Alquist-Priolo Earthquake Fault Zones

Earthquake Fault Zones

- San Andreas-North Golden Gate
- San Andreas -- Peninsula
- San Andreas -- Santa Cruz
- Rodgers Creek
- North Hayward
- South Hayward
- Northern Calaveras
- Central Calaveras
- Sargent
- Maacama
- West Napa
- Concord/Green Valley
- Greenville
- Northern San Gregorio
- Major Roads
- Local Roads
- Water

N

Scale: 1 inch equals 18.52 miles

Reproduced with permission, California Geological Survey from CD-ROM 2001-04 (2001), Official Map of Alquist-Priolo Earthquake Fault Zones

This interactive map was created using digital files of AP EFZ quadrangles and is considered an electronic facsimile of the Official Alquist-Priolo Earthquake Fault Zone map. If there is any doubt or conflict with respect to the location of EFZ boundaries, the original clear-film overlay compiled by and on file with CGS is the official version of the map. Fault information in these digital files is not sufficient to serve as a substitute for the geological site studies required under Chapter 7.5 of Division 2 of the California Public Resources Code.

For more information visit:
http://www.consrv.ca.gov/CGS/rghm/ap/

This map is available at:
http://quake.abag.ca.gov/

ABAG Geographic Information Systems

San Andreas-North Golden Gate Earthquake - Magnitude 7.5

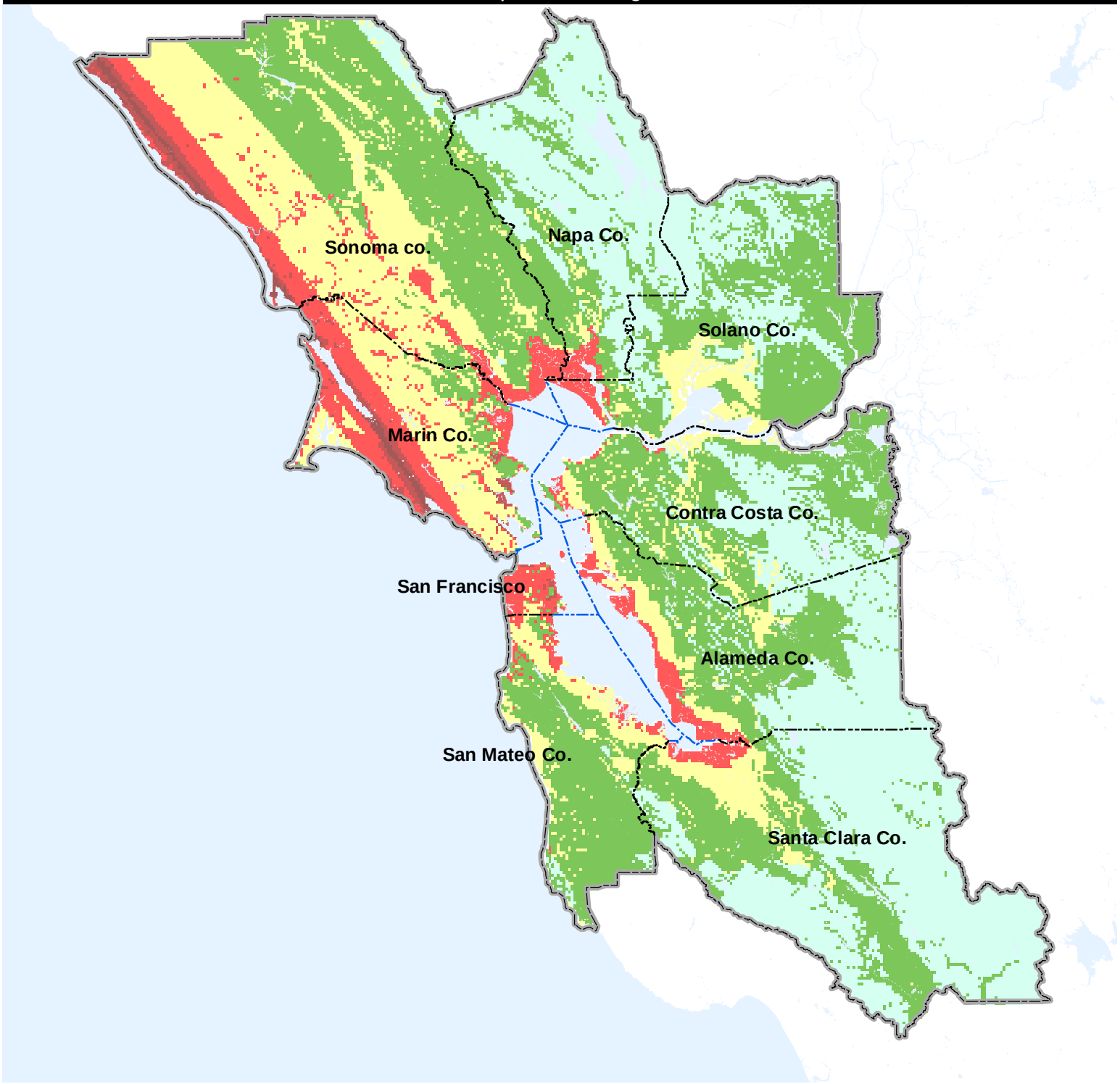
ABAG
Earthquake Shaking Scenario

Modified Mercalli Intensity
Shaking Severity Level

- X-Very Violent
- IX-Violent
- VIII-Very Strong
- VII-Strong
- VI-Moderate
- V-Light

N

Scale: 1 inch equals 18.31 miles



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This map is available at http://quake.abag.ca.gov

Source: ABAG Earthquake Program, June 2004

ABAG Geographic Information Systems

San Andreas-Peninsula Earthquake - Magnitude 7.2

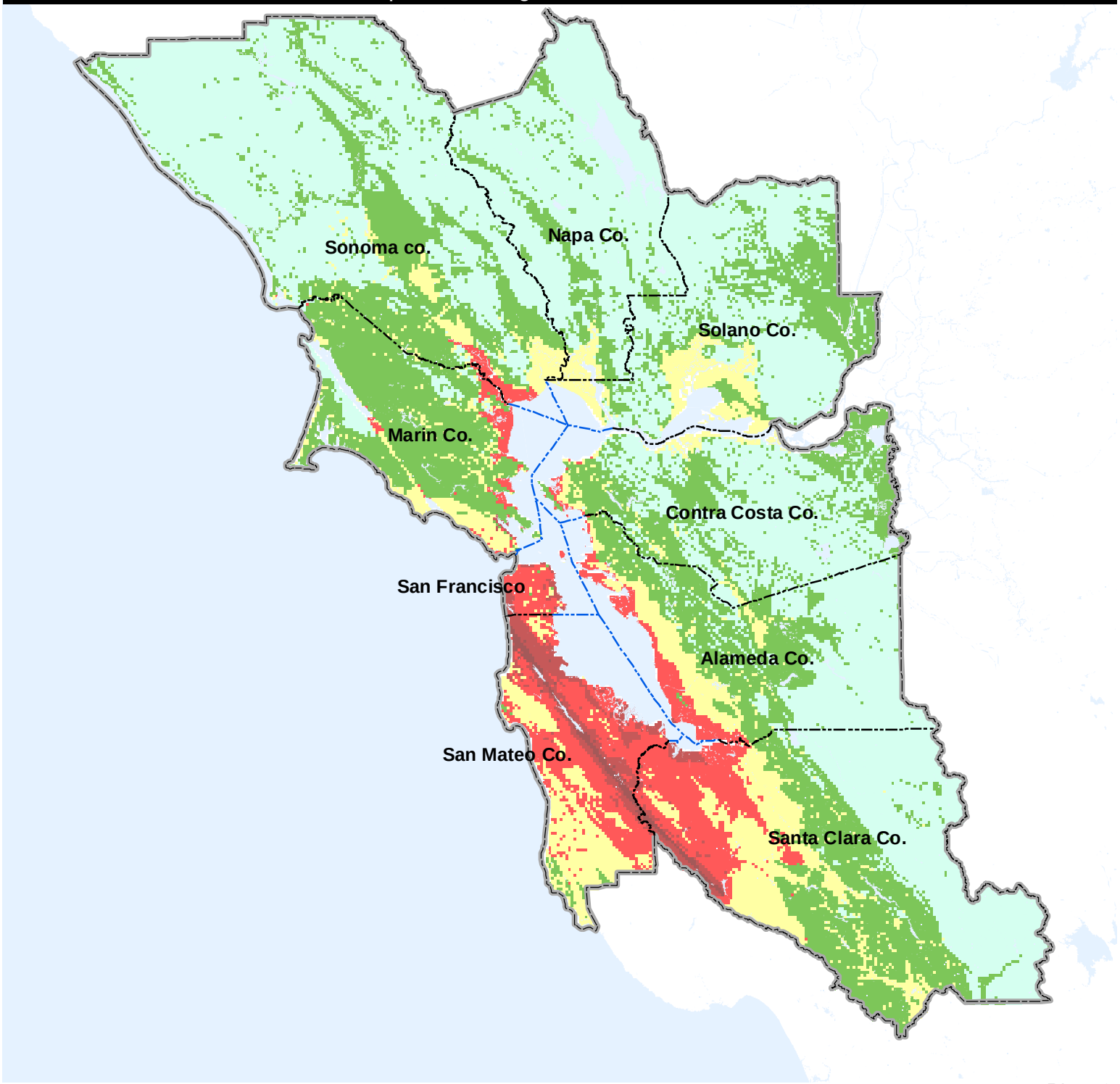
ABAG
Earthquake Shaking Scenario

Modified Mercalli Intensity
Shaking Severity Level

- X-Very Violent
- IX-Violent
- VIII-Very Strong
- VII-Strong
- VI-Moderate
- V-Light

N

Scale: 1 inch equals 18.31 miles



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Source: ABAG Earthquake Program, June 2004

ABAG Geographic Information Systems

Model of the 1989 Loma Prieta Earthquake - Magnitude 6.9

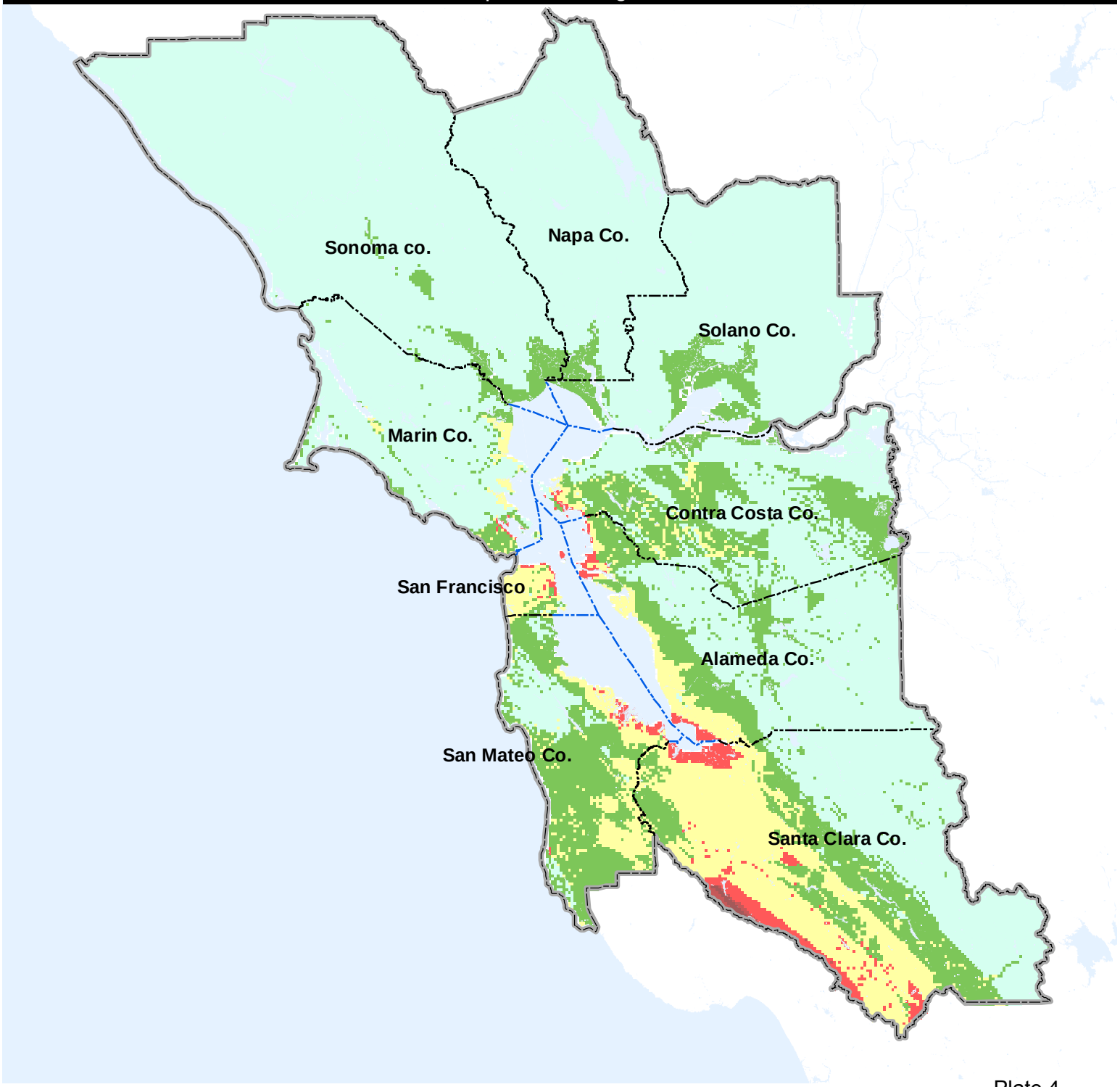
ABAG
Earthquake Shaking Scenario

Modified Mercalli Intensity
Shaking Severity Level

- X-Very Violent
- IX-Violent
- VIII-Very Strong
- VII-Strong
- VI-Moderate
- V-Light

N

Scale: 1 inch equals 18.31 miles



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Source: ABAG Earthquake Program, June 2004

ABAG Geographic Information Systems

ABAG
Earthquake Shaking Scenario

Modified Mercalli Intensity
Shaking Severity Level

- X-Very Violent
- IX-Violent
- VIII-Very Strong
- VII-Strong
- VI-Moderate
- V-Light

N

Scale: 1 inch equals 18.31 miles

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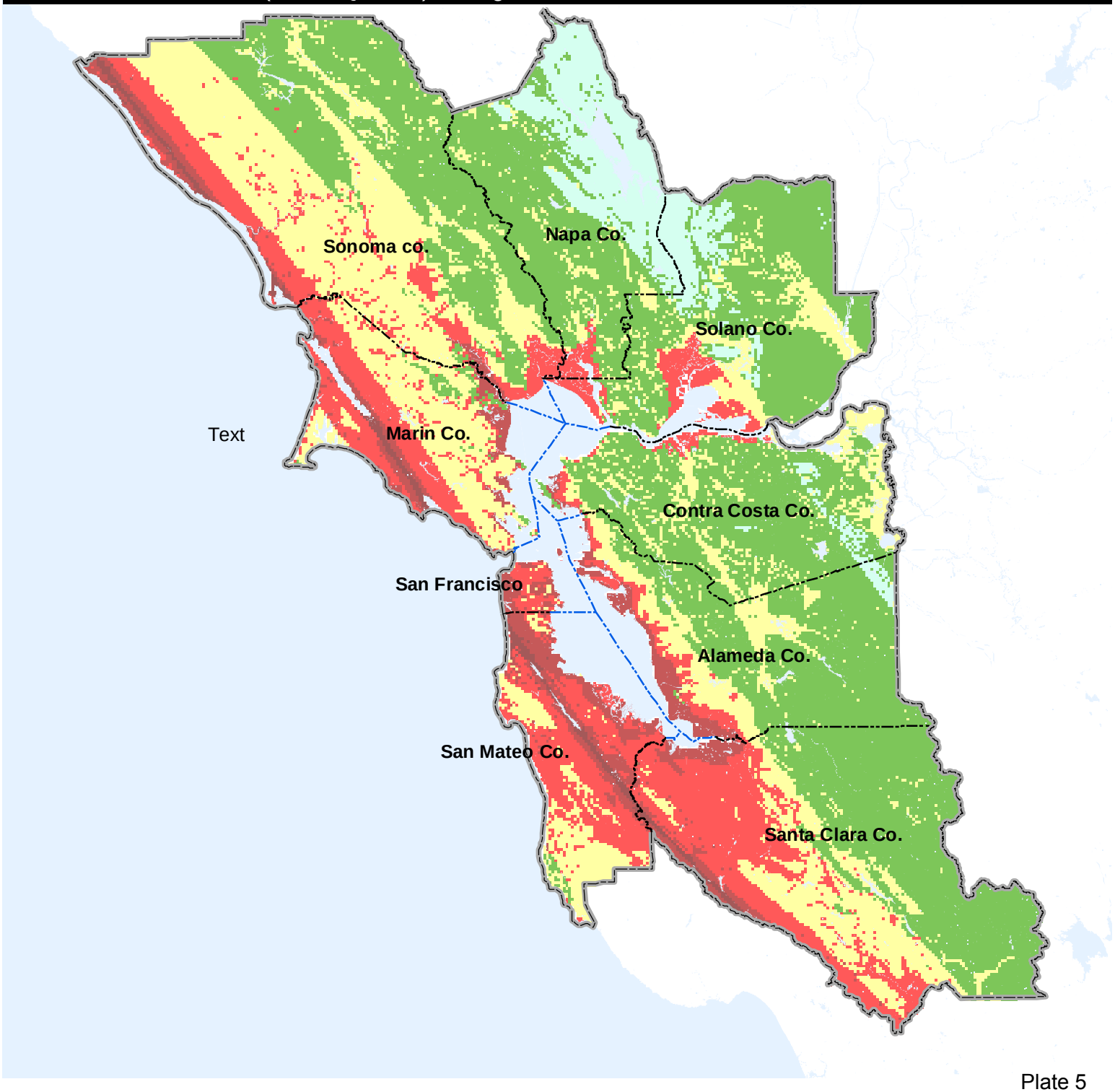
This map is available at http://quake.abag.ca.gov

Source: ABAG Earthquake Program, June 2004

ABAG Geographic Information Systems

Entire San Andreas (1906 Quake) - Magnitude 7.9



Rodgers Creek Earthquake - Magnitude 7.0

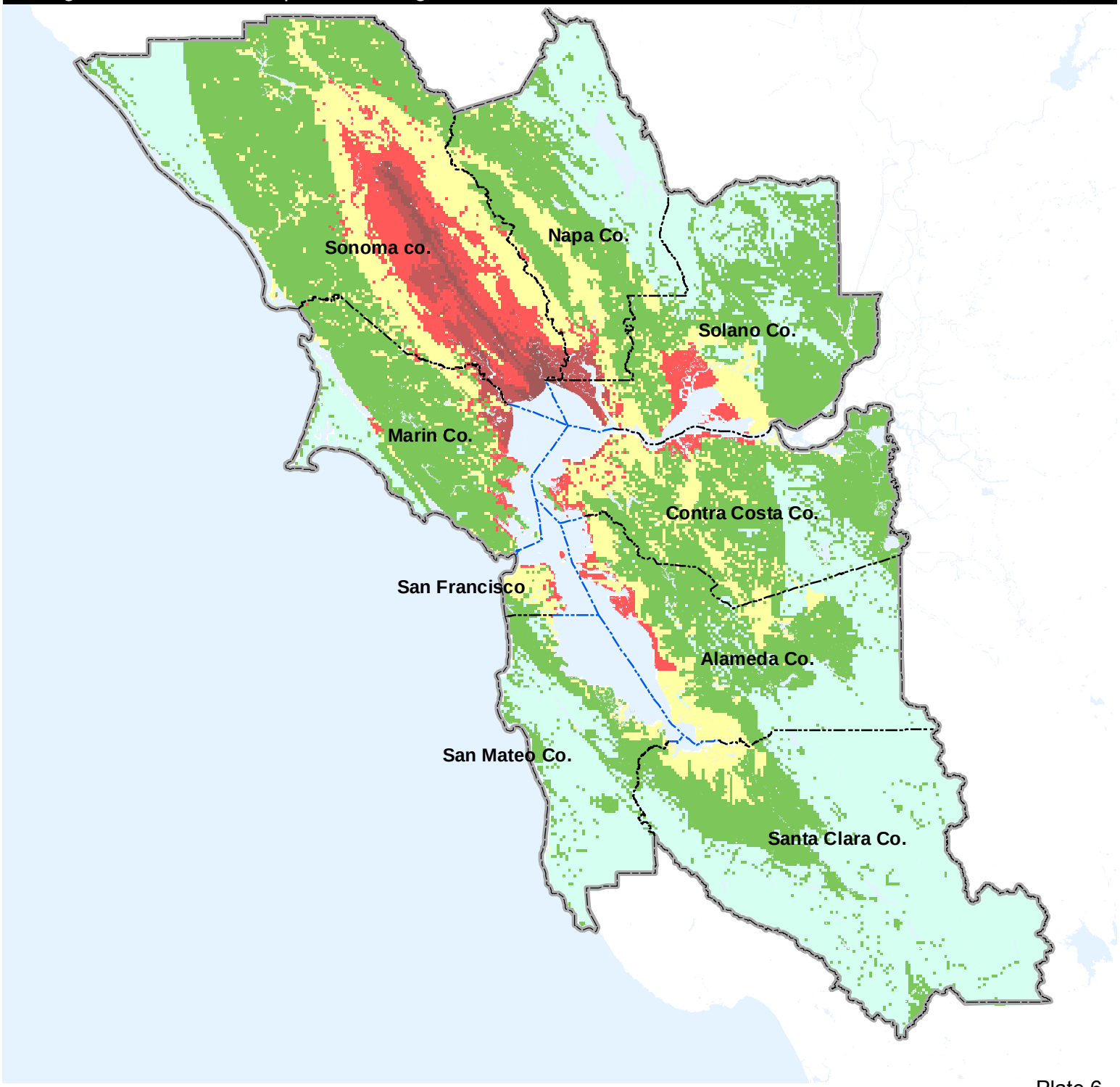
ABAG
Earthquake Shaking Scenario

Modified Mercalli Intensity
Shaking Severity Level

- X-Very Violent
- IX-Violent
- VIII-Very Strong
- VII-Strong
- VI-Moderate
- V-Light

N

Scale: 1 inch equals 18.31 miles



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This map is available at http://quake.abag.ca.gov

