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CORRELATION OF MAP UNITS

SURROUNDING 7.5' QUADRANGLES

Lake Mathews	Steele Peak	Perris
Alberhill	**Elsinore 7.5'**	Romoland
Wildomar	Wildomar	Murrieta

Classification of plutonic rock types (from IUGA, 1973, and Streckeisen, 1973).
A, alkali feldspar; P, plagioclase feldspar; Q, quartz.

DESCRIPTION OF MAP UNITS

VERY YOUNG SURFICIAL DEPOSITS—Sediment recently transported and deposited in channels and washes, on surfaces of alluvial fans and alluvial plains, and on hillslopes. Soil-profile development is non-existent

Artificial fill (late Holocene)—Deposits of fill resulting from human construction, mining, or quarrying activities; includes compacted engineered and non-compacted non-engineered fill. Most large deposits are mapped, but in some areas, small deposits are not shown

Very young wash deposits (late Holocene)—Unconsolidated boulder to sandy alluvium of active and recently active washes

Very young alluvial-fan deposits (late Holocene)—Active and recently active alluvial fans. Consists of unconsolidated, bouldery, cobbley, gravelly, sandy, or silty alluvial fan deposits, and headward channel parts of alluvial fans. Trunk drainages and proximal parts of fans contain greater percentage of coarse-grained sediment than distal parts

Very young lacustrine deposits (late Holocene)—Dominantly gray, clayey, silty, and fine-grained sandy lacustrine deposits

YOUNG SURFICIAL DEPOSITS—Sedimentary units that are slightly consolidated to cemented and slightly to moderately dissected. Alluvial fan deposits (Qyf series) typically have high coarse/fine clast ratios. Younger surficial units have upper surfaces that are capped by slight to moderately developed pedogenic-soil profiles

Rocks of the Peninsular Ranges batholith

Granodiorite of Arroyo del Toro pluton (Cretaceous)—Light gray, medium-grained, massive, very homogeneous, and inclusion-free biotite-hornblende granodiorite.

Gavilan ring complex (Cretaceous)—Composite ring structure consisting of a variety of granitic rocks that range from monzogranite to tonalite.

Paloma Valley Ring Complex (Cretaceous)—Composite ring dike intrusion.

Monzogranite to granodiorite—Pale gray, massive, medium-grained hypidiomorphic-granular biotite monzogranite, and less abundant hypidiomorphic-granular biotite-hornblende granodiorite.

Generic Cretaceous granitic rocks of the Peninsular Ranges batholith

Granodiorite, undifferentiated (Cretaceous)—Biotite and hornblende-biotite granodiorite, undifferentiated.

Gabbro (Cretaceous)—Mainly hornblende gabbro.

Heterogeneous granitic rocks (Cretaceous)—Includes wide variety of heterogeneous granitic rocks.

Santiago Peak Volcanics (Cretaceous)—Basaltic andesite, andesite, dacite, rhyolite, volcaniclastic breccia, welded tuff, and epiclastic rocks.

Estelle Mountain volcanics of Herzig (1991) (Cretaceous)—Heterogeneous mixture of rhyolite flows, shallow intrusive rocks, and volcaniclastic rocks.

Geologic Summary

The Elsinore quadrangle is located in the northern part of the Peninsular Ranges Province and includes parts of two structural blocks, or structural subdivisions of the province.

REFERENCES

Anderson, C.L., 1991. Zircon uranium-lead isotopic ages of the Santiago Peak volcanics and spatially related plutons of the Peninsular Ranges batholith, southern California: M.S. thesis, San Diego State University, 111 p.

Dickerson, R.E., 1914, The Martinez and Tejon Eocene and associated formations of the Santa Ana Mountains: Univ. California, Dept. Geol. Sciences, Bull., vol. 8, n. 11, pp. 257-274.

Dudley, P.H., 1935, Geology of a portion of the Perris block, southern California: California Journal Mines and Geology, v. 31, p. 487-506.

