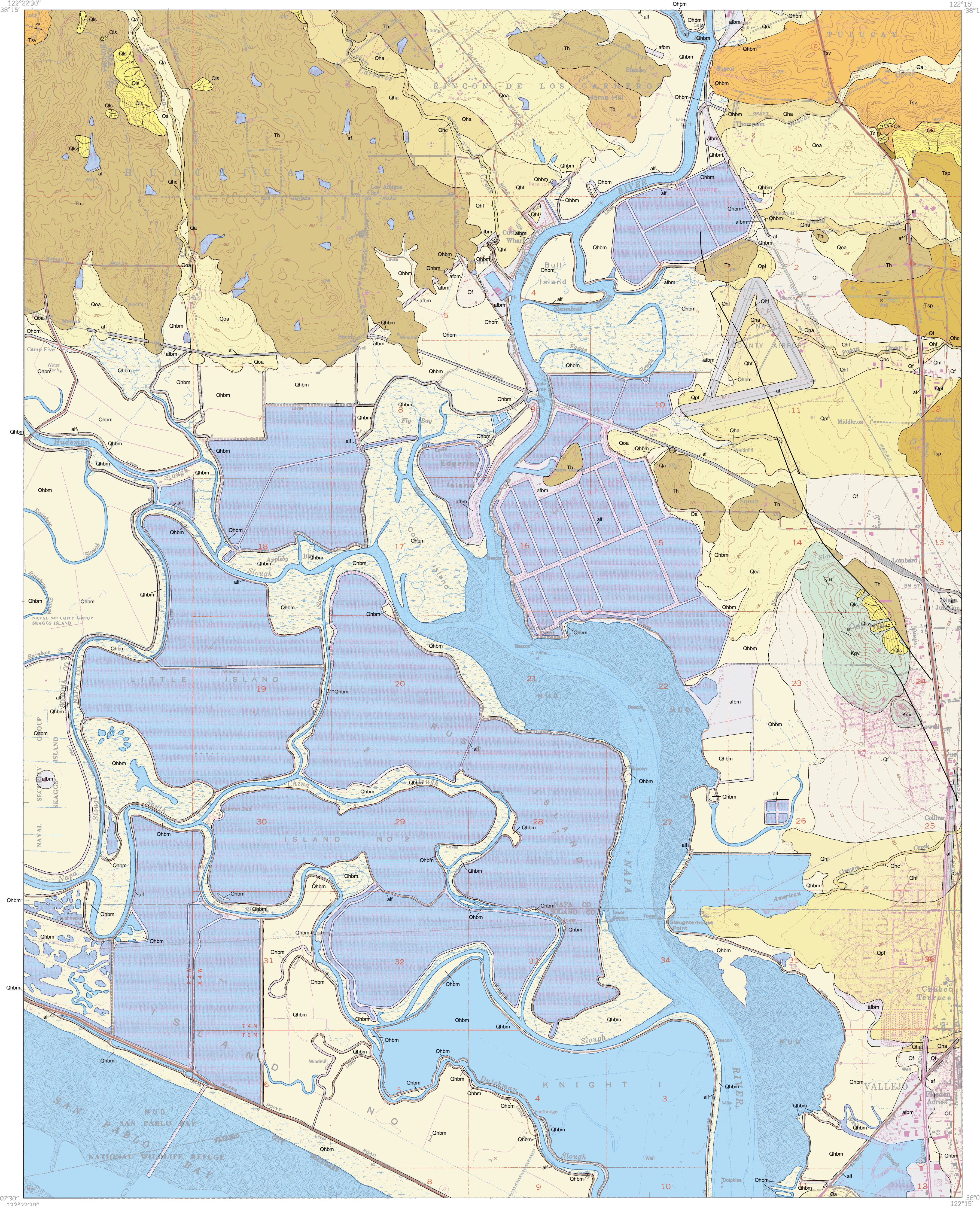


GEOLOGIC MAP OF THE CUTTINGS WHARF 7.5' QUADRANGLE NAPA AND SOLANO COUNTIES, CALIFORNIA: A DIGITAL DATABASE VERSION 1.0

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Digital Database
by
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2002

