Geologic Map of Point Reyes National Seashore

California

National Park Service
U.S. Department of the Interior

Geologic Resources Inventory
Natural Resource Stewardship and Science

Point Reyes NPS Boundary

Golden Gate NPS Boundary

Alteration and Metamorphic Areas

area of hydrothermal alteration

Infrastructure

- point of interest
- visitor center
- trails
- streams
- roads

Hazard Feature Lines

- landslide direction, known or certain
- landslide escarpment/scarp, known or certain

Folds

- anticline, dashed where approximate, dotted where concealed, large arrowhead shows direction of plunge
- syncline, dashed where approximate, dotted where concealed, short dash where inferred, large arrowhead shows direction of plunge

Faults

- thrust fault, known or certain, dashed where approximate, dotted where concealed, short dash where inferred, "?" indicates queried
- U / D: normal fault, known or certain, fault up "U" indicator, fault down "D" indicator
- unknown offset/displacement, known or certain, dashed where approximate, dotted where concealed, short dash where inferred, "?" indicates queried

North

0 2 4 Kilometers

0 2 4 Miles

Geologic Units

- water
- Qar Artificial fill (Quaternary)
- Qbs Beach sand (Quaternary)
- Qsc Stream channel deposits (Holocene)
- Qdsy Dune sand, younger (Quaternary)
- Qmf Artificial fill over marine and marsh deposits (Quaternary)
- Qyl Younger landslide deposits (Quaternary)
- Qbmy Bay mud, younger (Holocene < 10,000 years)
- Qst Stream terrace deposits (latest Holocene)
- Qafy Holocene alluvial fan deposits (Holocene)
- Qaly Alluvium, undivided, younger (Holocene)
- Qalo Alluvium, undivided, older (Quaternary)
- Qdso Dune sand, older (latest Pleistocene to Holocene)
- Qbmo Bay mud, older (Quaternary)
- Qafo Alluvial fan deposits (latest Pleistocene (<~30,000 years) to Holocene)
- Qls Landslide deposits (Quaternary)
- Qsr Slope and ravine debris (Quaternary)
- Qu Undifferentiated surficial deposits (Quaternary)
- Qcl Colluvium (latest Pleistocene to Holocene)
- Qpf Pleistocene alluvial fan deposits (Pleistocene)
- Qobs Older beach sand (late Pleistocene?)
- Qol Older landslide deposits (Quaternary)
- Qoal Older alluvium (Quaternary)
- Qtmr Marine terrace deposits (Quaternary)
- Qmst Marine and stream terrace deposits (Quaternary)
- Qc Colma Formation (Quaternary) — Shallow-water marine sand
- Qoc Olema Creek Formation (late Pleistocene) — Alluvial and estuarine granitic sand and gravel
- Qml Millerton Formation (Pleistocene) — Alluvial and estuarine clay, silt, sand, and gravel
- QTm Merced Formation (Quaternary and late Pliocene) — Marine sandstone and siltstone
- Tps Purisima Formation (Pliocene and Miocene) — Marine sadnstone, siltstone, and mudstone
- Twg Wilson Grove Formation (Pliocene and late Miocene) — Marine sandstone and conglomerate
- Tsc Santa Cruz Mudstone (upper/late Miocene)
- Tsm Santa Margarita Sandstone (upper/late Miocene)
- Tm Monterey Formation (late and middle Miocene) — Siliceous shale with minor and arkosic sandstone
- Tls Laird Sandstone (middle Miocene) — Mudstone, siltstone, and shale
- Tbv Burdell Mountain volcanics (middle Miocene) — Flows, breccia, and mudflow deposits
- Tpr Point Reyes Conglomerate of Galloway (1977) (lower Eocene)
- Kg Porphyritic granodiorite of Point Reyes (Late Cretaceous)
- Kgri Granodiorite of Inverness Ridge (Late Cretaceous)
- Kgdt Tonalite of Tomales Point (Late Cretaceous)
- Kgd Gabbro and diabase (Cretaceous)

