

Map Unit Descriptions

- Other Units**
- Water - Underlying geology obscured by standing water (Pecks Lake, Horseshoe and Bartlett Reservoirs)
 - Submerged - underlying unit submerged due to seasonal inundation in Bartlett and Horseshoe Reservoirs
 - Qm - Modern lake and marsh sediments - Underlying geology obscured by lake sediments (Pecks Lake, Horseshoe and Bartlett Reservoirs)
 - Qd - Quaternary hillslope talus and colluvium - unconsolidated to weakly consolidated, very poorly sorted angular rock debris deposited at the base of bedrock slopes
- River Alluvium**
- Qvr - Active river channel deposits - unconsolidated, very poorly sorted sandy to cobble beds in active river channels
 - Qvc - Flood channel and low terrace deposits - unconsolidated sand, gravel and silt deposits on bars, low terraces and flood channels
 - Qvh - Historical river terrace deposits - unconsolidated sand, gravel and silt deposits on low terraces just below the abandoned early historical floodplain
 - Qvl - Late Holocene to historical river terrace deposits - silt, clay, sand and minor gravel deposits underlying the early historical floodplain
 - Qvm - Late to early Holocene river terrace deposits - silt, clay, sand and minor gravel terrace deposits slightly above the early historical floodplain
 - Qvn - Pleistocene river terrace deposits - gravelly, sandy river terrace deposits up to 25 m above the active river channel
 - Qvo - Middle to late Pleistocene river terrace deposits - high-standing, gravelly, sandy river terrace deposits
 - Qvp - Middle Pleistocene river terrace deposits - high-standing, gravelly, sandy river terrace deposits
 - Qvq - Early Pleistocene river terrace deposits, younger - Very high, old Verde River terrace deposits, lower level
 - Qvr - Early Pleistocene river terrace deposits, middle - Very high old Verde River terrace deposits, middle level
 - Qvq - Early Pleistocene river terrace deposits, older - Very high, old Verde River terrace deposits, upper level
- Piedmont Alluvium**
- Qpa - Modern stream channel deposits - active channel deposits composed of very poorly sorted sand, pebbles, and cobbles with some boulders to moderately sorted sand and pebbles
 - Qpl - Latest Holocene alluvium - unconsolidated, very poorly sorted silt to cobble low terrace and overflow channel deposits
 - Qpv - Late Holocene alluvium, active fan deposits - active portions of young fan deposits exhibiting distributary drainage patterns
 - Qvh - Late Holocene alluvium - older terrace deposits located along incised drainage, broad low-relief distal fan deposits overlapping onto Holocene river alluvium, and infrequently active distributary drainage deposits
 - Qvi - Older Holocene alluvium - broad, low relief, undulating fan deposits exhibiting widespread, shallow braided drainage patterns
 - Qvl - Landslide Deposits - Unsorted sediment resulting from mass down-slope movement (Whitke and Conway, 1987)
 - Qvm - Late Pleistocene alluvial fan and terrace deposits - weakly consolidated sandy gravel deposits with moderate soil development
 - Qvo - Middle to late Pleistocene alluvial fan and terrace deposits - weakly consolidated sandy gravel deposits with strong soil development
 - Qvp - Early to middle Pleistocene alluvial fan and terrace deposits - high, moderately consolidated gravelly deposits with strong soil development
 - Qvq - Early Pleistocene alluvial fan deposits, undivided - High, moderately consolidated gravelly deposits with strong soil development
- Cenozoic Basin Deposits**
- Tm - Late Miocene to Pliocene deposits - moderately to strongly indurated conglomerate and sandstone basin fill deposits
 - Tr - Limestone of Chalk Mountain (Pliocene or Miocene) - White to light-gray, finely laminated, porous limestone and minor medium-gray to light brown, fine-bedded chert (Whitke and Conway, 1987)
 - Tr - Older conglomerate - Weakly consolidated conglomerate and sandstone (Whitke and Conway, 1987)
 - Tu - Tertiary deposits, undivided - Moderately to strongly consolidated conglomerate, undivided
- Bedrock Units**
- Tb - Tertiary basalt, undivided - Tertiary basalt flows, associated cinder cones and pyroclastic rocks, intrusive basalts, and mafic rocks
 - Tt - Tertiary tuff, undivided - Felsic ash flow tuff, pumice, and siliceous flows
 - Dm - Martin Formation - Devonian Martin Formation
 - Sp - Tapesit Sandstone - Tapesit sandstone
 - Xp - Proterozoic granite, undivided - Fine to coarse grained granitoids, quartz monzonite, porphyry myelite ash flows, myelite, and gneissophyre
 - Xm - Proterozoic sedimentary, metasedimentary, and metavolcanic rocks, undivided - Quartzite, sandstone, and metavolcanic rocks
- Other Geologic Lines**
- Thin, Solid Line - Active Contact
 - Thin, Dashed Line - Approximate Contact
 - Thin, Dotted Line - Conjectured Contact
 - Thick, Solid Line - Active Contact
 - Thick, Dashed Line - Approximate Contact
 - Thick, Dotted Line - Conjectured Contact
- Scale**
- 1:24,000 Scale
- Arizona Geological Survey
415 W. Congress Street, Suite 100
Tucson, AZ 85724
(520) 770-3500
www.azgs.gov