Source: ABAG Earthquake Program, June 2004

ABAG Geographic Information Systems

Rodgers Creek and North Hayward Earthquake - Magnitude 7.1

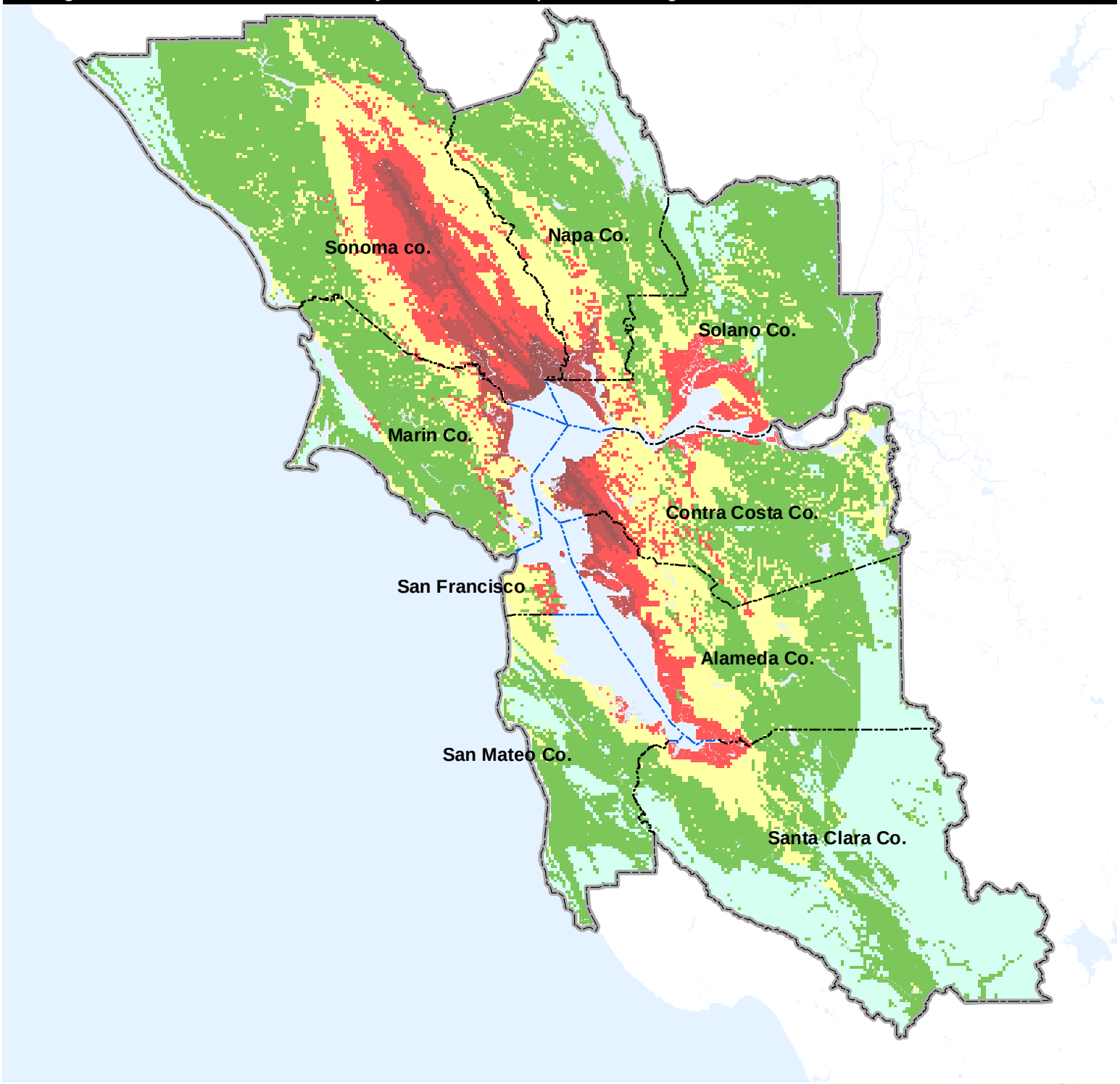
ABAG
Earthquake Shaking Scenario

Modified Mercalli Intensity
Shaking Severity Level

- X-Very Violent
- IX-Violent
- VIII-Very Strong
- VII-Strong
- VI-Moderate
- V-Light

N

Scale: 1 inch equals 18.31 miles



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This map is available at http://quake.abag.ca.gov

Source: ABAG Earthquake Program, June 2004

ABAG Geographic Information Systems

North Hayward Earthquake - Magnitude 6.5

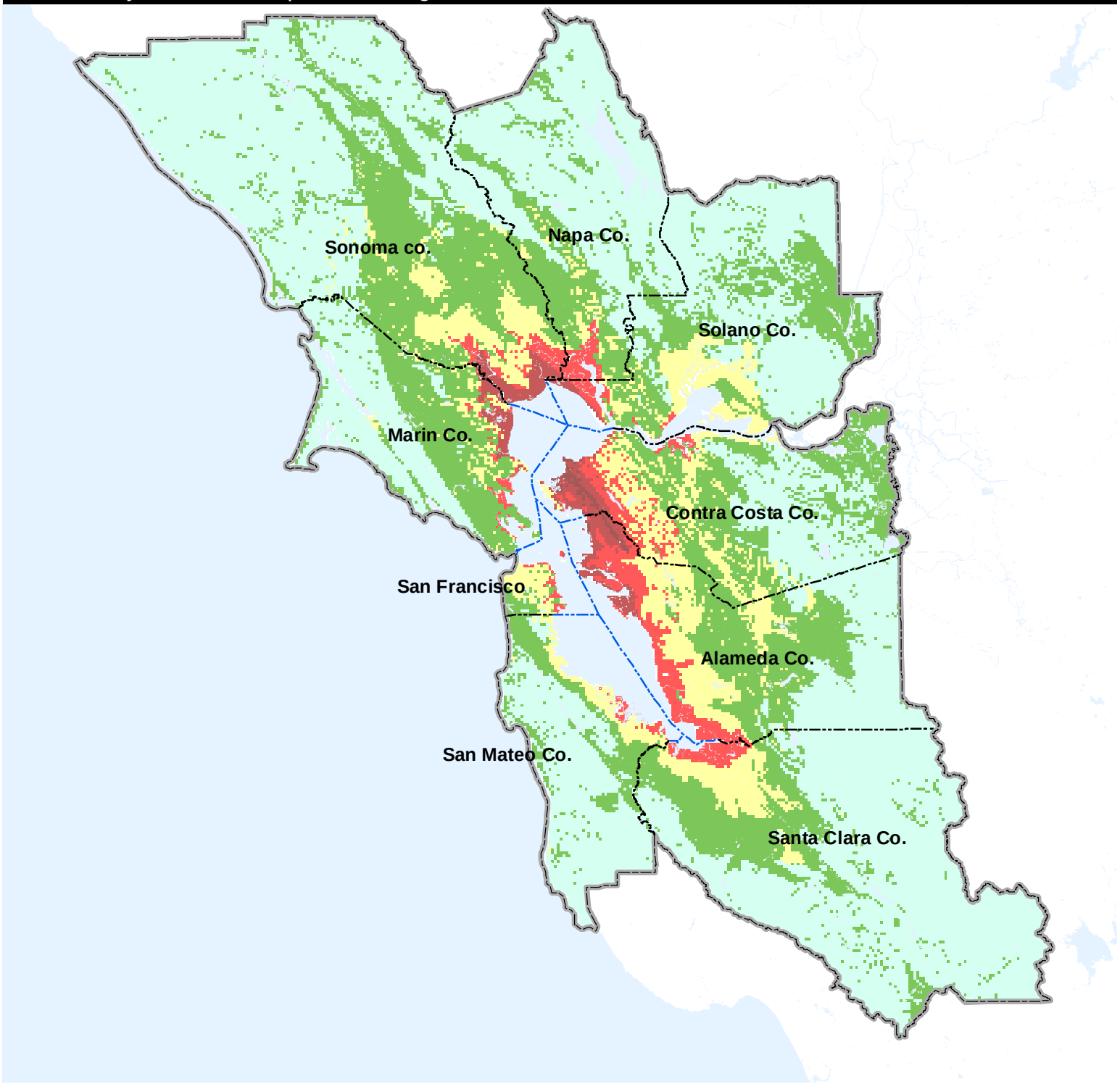
ABAG
Earthquake Shaking Scenario

Modified Mercalli Intensity
Shaking Severity Level

- X-Very Violent
- IX-Violent
- VIII-Very Strong
- VII-Strong
- VI-Moderate
- V-Light

N

Scale: 1 inch equals 18.31 miles



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This map is available at http://quake.abag.ca.gov

Source: ABAG Earthquake Program, June 2004

ABAG Geographic Information Systems

South Hayward Earthquake - Magnitude 6.7

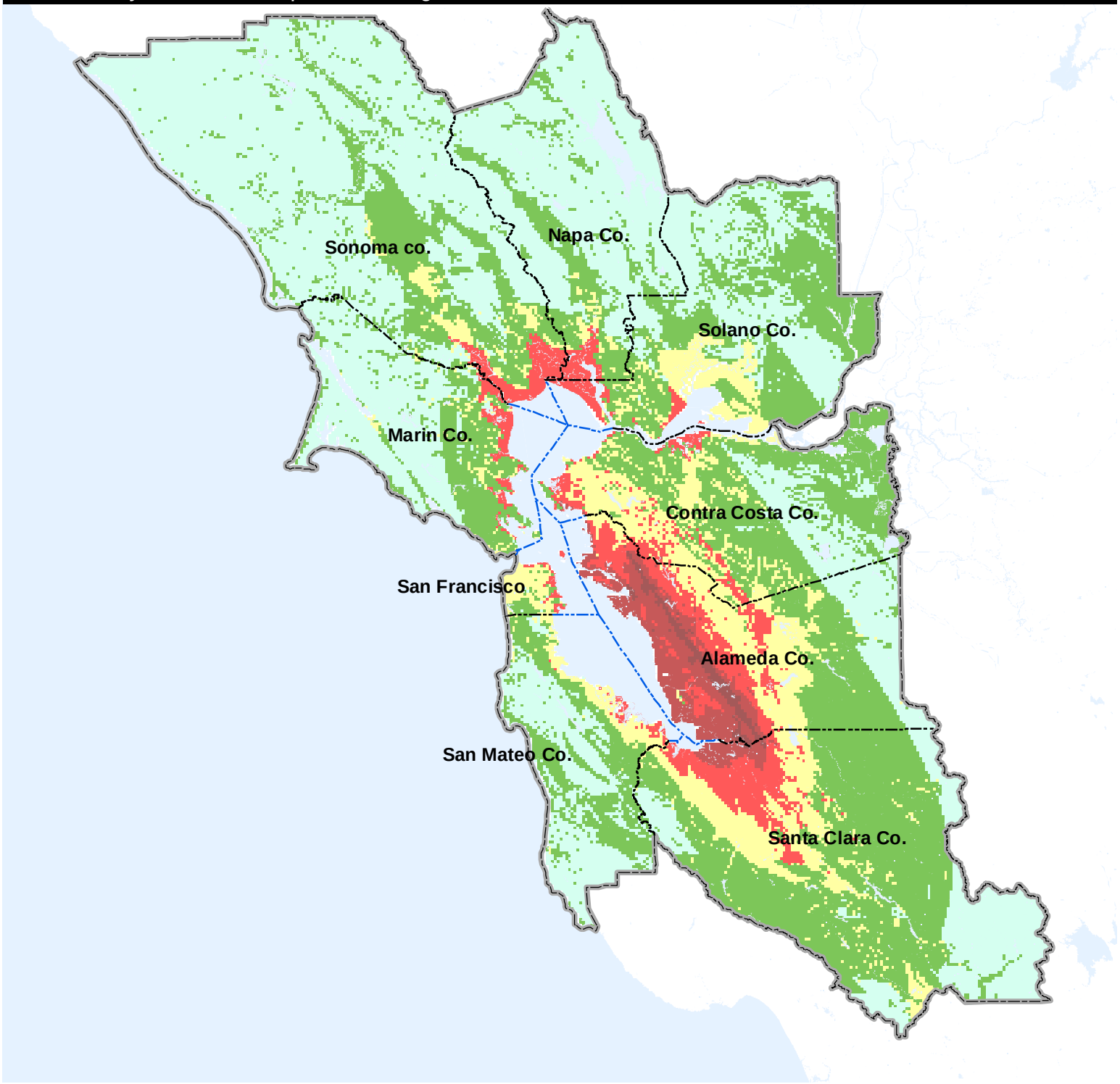
ABAG
Earthquake Shaking Scenario

Modified Mercalli Intensity
Shaking Severity Level

- X-Very Violent
- IX-Violent
- VIII-Very Strong
- VII-Strong
- VI-Moderate
- V-Light

N

Scale: 1 inch equals 18.31 miles



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This map is available at http://quake.abag.ca.gov

Source: ABAG Earthquake Program, June 2004

ABAG Geographic Information Systems

North and South Hayward Earthquake - Magnitude 6.9

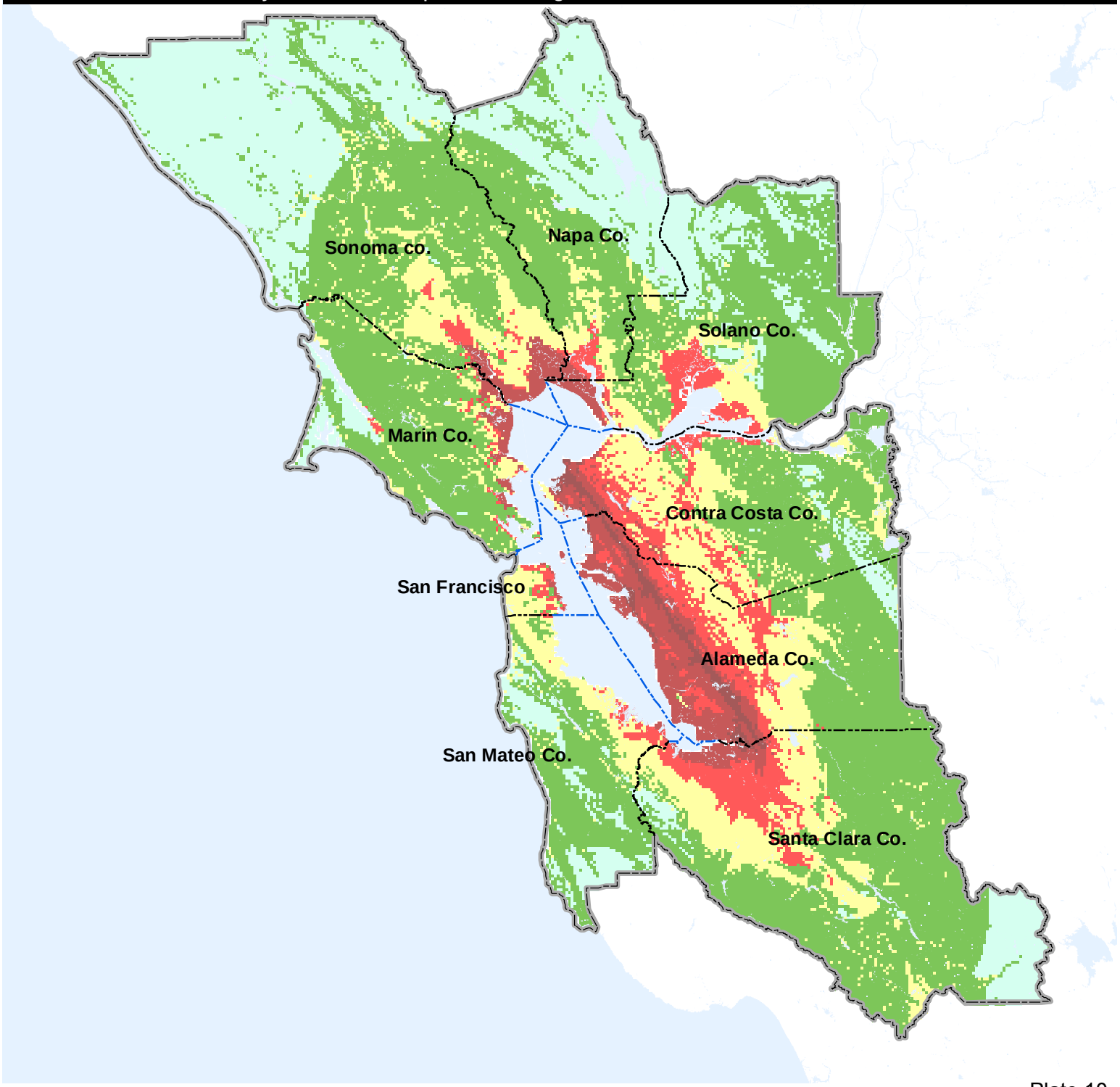
ABAG
Earthquake Shaking Scenario

Modified Mercalli Intensity
Shaking Severity Level

- X-Very Violent
- IX-Violent
- VIII-Very Strong
- VII-Strong
- VI-Moderate
- V-Light

N

Scale: 1 inch equals 18.31 miles



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This map is available at http://quake.abag.ca.gov

Source: ABAG Earthquake Program, June 2004

ABAG Geographic Information Systems

Northern Calaveras Earthquake - Magnitude 6.8

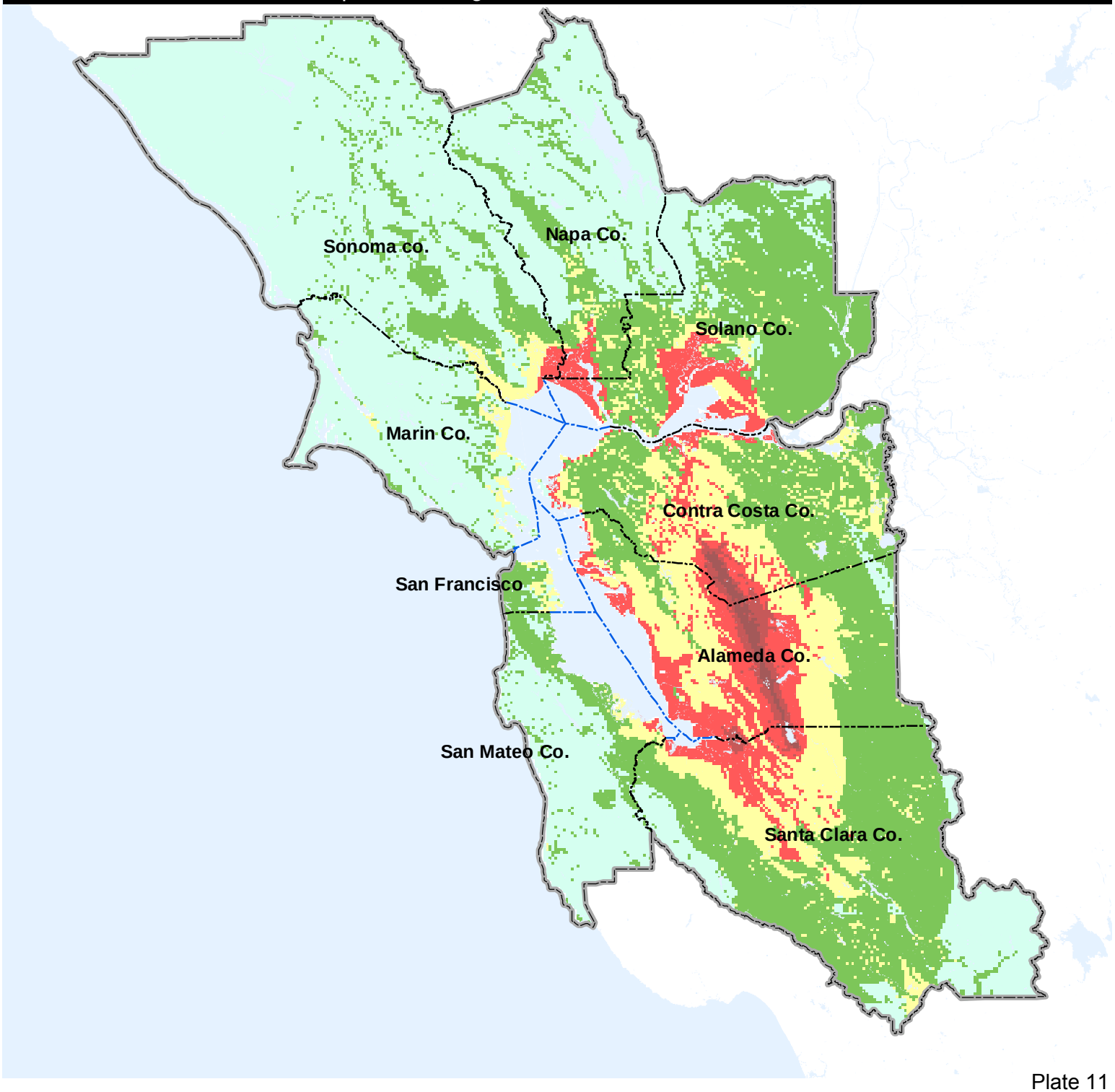
ABAG
Earthquake Shaking Scenario

Modified Mercalli Intensity
Shaking Severity Level

- X-Very Violent
- IX-Violent
- VIII-Very Strong
- VII-Strong
- VI-Moderate
- V-Light

N

Scale: 1 inch equals 18.31 miles



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This map is available at http://quake.abag.ca.gov

Source: ABAG Earthquake Program, June 2004

ABAG Geographic Information Systems

Central Calaveras Earthquake - Magnitude 6.2

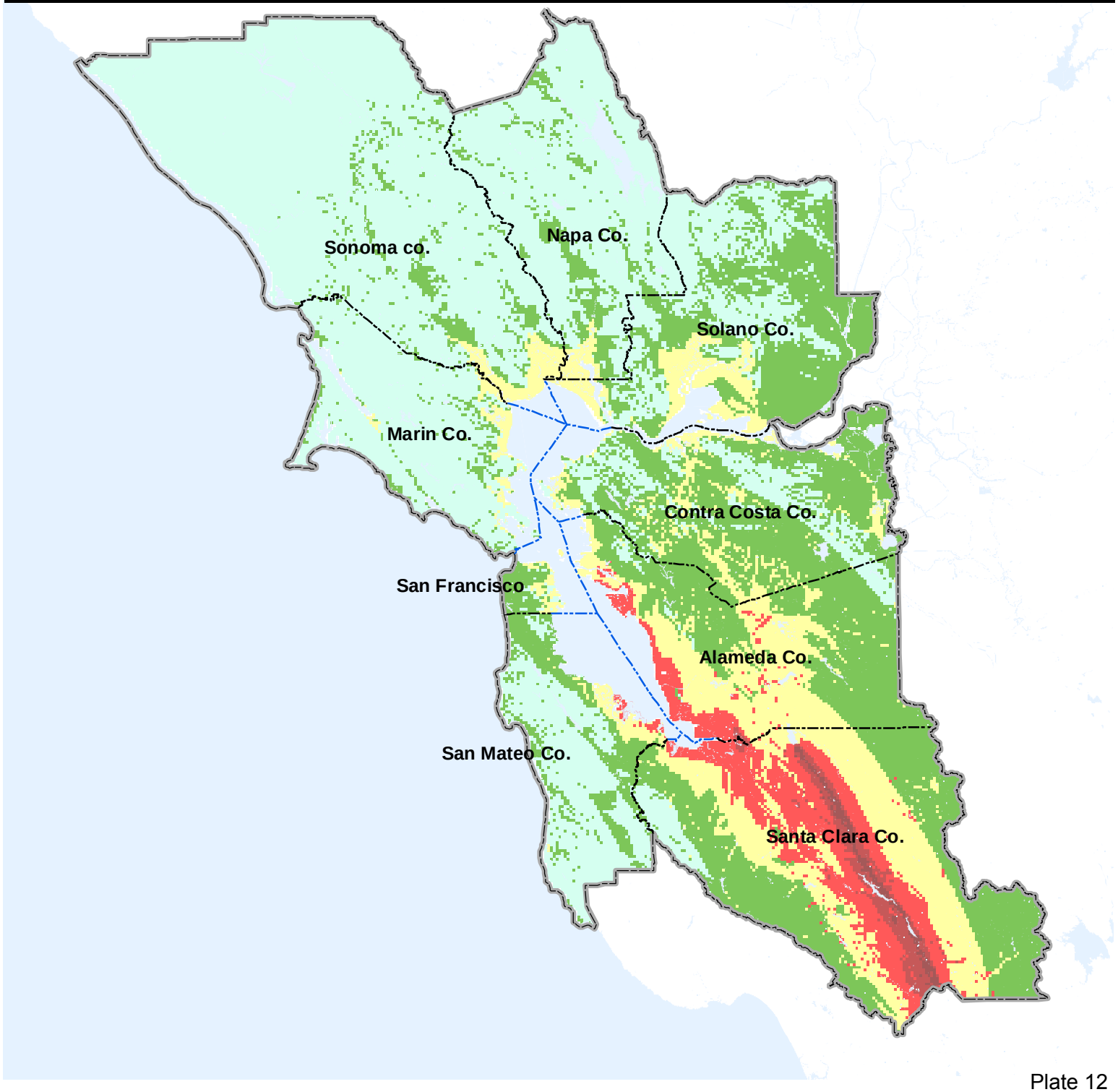
ABAG
Earthquake Shaking Scenario

Modified Mercalli Intensity
Shaking Severity Level

- X-Very Violent
- IX-Violent
- VIII-Very Strong
- VII-Strong
- VI-Moderate
- V-Light

N

Scale: 1 inch equals 18.31 miles



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This map is available at http://quake.abag.ca.gov

