Preliminary Geologic Map available from:
http://www.conservation.ca.gov/cgs/rghm/rgm/preliminary_geologic_maps.htm

PRELIMINARY GEOLOGIC MAP OF ONSHORE PORTIONS OF THE CRESCENT CITY AND ORICK 30' x 60' QUADRANGLES, CALIFORNIA

Compilation and Digital Preparation by

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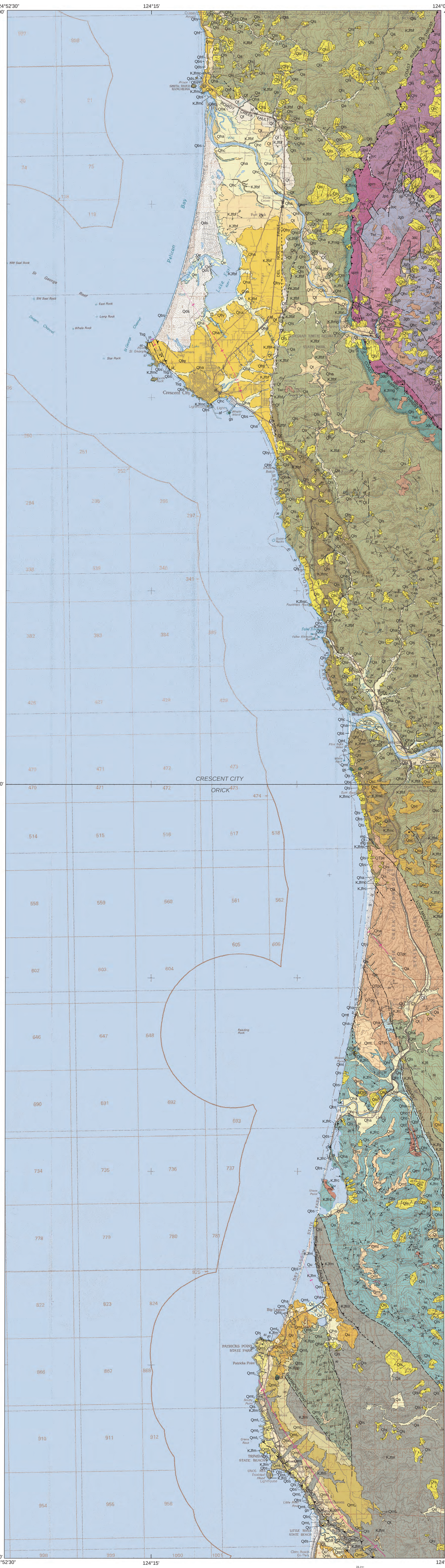
2012



ABBREVIATED EXPLANATION

(Approximate stratigraphic relationships only; see pamphlet for more detailed information)

CENOZOIC

QUATERNARY – Holocene

- af — Artificial fill (historical)
- Qhc — Stream channel deposits (latest Holocene)
- Qbs — Beach deposits (latest Holocene)
- Qha — Young alluvial deposits, undifferentiated (Holocene)
- Qhf — Young alluvial fan deposits (Holocene)
- Qht — Young stream terrace deposits (Holocene)
- Qds — Dune sand (Holocene)
- Qe — Estuarine deposits (Holocene)
- Qls — Landslide deposits (historical to Pleistocene)
- Qa — Alluvial deposits, undifferentiated (Holocene to latest Pleistocene)
- Qf — Alluvial fan deposits (Holocene to Pleistocene)
- Qt — Stream terrace deposits (early Holocene to Pleistocene)

QUATERNARY – Pleistocene

- Qby — Battery Formation (late Pleistocene)
- Qmt — Marine terrace deposits (Pleistocene)
  - Trinidad marine terraces; names and approximate ages (ka=1000 years) from Woodward-Clyde Consultants (1980), and Carver (1992):
  - Qmt_1 — Patricks Pt. terrace, age 64 ka
  - Qmt_2 — Savage Creek terrace, age 83 ka, and McKinleyville terrace, age 96 ka
  - Qmt_3 — Westhaven terrace, 103 ka
  - Qmt_4 — Fox Farm terrace, 120 ka, and Sky Horse terrace, 130 ka
  - Qmt_5 — A-Line terrace, 176 ka and older
  - Qmt_6 — Maple Stump terrace, 200+ ka
- Qsc — Terrace gravels of Surpur Creek (Pleistocene)

