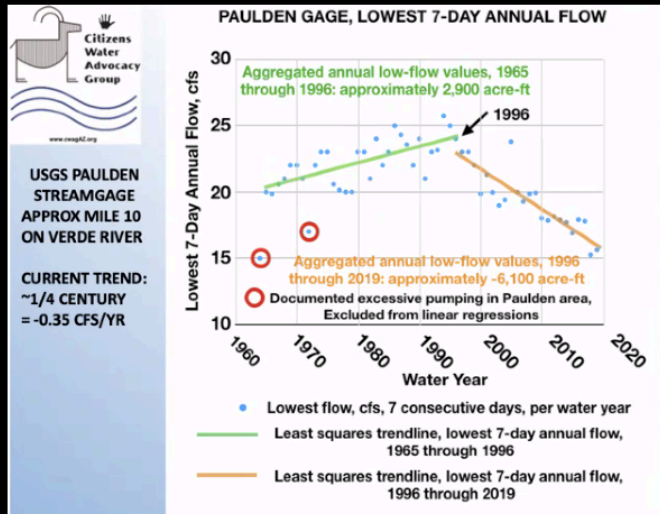


Record Low Flow for 60 years

- USGS Paulden gage: 11.5 cfs, June 2022



Trade a river for more houses? Ouch!

EDWARD W. WOLFE, Special to the Courier

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For over 20 years Prescott and Prescott Valley had envisioned piping nearly 4 billion gallons, 11,550 acre-feet per year (afy), of groundwater from the Big Chino Valley to support a vastly increasing population.

Accordingly, they had planned for a pipeline that could transport 12,000 afy roughly 40 miles from the Big Chino Valley to the Prescott area. Now Prescott has apparently put consideration of the Big Chino pipeline on hold. But, as stated in Prescott Valley's 2035 General Plan, the town is pulling out the stops to obtain Big Chino water.

The fact remains that exportation of Big Chino groundwater would eventually devastate the year-round flow of the uppermost Verde River.

Rivers such as the Verde that flow year-round in the arid Southwest are sustained by groundwater. A new groundwater study of the Big Chino Valley by a private consultant is expected soon. This study has been paid for by Prescott, Prescott

Valley and the Salt River Project (SRP), the utility with senior water rights to the upper Verde River flow that emerges from the Big Chino aquifer. The Citizens Water

Advocacy Group (CWAG) expects that the new study will show again that the upper part of the Verde River is fed by groundwater from the Big Chino Valley.

There are already five published reports, one in 1993 by the Bureau of Reclamation, and four subsequent reports by the U.S. Geological Survey (USGS), the latest in 2019. All agree that “groundwater in the Big Chino Valley discharges ... to the upper Verde River springs, which form the headwaters of the Verde River” (most recently, Kennedy and others, USGS, 2019).

The USGS Paulden streamgauge is located at river mile 10 on the uppermost Verde River. (River mile zero is at Sullivan Lake dam.) Average upper Verde River flow increases over the 10 river miles to the Paulden gage and decreases over the next 16 river miles.

The annual lowest-flow record (the lowest average consecutive seven-day flow per year) of the Paulden gage shows a gradual but erratic increase from about 14,500 afy in 1965 to 17,400 afy in 1996 — averaging an annual increase of 90 afy. Then something changed, in near-concert with regional increase in temperature. From 1997 through 2021 the annual week-long lowest flow at the gage decreased from about 16,700 afy to 10,800 afy — averaging an annual decrease of about 240 afy.

Non-storm streamflow currently begins to decrease somewhere downstream from the Paulden streamgauge. Should the current average rate of loss of annual week-long lowest streamflow at the streamgauge, about 240 afy, continue unchanged, the Verde River will be briefly dry at the streamgauge and downstream through Paulden during some years beginning about a half century from now. That would be a nail in the coffin of a critically important ecologic treasure — the upper Verde River.

Most would agree that it is unacceptable for us to knowingly kill the perennial flow of the vital upper Verde River. The prospect of obtaining a new water supply from elsewhere that could support a substantially increased population far into the future is dim at best. Trading a river for more houses? Ouch! It's time for us in this part of Yavapai County to abandon this pipe dream. Let's instead work together to live within our means.

Former Gov. Bruce Babbitt will speak to CWAG on Aug. 13. Details at www.cwagaz.org.

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