Source: ABAG Earthquake Program, June 2004

ABAG Geographic Information Systems

Maacama Earthquake - Magnitude 6.6

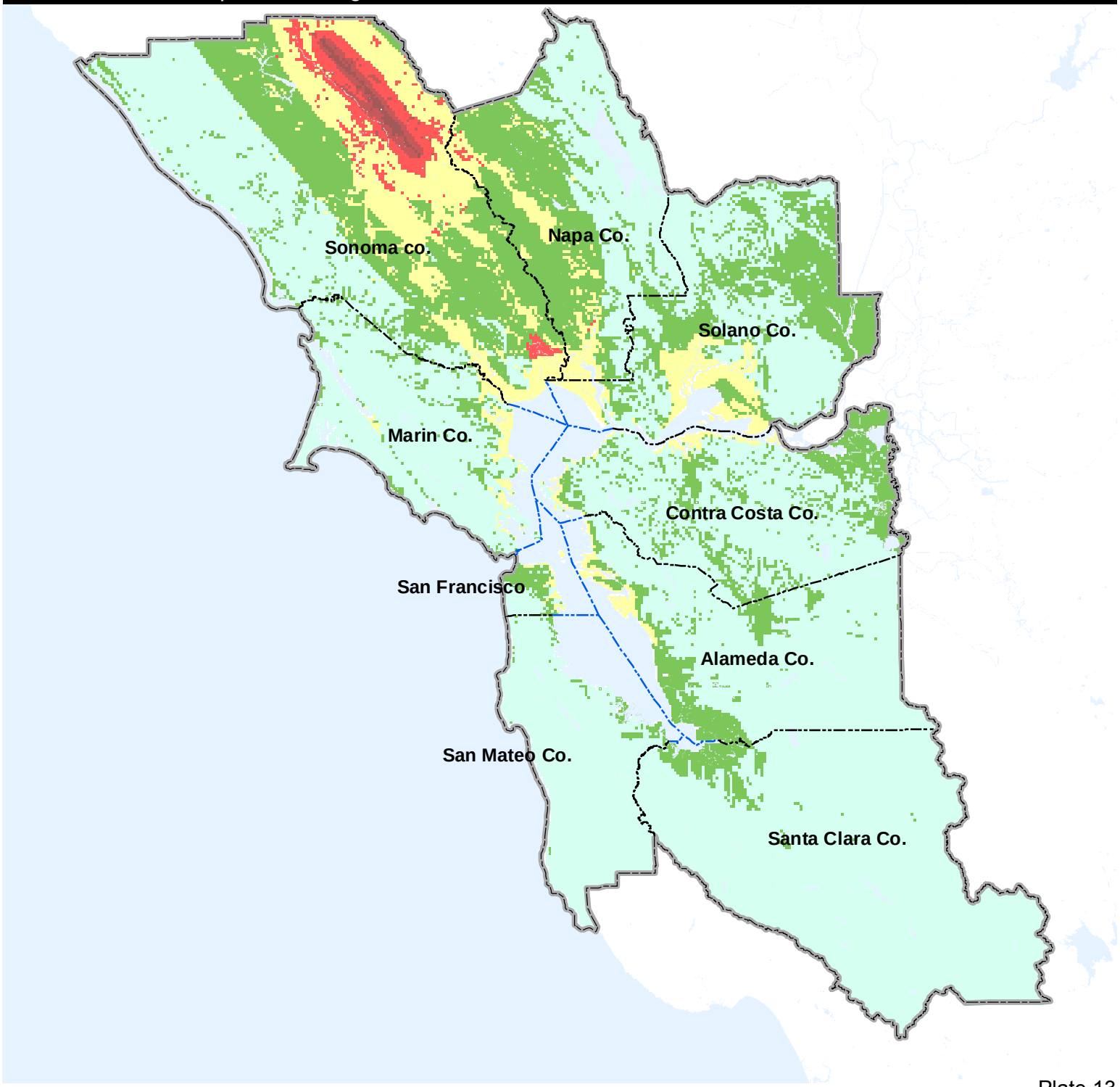
ABAG
Earthquake Shaking Scenario

Modified Mercalli Intensity
Shaking Severity Level

- X-Very Violent
- IX-Violent
- VIII-Very Strong
- VII-Strong
- VI-Moderate
- V-Light

N

Scale: 1 inch equals 18.31 miles



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This map is available at http://quake.abag.ca.gov

Source: ABAG Earthquake Program, June 2004

ABAG Geographic Information Systems

West Napa Earthquake - Magnitude 6.5

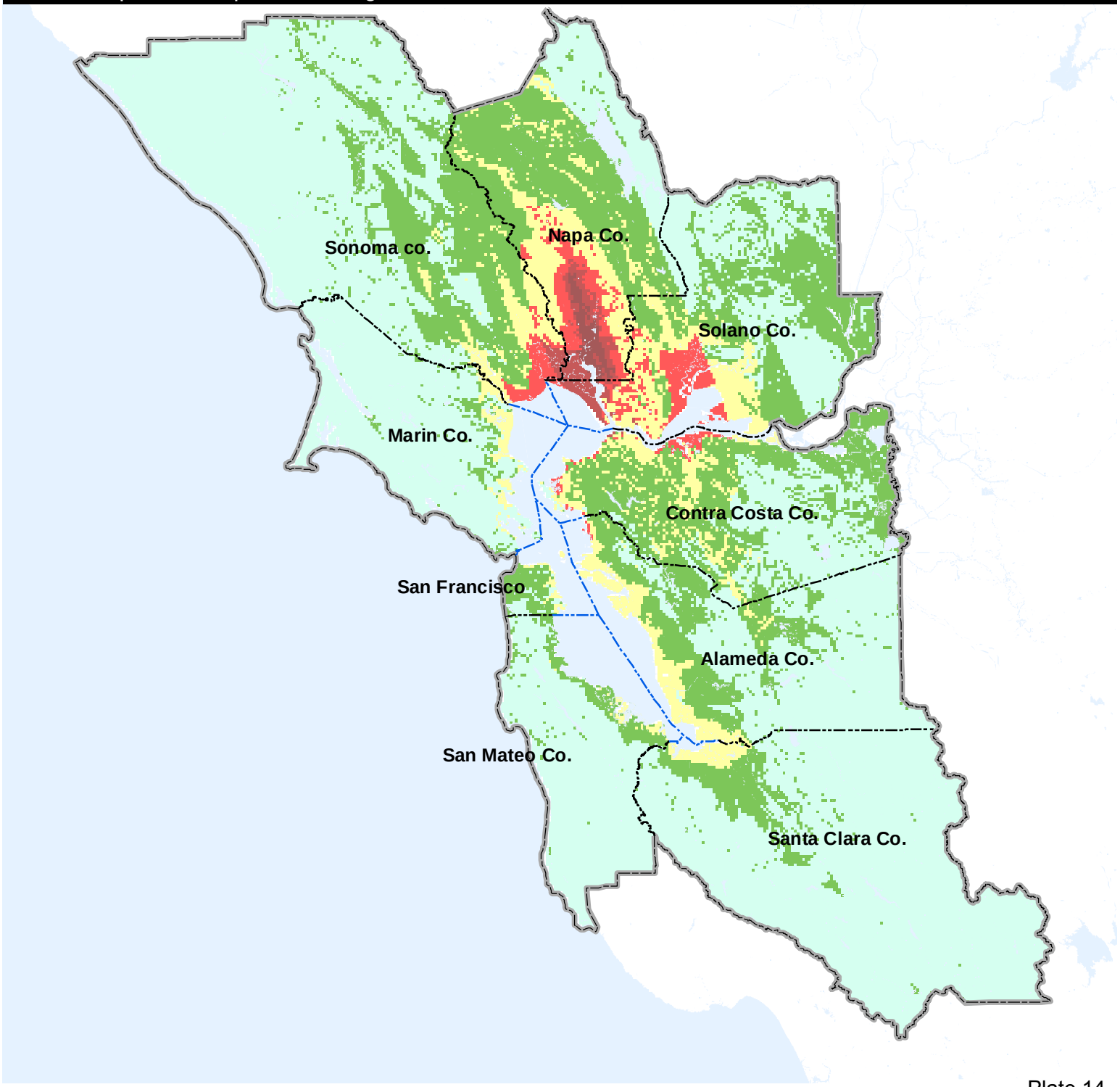
ABAG
Earthquake Shaking Scenario

Modified Mercalli Intensity
Shaking Severity Level

- X-Very Violent
- IX-Violent
- VIII-Very Strong
- VII-Strong
- VI-Moderate
- V-Light

N

Scale: 1 inch equals 18.31 miles



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This map is available at http://quake.abag.ca.gov

Source: ABAG Earthquake Program, June 2004

ABAG Geographic Information Systems

Concord-Green Valley Earthquake - Magnitude 6.7

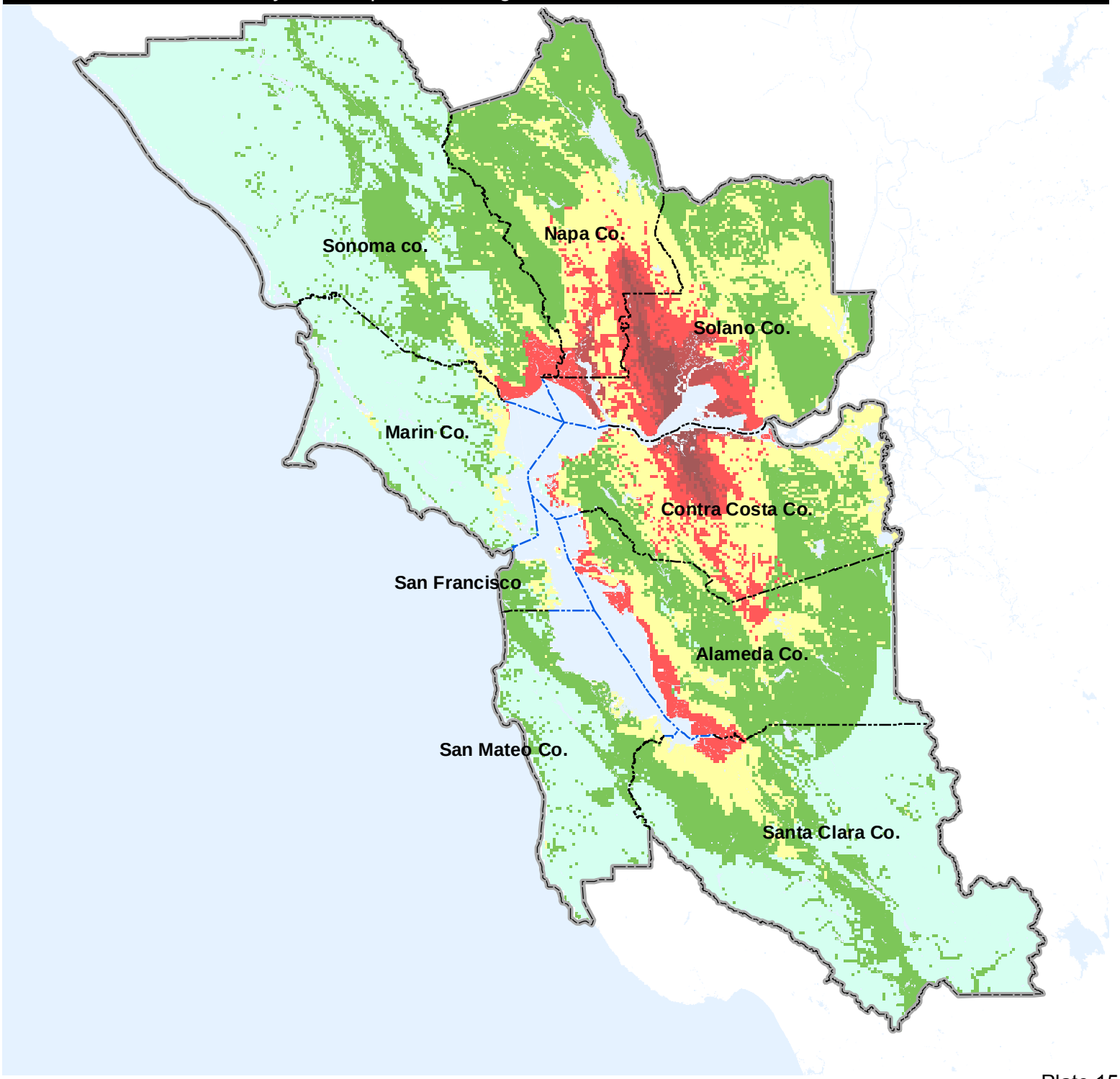
ABAG
Earthquake Shaking Scenario

Modified Mercalli Intensity
Shaking Severity Level

- X-Very Violent
- IX-Violent
- VIII-Very Strong
- VII-Strong
- VI-Moderate
- V-Light

N

Scale: 1 inch equals 18.31 miles



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This map is available at http://quake.abag.ca.gov

Source: ABAG Earthquake Program, June 2004

ABAG Geographic Information Systems

Greenville Earthquake - Magnitude 6.9

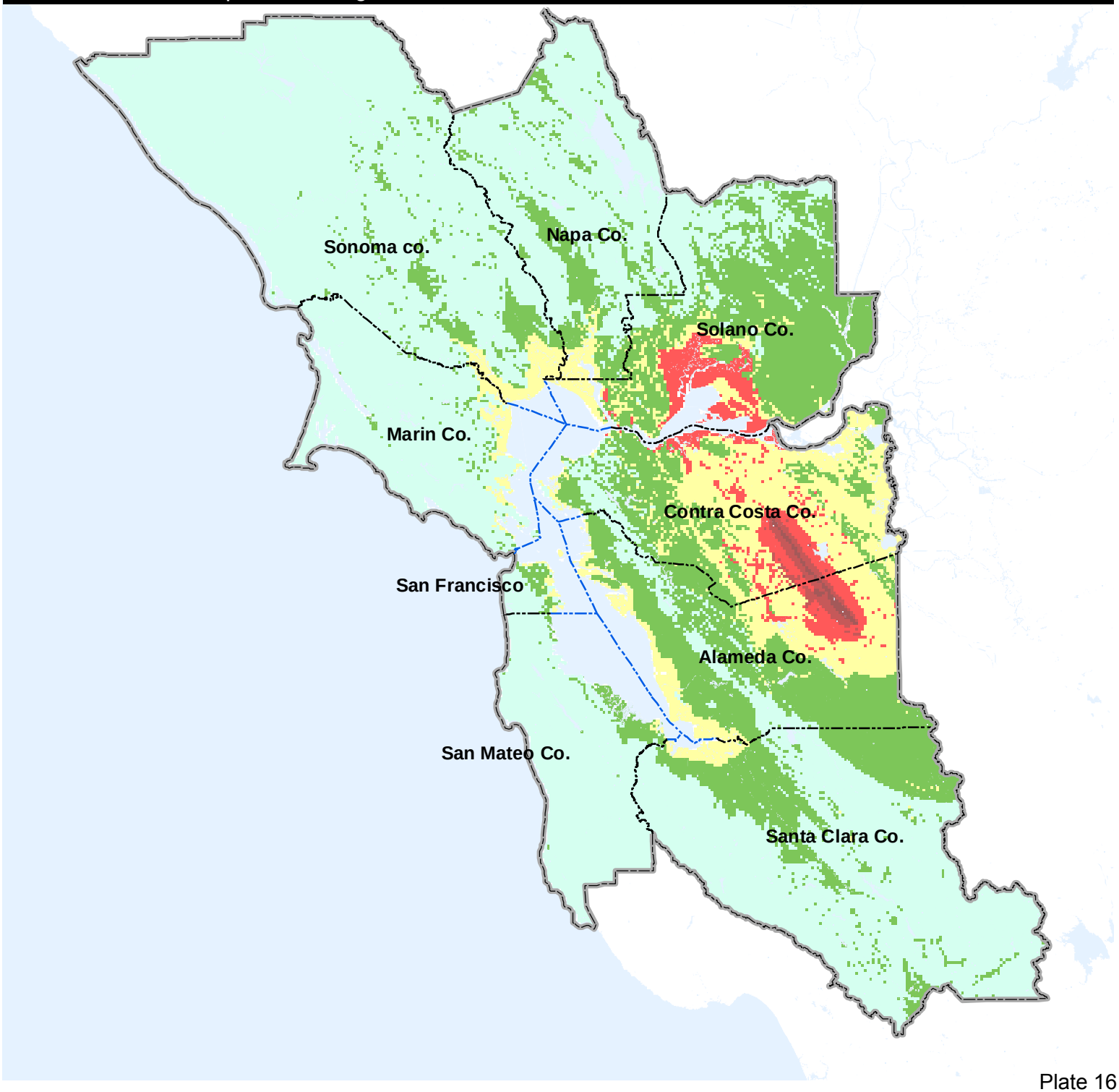
ABAG
Earthquake Shaking Scenario

Modified Mercalli Intensity
Shaking Severity Level

- X-Very Violent
- IX-Violent
- VIII-Very Strong
- VII-Strong
- VI-Moderate
- V-Light

N

Scale: 1 inch equals 18.31 miles



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This map is available at http://quake.abag.ca.gov

Source: ABAG Earthquake Program, June 2004

ABAG Geographic Information Systems

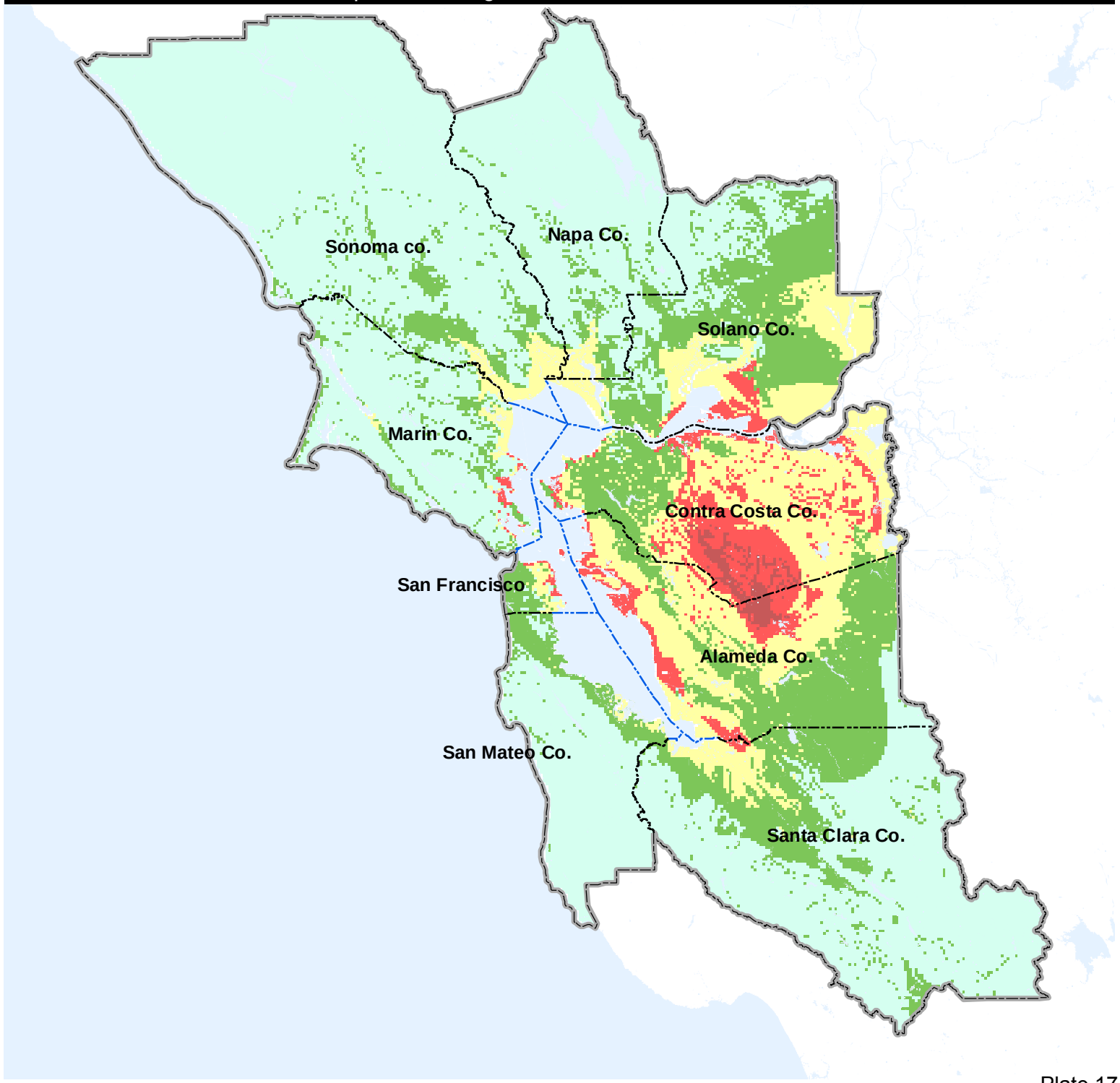
Mount Diablo Thrust Earthquake - Magnitude 6.7

ABAG
Earthquake Shaking Scenario

Modified Mercalli Intensity
Shaking Severity Level

- X-Very Violent
- IX-Violent
- VIII-Very Strong
- VII-Strong
- VI-Moderate
- V-Light

Scale: 1 inch equals 18.31 miles



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This map is available at http://quake.abag.ca.gov

Source: ABAG Earthquake Program, June 2004

ABAG Geographic Information Systems

Northern San Gregorio Earthquake - Magnitude 7.2

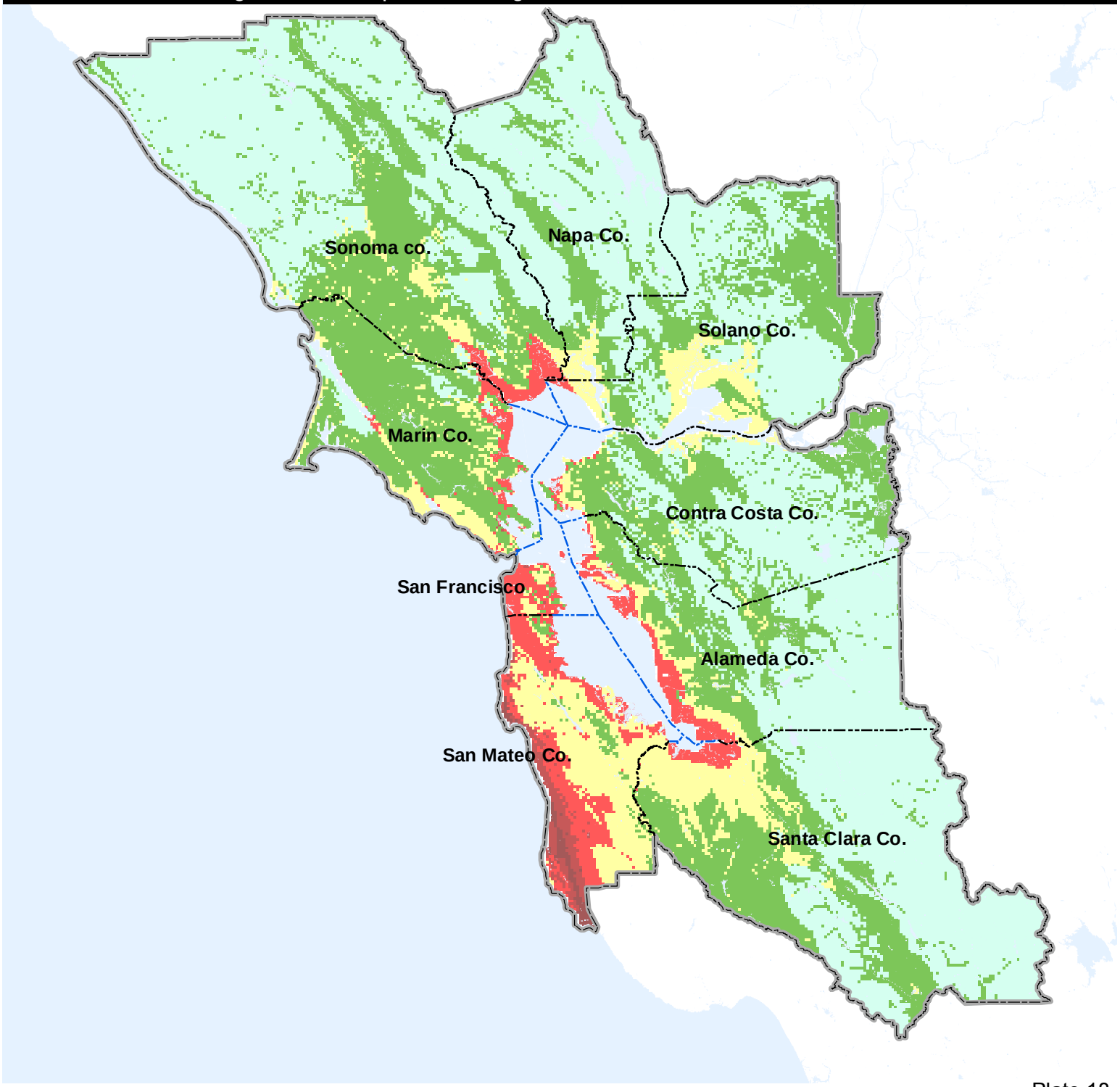
ABAG
Earthquake Shaking Scenario

Modified Mercalli Intensity
Shaking Severity Level

- X-Very Violent
- IX-Violent
- VIII-Very Strong
- VII-Strong
- VI-Moderate
- V-Light