Bedrock and surficial geologic mapping for areas outside the lateral limits of Holocene river alluvium was compiled from the following sources

Ferguson, C.A., Gilbert, W.G., Skotnicki, S.J., Wrucke, C.T., and Conway, C.M., 1999. Geologic map of the Horseshoe Dam 7.5' quadrangle, Maricopa County, Arizona. Arizona Geological Survey Open-File Report 99-15, 11 p., 1 sheet, scale 1:24,000.

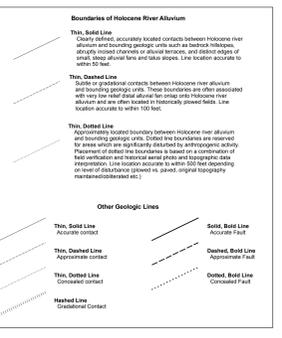
Skotnicki, S.J., 1996. Geologic map of the Bartlett Dam quadrangle and southern part of the Horseshoe Dam quadrangle, Maricopa County, Arizona. Arizona Geological Survey Open-File Report 96-22, 21 p., 1 sheet, scale 1:24,000.

Wrucke, C.T., and Conway, C.M., 1987. Geologic map of the Nazical Wilderness and contiguous Roadless Area, Gila, Maricopa, and Yavapai Counties, Arizona: U.S. Geological Survey Open-File Report 87-0664, 22 p., 1 sheet, scale 1:48,000.

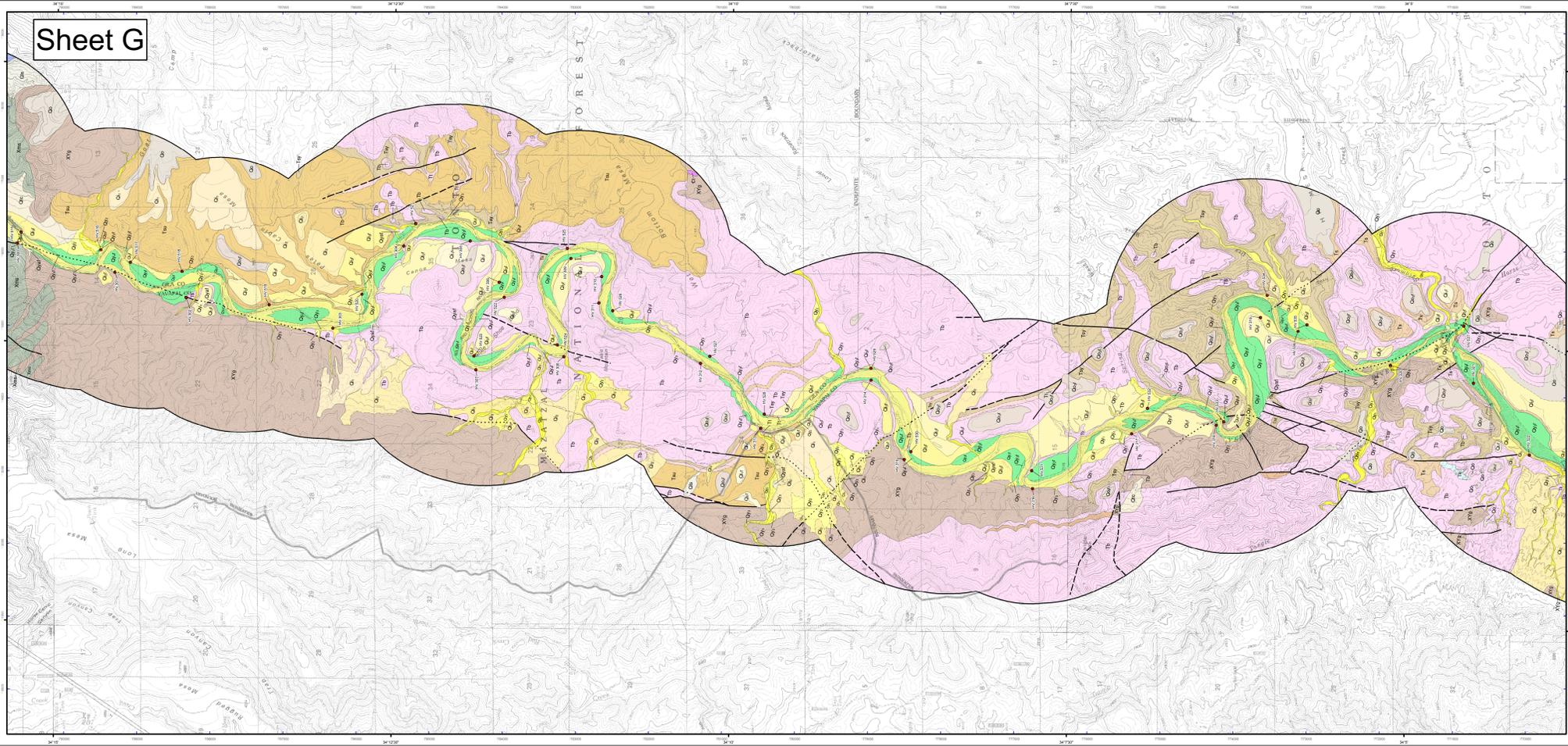
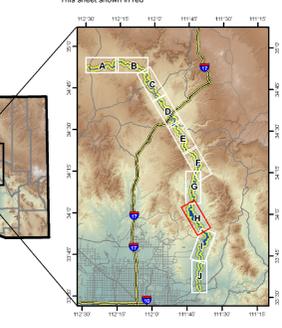
SURFICIAL GEOLOGIC MAP OF THE VERDE RIVER CORRIDOR, CENTRAL ARIZONA