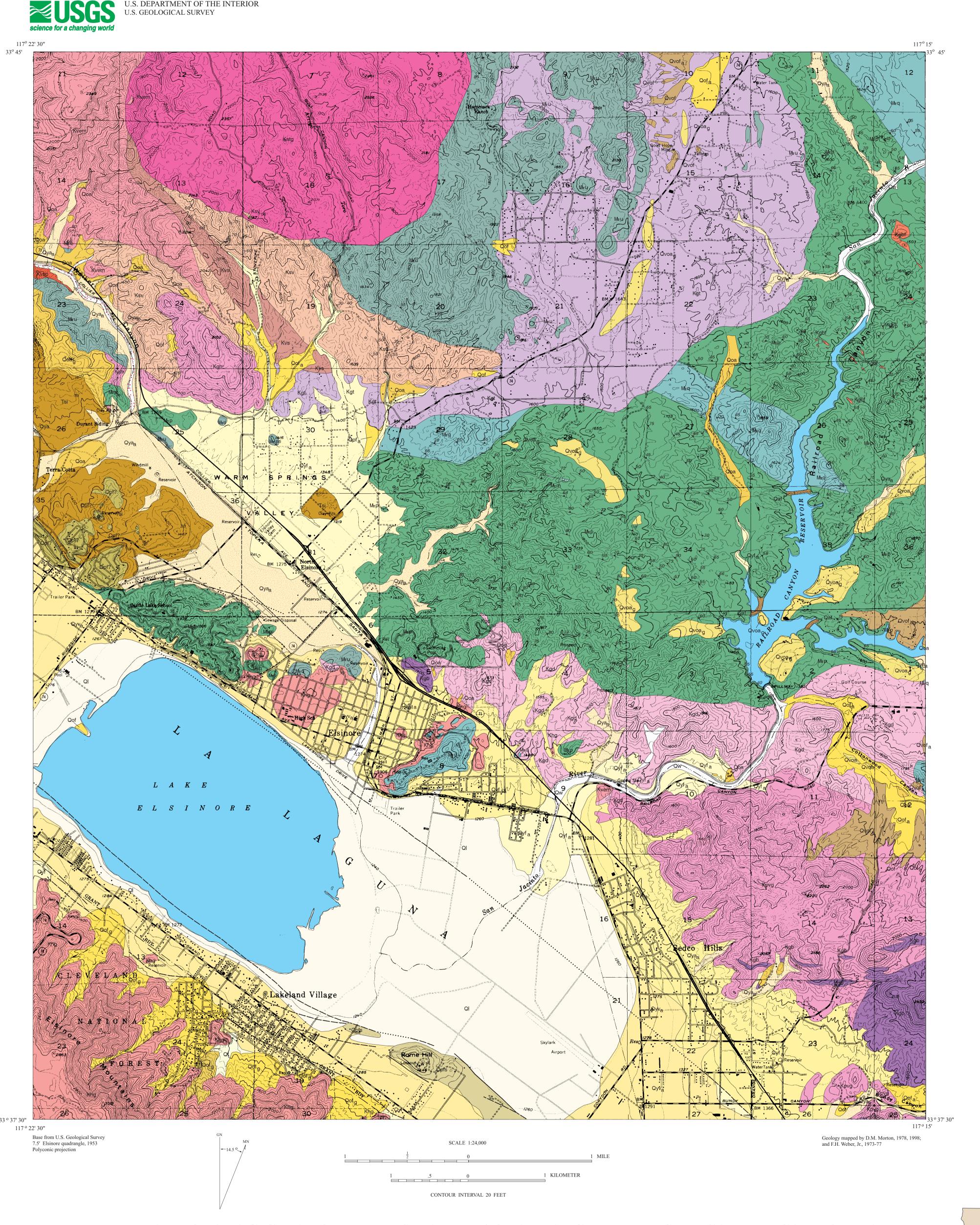## PRELIMINARY GEOLOGIC MAP OF THE ELSINORE 7.5' QUADRANGLE, RIVERSIDE COUNTY, CALIFORNIA

Version 1.0

By

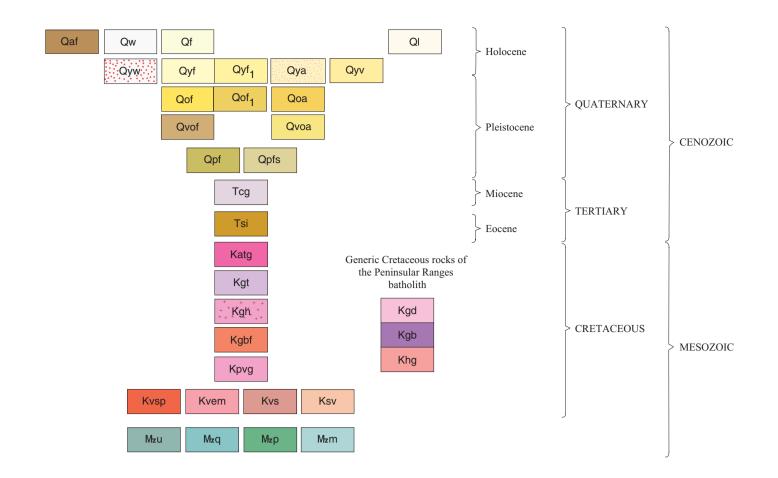Douglas M. Morton[1] and F. Harold Weber, Jr.[2]

Digital preparation by

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SCALE 1:24,000

CONTOUR INTERVAL 20 FEET

Base from U.S. Geological Survey
7.5' Elsinore quadrangle, 1953
Polyconic projection

Geology mapped by D.M. Morton, 1974, 1976, 1998, and F.H. Weber, Jr., 1973-77

LOCATION MAP

Figure 1. Location of Elsinore quadrangle relative to major structural blocks of the northern Peninsular Ranges batholith.