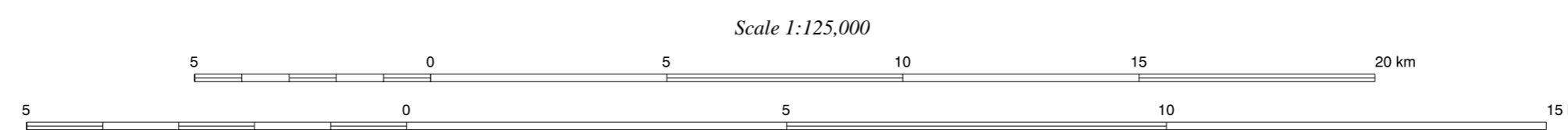
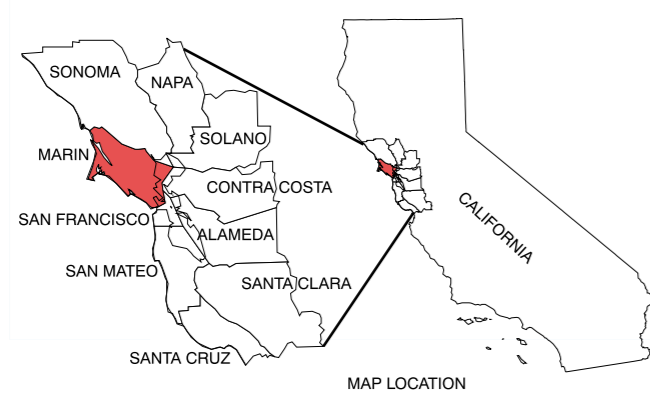


EXPLANATION

● Location of damaging landslide. The number identifies the landslide in the database. Data on file with authors, USGS, Menlo Park, California and Golden, Colorado.

SUMMARY

In Marin County, the early February rains of 1998 caused several landslides that resulted in at least \$2,540,000 in damage to public and private properties. The landslides occurred mainly near the cities of Tomales, Mill Valley (including unincorporated areas), and Novato. Approximately 58% of the county's total cost was related to damage caused to homes by earth or debris slides. Two homes in the county were red-tagged. "Tagged" structures are those that have been either condemned (red) or in need of significant repair (yellow). Municipal and county building inspection departments are commonly responsible for such determinations. Several homes were threatened by potentially unstable hillsides, but no incidents were reported during the time this information was acquired. More than nine landslides damaged public transportation corridors, although the cost was less than that to private properties. These landslides were rotational block slumps that removed one lane of many two-lane roads around the county, especially on steep, twisting roads near the coast, such as Panoramic Highway and Dillon Beach road. The main source of information for this report came from Jack Baker of the County Public Works and Valerie Quigley of the Office of Emergency Services.



Universal Transverse Mercator Projection
Zone 10

MAP SHOWING LOCATIONS OF DAMAGING LANDSLIDES IN MARIN COUNTY, CALIFORNIA, RESULTING FROM 1997-98 EL NIÑO RAINSTORMS

By

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1999



Digital data prepared using ARC/INFO 7.1.2 running under Solaris 2.6 on a UNIX workstation. Map formatted using Adobe Illustrator 8.0 running under Mac OS 8.6.

Shaded relief base derived from Graham, S.E., and Pike, R.J., 1997, Shaded Relief Map of the San Francisco Bay Region, California, U.S. Geological Survey Open-File Report 97-745-B.

Any use of trade, product or firm names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

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This map was produced on request, directly from digital files, on an electronic plotter. It is also available as a PDF file at <http://greenwood.cr.usgs.gov>

For sale by U.S. Geological Survey Information Services Box 25286, Federal Center, Denver, CO 80225.