

Identifier: GEOMORPH
Title: California North Coast Geomorphic Features - Private Forestlands
Originator: California Department of Conservation, Division of Mines and Geology; California Department of Forestry and Fire Protection

Edition: 1

Publication Date: 19991101

Information Spatial data
Resource Type:

Scale: 1:24,000

Other Citation

Details: Map projection is Albers Equal Area, NAD27

Abstract: Geologic units and geomorphic features were mapped by the California Department of Conservation Division of Mines and Geology in the early 1980's, in cooperation with California Department of Forestry and Fire Protection, the Environmental Protection Agency, California Department of Water Resources, California Department of Parks and Recreation, California Department of Water Resources, and the State Water Resources Control Board. The mapping effort covered most North Coast private forestlands and included 60 7.5' quadrangles. The maps were digitized in cooperation with the California Department of Forestry and Fire Protection in the early 90's and are available in GIS format. As part of this project, two distinct product series were created, each with unique metadata: 1) geology 2) geomorphic features. Each product series contains GIS data layers, symbology layers and AML (ArcInfo Macro Language) programs for map generation, and graphics (PDF) files for each quad. The graphics files show geologic units overlain on contours, public land survey, roads, and other features that were extracted from scanned 7.5' U.S. Geological Survey topographic maps.

Purpose: The maps were originally created in response to the Clean Water Act (1972) requirements that each state develop plans to control sources of water pollution, including those related to silvicultural practices and natural runoff that occurs in forested areas. The maps/data are useful in preparation of Timber Harvesting Plans, and for use by land managers for identifying areas of potentially unstable ground. The maps/data serve as a guide to potential problem areas where more site-specific review is required.

Supplemental

Information: Bedrossian, Trinda L. Watershed Mapping in Northern California. California Geology, June 1983. Bedrossian, Trinda L. Watershed Mapping in Northern California, an update. California Geology, February 1986.

Time Period: Start: 1982 End: 1985

Currentness: Ground Condition

Progress: Complete

Update Frequency: Irregular

Bounding Box: -124 45 00, 38 45 00
-123 37 30, 42 00 00

Themes:	Earth Sciences	Landslides
	Forests & Forestry	Watersheds
	Geology	Water Quality
	Mines & Mineral Resources	Erosion

Access No restrictions

Limitations:

Limits on Use: The State of California, the Department of Forestry and Fire Protection, and the Department of Conservation make no representations or warranties regarding the accuracy of data or maps. Neither the State nor the Departments shall be liable under any circumstances for any direct, special, incidental, or consequential damages with respect to any claim by any user or third party on account of or arising from the use of data or maps.

Users should cite the Departments of Conservation and Forestry and Fire Protection as the original source of the data, but clearly denote cases where the original data have been updated, modified, or in any way altered from the original condition.

There are no restrictions on distribution of the data or reproduction of maps created from the graphics files. However, users are encouraged to refer others to the Department of Conservation to acquire the data, in case updated data become available.

Data Contact: Kit Custis 916-324-1236
kcustis@consrv.ca.gov

Size (MB): The entire geology and geomorphic features product series can be obtained on a single CD-ROM. Each graphics (PDF) file averages 1 MB.

Native Format: ARC/INFO Export

Distributor Division of Mines and Geology, Information Desk
Contact: 801 K St. MS 14-34
Sacramento, Ca. 95814
916-445-5716

Metadata Date: 199901101

Metadata Contact: Joy Arthur 916-327-1042
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DATA DICTIONARY

Geomorphology products are provided on a single CD-ROM which contains the following directories:

GEO_COVS: contains the GIS data layers associated with geomorphology and geologic features.

PLOT: contains fonts, custom symbolsets, logos, key legend files, symbology layers, and AMLs needed to create geomorphology maps.

You should create a directory on your local drive, and copy the PLOT and GEO_COVS directories into it. The PLOT directory contains AMLs that must be run within the PLOT directory, and that look for data in a sister directory called GEO_COVS.

You are not required to copy the PDF directory to a local drive. The CD can be used to store the graphics files for individual retrieval when needed.

Each of the main geomorphology products (data layer, AML, graphics file, etc.) is documented below.

COVERAGE NAME: GEOMORPH

PURPOSE: This coverage contains "landslide" data (e.g. earthflows, debris slides, etc.). Each unique feature is included as a separate subclass.