by
Cook, J.P., Bigio, E.R., Youberg, A.,
Pearthree, P.A., and House, P.K.
July 2010
Arizona Geological Survey
Digital Map DM-RM-2H
version 1.1

Funding for this project was provided by the
Arizona Department of Water Resources
USGS 24k quadrangle series topographic base maps,
North American Datum of 1983. Projection and 100-meter
grid ticks (blue). Universal Transverse Mercator, zone 12.



Location Map



Map Unit Descriptions

- Other Units**
- Qd - Quaternary hillslope talus and colluvium - unconsolidated to weakly consolidated, very poorly sorted angular rock debris deposited at the base of bedrock slopes
- River Alluvium**
- Qvr - Active river channel deposits - unconsolidated, very poorly sorted sandy to cobble beds in active river channels
 - Qvc - Flood channel and low terrace deposits - unconsolidated sand, gravel and silt deposits on bars, low terraces and flood channels
 - Qvh - Historical river terrace deposits - unconsolidated sand, gravel and silt deposits on low terraces just below the abandoned early historical floodplain
 - Qvl - Late Holocene to historical river terrace deposits - silt, clay, sand and minor gravel deposits underlying the early historical floodplain
 - Qvm - Late to early Holocene river terrace deposits - silt, clay, sand and minor gravel terrace deposits slightly above the early historical floodplain
 - Qvn - Pleistocene river terrace deposits - gravelly, sandy river terrace deposits up to 25 m above the active river channel
 - Qvo - Middle to late Pleistocene river terrace deposits - high-standing, gravelly, sandy river terrace deposits
 - Qvp - Middle Pleistocene river terrace deposits - high-standing, gravelly, sandy river terrace deposits
 - Qvq - Early Pleistocene river terrace deposits, younger - Very high, old Verde River terrace deposits, lower level
 - Qvr - Early Pleistocene river terrace deposits, middle - Very high old Verde River terrace deposits, middle level
 - Qvq - Early Pleistocene river terrace deposits, older - Very high, old Verde River terrace deposits, upper level
- Piedmont Alluvium**
- Qpa - Modern stream channel deposits - active channel deposits composed of very poorly sorted sand, pebbles, and cobbles with some boulders to moderately sorted sand and pebbles
 - Qpl - Latest Holocene alluvium - unconsolidated, very poorly sorted silt to cobble low terrace and overflow channel deposits
 - Qpv - Late Holocene alluvium, active fan deposits - active portions of young fan deposits exhibiting distributary drainage patterns
 - Qvh - Late Holocene alluvium - older terrace deposits located along incised drainage, broad low-relief distal fan deposits overlapping onto Holocene river alluvium, and infrequently active distributary drainage deposits
 - Qvi - Older Holocene alluvium - broad, low relief, undulating fan deposits exhibiting widespread, shallow braided drainage patterns
 - Qvl - Landslide Deposits - Unsorted sediment resulting from mass down-slope movement (Whitke and Conway, 1987)
 - Qvm - Late Pleistocene alluvial fan and terrace deposits - weakly consolidated sandy gravel deposits with moderate soil development