N

Scale: 1 inch equals 18.31 miles



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Source: ABAG Earthquake Program, June 2004

ABAG Geographic Information Systems

Monte Vista Thrust Earthquake - Magnitude 6.6

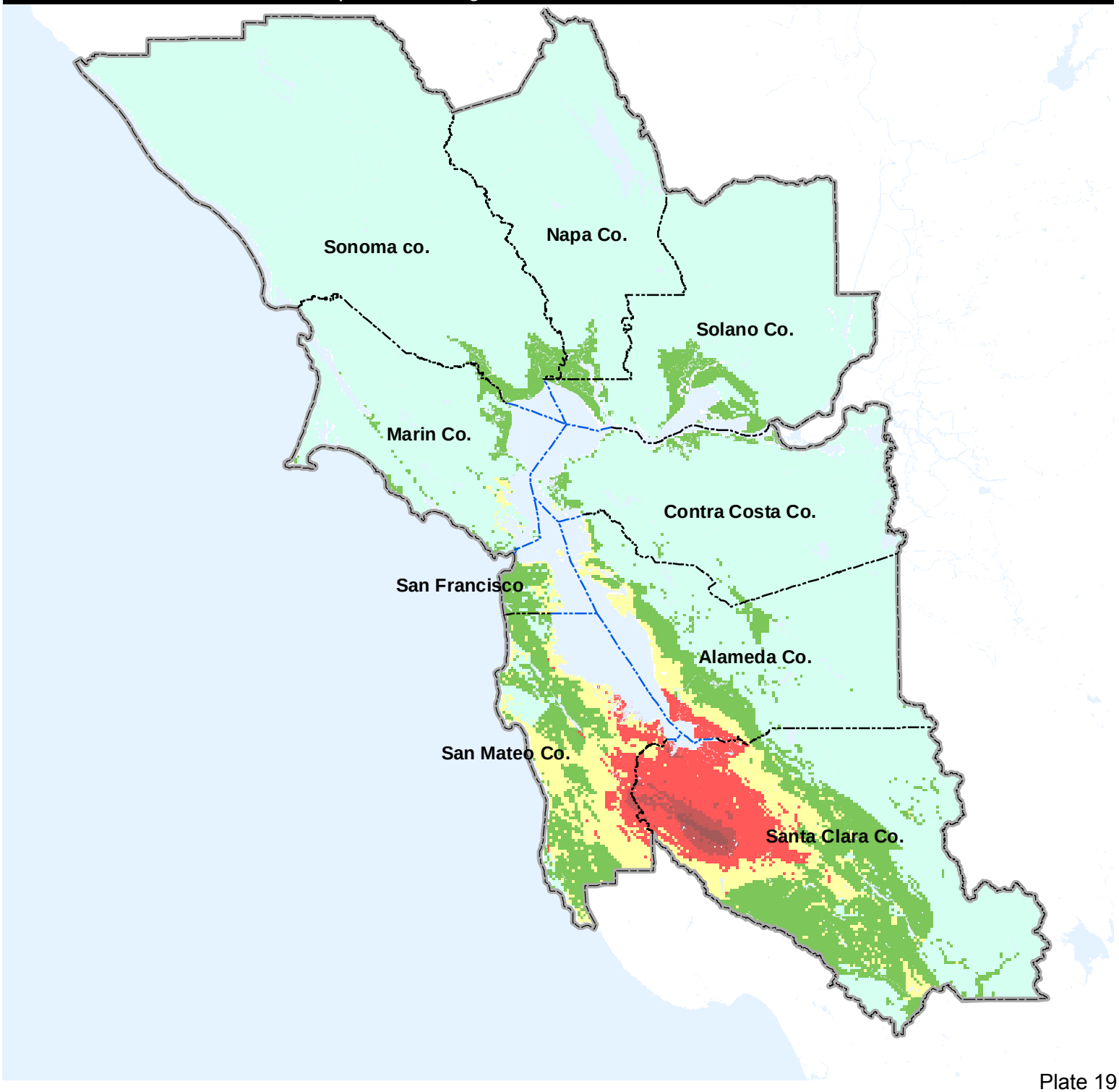
ABAG
Earthquake Shaking Scenario

Modified Mercalli Intensity
Shaking Severity Level

- X-Very Violent
- IX-Violent
- VIII-Very Strong
- VII-Strong
- VI-Moderate
- V-Light

N

Scale: 1 inch equals 18.31 miles



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This map is available at http://quake.abag.ca.gov

Source: ABAG Earthquake Program, June 2004

ABAG Geographic Information Systems

North and South Hayward Earthquake - Magnitude 6.9

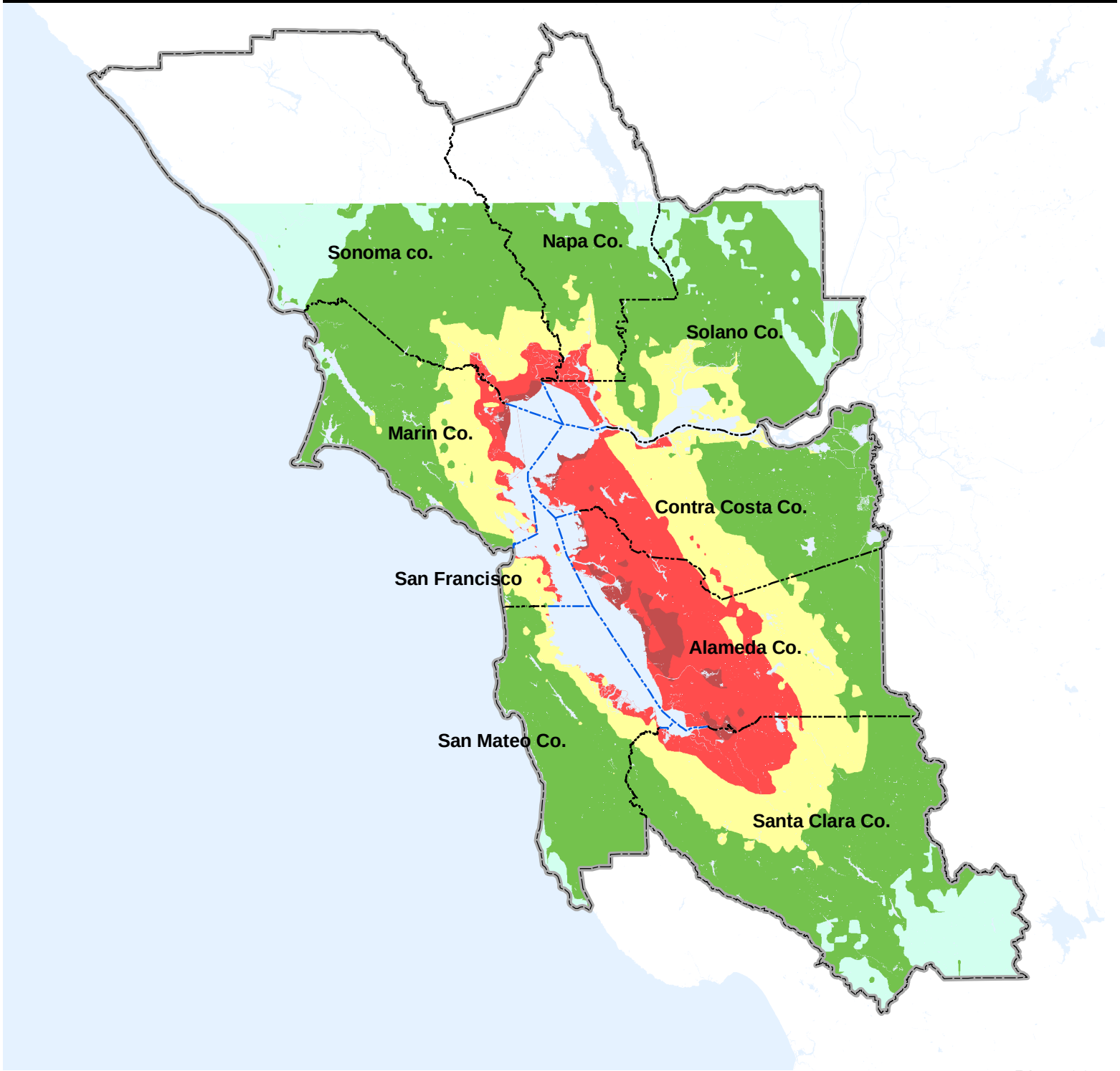
USGS ShakeMap Scenario

Modified Mercalli Intensity Shaking Severity Level

- X-Very Violent
- IX-Violent
- VIII-Very Strong
- VII-Strong
- VI-Moderate
- V-Light

N

Scale: 1 inch equals 18.86 miles



Source: USGS, 2003

The USGS ShakeMap scenario is provided for comparison with the ABAG earthquake shaking scenario. For ease of comparison, ABAG changed the colors and legend of the ShakeMap to make them consistent with our map. The ShakeMap scenario lacks data for the northern sections of Sonoma and Napa counties. These sections appear blank on the map. For more information regarding ShakeMaps for earthquake scenarios visit: http://earthquake.usgs.gov/shakemap/nc/shake/archive/scenario.html

This map is for planning use only.

This map is available at http://quake.abag.ca.gov

ABAG Geographic Information Systems

Earthquake Shaking Potential for the San Francisco Bay Region

Level of Earthquake Hazard

These regions are near major, active faults and will on average experience stronger earthquake shaking more frequently. This intense shaking can damage even strong, modern buildings.

Increasing Intensity

These regions are distant from known, active faults and will experience lower levels of shaking less frequently. In most earthquakes, only weaker, masonry buildings would be damaged. However, very infrequent earthquakes could still cause strong shaking here.

Major Roads

Local Roads

Water

N

Scale: 1 inch = 17.13 miles

Source:
This interactive map is a derivative of the Probabilistic Seismic Hazard Map that was produced by the California Seismic Safety Commission, California Geological Survey, California Office of Emergency Services and US Geological Survey, 2003

The colors on this map have been changed from the original map. For more information visit: http://www.consrv.ca.gov/CGS/rghm/psha/

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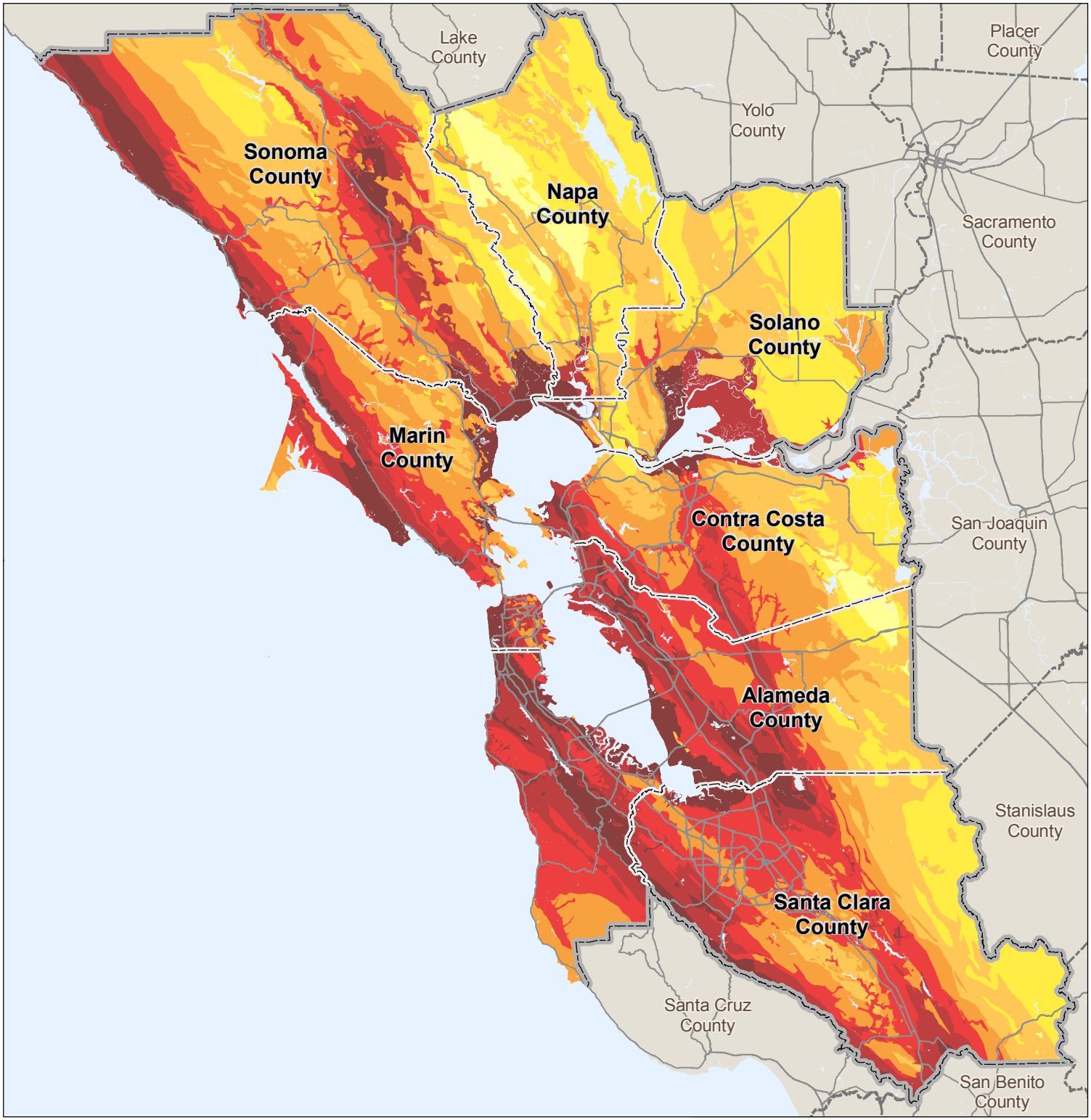
This map is available at http://quake.abag.ca.gov/

ABAG Geographic Information Systems



Liquefaction Susceptibility Map

Susceptibility Level

- Very High
- High
- Moderate
- Low
- Very Low

Major Roads

Local Roads

Scale: 1 inch = 19.55 miles

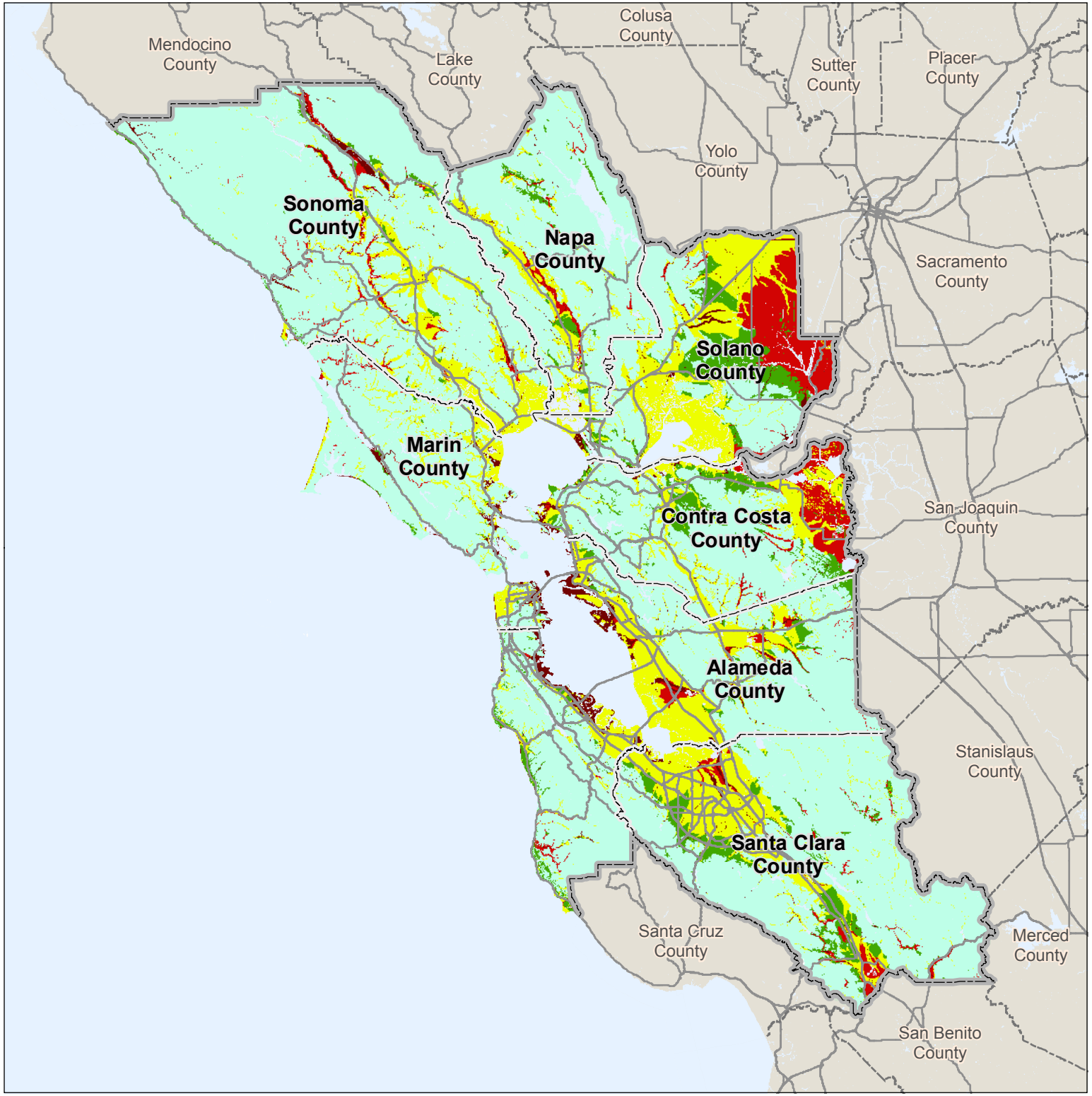
This map is intended for planning use only and is not intended to be site-specific. Rather, it depicts the general hazard level of a neighborhood and the relative hazard levels from community to community. Hazard levels are less likely to be accurate if your neighborhood is on or near the border between two zones. This information is not a substitute for a site-specific investigation by a licensed professional.

This map is available at http://quake.abag.ca.gov

Sources:
This map is based on work by William Lettis & Associates, Inc. and USGS.
USGS Open-File Report 00-444, Knudsen & others, 2000 and
USGS Open-File Report 2006-1037, Witter & others, 2006

For more information visit:
http://pubs.usgs.gov/of/2000/of00-444/
http://pubs.usgs.gov/of/2006/1037/

ABAG Geographic Information Systems



California Geological Survey Seismic Hazard Zones of Required Investigation

Liquefaction Zones

Areas where historical occurrence of liquefaction, or local geological, geotechnical and ground-water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required.

Mapping in progress

Mapping Planned

Area Not Yet Evaluated

N

Scale: 1 inch equals 9.42 miles

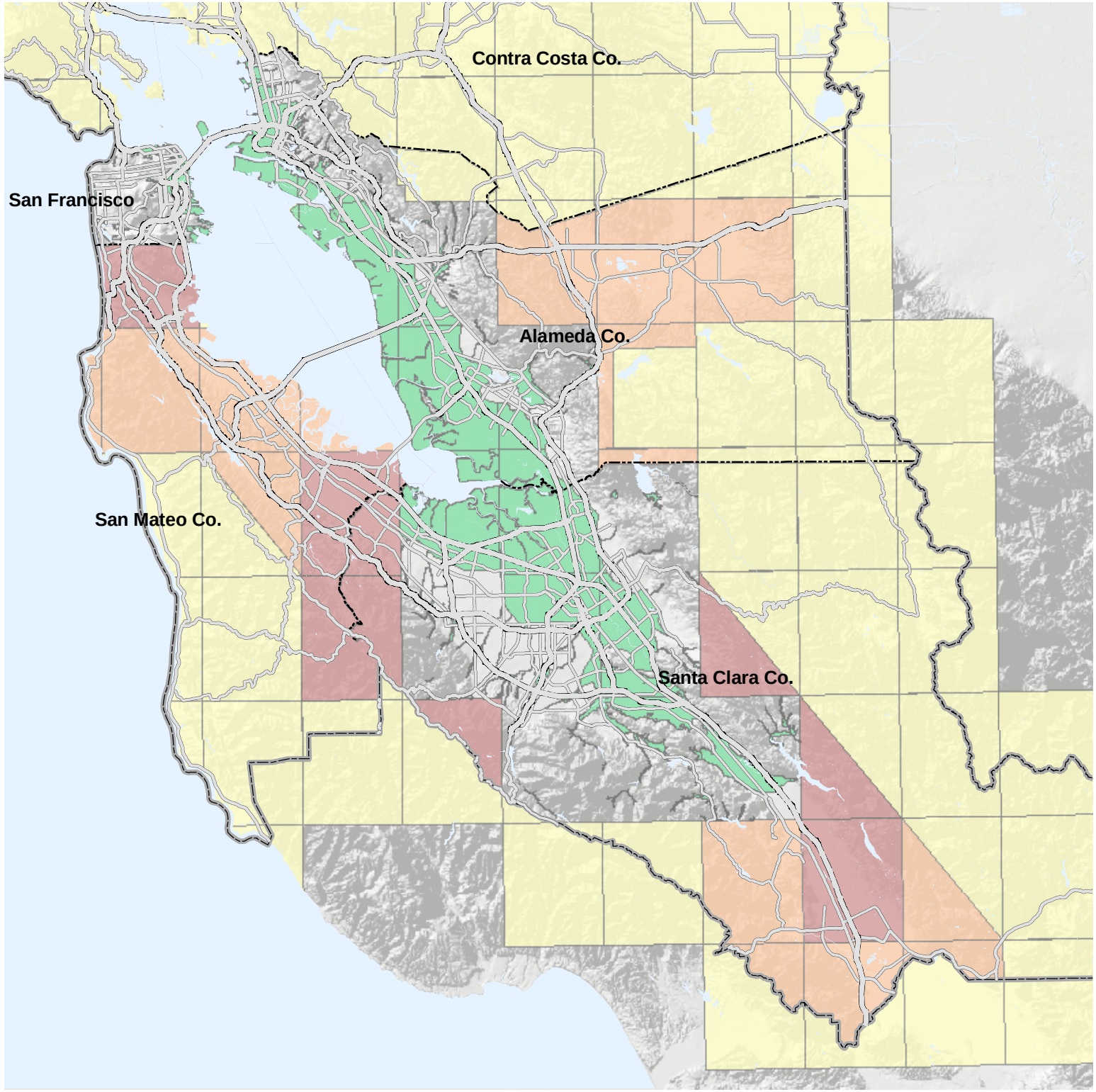
This map is intended for planning use only, and is not intended to be site-specific. Rather, it depicts the general risk within neighborhoods and the relative risk from community to community.

