dissatisfaction that researchers and conservationists in general have with how the feds are overseeing the river, whose reservoirs — including Lake Powell and Lake Mead — have steadily dropped during a 15-year drought.

“The independent review that’s outside of existing power structures tends to bring uncomfortable questions out in the open, in ways that don’t happen when they’re done by existing (government) entities with huge, vested interests in the outcome,” said one of the 23 scientists, Brad Udall, a Colorado State University water and climate researcher, and son of the late Tucson congressman Morris “Mo” Udall.

UA geologists Victor Baker and Karl Flessa and tree ring researcher David Meko also signed the letter.

Once the Interior Department gets the letter later this week, “we plan to carefully review it as we take all Western water issues, including Colorado River issues, very seriously,” Emily Breyer, Jewell’s deputy press secretary, said in an email.

A key issue in the letter is how the federal government has met a 2009 federal law requiring research of the impacts of climate change and how people can adapt to it on the Colorado and
other major river basins managed by the Bureau of Reclamation.

In 2012, the bureau published a study warning that by 2060 the river could face a median annual shortfall of 3.2 million acre feet, and that the shortfall could peak at 6.8 million. The 3.2 million is twice the annual supply of the Central Arizona Project that delivers drinking water to Tucson and Phoenix.

By 2060, the river’s supply is likely to be reduced 9 percent from 20th century averages due to climate change, the study said.

But the new letter said:

- The 2012 report focused too much on a possible 9 percent reduction, when 21st century river streamflows are averaging 19 percent lower annually than the 20th-century norms. Researchers have said that climate change could reduce runoff by 6 to 45 percent by 2060.
- The feds have failed to examine the stress that shrinking supplies and increased demands for river water put on groundwater supplies. A 2014 study led by California scientists warned that groundwater supplies are being depleted across the basin.
- While flood risks are low today when many reservoirs are half full, they could rise again if management of the river can restore reservoir levels, UA geologist Baker said. If that happens, the reservoirs could be very vulnerable because, according to research conducted by Baker and others, many major floods occurred in the basin near Moab, Utah, over the past 2,000 years, including some far worse than the 1983 flood that many experts said almost destroyed Glen Canyon Dam.
- The bureau forecasts of water supply shortfalls relied on outdated population projections — made before the real estate market crash in 2007 caused growth rates to plummet — and on inflated water demand estimates.

While it would be positive for the river if water use and population doesn’t increase as fast as expected, inflated population and water demand forecasts can be used to justify building expensive, environmentally damaging water projects, said Udall and Douglas Kenney, a University of Colorado researcher who signed the letter.

- While the 2012 bureau study examined salinity concerns, it didn’t follow the 2009 law’s requirements to look more generally at water quality issues involving heavy metals and organic compounds affecting wildlife habitat, human health and the economy.

Baker cited water quality as an example of how researchers need to respond to changing conditions on the river.

The recent mine waste spill on the Animas River in Colorado, whose contamination spread into New Mexico and northeast Arizona, affected a Colorado River tributary, he noted. Heavy metals “are a big deal — they kill fish,” he said.