

Arizona Geological Survey 07.02.2010

News Release: AZGS releases geologic strip maps for Arizona's Verde River.

Tucson. The Arizona Geological Survey (AZGS) is releasing five new geologic map sheets showing the extent and age relationships of Holocene channel and floodplain deposits along the Verde River of north-central Arizona. A 51-page report accompanies the maps.

Arizona's rivers are an integral part of the State's water resources. In an ongoing effort to understand the water resources associated with Arizona's rivers, the Arizona Department of Water Resources engaged AZGS to map Holocene-age deposits of the Verde River as part of the Gila River stream adjudication program.

The Verde River winds 178 miles from its headwaters in the Chino Valley to its confluence with the Salt River, east of Phoenix. Draining parts of Coconino, Gila, Maricopa and Yavapai Counties, the Verde River watershed covers more than 6,500 square miles.

AZGS's mapping team constructed geologic strip maps of a two-mile wide swath centered on the river's active channel and running the length of the river. Geologic mapping was overlain on USGS 7.5 minute, 1:24,000-scale topographic maps. The team used earlier mapping, aerial photography, and extensive field work – establishing GPS stations on approximately one-mile centers along the course of the river – to map modern and recently active channel and floodplain deposits, river terraces and adjacent tributary deposits, eroded older basin deposits, and bedrock.

The geologic maps provide foundational geologic data for deciphering the recent history of the Verde River system. Young Verde River sediments – those deposited over the past 10,000-years -- are subdivided by age and broadly grouped into two classes: channel deposits that comprise mostly sand and gravel; and, overbank floodplain and terrace deposits that consist of sand, silt, and clay with minor gravel.

Stakeholders – water managers, civil authorities, ranchers, wildlife biologists, archeologists, environmentalists, and the Arizona public – should find these maps indispensable for physical and biological studies of the Verde River riparian corridor.

The geologic maps and technical report are available in PDF format at www.azgs.az.gov/publications_online.shtml.

Printed copies and the GIS data are available at the AZGS Map & Book Store at 416 W. Congress, Ste 100, Tucson, 85701. To order call 520-770-3500 or fax 520-770-3505.

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