For more detailed information regarding this map, please visit the CGS website at http://gmw.consrv.ca.gov/shmp/

Source:
California Geological Survey, 2004

This map is available at
http://quake.abag.ca.gov

ABAG Geographic Information Systems



Liquefaction Hazard Map

Liquefaction Hazard Level

- High
- Moderate
- Moderately Low
- Very Low
- Major Roads
- Local Roads

Scale: 1 inch = 19.51 miles

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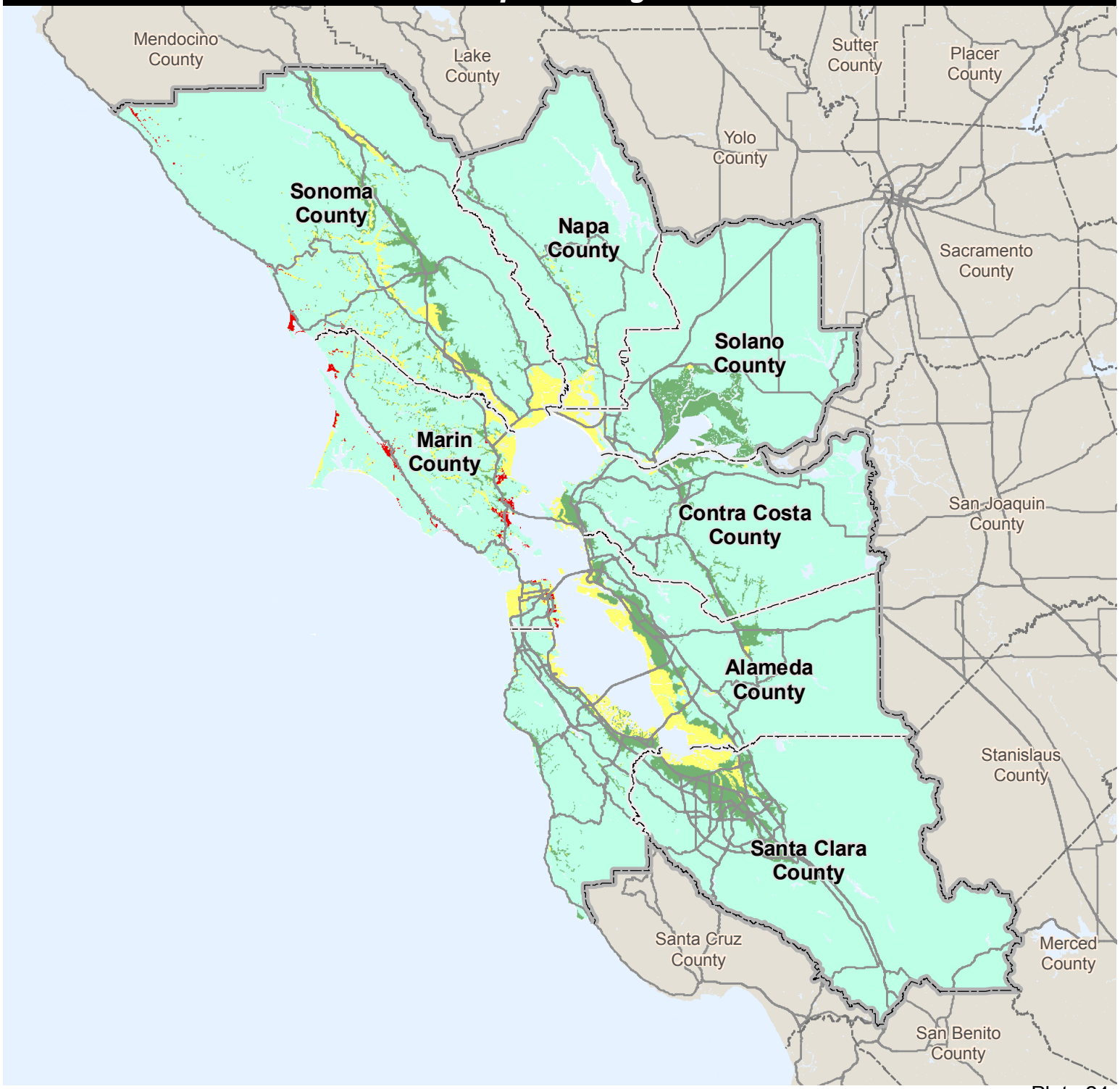
This map is available at http://quake.abag.ca.gov

Source:
ABAG, 2001

ABAG Geographic Information Systems

San Andreas-North Golden Gate Earthquake - Magnitude 7.5



Liquefaction Hazard Map

Liquefaction Hazard Level

- High
- Moderate
- Moderately Low
- Very Low
- Major Roads
- Local Roads

Scale: 1 inch = 19.51 miles

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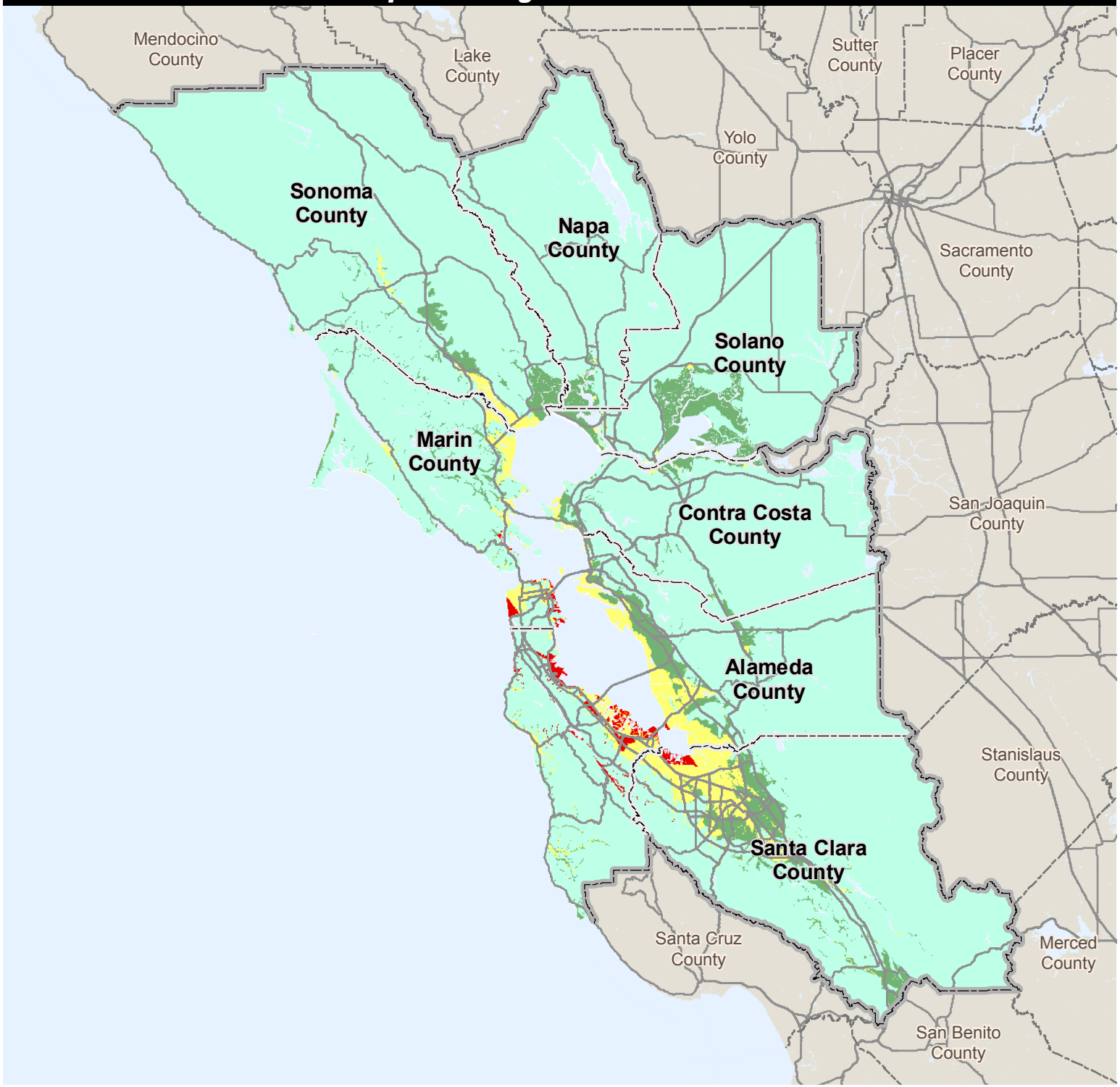
Source:
ABAG, 2001

ABAG Geographic Information Systems

San Andreas-Peninsula Earthquake - Magnitude 7.2



Liquefaction Hazard Map

Liquefaction Hazard Level

- High
- Moderate
- Moderately Low
- Very Low
- Major Roads
- Local Roads

Scale: 1 inch = 19.51 miles

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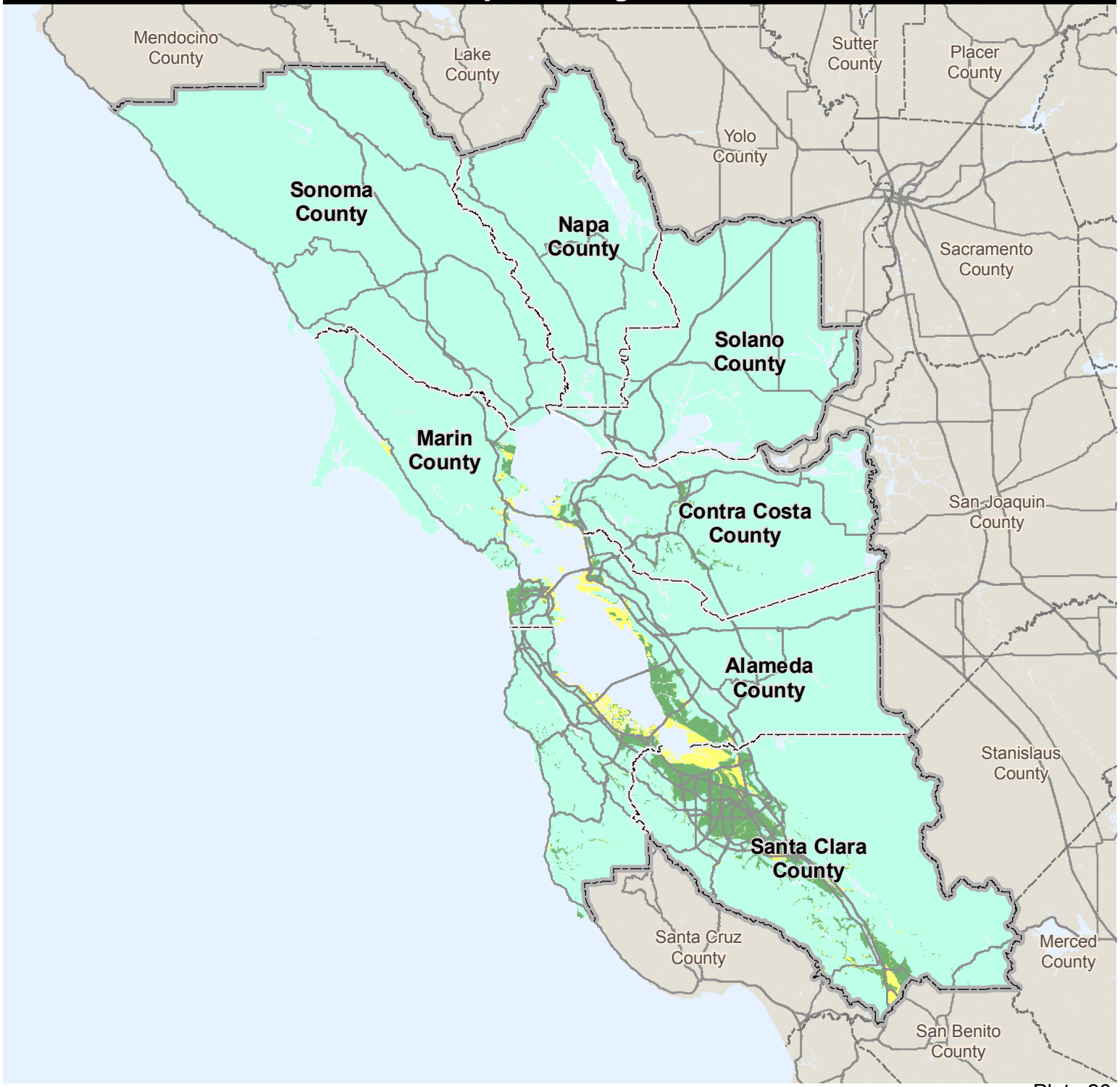
This map is available at http://quake.abag.ca.gov

Source:
ABAG, 2001

ABAG Geographic Information Systems

Model of the 1989 Loma Prieta Earthquake - Magnitude 6.9



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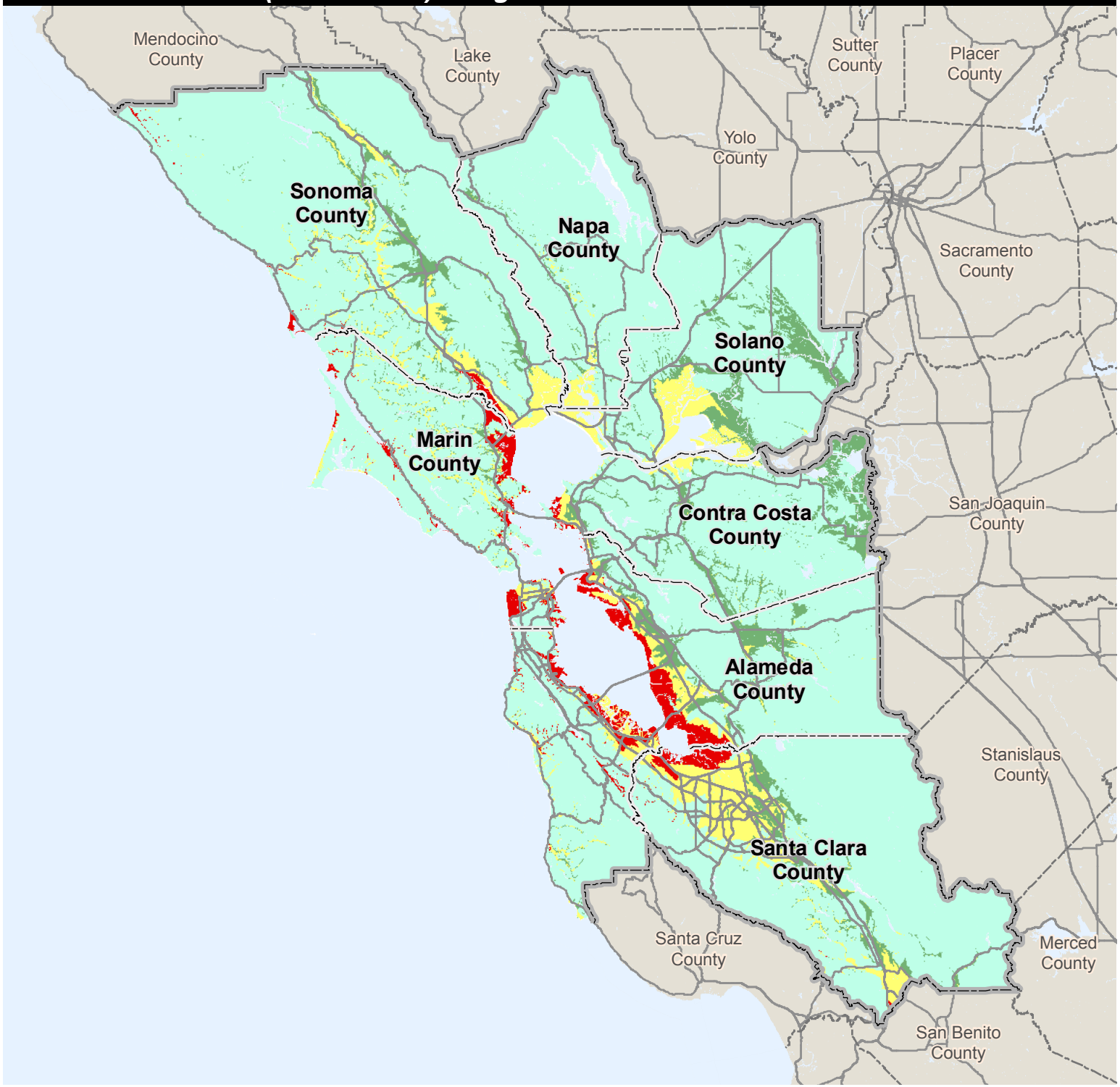
This map is available at http://quake.abag.ca.gov

Source:
ABAG, 2001

ABAG Geographic Information Systems

Entire San Andreas (1906 Quake) - Magnitude 7.9



Liquefaction Hazard Map

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Major Roads

Local Roads

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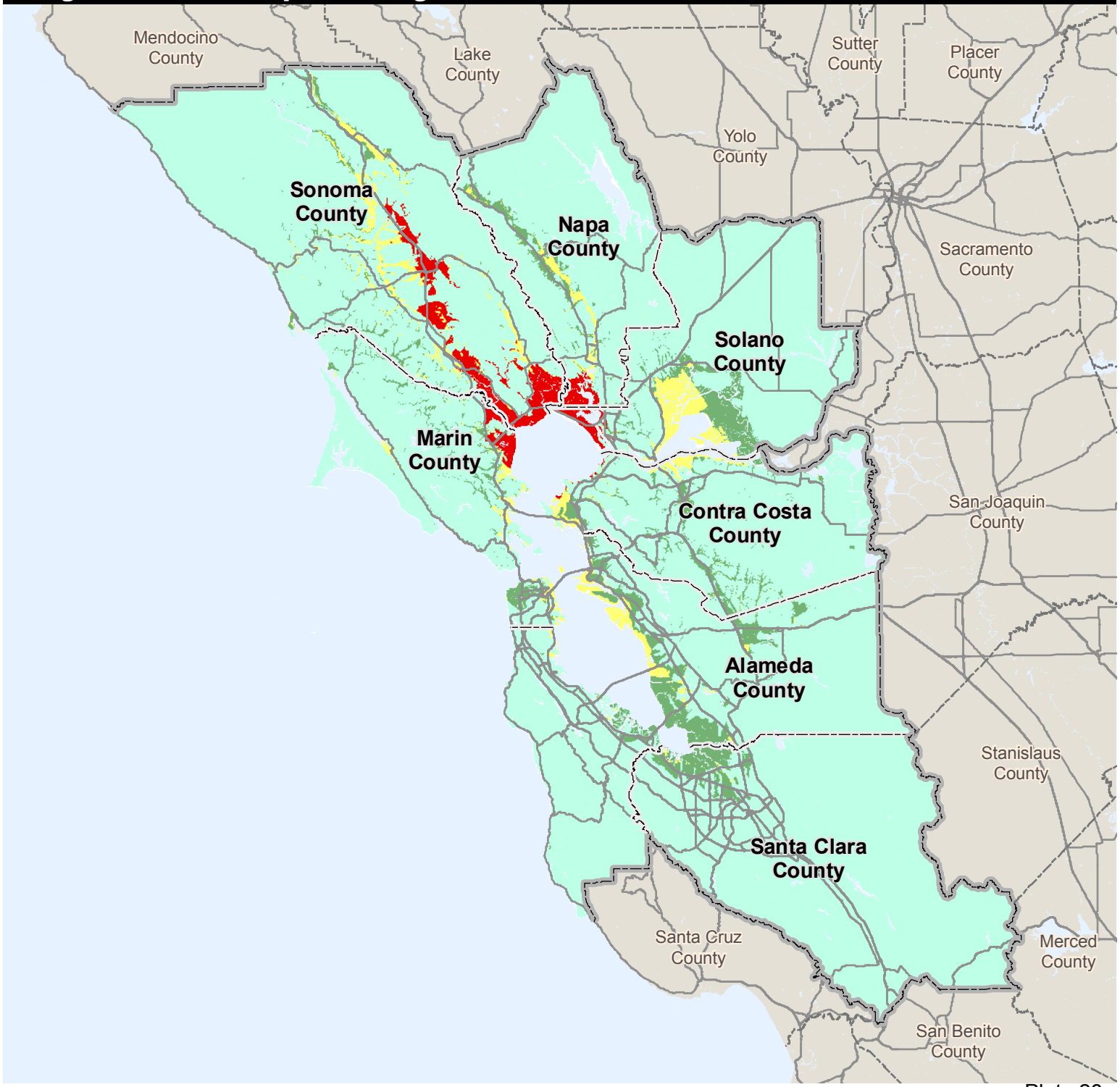
This map is available at http://quake.abag.ca.gov

Source:
ABAG, 2001

ABAG Geographic Information Systems

Rodgers Creek Earthquake - Magnitude 7.0



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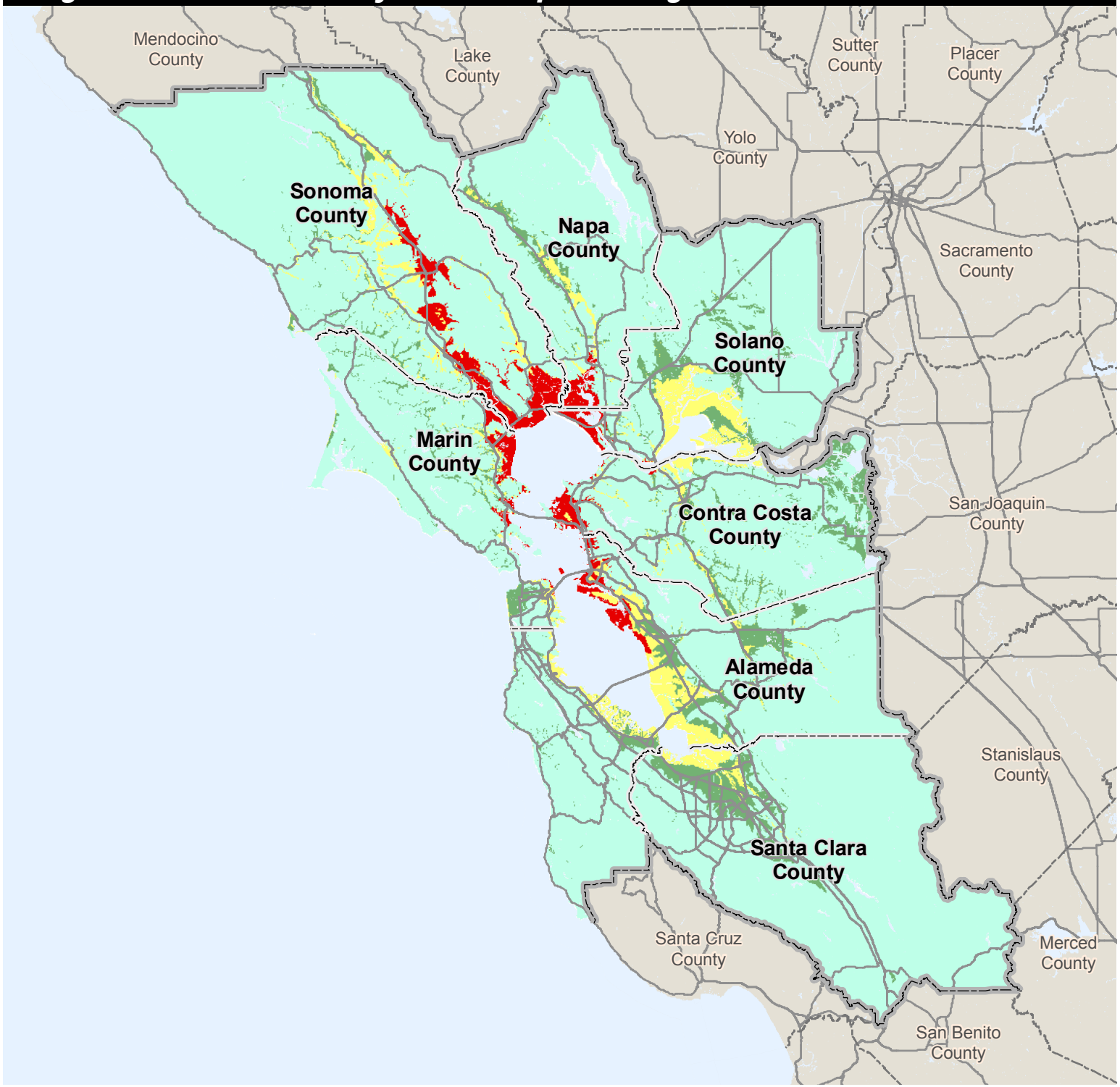
This map is available at http://quake.abag.ca.gov

