

SUGGESTED

Description of Map Units

Modified from Reheis, M.C., Redwine, J.R., Wan, Elmira, McGeehin, J.P., and VanSistine, D.P., 2014, Surficial geology and stratigraphy of Pleistocene Lake Manix, San Bernardino County, California: U.S. Geological Survey Scientific Investigations Map 3312, 46 p., 2 sheets, scale 1:24,000, <http://dx.doi.org/10.3133/sim3312>.

Unconsolidated Surficial Deposits

Man-Made Deposits

d Disturbed areas (modern)—Unconsolidated to loosely compacted rubble composed of silt, sand, and rock. Mapped mainly along the interstate highway and railroad beds. Locally includes bulldozed areas

Fluvial Deposits

Qyf Young fluvial deposits (Holocene and late Pleistocene)—Unconsolidated sand and gravel, undifferentiated by source. Laminated to bedded, with 2–3 cm-thick beds that are locally cross-bedded; well to moderately well sorted sand, silt, and pebble to cobble gravel of mixed lithologies and sources.

Qof Older fluvial deposits (middle Pleistocene)—Mostly well-bedded, clast-supported fluvial gravel and sand; locally includes chaotically bedded deposits.

Alluvial-Fan Deposits

Qya Young alluvial-fan deposits, undivided (Holocene and late Pleistocene)—Alluvial fan and wash deposits. Includes scattered thin mudflow deposits

Qia Intermediate alluvial-fan deposits, undivided (early late Pleistocene and middle Pleistocene)—Fan surfaces with well-developed desert pavement over ~80 percent of surface and well-developed varnish on clasts

Qoa Older alluvial-fan deposits (middle and early Pleistocene)—Alluvial fans with poorly preserved, rounded and eroded surfaces. Locally, thick carbonate soils with stage III or greater morphology are exposed. Moderately developed and degraded desert pavement and varnish. Age is unknown, but based on poor preservation and apparently more developed soils, these deposits are inferred to be older than Qia fans.

QTgu Fanglomerate, undifferentiated (early Pleistocene? and Pliocene?)—Fanglomerate. May include deposits elsewhere mapped as units QTvg, Qoa, and Tertiary

Playa and Distal-Fan Deposits

Qp Playa and distal-fan deposits (middle Pleistocene)—Mud, silt, sand, and lesser fine gravel in massive, poorly sorted, matrix supported beds (photos 34 and 54). Locally includes moderately bedded, poorly sorted alluvial deposits 20–50 cm thick. Deposited by low-gradient streams, playas, and small wetlands

Bedrock Units

Tvs Volcanic and sedimentary rocks, undivided (Miocene)—Volcanic rocks and volcanoclastic sediments.

Br Extrusive and intrusive igneous, and metamorphic rocks