

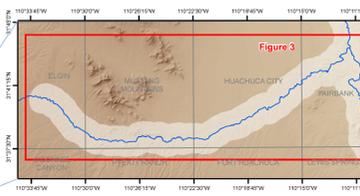
Statewide Location Map

Location of each sheet shown in black



Figures on this Sheet

Figure locations shown in red



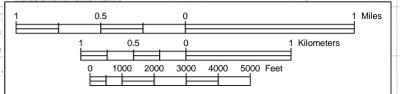
Geologic Map of the San Pedro River, Babocomari River and Aravaipa Creek Corridors, Southeastern Arizona

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Digital Map DM-RM-1B

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USGS 24k quadrangle series topographic base maps.
North American Datum of 1983. Projection and 1000-meter
grid ticks (blue). Universal Transverse Mercator, zone 12.



Map Unit Descriptions

Other units		Tertiary basin fill alluvium	
di	Disturbed ground - heavily disturbed ground due to agriculture, extensive excavation, or construction of earth dams	Q ₁ g	Early Pleistocene cobble conglomerate - cobble conglomerate cemented by calcium carbonate
pl	Plowed areas - historically or actively plowed fields, irrigated pastures, and other lightly disturbed ground	Q ₁ ta	Late Pliocene to early Pleistocene fan gravel - coarse, moderately to well-consolidated gravelly deposits capping high rounded ridges
Q ₁ c	Quaternary hilllope talus and colluvium - weakly bedded hilllope deposits mantling the middle and lower slopes of bedrock hills	Q ₁ trf	Early Pleistocene fine-grained basin-floor alluvium - very old relic basin floor deposits forming a minimally dissected surface
River alluvium		Q ₁ tsd	Pliocene to early Pleistocene Saint David Formation - fine-grained, highly eroded basin-fill deposits
Q ₁ ay	Active river channel deposits - unconsolidated, very poorly sorted sandy to cobbly beds in active river channels	Q ₁ tr	Pliocene to middle Miocene deposits - moderately to strongly indurated conglomerate and sandstone basin fill deposits
Q ₁ ayf	Flood channel and low terrace deposits - unconsolidated sand, gravel and silt deposits in bank low terraces and flood channels	Q ₁ trg	Conglomerate - tan, thin- to medium bedded, pebble-cobble, sandy matrix conglomerate and pebbly sandstone
Q ₁ ayh	Historical river terrace deposits - unconsolidated sand, gravel and silt deposits on low terraces fringed below the abandoned early historical floodplain	Q ₁ trc	Sandstones and conglomerates - reddish mudstones and sandstones to tan sandstones and conglomerates
Q ₁ ayl	Latest Holocene to historical river terrace deposits - silt, clay, sand and minor gravel deposits underlying the early historical floodplain	Q ₁ trm	Mafic dikes - mafic dikes within or adjacent to older deformed gravels, Tg
Q ₁ aym	Late to early Holocene river terrace deposits - silt, clay, sand and minor gravel terrace deposits slightly above the early historical floodplain	Q ₁ trp	Porphyry of Fairbank - phenocryst-rich porphyry
Q ₁ ayn	Late Pleistocene river terrace deposits - gravelly, sandy river terrace deposits up to 25 m above the active river channel	Q ₁ trv	Uncle Sam Tuff - phenocryst-rich ash-flow tuff
Q ₁ ayp	Middle to late Pleistocene river terrace deposits - older, higher gravelly, sandy river terrace deposits	Q ₁ trw	Uncle Sam Tuff megabreccia - zones of megabreccia within the Uncle Sam Tuff
Q ₁ ayq	Early to middle Pleistocene river terrace deposits - oldest, highest preserved gravelly, sandy river terrace deposits	Q ₁ trx	Uncle Sam Tuff andesite megabreccia - zones of monolithic, andesite lava megabreccia within the Uncle Sam Tuff
Q ₁ ayr	Early Pleistocene river terrace deposits - very high remnant river terrace deposits located 30 to 40 m above the active channel emanating from Babocomari Wash	Q ₁ trz	Coarse-grained andesite - volcanic complex dominated by coarse-grained, phenocryst-rich andesitic lava and probable hyaloclastite bodies
Piedmont alluvium and surficial deposits		Q ₁ tr1	Tuff of Charleston - rhyolite ash-flow tuff
Q ₁ ay	Modern stream channel deposits - active channel deposits composed of very poorly sorted sand, pebbles, and cobbles with some sorted silt to moderately sorted sand and pebbles	Q ₁ tr2	Aphyric rhyolite - aphyric to very phenocryst-rich rhyolite lava with probable zones of hyaloclastite rock, and tuff breccia
Q ₁ ayf	Latest Holocene alluvium - unconsolidated, very poorly sorted silt to cobbly low terrace and overflow channel deposits	Q ₁ tr3	Andesite - amalgamated, andesite lava flows intruded by a myriad of dikes
Q ₁ ayh	Late Holocene alluvium, active fan deposits - active portions of young fan deposits exhibiting distributary drainage patterns	Q ₁ tr4	Biisbee Group - complexly intertonguing sequences of sandstone, mudstone, shale, and conglomerate
Q ₁ ayl	Late Holocene alluvium - planar terrace deposits located along incised drainages, broad low-relief distal fan deposits overlapping onto Holocene river alluvium, and infrequently active tributary drainage deposits	Q ₁ tr5	Volcanic and sedimentary rocks of Mustang Mountain - siliceous flows and minor welded tuff
Q ₁ aym	Older Holocene alluvium - broad, low-relief, undulating fan deposits exhibiting widespread, shallow branched drainage patterns	Q ₁ tr6	Volcanic and sedimentary rocks of Mustang Mountain - conglomerates, sandstone, siltstone, mudstone, and volcanic rocks
Q ₁ ayn	Holocene alluvial deposits, undifferentiated	Q ₁ tr7	Concha Limestone - light-gray relatively thick-bedded limestone with abundant distinctive chert nodules
Q ₁ ayp	Holocene fine-grained deposits - unconsolidated alluvium derived predominantly from basin fill deposits	Q ₁ tr8	Scherer Formation - quartzose sandstone and dolomite
Q ₁ ayq	Holocene and Pleistocene alluvium - mixed fine-grained Holocene (Q ₁) and Pleistocene (Q ₂ or Q ₃) alluvium	Q ₁ tr9	Epitaph dolomite - dolomite and limestone, marl, siltstone, and gypsum
Q ₁ ayr	Late Pleistocene alluvial fan and terrace deposits - weakly consolidated sandy gravel deposits with moderate soil development	Q ₁ tr10	Colina limestone - medium to dark-gray limestone
Q ₁ ays	Middle to late Pleistocene alluvial fan and terrace deposits - weakly consolidated sandy gravel deposits with strong soil development		
Q ₁ ayt	Early to middle Pleistocene alluvial fan and terrace deposits - high, moderately consolidated gravelly deposits with strong soil development		
Q ₁ ayu	Early Pleistocene alluvial fan deposits - highest standing Pleistocene alluvial surface in the landscape composed of moderately consolidated gravelly deposits with variable soil development		