Source:
ABAG, 2001

ABAG Geographic Information Systems

Rodgers Creek and North Hayward Earthquake - Magnitude 7.1



Liquefaction Hazard Map

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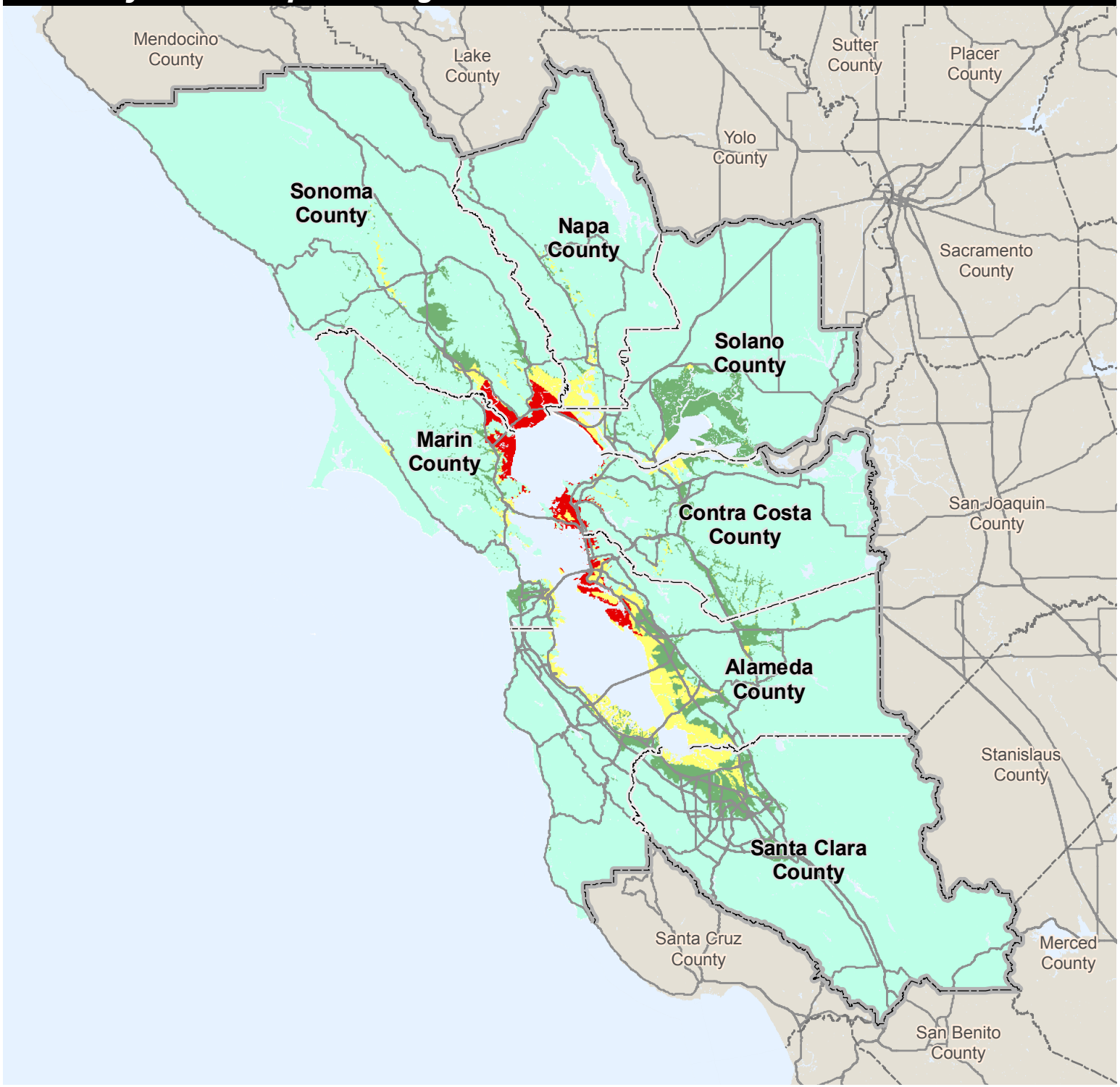
This map is available at http://quake.abag.ca.gov

Source:
ABAG, 2001

ABAG Geographic Information Systems

North Hayward Earthquake - Magnitude 6.5



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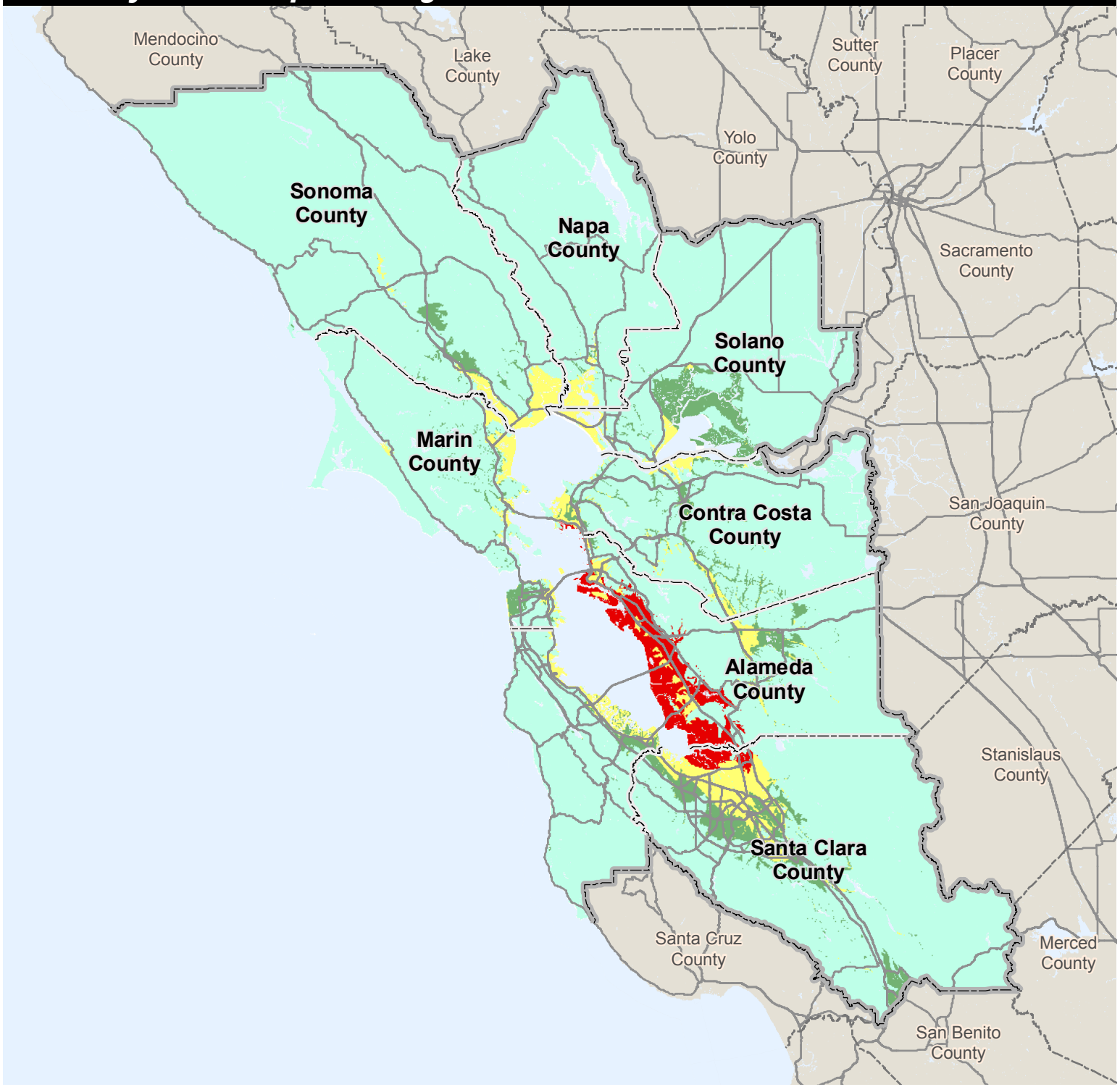
This map is available at http://quake.abag.ca.gov

Source:
ABAG, 2001

ABAG Geographic Information Systems

South Hayward Earthquake - Magnitude 6.7



Liquefaction Hazard Map

Liquefaction Hazard Level

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Scale: 1 inch = 19.51 miles

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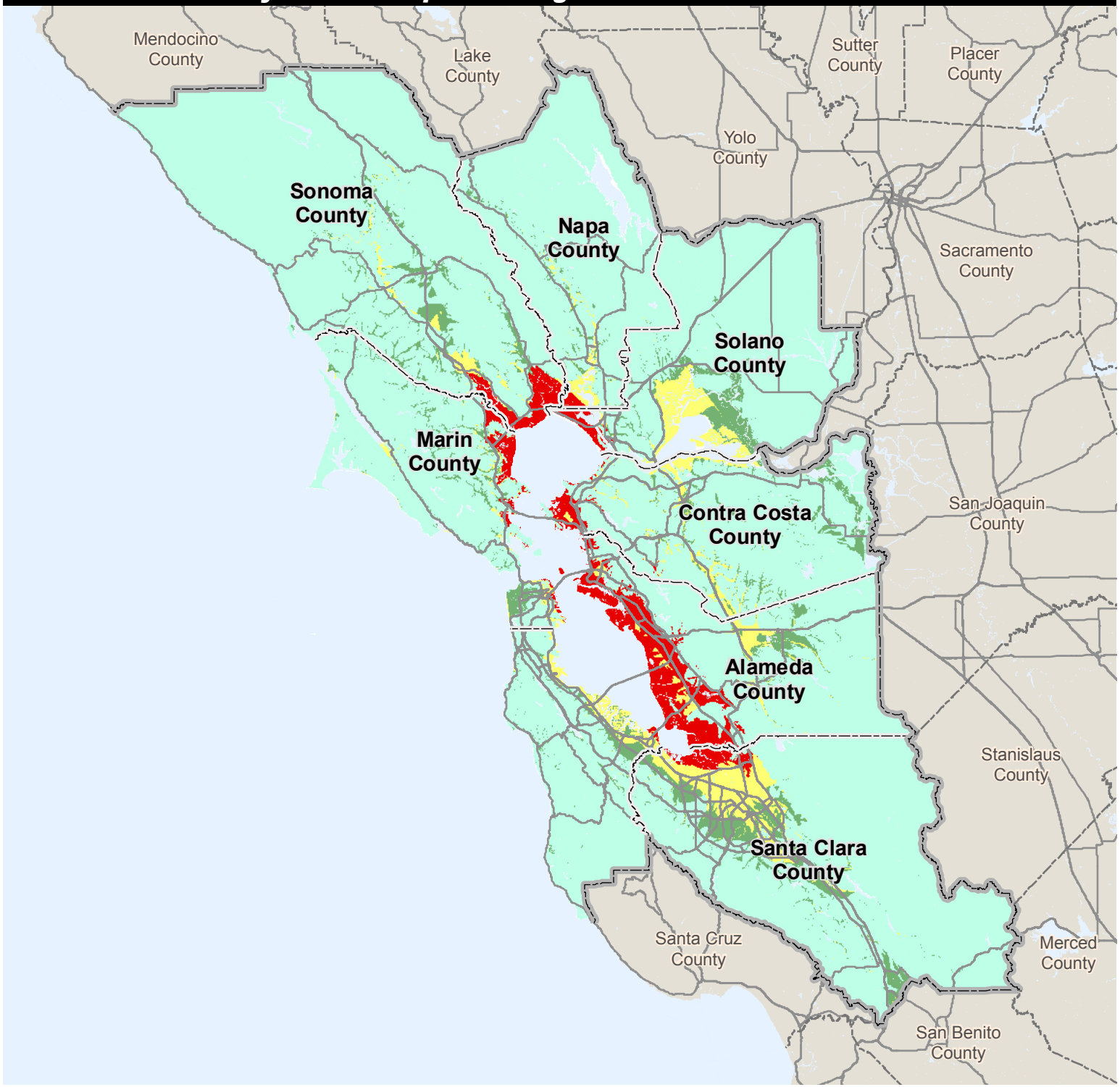
This map is available at http://quake.abag.ca.gov

Source:
ABAG, 2001

ABAG Geographic Information Systems

North and South Hayward Earthquake - Magnitude 6.9



Liquefaction Hazard Map

Liquefaction Hazard Level

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- Local Roads

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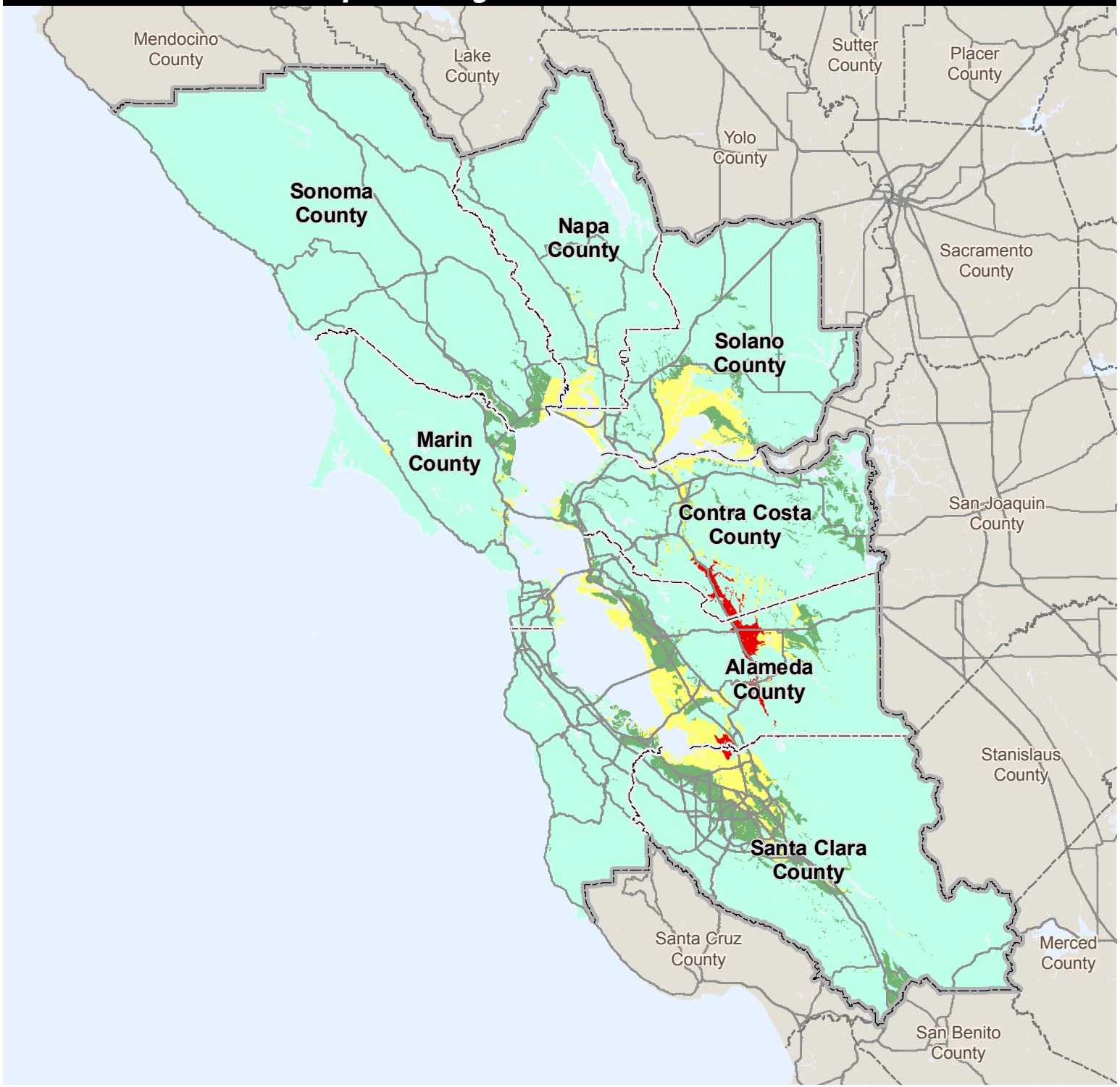
Source:
ABAG, 2001

ABAG Geographic Information Systems

Northern Calaveras Earthquake - Magnitude 6.8



Liquefaction Hazard Map

Liquefaction Hazard Level

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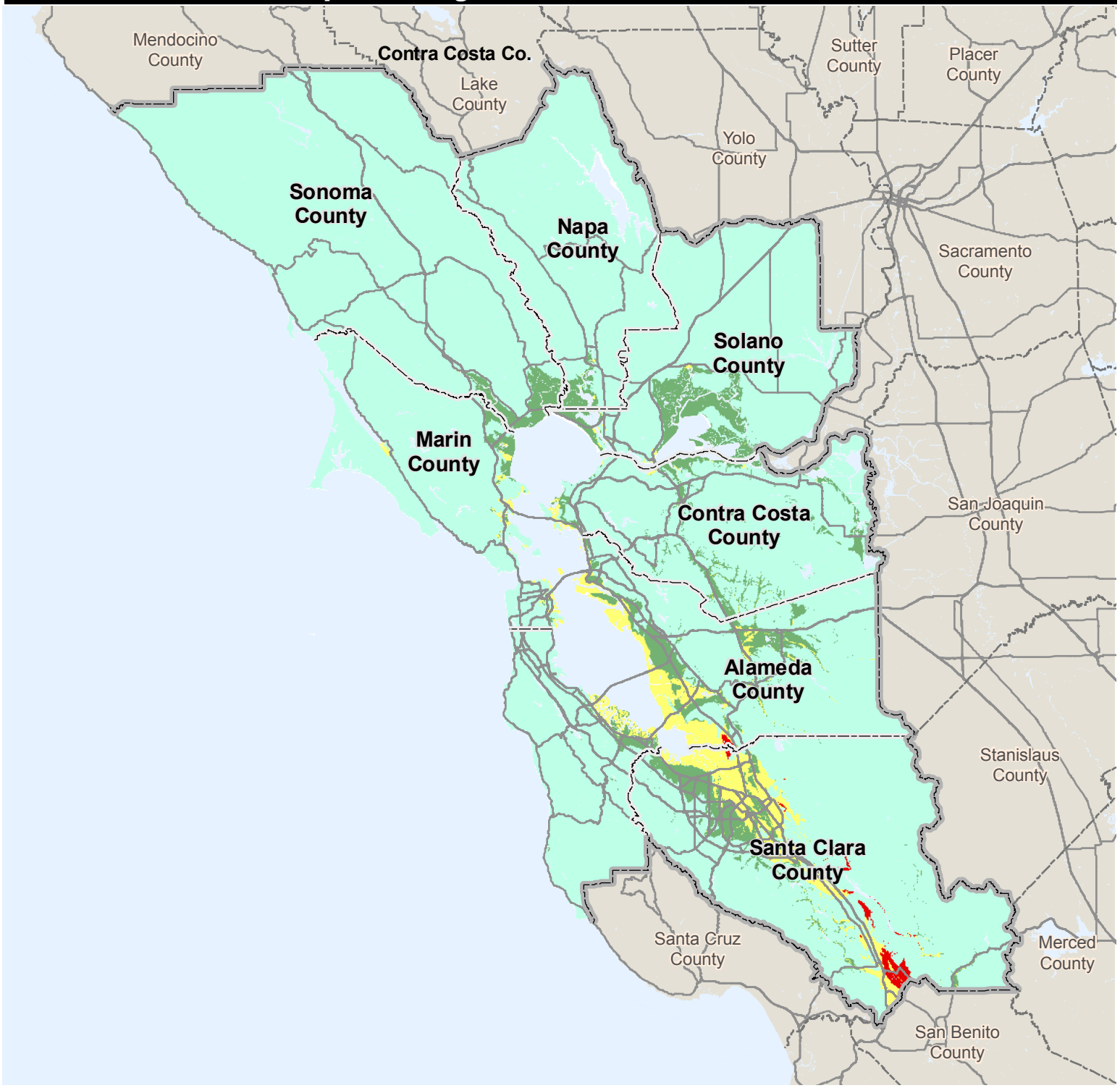
Source:
ABAG, 2001

ABAG Geographic Information Systems

Central Calaveras Earthquake - Magnitude 6.2



Liquefaction Hazard Map

Liquefaction Hazard Level

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- Local Roads

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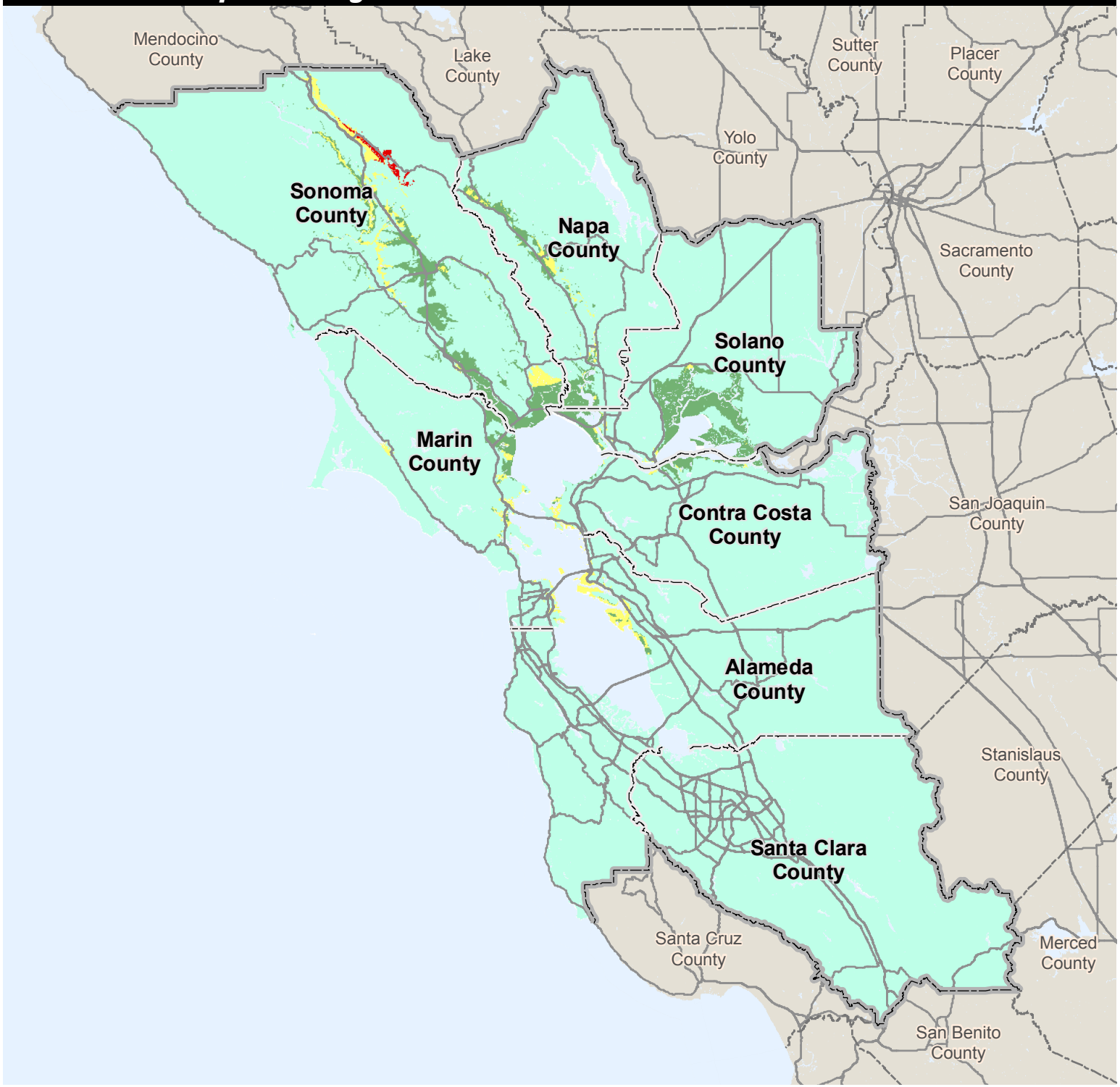
This map is available at http://quake.abag.ca.gov