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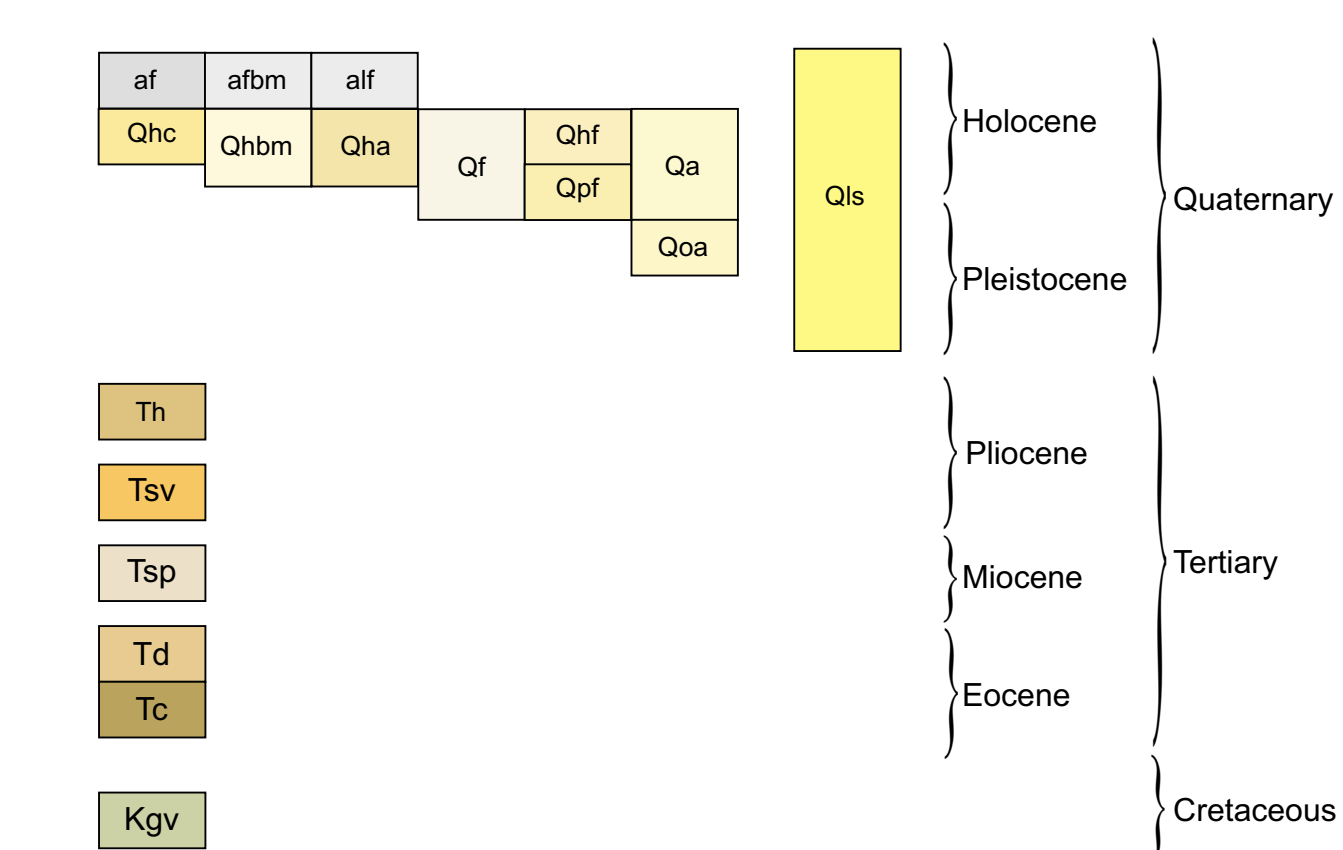


Unit Explanation

(See Knudsen and others, 2000, for more information on Quaternary units.)