Boundaries of Holocene River Alluvium

- Thin, Solid Line**
Clearly defined, accurately located contacts between Holocene river alluvium and bounding geologic units such as bedrock hillslopes, sharply incised channels or alluvial terraces, and distinct edges of small, steep alluvial fans and talus slopes. Line location accurate to within 50 feet.
- Thin, Dashed Line**
Subtle or gradational contacts between Holocene river alluvium and bounding geologic units. These boundaries are often associated with very low relief distal alluvial fan onlap onto Holocene river alluvium and are often located in historically plowed fields. Line location accurate to within 100 feet.
- Thin, Dotted Line**
Approximately located boundary between Holocene river alluvium and bounding geologic units. Dotted line boundaries are reserved for areas which are significantly disturbed by anthropogenic activity. Placement of dotted line boundaries is based on a combination of field verification and historical aerial photo and topographic data interpretation. Line location accurate to within 500 feet depending on level of disturbance (plowed vs. paved, original topography maintained/obliterated etc.)

Other Geologic Lines

- Thin, Solid Line**
Accurate contact
- Thin, Dashed Line**
Approximate contact
- Thin, Dotted Line**
Concealed contact
- Hashed Line**
Gradational Contact
- Solid, Bold Line**
Accurate Fault
- Dashed, Bold Line**
Approximate Fault
- Dotted, Bold Line**
Concealed Fault

Figure 3