Source:
ABAG, 2001

ABAG Geographic Information Systems

Maacama Earthquake - Magnitude 6.6



Liquefaction Hazard Map

Liquefaction Hazard Level

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- Moderate
- Moderately Low
- Very Low

Major Roads

Local Roads

N

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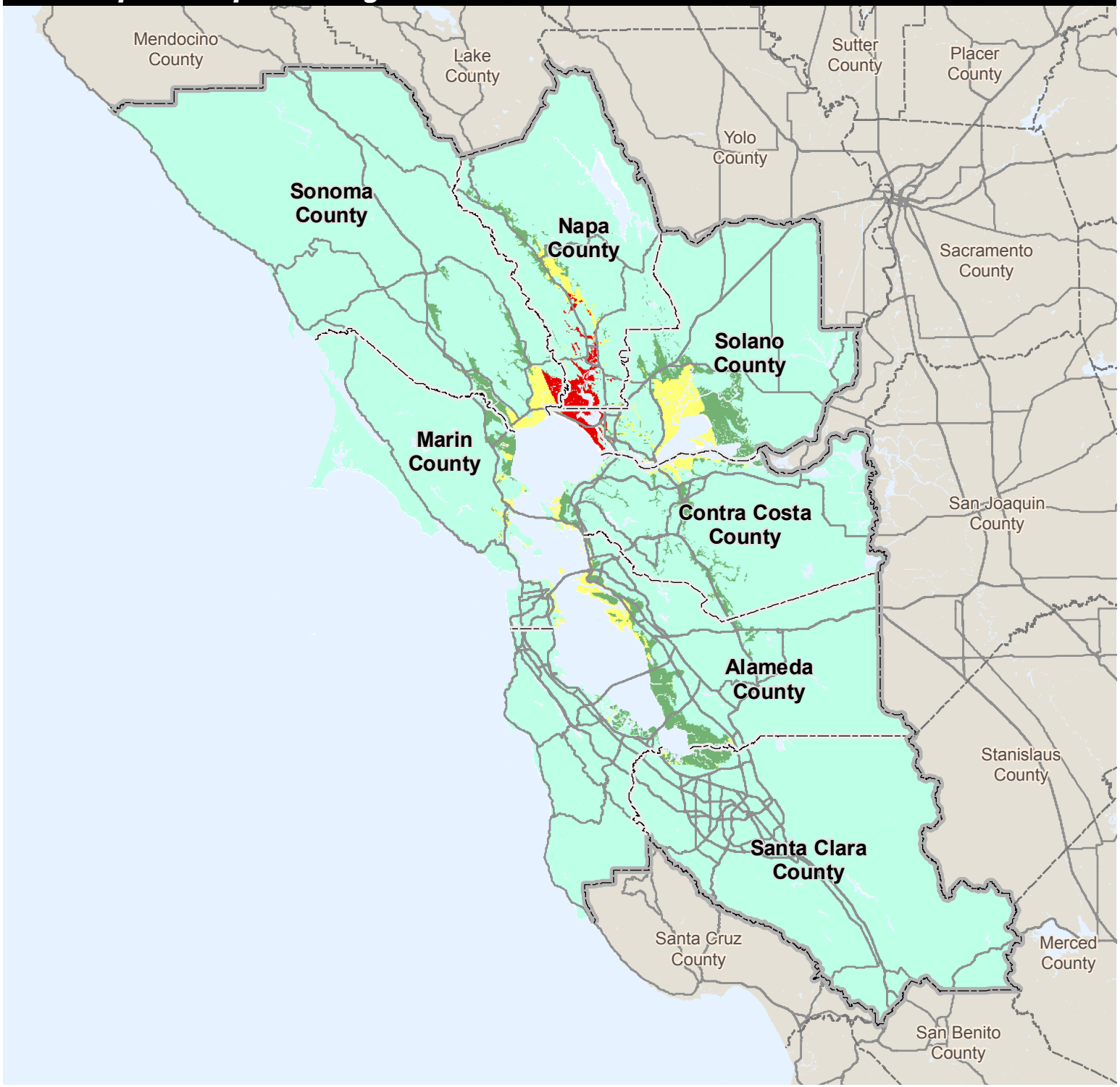
This map is available at http://quake.abag.ca.gov

Source:
ABAG, 2001

ABAG Geographic Information Systems

West Napa Earthquake - Magnitude 6.5



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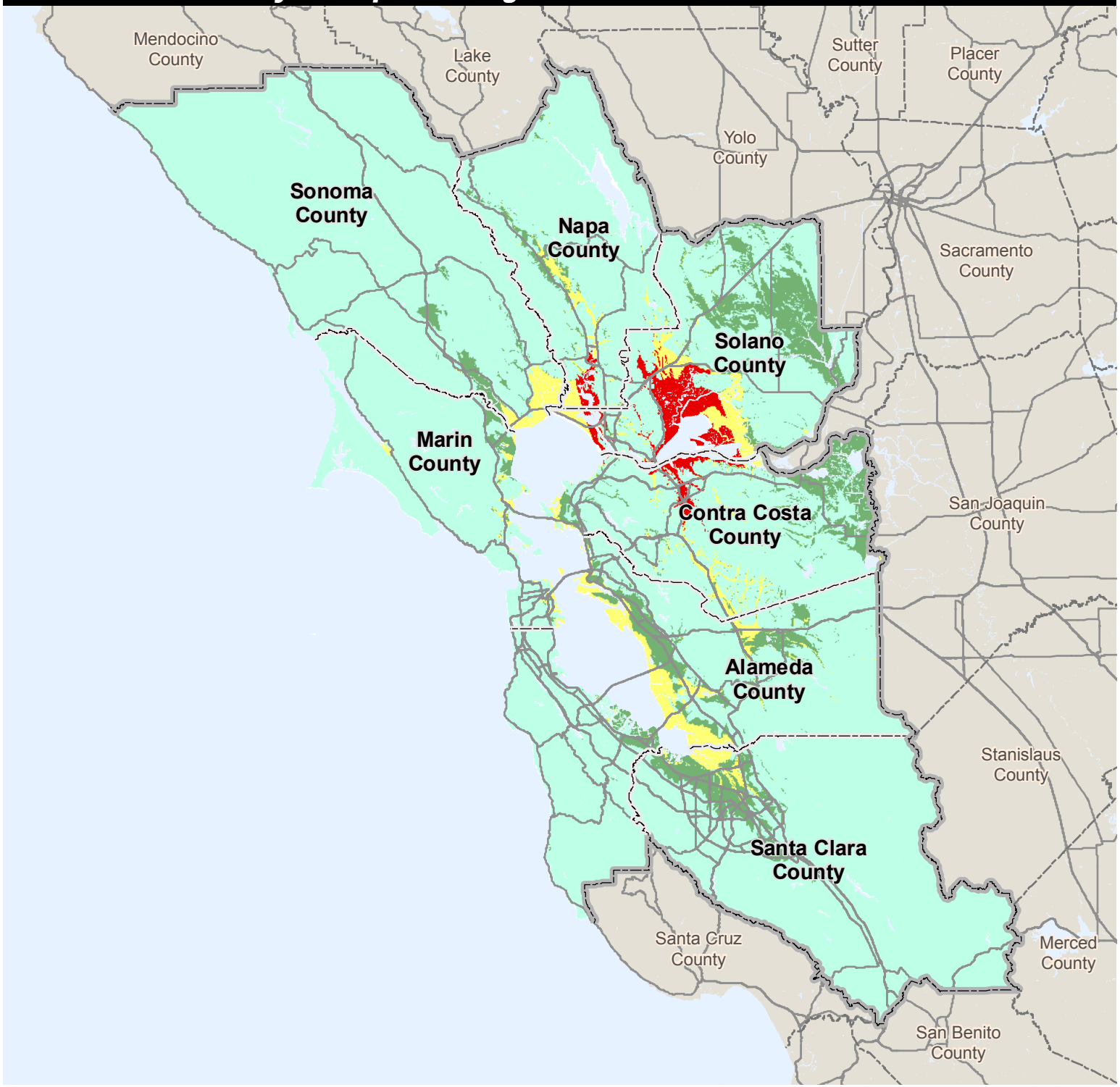
This map is available at http://quake.abag.ca.gov

Source:
ABAG, 2001

ABAG Geographic Information Systems

Concord-Green Valley Earthquake - Magnitude 6.7



Liquefaction Hazard Map

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Major Roads

Local Roads

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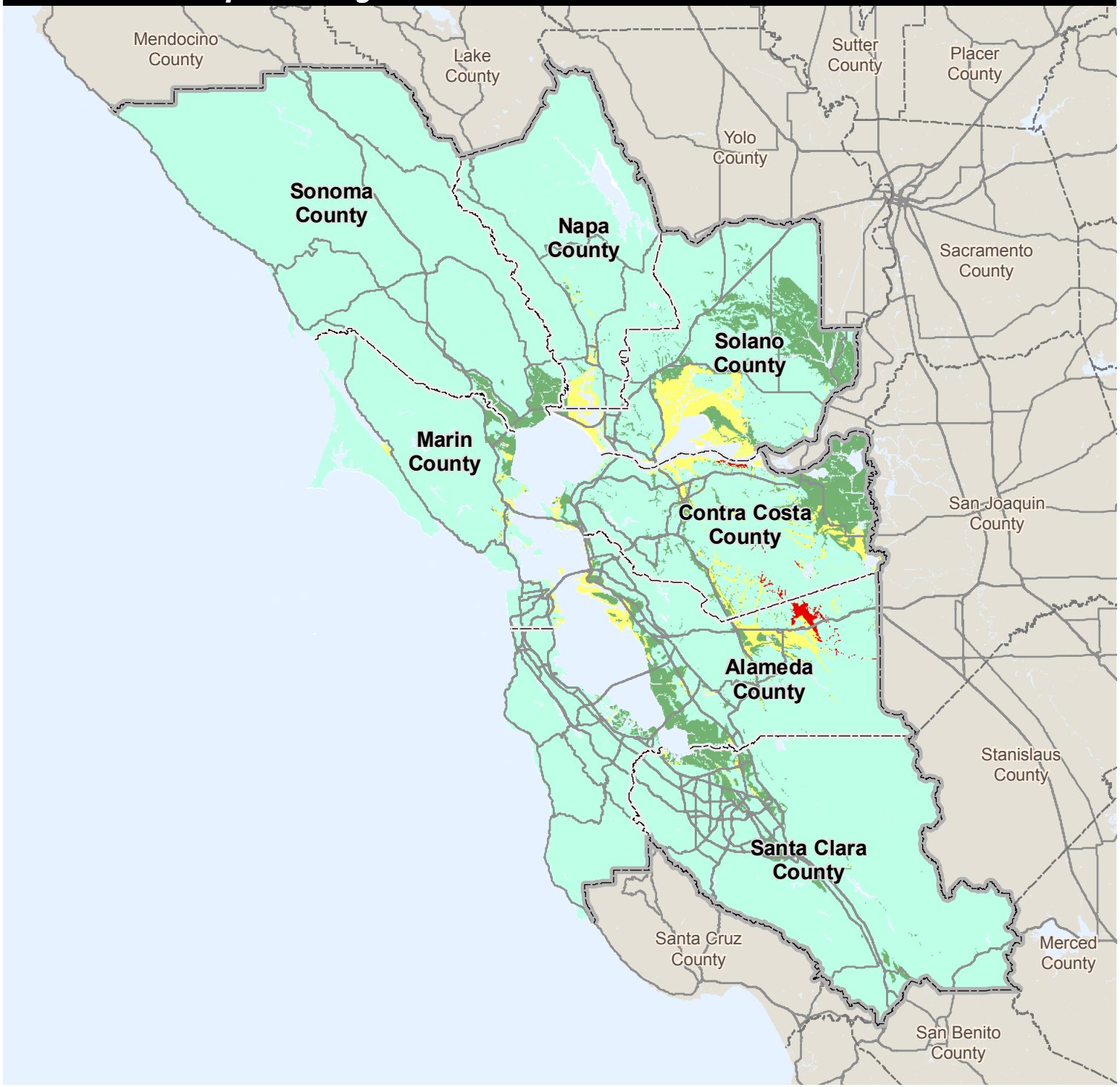
This map is available at http://quake.abag.ca.gov

Source:
ABAG, 2001

ABAG Geographic Information Systems

Greenville Earthquake - Magnitude 6.9



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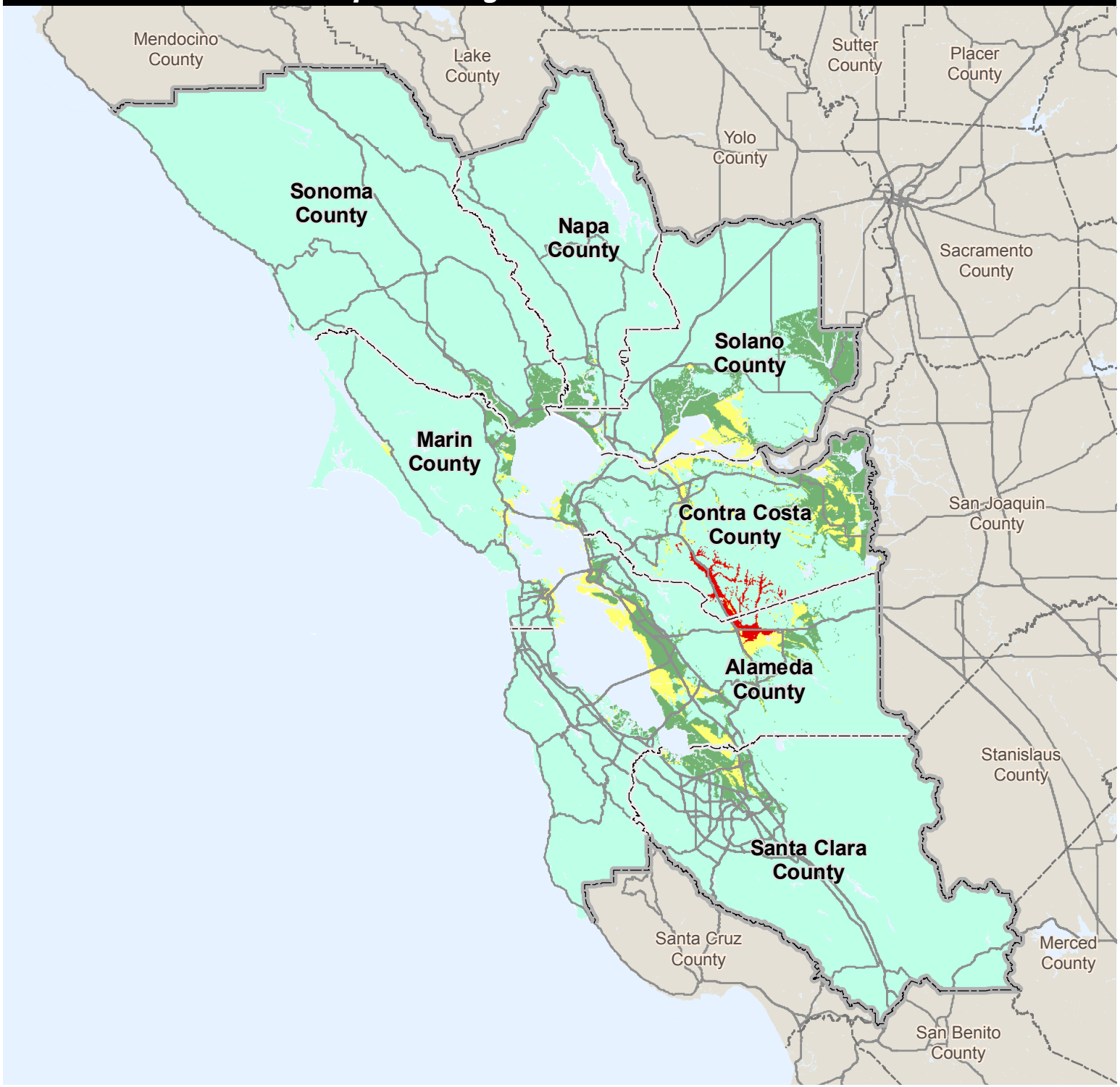
This map is available at http://quake.abag.ca.gov

Source:
ABAG, 2001

ABAG Geographic Information Systems

Mount Diablo Thrust Earthquake - Magnitude 6.7



Liquefaction Hazard Map

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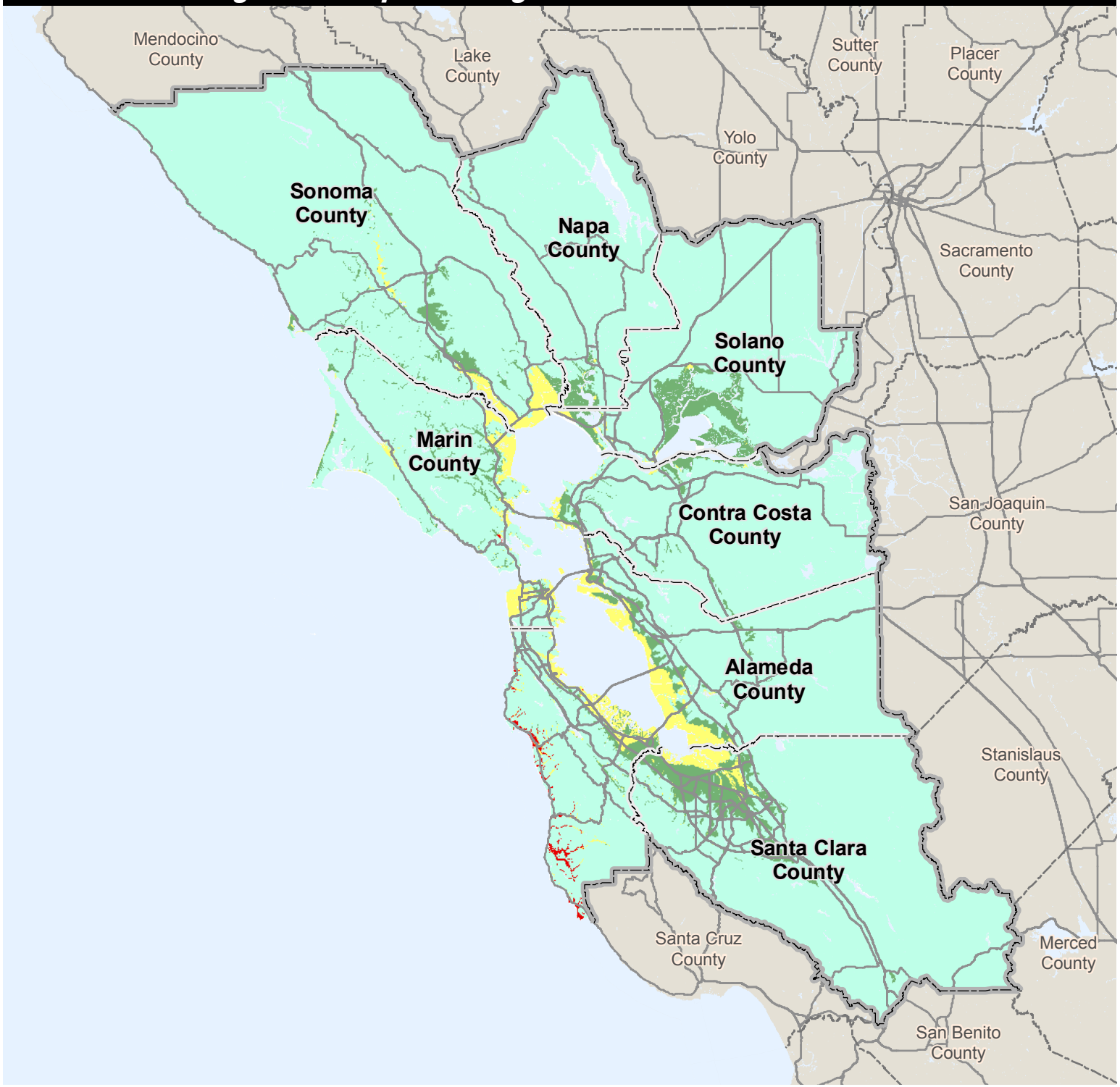
Source:
ABAG, 2001

ABAG Geographic Information Systems

Northern San Gregorio Earthquake - Magnitude 7.2



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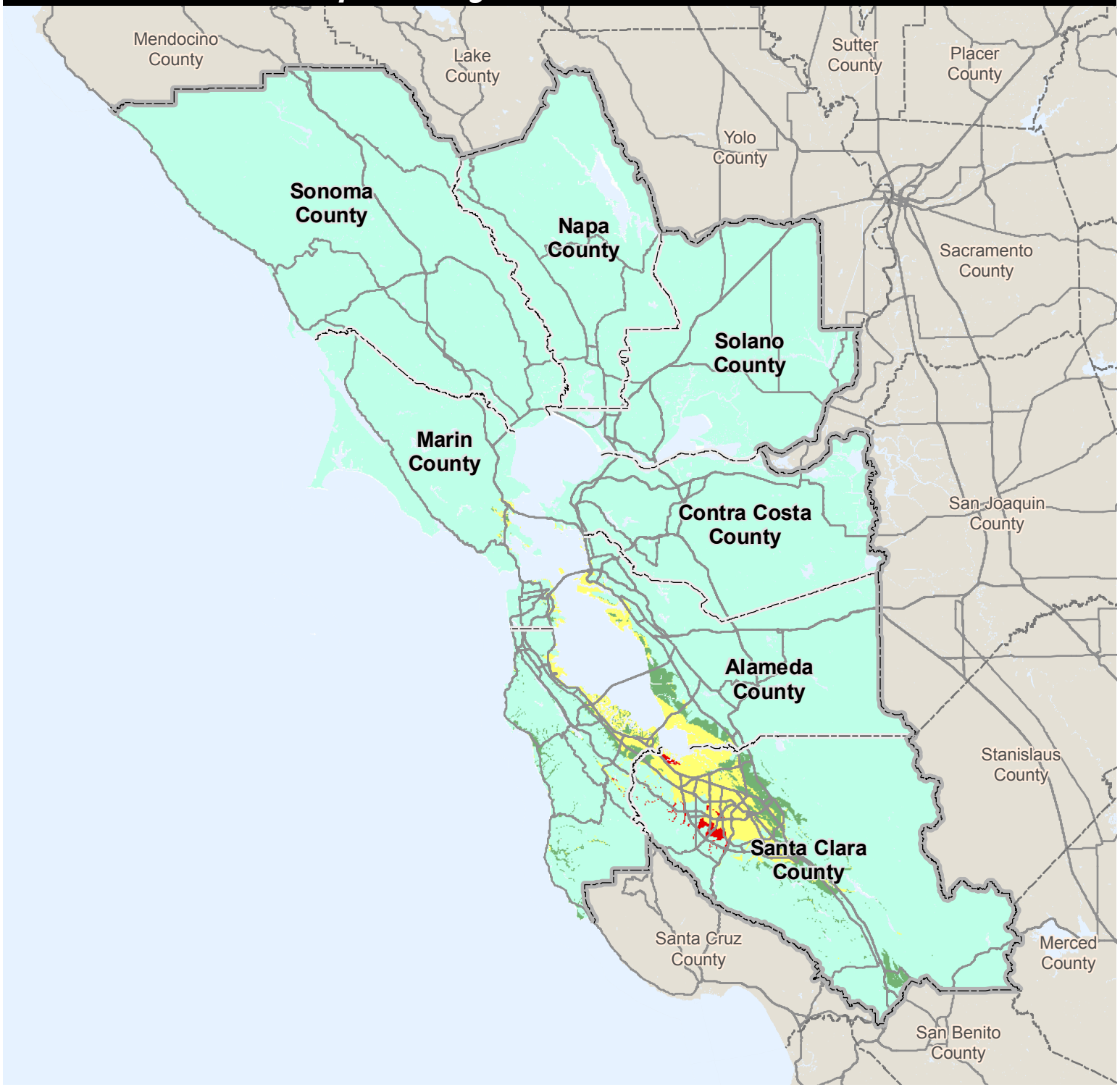
Source:
ABAG, 2001

ABAG Geographic Information Systems

Monte Vista Thrust Earthquake - Magnitude 6.6



California Geological Survey Seismic Hazard Zones of Required Investigation

Landslide Zones

Areas where previous occurrence of landslide movement, or local topographic, geological, geotechnical and subsurface water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required.

