

ARIZONA RIPARIAN COUNCIL

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Jennifer Martin Water Sentinels Program Sierra Club – Grand Canyon Chapter Phoenix, Arizona

Dear Jennifer:

The Arizona Riparian Council (ARC) has reviewed your nomination of the upper Verde River, lower Granite Creek, and lower Sycamore Creek for classification by Arizona Department of Environmental Quality (ADEQ) as an Outstanding Arizona Water (OAW). For three decades, ARC has been dedicated to understanding the role that healthy streams in Arizona play in maintaining our natural and built environment. Our organization has visited scores of streams and we believe the Upper Verde to be among the most productive and important streams in central Arizona. Your nomination to ADEQ accurately describes the important features of the river.

We support the nomination of these streams and refer to them collectively as the "Upper Verde." We highlight the following points because they demonstrate the ecological significance of this stream for its inclusion as an OAW.

- Ecologically the Verde River and its nominated reach of the Upper Verde are important wildlife corridors with high quality riparian habitat along a major perennial waterway.
- Among high quality riparian areas of the state the Upper Verde ranks among the top.
- A healthy, flowing Upper Verde forms a crucial and vital connection of many federal and state land designations. The biologic and hydrologic values of the Upper Verde cannot be overemphasized as it provides habitat important at a regional, state, and national scale.
 - o For comparison, the Upper Verde corridor is near the Agua Fria River corridor to the south. Together they provide complementary, parallel corridors facilitating the migration of birds and mammals across the central Arizona landscape. But, the interrupted flow of the Agua Fria pales in comparison to perennial flows of the Upper Verde.
- The Upper Verde is remarkable for its diverse population of fish. Designating the conjoined 54.1-mile length of the Upper Verde is important because it can compensate for the effects of large scale fires that often extirpate aquatic species in smaller subwatersheds. For example, the Dude Fire severely impacted small creeks below the Mogollon Rim; protecting only small creeks provides insufficient protection of water

quality against landscape-scale fire or drought that can occur at local scale.

- Members of the ARC have led and participated in multiple outings to observe the waters
 and associated riparian habitat. The ARC's visits to the Verde area have included
 educational outings and hikes to and along the flowing waters. The aquatic values of the
 Upper Verde have been presented and discussed at several annual meetings of the
 Council.
- Exceptional water quality and hydrology have supported the establishment of a resident population of beaver. In turn, this population of beaver has built small dams that stabilize flow and create additional habitat for special species such as otter and fish.

In economic terms, healthy streams provide valuable ecosystem water quality-cleansing "services" back to human populations. These services include the trapping of sediment by vegetation along the bank and removal of microorganisms. Reduction of suspended solids, improvement in water clarity, and enhancement of dissolved oxygen (DO) occur in healthy streams. Good water quality draws wildlife. A healthy stream is aesthetically pleasing and attracts residents and tourists. The economic benefits of all these services are enjoyed by downstream users of the water. [https://azriparian.org/resources/education/]

Arizona streams are in a precarious situation as the threats of natural drought and development cause stress to these stream systems. Designation would provide ADEQ an effective administrative tool to help manage the water quality of this important waterway.

In conclusion, the Upper Verde is a strong candidate for ADEQ to designate as an OAW; therefore, ARC supports this nomination.

Sincerely,

Tim Flood, co-chair

Timothy D. Flood

ARC Conservation Committee

Cc: Kris Randall