TERTIARY – Pliocene

- Qu — Undifferentiated marine and nonmarine overlap deposits (Pleistocene to late Pliocene?)
- QTpc — Prairie Creek Formation (early Pleistocene to late Pliocene)

TERTIARY – Miocene

- Twi — Wimer Formation (late Miocene)
- Tsg — St. Green Formation (late Miocene)

MESOZOIC

CRETACEOUS

Franciscan Complex - Central Belt

- KJfm — Mélange of the Central Belt (Late Cretaceous to Late Jurassic)
  - gs — Greenstone block within mélange

Franciscan Complex - Eastern Belt

- KJfbf — Broken formation (Early Cretaceous to Middle Jurassic)
- KJfmc — Mélange unit of Crescent City area (Early Cretaceous to Middle Jurassic)
  - Blocks within mélange:
  - gs — Greenstone
  - ch — Chert
  - mg — Metagraywacke
  - u — Undifferentiated
- KJfmg — Metagraywacke (Cretaceous to Jurassic)

Redwood Creek watershed units of Hardin and others (1982)

- KJfl — Coherent unit of Lacks Creek (Cretaceous to Jurassic)
- KJfc — Incoherent unit of Coyote Creek (Cretaceous to Jurassic)
- KJfg — Transitional rocks of the Grogan Fault Zone (Cretaceous to Jurassic)
- KJfrc — Redwood Creek Schist (Early Cretaceous to Late Jurassic)
  - mv — Interbedded metatuff
  - sp — Serpentinite block
- KJfpp — Patricks Point unit of Aalto and others, 1981 (Cretaceous to Jurassic)

Klamath Mountains Province - Western Jurassic Belt

Josephine Ophiolite of Harper (1980)

JURASSIC

- Jdc — Dike Complex (Late Jurassic)
- Jgb — Gabbro (Late Jurassic)
- Jpd — Peridotite (Late Jurassic)
- Juc — Cumulate ultramafic rocks (Late Jurassic)
- sp — Sheared serpentinite (Jurassic)
- spm — Serpentinite matrix mélange (Jurassic)
  - Blocks within mélange:
  - gs — Greenstone
  - gr — Granitic rocks
  - ms — Metasedimentary rocks

SYMBOL EXPLANATION

Contact between map units - Hashed where gradational; solid where accurately located, dashed where approximately located; short dash where inferred; dotted where concealed; queried where uncertain.

Fault - Solid where accurately located; dashed where approximately located; short dash where inferred; dotted where concealed; queried where uncertain; bar and ball on downthrown side. U = upthrown block, D = downthrown block.

Thrust fault - Sawteeth on upper plate; solid where accurately located; dashed where approximately located; short dash where inferred; dotted where concealed; queried where existance uncertain

Anticline - Solid where accurately located, dashed where approximately located; dotted where concealed.

Syncline - Solid where accurately located, dashed where approximately located; dotted where concealed.

Strike and dip of bedding:
- Inclined
- Vertical
- Overturned
- Crumpled
- Approximate