Franciscan Complex

- Kfl limestone and chert (Cretaceous)
- Kfgwy graywacke, shale and some metagraywacke (Cretaceous)
- Kfdb diabase (Cretaceous)
- Kfg younger greenstone (Cretaceous)
- KJfg greenstone (Cretaceous and Jurassic)
- KJfsch metamorphic rocks (Cretaceous and/or Jurassic)
- KJfss sandstone and shale (Cretaceous and Jurassic)
- KJfmss sandstone (Cretaceous and Jurassic)
- KJfsh thin-bedded sandstone and shale (Cretaceous and Jurassic)
- KJfm melange (Cretaceous and Jurassic)
- KJfbss sandstone, shale and conglomerate (Cretaceous and Jurassic)
- KJfbsch schist and semischist (Cretaceous and Jurassic)
- KJfbch chert and metachert (Cretaceous and Jurassic)
- KJfbmg metagraywacke and graywacke (Cretaceous and Jurassic)
- KJfmgs metagreenstone (Cretaceous and Jurassic)
- KJfbsc silica carbonate rocks (Cretaceous and Jurassic)
- KJfsu serpentine (Cretaceous and Jurassic)
- KJfmch metachert (Cretaceous and Jurassic)
- KJfgs greenstone (small discrete masses) (Cretaceous and Jurassic)
- KJfmgc metagreenstone and metachert (Cretaceous and Jurassic)
- MZPZmx Metamorphic rocks (Mesozoic and/or Paleozoic)

This map displays geologic map data compiled by the National Park Service Geologic Resources Inventory. It is not a substitute for site-specific investigations.

Source Maps

Blake, M. C., R. W. Graymer, and D. L. Jones. 2000. Geologic map and map database of parts of Marin, San Francisco, Alameda, Contra Costa, and Sonoma counties, California (scale 1:75,000). Pamphlet to accompany Miscellaneous Field Studies Map 2337 (version 1.0). US Geological Survey, Reston, Virginia.

Bonilla, M. G. 1998. Preliminary geologic map of the San Francisco South 7.5' quadrangle and part of the Hunters Point 7.5' quadrangle, San Francisco Bay Area, California: a digital database (scale 1:24,000). Open-File Report 1998-354. US Geological Survey, Reston, Virginia.

Brabb, E. E., R. W. Graymer, and D. L. Jones. 2000. Geologic map and map database of the Palo Alto 30' × 60" quadrangle, California (scale 1:100,000). Miscellaneous Field Studies Map 2332. US Geological Survey, Reston, Virginia.

Clark, J. C. and E. E. Brabb. 1997. Geology of Point Reyes National Seashore and vicinity, California: a digital database (scale 1:48,000). Open-File Report 1997-456. US Geological Survey, Reston, Virginia.

Pampeyan, E. H. 1994. Geologic map of the Montara Mountain and San Mateo 7.5' quadrangles, San Mateo County, California (scale 1:24,000). Miscellaneous Investigations Series Map I-2390. US Geological Survey, Reston, Virginia.

Schlocker, J., M. G. Bonilla, and D. H. Radbruch. 1958. Geology of the San Francisco North quadrangle, California (scale 1:24,000). Miscellaneous Geologic Investigations Map I-272. US Geological Survey, Reston, Virginia.

Wagner, D. L., C. I. Gutierrez, and K. B. Clahan. 2006. Geologic map of the south half of the Napa 30'x60' quadrangle, California (scale 1:100,000). Preliminary Geologic Maps. California Geological Survey, Sacramento, California.

Poster Layout
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According to US National Map accuracy standards, features are within 12 m (40 ft) (1:24,000 scale data), 38 m (125 ft) (1:75,000 scale data) and 50 m (166 ft) (1:100,000 scale data) of their true location.

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