- af** Artificial fill
- afbm** Artificial fill on bay mud (Qhbm)
- alf** Artificial levee fill
- Qhbm** Holocene estuarine deposits (bay mud). Holocene sediments deposited in a tidal marsh, estuary, delta, or lagoon. Sediments are silts, fine sands, peats, and clays.
- Qhc** Modern stream channel deposits. Channel bed and bank deposits of the major present-day creeks and streams. Deposits are late Holocene to modern in age and consist of loose fluvial sand, gravel, and silt.
- Qhf** Holocene alluvial fan deposits. Holocene alluvial fan sediments, deposited by streams emanating from the mountains as debris flows, hyperconcentrated mudflows, or braided stream flows. Sediments include sand, gravel, silt and clay, that are moderately to poorly sorted, and moderately to poorly bedded.
- Qha** Holocene alluvium, undifferentiated. Alluvium of Holocene age, deposited in fan, terrace, or basin environments. The unit is mapped where separate types of deposits could not be delineated either due to complex interfingering of depositional environments or the limited size of the area.
- Qf** Late Pleistocene to Holocene fan deposits. Gently sloping, fan-shaped, relatively undifferentiated alluvial surfaces where late Pleistocene or Holocene age was uncertain or where the deposits of different age interfinger such that they could not be delineated at the map scale. Sediments include sand, gravel, silt, and clay, that are moderately to poorly sorted, and moderately to poorly bedded.
- Qa** Late Pleistocene to Holocene alluvium, undifferentiated. Alluvium deposited in small valleys where separate fan, basin, and terrace units could not be delineated at the map scale, and where Holocene or Pleistocene age was uncertain. The unit includes flat, relatively undifferentiated fan, terrace, and basin deposits, and small active stream channels.
- Qpf** Late Pleistocene fan deposits. Gently sloping, fan-shaped alluvial surfaces where late Pleistocene age is indicated by slight dissection and/or the development of a hardpan.
- Qoa** Early to middle Pleistocene fan or terrace deposits. Moderately to deeply dissected alluvial deposits capped by allsols, ultisols, or soils containing a silica or calcic hardpan.
- Qls** Landslide deposits. Holocene and Pleistocene landslides.
- Th** Huachuca Formation (Pliocene). Fluvial gravel, sand, silt, and clay. Sediments are derived mostly from the Sonoma Volcanics. A full interbed yields a *K/Ar* date of 4.09 ± 0.19 (Andre Sarna, written communication, 1981, reported in Kelly (1982)).
- Tsv** Sonoma Volcanics, undivided (Pliocene). Basalt to rhyolite flows, agglomerates, and tuffs.
- Td** Domingene Formation (Eocene). Light gray to light brown quartz sandstone, commonly crossbedded with minor shale and conglomerate; locally contains serpentinite sandstone and conglomerate with gabbro clasts.
- Tc** Capay Shale (Eocene). Grayish-brown sandy shale.
- Kgv** Great Valley Sequence (Cretaceous). Sandstone, siltstone, shale, and minor conglomerate.

Unit Correlation

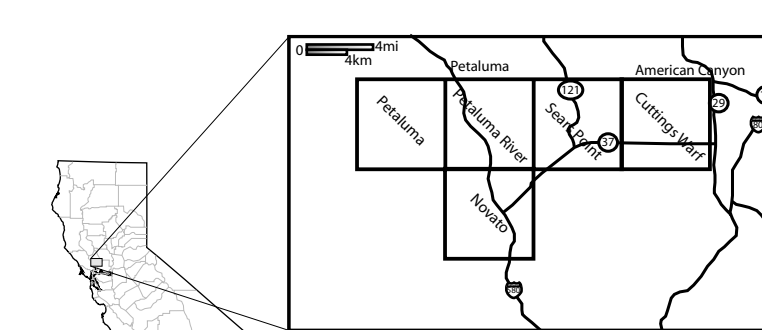


Symbol Explanation

- Contact between map units - solid where accurately located, dashed where approximately located, short dash where inferred, dotted where concealed.
- Fault - solid where accurately located, dashed where approximately located, short dash where inferred, dotted where concealed. U = upthrown block, D = downthrown block. Arrow and number indicate direction and angle of dip of fault plane.
- Strike and dip of sedimentary beds:
- Inclined
- Horizontal
- Landslide - arrows indicate principal direction of movement. Questioned where questionable.