Strike and dip of foliation:
- Iinclined
- Vertical

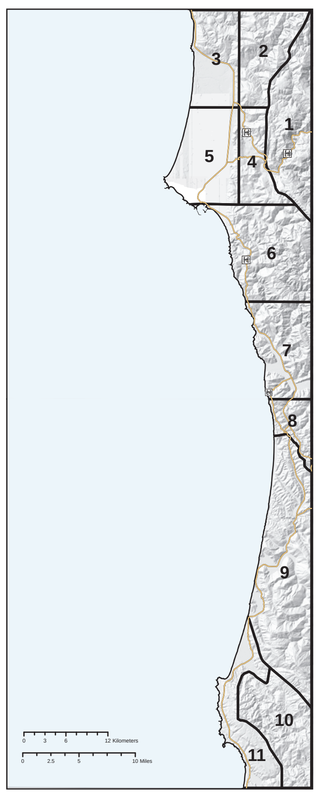
Strike and dip of joints or fractures

Strike and dip if igneous layering

Strike and dip of dike walls

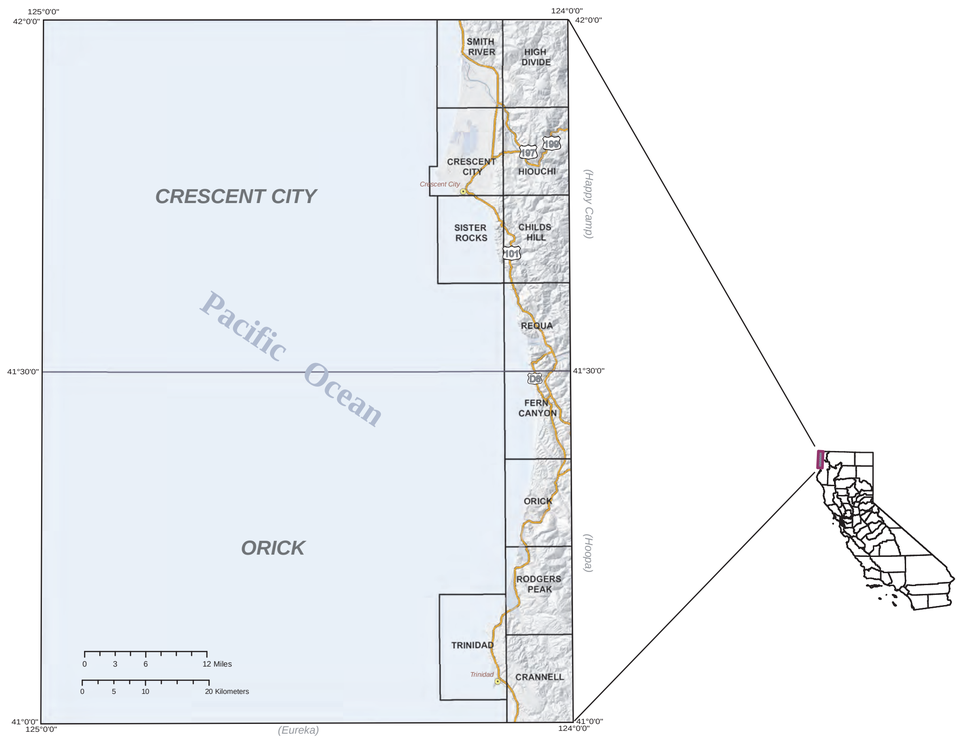
Landslide - arrows indicate principal direction of movement.

ABBREVIATED INDEX TO GEOLOGIC SOURCE DATA



(SEE PAMPHLET FOR COMPLETE REFERENCES)

1. Harper, 1980; Elder and Reichert, 2010; Evans, 1984; Stone, 1983, for Wimer Formation; Quaternary mapping by Delattre, this study.
2. Davenport, 1983b; Aalto, 1981; Quaternary mapping by Delattre, this study.
3. Davenport, 1983c; Back, 1957; Aalto and others, 1981; Quaternary mapping by Delattre, this study.
4. Davenport, 1983a; Back, 1957; Aalto and others, 1981; Stone, 1983, for Wimer Formation; Quaternary mapping by Delattre, this study.
5. Davenport, 1982; Back, 1957; Aalto, 2006, for Point St. George area; Polenz and Kelsey, 1999; Quaternary mapping by Delattre, this study.
6. Davenport, 1984a; Aalto and Harper, 1982; Wills, 2000; Ristau, 1979; Quaternary mapping by Delattre, this study.
7. Davenport, 1984b; Aalto and Harper, 1982; Quaternary mapping by Delattre, this study.
8. Aalto and others, 1981; Cashman and others, 1995; Kelsey and Trexler, 1989.
9. Dell'Osso and others, 2003; Cashman and others, 1995; Hardin and others, 1982; Aalto and others, 1981; Quaternary mapping by Delattre and Rosinski, this study.
10. Aalto and others, 1981; Quaternary mapping by Delattre and Rosinski, this study.
11. Aalto and others, 1981; Carver, 1992, Woodward-Clyde Consultants, 1980, and Aalto, 1989b for marine terraces; Quaternary mapping by Delattre and Rosinski, this study.



INDEX MAP OF 7.5' QUADRANGLES
WITHIN THE CRESCENT CITY AND ORICK 30' X 60' QUADRANGLES

Projection: Universal Transverse Mercator, Zone 10N, North American Datum 1927.

Topographic base from USGS Crescent City and Orick 30'x60' quadrangles, 1983. Shaded relief image derived from USGS 1/3 arc-second National Elevation Dataset (NED).

SCALE 1:100,000

2 0 2 4 6 Miles

2 0 2 4 6 Kilometers

Contour Interval: 50 meters

TRUE NORTH
MAGNETIC NORTH
15.27°
APPROXIMATE MEAN DECLINATION, 2012

Geology compiled 2011-2012

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