 - Qvo - Middle to late Pleistocene alluvial fan and terrace deposits - weakly consolidated sandy gravel deposits with strong soil development
 - Qvp - Early to middle Pleistocene alluvial fan and terrace deposits - high, moderately consolidated gravelly deposits with strong soil development
 - Qvq - Early Pleistocene alluvial fan deposits, undivided - High, moderately consolidated gravelly deposits with strong soil development
- Cenozoic Basin Deposits**
- Tm - Late Miocene to Pliocene deposits - moderately to strongly indurated conglomerate and sandstone basin fill deposits
 - Tr - Limestone of Chalk Mountain (Pliocene or Miocene) - White to light-gray, finely laminated, porous limestone and minor medium-gray to light brown, fine-bedded chert (Whitke and Conway, 1987)
 - Tr - Older conglomerate - Weakly consolidated conglomerate and sandstone (Whitke and Conway, 1987)
 - Tu - Tertiary deposits, undivided - Moderately to strongly consolidated conglomerate, undivided
- Bedrock Units**
- Tb - Tertiary basalt, undivided - Tertiary basalt flows, associated cinder cones and pyroclastic rocks, intrusive basalts, and mafic rocks
 - Tt - Tertiary tuff, undivided - Felsic ash flow tuff, pumice, and siliceous flows
 - Dm - Martin Formation - Devonian Martin Formation
 - Sp - Tapesit Sandstone - Tapesit sandstone
 - Xp - Proterozoic granite, undivided - Fine to coarse grained granitoids, quartz monzonite, porphyry myelite ash flows, myelite, and gneissophyre
 - Xm - Proterozoic sedimentary, metasedimentary, and metavolcanic rocks, undivided - Quartzite, sandstone, and metavolcanic rocks
- Other Geologic Lines**
- Thin, Solid Line - Active Contact
 - Thin, Dashed Line - Approximate Contact
 - Thin, Dotted Line - Conjectured Contact
 - Thick, Solid Line - Active Contact
 - Thick, Dashed Line - Approximate Contact
 - Thick, Dotted Line - Conjectured Contact
- Scale**
- 1:24,000 Scale
- Arizona Geological Survey
415 W. Congress Street, Suite 100
Tucson, AZ 85724
(520) 770-3500
www.azgs.gov

Bedrock and surficial geologic mapping for areas outside the lateral limits of Holocene river alluvium was compiled from the following sources

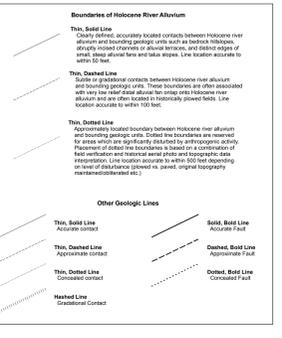
Pearthree, P.A., 1993. Geologic and geomorphic setting of the Verde River from Sullivan Lake to Horseshoe Reservoir. Arizona Geological Survey Open-File Report 93-04, 25 p., 5 sheets, scale 1:24,000.

Wrucke, C.T., and Conway, C.M., 1987. Geologic map of the Nazical Wilderness and contiguous Roadless Area, Gila, Maricopa, and Yavapai Counties, Arizona: U.S. Geological Survey Open-File Report 87-0664, 22 p., 1 sheet, scale 1:48,000.

SURFICIAL GEOLOGIC MAP OF THE VERDE RIVER CORRIDOR, CENTRAL ARIZONA

by
Cook, J.P., Bigio, E.R., Youberg, A.,
Pearthree, P.A., and House, P.K.
July 2010
Arizona Geological Survey
Digital Map DM-RM-2G
version 1.1

Funding for this project was provided by the
Arizona Department of Water Resources
USGS 24k quadrangle series topographic base maps,
North American Datum of 1983. Projection and 100-meter
grid ticks (blue). Universal Transverse Mercator, zone 12.



Location Map

