

Talk of the Town: Officials must protect the upper Verde River

 dcourier.com/news/2020/nov/09/purcell-officials-must-protect-upper-verde-river



The upper Verde River (Gary Beverly/Courtesy.)

GARY BEVERLY, PH.D Special to the Courier

Originally Published: November 9, 2020 7:54 p.m.

The Verde River is 2.5 million years old. We are now poised to destroy it in a century by changing the climate and by pumping the groundwater that feeds it. The Verde is extraordinarily valuable — losing it would be a tragedy for the Southwest, devastating wildlife and degrading our quality of life.

To understand this tragedy, refer to my previous column "10 Reasons to Protect the Verde" at cwagaz.org.

The perennial base flow of the upper Verde River is groundwater flowing from the Big Chino and Little Chino aquifers. It emerges at Verde Springs, the headwaters of the river. For the first 25 miles of the upper Verde downstream to Perkinsville Bridge, Verde Springs is the only source of water keeping the river flowing. This stretch supports some of the finest surviving riparian habitat in Arizona and requires continuous flow.

As of June 2020, the upper Verde base flow at the Paulden gauge was approximately 60% of the base flow in the mid-1990s. In 2018 the annual volume flowing past the Paulden gauge was 61% of the annual volume in 1940. Most alarming is that the lowest flow continues to decline (see "Low flow on the Verde River needs citizen action" at cwagaz.org).

Two decades of regional drought — likely to continue and worsen — is one cause. Climate change models project higher temperatures, which will reduce aquifer recharge, thus reducing river flow.

Another cause is uncontrolled groundwater pumping in the Big Chino, which will reduce the base flow by the amount pumped and threatens the continued existence of the upper Verde River. There are three classes of groundwater pumping threats to the Big Chino, any one of which could dry up the river:

Expanded Agricultural Irrigation. It is legal under Arizona law for a farmer to irrigate with groundwater. When big agriculture from out of state began irrigating in Kingman and Willcox, groundwater pumping increased sharply. If half of that pumping occurred in the Big Chino, it would dry up the upper Verde. The Arizona Legislature could control agricultural pumping in the Big Chino Valley and help protect the river.

Groundwater Export. Arizona water law authorizes Prescott and Prescott Valley to export Big Chino groundwater via the proposed Big Chino pipeline. Cities may also export water from formerly irrigated agricultural fields. The total legally authorized water for export is more than enough to dry the Verde River. The cities of Prescott and Prescott Valley have promised to offset the effects of their pipeline pumping on the river, but no specific dates or plans have been released.

Population Growth. As Paulden grows and expands up the Big Chino Valley, increasing demand for groundwater pumping will eventually dry up the upper Verde. The Board of Supervisors has the responsibility to control the density and character of land use in the Big Chino Valley.

Protecting the Verde River is a three-pronged political problem. Citizens must demand that elected officials control groundwater pumping and mitigate climate change. We cannot risk drying the upper Verde.

I will provide a photo-filled Verde River update in a Zoom webinar hosted by the Citizens Water Advocacy Group on Saturday, Nov. 14. Details at www.cwagaz.org.

Gary Beverly is president of CWAG and a retired business owner working to protect the Verde River.

Sign up for our e-News Alerts

Contents of this site are © Copyright 2020 Prescott Newspapers, Inc. and Western News&Info®, Inc. All rights reserved. | [Terms of Service](#) | [Privacy Policy](#)