FEATURE TYPE: Region

SUBCLASS	DESCRIPTION
AMP	Amphitheater/debris slide slope
BASIN	Basin/depression
DEBSLIDEACT	Active debris slide
DEBSLIDEDOR	Dormant debris slide
DGROUND	Disrupted ground
EFLOWACT	Active earthflow
EFLOWDOR	Dormant earthflow
GORGE	Inner gorge
SHEAR	Shear zone
TRANSACT	Active translational/rotational slide
TRANSDOR	Dormant translational/rotational slide

COORDINATE SYSTEM DESCRIPTION

Projection	ALBERS (TEALE)	Spheroid	CLARKE1866
Units	METERS		
Parameters:			
1st standard parallel			34 0 0.000
2nd standard parallel			40 30 0.000
central meridian			-120 0 0.00
latitude of projection's origin			0 0 0.000
false easting (meters)			0.00000
false northing (meters)			-4000000.0000

COVERAGE NAME: QUADS

PURPOSE: Used to set geographic extent of each map to a specific quad, used to "mask out" features drawn beyond the specific quad boundary.

FEATURE TYPE: POLYGON

DATABASE FIELDS:

FIELD NAME	INPUT WIDTH	OUTPUT WIDTH	DATA TYPE	DECI MALS	DESCRIPTION
QUADNAME	27	27	C	-	7.5' quad name
FULLNAME	35	35	C	-	Same as QUADNAME, no abbreviations
USGSCODE	7	7	C	-	Standard USGS quad code
OFR	12	12	C	-	Div. of Mines & Geology map code
ALTNAME	35	35	C	-	Alternate 7.5' quad name (usually the 15' quad name and the quadrant)

COVERAGE NAME: GEOLINES

PURPOSE: This coverage contains "linear" features (inner-gorges and torrent tracks) that were too small to delineate as polygons at 1:24,000 scale

FEATURE TYPE: LINE

DATABASE FIELDS:

FIELD NAME	INPUT WIDTH	OUTPUT WIDT	DATA TYPE	DECI MALS	DESCRIPTION
FEATURE	20	20	C	-	Feature Description
ACT-DOR	1	1	C	-	Active/Dormant coding (if applicable)

FIELD NAME: FEATURE

FEATURE	DESCRIPTION
Gorge	Inner Gorge
Torrent-track	Torrent-track

FIELD NAME: ACT-DOR

ACT-DOR	DESCRIPTION
a	active feature
d	dormant feature

COVERAGE NAME: GEOPOINTS

PURPOSE: This coverage contains point data for slides that were too small to delineate as polygons at 1:24000 scale.

FEATURE TYPE: POINT

DATABASE FIELDS:

FIELD NAME	INPUT WIDTH	OUTPUT WIDTH	DATA TYPE	DECI MALS	DESCRIPTION
FEATURE	20	20	C	-	Feature Description

FIELD NAME: FEATURE

FEATURE	DESCRIPTION
Slide	Active slides

COVERAGE NAME: GEOSYM

PURPOSE: Contains linear features that are used to create standard geologic map symbols

FEATURE TYPE: LINE

DATABASE FIELDS:

FIELD NAME	INPUT WIDTH	OUTPUT WIDTH	DATA TYPE	DECI MALS	DESCRIPTION
ACT-DOR	1	1	C	-	Active/dormant coding
SYM	1	1	C	-	Line symbol coding
ARROW	4	4	I	-	Arrowhead type

FIELD NAME: ACT-DOR

ACT-DOR	DESCRIPTION
a	active
d	dormant

FIELD NAME: SYM

SYM	DESCRIPTION
a	flow direction arrows (earthflow and transrot)
e	earthflow headwall arcs
w	translational/rotational headwall arcs
y	transrotational scarp arcs

FIELD NAME: ARROW

ARROW	DESCRIPTION
4	Arrowhead symbol (used in Arcplot) for anticline, syncline, fault direction and faultdip arrows

COVERAGE NAME: GORGES

PURPOSE: Contains inner-gorge polygons. The arcs have been created to have directions used to ensure proper line symbology on the resulting maps.

FEATURE TYPE: POLYGON, LINE

DATABASE FIELDS: (polygon attributes)

FIELD NAME	INPUT WIDTH	OUTPUT WIDTH	DATA TYPE	DECI MALS	DESCRIPTION
FEATURE	4	4	C	-	Used to indicate gorge polygons

FIELD NAME: FEATURE

FEATURE	DESCRIPTION
Gorge	Gorge polygon

COVERAGE NAME: STUDYBND

PURPOSE: Contains the outer bound of the mapped area, which sometimes includes partial quads. This boundary appears on some of the quad maps.

FEATURE TYPE: POLYGON

AML NAME: geomorphology.aml

PURPOSE: This AML creates 7.5' quad size geomorphic features maps. Everything needed by this AML should be included, except for the "backdrop" images of contour lines. The AML line that draws this image has been commented out. It can be activated if the user has access to backdrops of contours or other desired features.

FILE NAME: "quad_name".pdf (the standard USGS quad name is used with any blanks replaced with an underscore)

PURPOSE: Provides 7.5' quad geologic features map products that can be downloaded and plotted.
