

Explanation accompanying "Generalized geologic map of the  
Rio Vista 15-minute quadrangle, California",  
by Brian Atwater (U.S. Geol. Survey Open-File Report 79-853)

(This report is preliminary and has not been edited or reviewed  
for conformity with Geological Survey standards or nomenclature)

CORRELATION OF MAP UNITS

QUATERNARY	Holocene	Qh1	Qh1
		Qpha	Qphe
	Pleistocene		
		Qpmz	

## DESCRIPTION OF MAP UNITS

- Qh1** Intertidal deposits (late Holocene). Mainly peat and peaty mud formed in tidal marshes and swamps; also includes clay, silt and sand from low natural levees along major waterways, small crevasse splays, small distributaries (such as Jackson Slough), and sloughs that drained tidal marshes (such as those on Mandeville Is.). Shown where generally thicker than 1 m. Locally capped with man-made levees, dredge spoils (especially along Sacramento River downstream of Cache Slough), and as much as 3 m of silt and sand attributable to historic overtopping of man-made levees (Cosby, 1941, p. 36).
- Qh1** Levee and crevasse-splay deposits (late Holocene). Silt and very fine sand deposited on stream-built ridges. Mapped distribution approximate, being based on topography and soils surveyed after erection of man-made levees and local deposition of hydraulic mining debris. Contact with intertidal deposits is gradational, and in this area is located near the 0-foot contour. Contact along waterways shown only downstream of high-tide lines; elsewhere contact equals inner high tide line.
- Qphe** Eolian deposits (late Pleistocene and early Holocene?). Moderately- to well-sorted fine sand. In southern part of map, eolian deposits within the historic high-tide line are locally overlain by 1-2 m of Holocene sediment, chiefly intertidal peat, lacustrine clay, and alluvial sand. The virtual lack of soil development in dune sand above the historic high-tide line suggests contemporaneity with late Modesto deposits of Marchand and Allwardt (1977).
- Qpha** Alluvial deposits, undifferentiated (late Pleistocene and Holocene). Sand, silt, and clay. Contact with Holocene intertidal deposits is approximately located. For differentiation of this alluvium according to age, see maps by Sims and others (1973), Dudley and Allsup (1976), and Burke and others (in press).
- Qpmz** Montezuma formation of Weaver (1949) (Pleistocene). Sand, silt, and gravel, with a large volcanic component, largely or wholly alluvial. Includes younger alluvium in stream valleys.
- Approximate high-water line for autumnal tides circa 1850. Traced or inferred from USGS topographic maps surveyed 1906-1908. Not a geologic contact, but approximates landward limit of intertidal deposits before erection of man-made levees.

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Note: This map depicts Cenozoic deposits on part of the Sacramento 1° by 2° sheet. Map units are differentiated by surface morphology shown on USGS topographic maps (1906-1908, 1952, and 1978 editions), particle size and organic content indicated by soils (mapping by staff of the University of California and the Soil Conservation Service; see references), and local field checking by Atwater.