

Description of Map Units

Map unit descriptions are summarized from descriptions in the Albuquerque 30' x 60' quadrangle (Williams and Cole, 2007) and modified to reflect general characteristics of the unit across the East Mountain study area.

RIVER ALLUVIUM OF THE RIO GRANDE

- Qroc** Older river alluvium (lower Pleistocene) – Light grayish-brown coarse, heterolithic bouldery gravel, and light brown to yellowish-gray sand, cobble gravel, pebbly sand, and silt; weakly cemented, moderately sorted; coarse sand deposits typically display conspicuous planar and trough cross-bedding at meter scale. Thickness highly variable, but may exceed 400 feet in total.

STREAM ALLUVIUM OF TRIBUTARY STREAMS

- Qa** Tributary-stream alluvium (Holocene) – Unconsolidated light brown to yellowish-brown sand, silt, and gravel beneath tributary arroyos and small alluvial fans marginal to the Rio Grande flood plain.
- Qty** Young tributary-stream alluvium (upper Pleistocene) – Poorly consolidated sand, silt, and gravel deposits in low terraces that flank tributary streams. In the Galisteo Creek drainage, unit consists of three strath and fill terraces about 6 to 30 feet above creek level. Unit may locally include some Holocene deposits. Thickness variable.

ALLUVIAL DEPOSITS ON ERODED SLOPES

- Qay** Young slope alluvium (upper Pleistocene) – Poorly consolidated deposits of light brown to yellowish-brown sand, sandy clay, and local gravel. Deposits form low-gradient alluvial slopes adjacent to flood plains of Rio Grande and major tributary drainages, and form the youngest stream channels and terraces along minor tributary valleys.
- Qam** Medial-age slope alluvium (middle Pleistocene) – Poorly consolidated deposits of light yellow to brown sand, silt, and local gravel that cover extensive low-gradient alluvial slopes throughout the quadrangle. Unit may locally include some upper Pleistocene deposits. In the western part of Estancia Basin, geomorphic position allows local subdivision into:
- Qam2** Younger medial-age slope alluvium
- Qam1** Older medial-age slope alluvium
- Qao** Old slope alluvium (middle to lower Pleistocene) – Moderately consolidated deposits of light to dark brown sand, silty loam, and boulder to cobble gravel.

PIEDMONT-SLOPE ALLUVIAL DEPOSITS WEST OF SANDIA CREST

- Qpy** Young piedmont-slope alluvium (upper Pleistocene) – Poorly consolidated deposits of sand and gravel in low geomorphic positions; contain subangular boulder and cobble gravel near Sandia Mountain front.
- Qpm** Medial-age piedmont-slope alluvium (middle Pleistocene) – Poorly consolidated deposits of sand and gravel in intermediate geomorphic positions; gravels contain subangular clasts near Sandia Mountain front. Unit may locally include some upper Pleistocene deposits.
- Qpo** Old piedmont-slope alluvium (middle to lower Pleistocene) – Moderately consolidated deposits of sand and gravel in high geomorphic positions near the Sandia Mountain front; deposits are chiefly erosional remnants inset by younger piedmont-slope units.
- Qtp** Older piedmont-slope alluvium (lower Pleistocene to upper Pliocene?) – Light brown, red-brown, and yellowish-brown deposits of conglomerate, conglomeratic sandstone, sandstone, and minor siltstone and mudstone eroded from Sandia Mountain uplift.

MINOR SURFICIAL UNITS

- Qae** Eolian sand and slope-wash alluvium, undivided (Holocene to middle? Pleistocene) – Light brown, poorly consolidated sand and silt with scattered pebbles; deposits form discontinuous mantles on upland surfaces throughout the area. Soil development weak to moderate.
- Qc** Colluvium (Holocene to middle? Pleistocene) – Poorly sorted, unconsolidated to partly consolidated, coarse- to fine-grained, weathering debris on steep slopes.