References

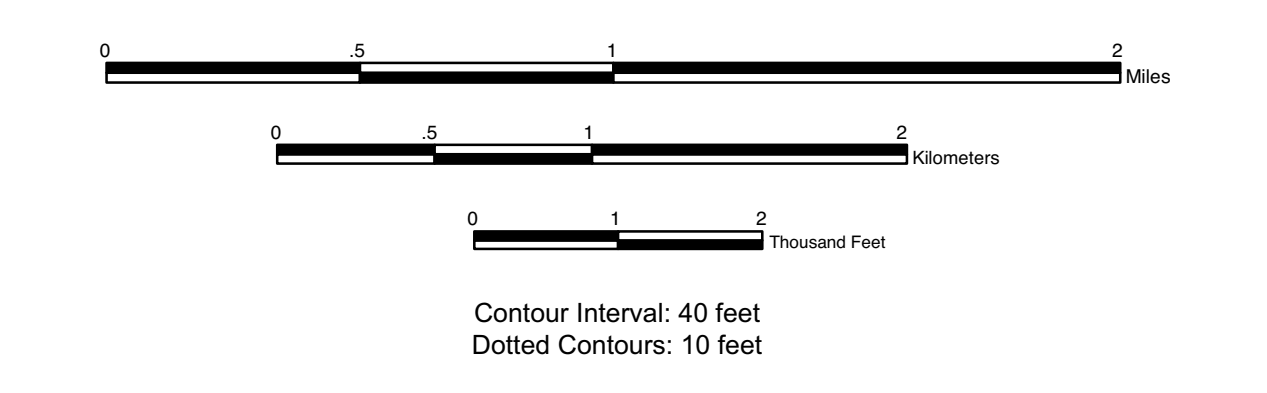
- Bryant, W.A., 1982. West Napa and SodaCreek Faults. California Department of Conservation Division of Mines and Geology Fault Evaluation Report FER-129, 8 p, scale 1:24,000.
- Manson, M. W., 1988. Landslide hazards in the Cordelia-Vallejo area, Solano and Napa counties, California. California Department of Conservation, Division of Mines and Geology Open-File Report 88-22, scale 1:24,000.
- Knudsen, K.L., Sowers, J.M., Witter, R.C., Wentworth, C.M., and Helley, E.J., 2000. Preliminary geologic maps of the Quaternary deposits and liquefaction susceptibility, nine-county San Francisco Bay Region, California. A digital database. U.S. Geological Survey Open-File Report 00-44, ver. 1.0, scale 1:52,500.
- Sims, J. D., Fox, K. F., Bartow, J. A., and Helley, E.A., 1973. Preliminary geologic map of Solano County and parts of Napa, Contra Costa, Marin, and Yolo counties, California. U.S. Geological Survey Miscellaneous Field Studies MF-484, scale 1:62,500.
- Weaver, C. E., 1949. Geology and mineral deposits of an area north of San Francisco Bay, California. California Division of Mines Bulletin 149, 135 p., scale 1:62,500.
- Wills, C. J., and Majumdar, H. H., 2000. Landslide hazard map of southwestern Napa County, California. California Department of Conservation, Division of Mines and Geology Open-File Report 99-06, scale 1:24,000.



Topographic base from the U.S. Geological Survey Polyconic Projection

UTM GRID AND 2002 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

0°18' 5 MEST
15° 267 MEST



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