Mapping In Progress

Mapping Planned

Area Not Yet Evaluated

1 inch equals 9.30 miles

N

Scale:

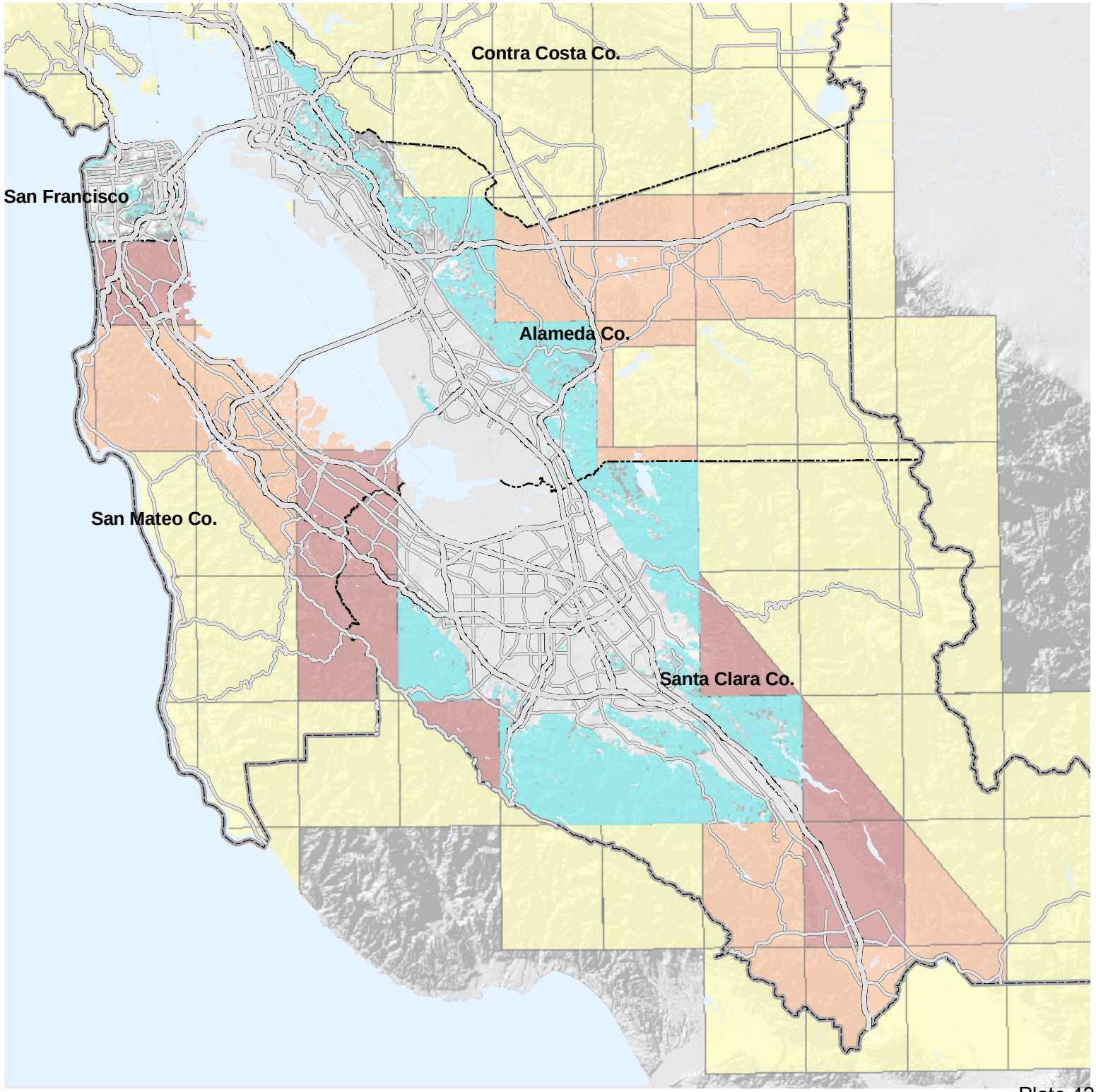
This map is intended for planning use only, and is not intended to be site-specific. Rather, it depicts the general risk within neighborhoods and the relative risk from community to community.

For more detailed information regarding this map, please visit the CGS website at http://gmw.consrv.ca.gov/shmp/

Source:
California Geological Survey, 2004

This map is available at http://quake.abag.ca.gov

ABAG Geographic Information Systems



Tsunami Inundation Emergency Planning Map for the San Francisco Bay Region

Tsunami Inundation Area

Urbanized Area

Shaded to show topographical relief

N

Scale: 1 inch = 21.21 miles

This tsunami inundation planning map for the San Francisco Bay Region is based on modeling a number of potential earthquake sources and hypothetical extreme undersea, near-shore landslide sources.

This data was produced by CalEMA and is intended for local jurisdictional, coastal planning uses only. Data for north coastal Sonoma County is not yet available. For more information visit http://quake.abag.ca.gov/tsunami.

Source: California Emergency Management Agency, Coastal Region (2009)

This map is available at http://quake.abag.ca.gov

Disclaimer: The California Emergency Management Agency (CalEMA), the University of Southern California (USC), and the California Geological Survey (CGS) make no representation or warranties regarding the accuracy of this inundation map nor the data from which the map was derived. Neither the State of California nor USC shall be liable under any circumstances for any direct, indirect, special, incidental or consequential damages with respect to any claim by any user or any third party on account of or arising from the use of this map.

ABAG Geographic Information Systems

FEMA
Flood Hazard Areas

Flood Hazard Areas

- Zone V- (100 yr. Flood Zone)
- Zone A- (100 yr. Flood Zone)
- Zone X500- (500 yr. Flood Zone or other concerns)
- Urbanized Area

Shaded to show topographical relief

Detailed FEMA Explanation

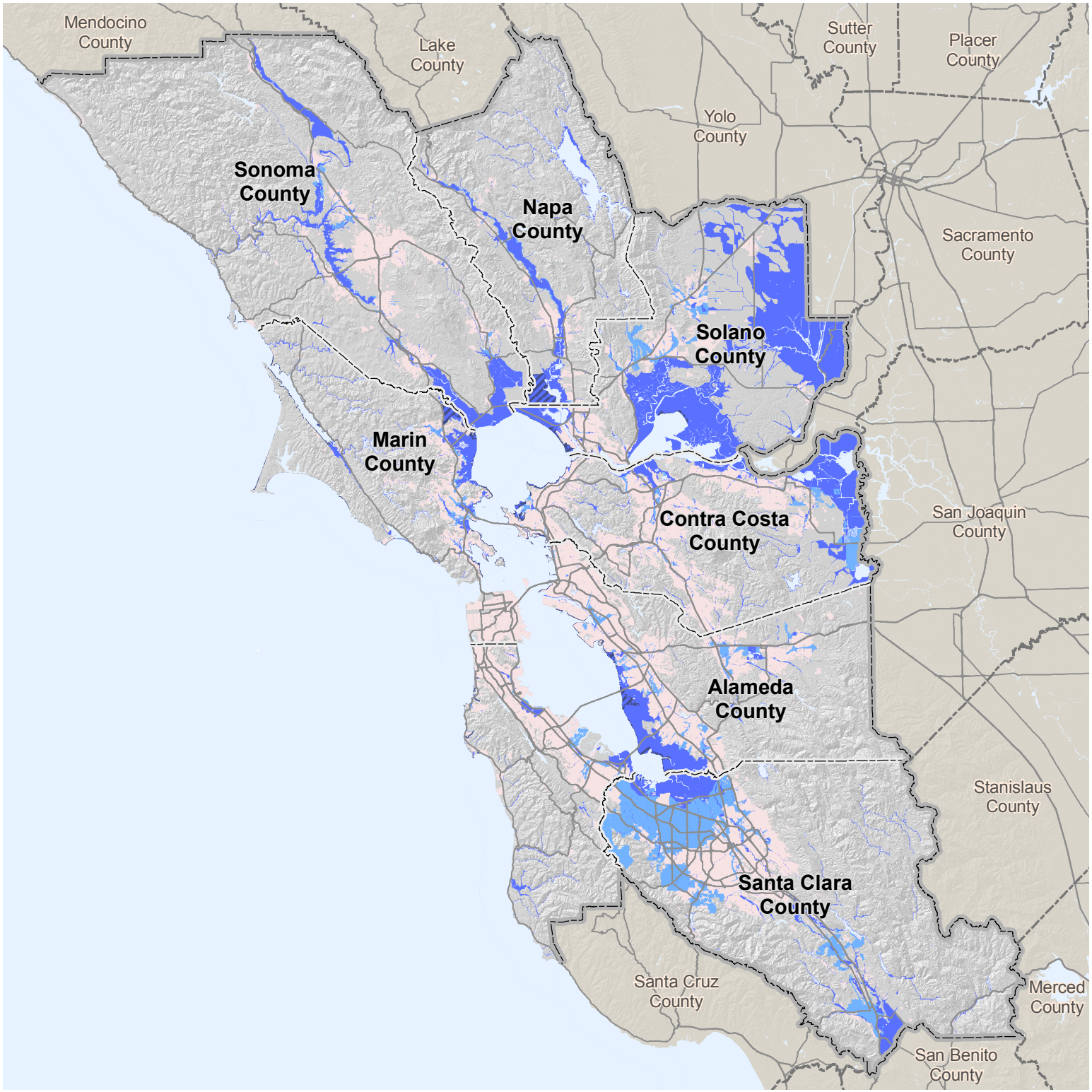
Flood Zone	Description
Zone V	This code identifies an area inundated by 1% annual chance flooding with velocity hazard (wave action).
Zone A	This code identifies an area inundated by 1% annual chance flooding.
Zone X500	This code identifies an area inundated by 0.2% annual chance flooding; an area inundated by 1% annual chance flooding with average depths of less than 1 foot or with drainage areas less than 1 square mile; or an area protected by levees from 1% annual chance flooding.

N

Scale: 1 inch = 17.53 miles

Sources:
Flood Zones - FEMA Q3 (2003) and DFIRM (2009)
Base Data - TeleAtlas (2008)
The product has been designed to support planning activities.
A more detailed version of this map is available at http://quake.abag.ca.gov

ABAG Geographic Information Systems



Principal Debris-Flow Source Areas in the San Francisco Bay Region

Debris-Flow Source Area

Urban Footprint

N

Scale: 1 inch = 17.13 miles

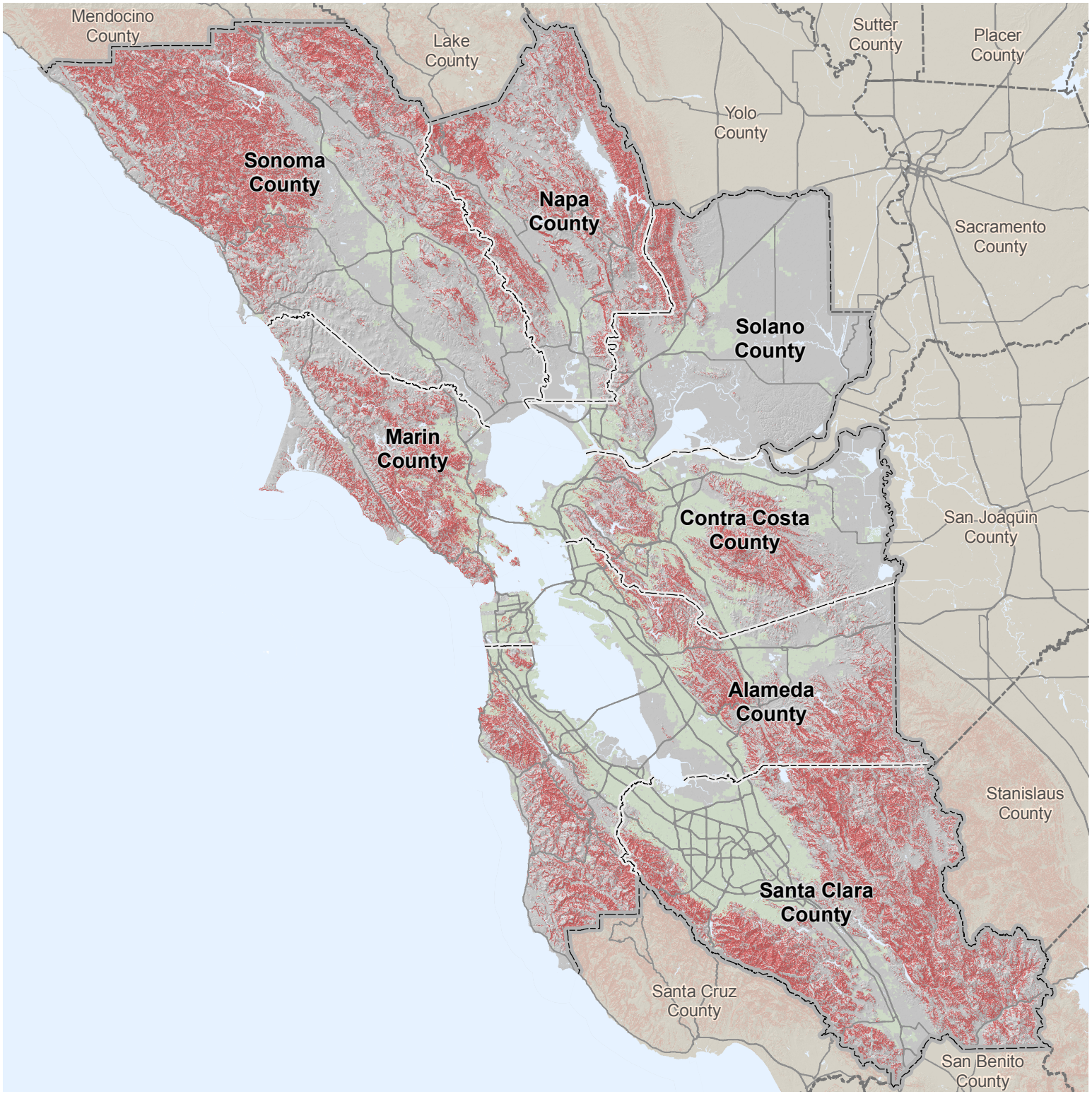
This map is intended for planning use only and is not intended to be site-specific. Rather, it depicts the general risk within neighborhoods and the relative risk from community to community.

This map is available at http://quake.abag.ca.gov

For more detailed informtion regarding this map, please visit the USGS website at http://wrgis.wr.usgs.gov/open-file/of97-745/

Source:
USGS Open File Report 97-745 E, 1997

ABAG Geographic Information Systems

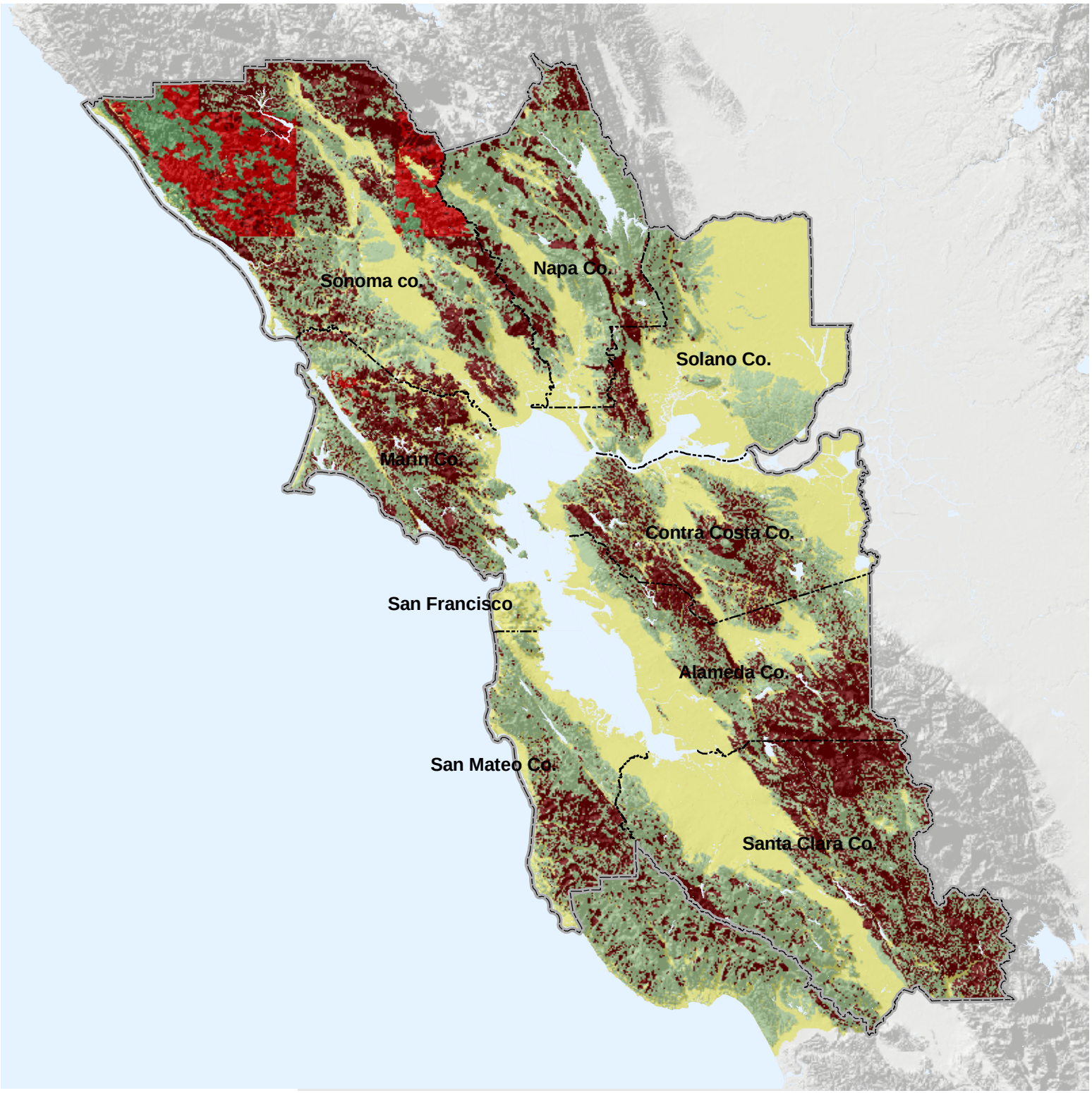


Summary Distribution of Slides and Earth Flows in the San Francisco Bay Region

- Mostly Landslides
- Many Landslides
- Flatland
- Few Landslides
- Very Few Landslides

N

Scale: 1 inch equals 18.67 miles



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For more detailed informtion regarding this map, please visit the USGS website at http://wrgis.wr.usgs.gov/open-file/of97-745/

Source:
USGS Open File Report 97-745 E, 1997

ABAG Geographic Information Systems

Wildland Urban Interface - Fire Threatened Communities

Community at Risk

Urbanized Area

N

1 inch = 17.81 miles

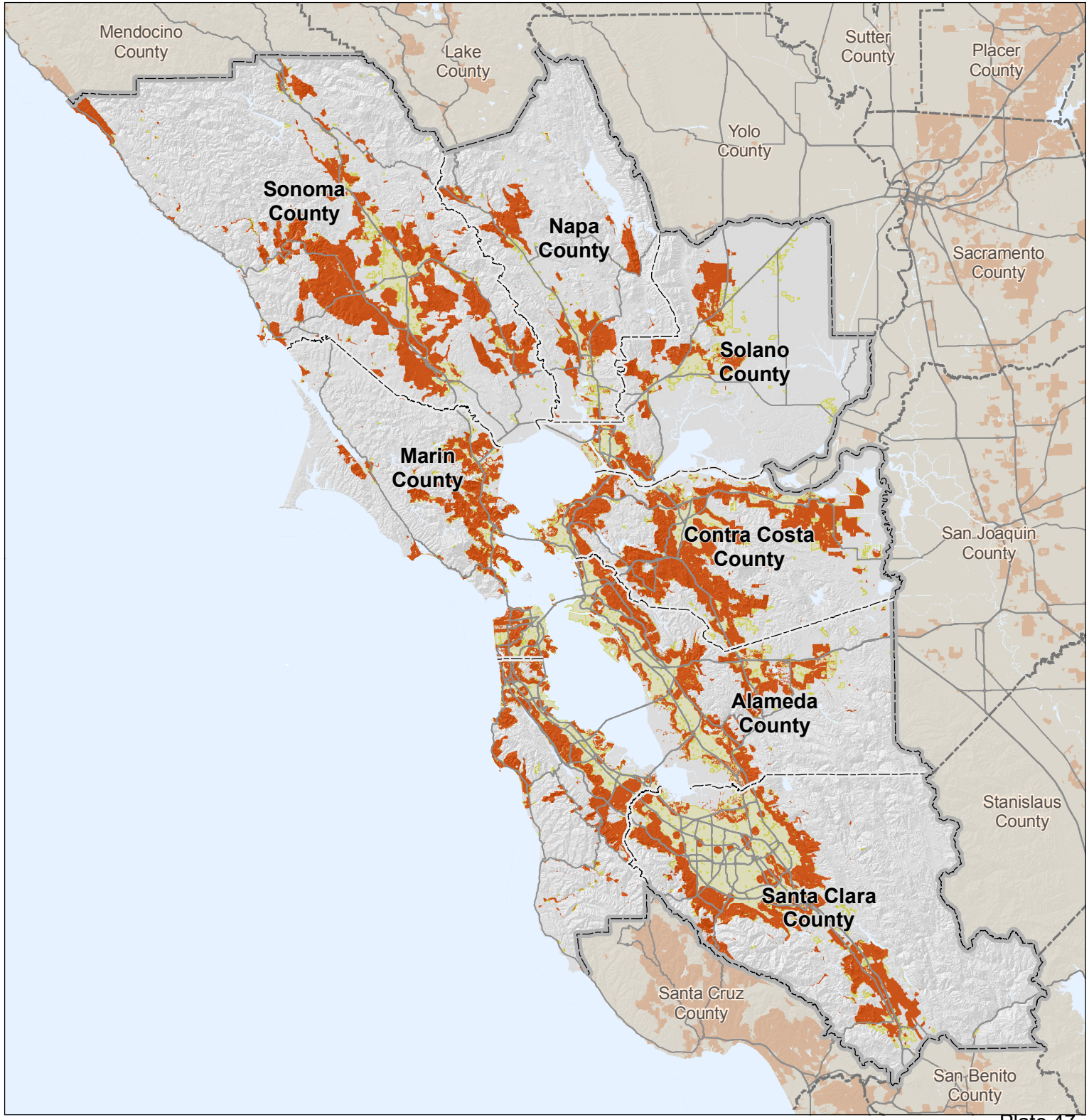
Local fire jurisdictions may have identified additional fire hazard areas, especially in communities adjacent to wildland.

This map is intended for planning use only and is not intended to be site-specific. Rather, it depicts the general risk within neighborhoods and the relative risk from community to community.

This map is available at http://quake.abag.ca.gov

Source:
California Department of Forestry and Fire Protection, 2003

ABAG Geographic Information Systems



Fire Threat in the San Francisco Bay Region

- Extreme
- Very High
- High
- Moderate
- Little or No Threat

N

1 inch = 17.54 miles

This map focuses on wildland fuels in State Responsibility Areas, that is, where the California Department of Forestry has primary jurisdiction for wildland fire response. Local fire jurisdictions may have identified additional fire hazard areas, especially in communities adjacent to wildland.

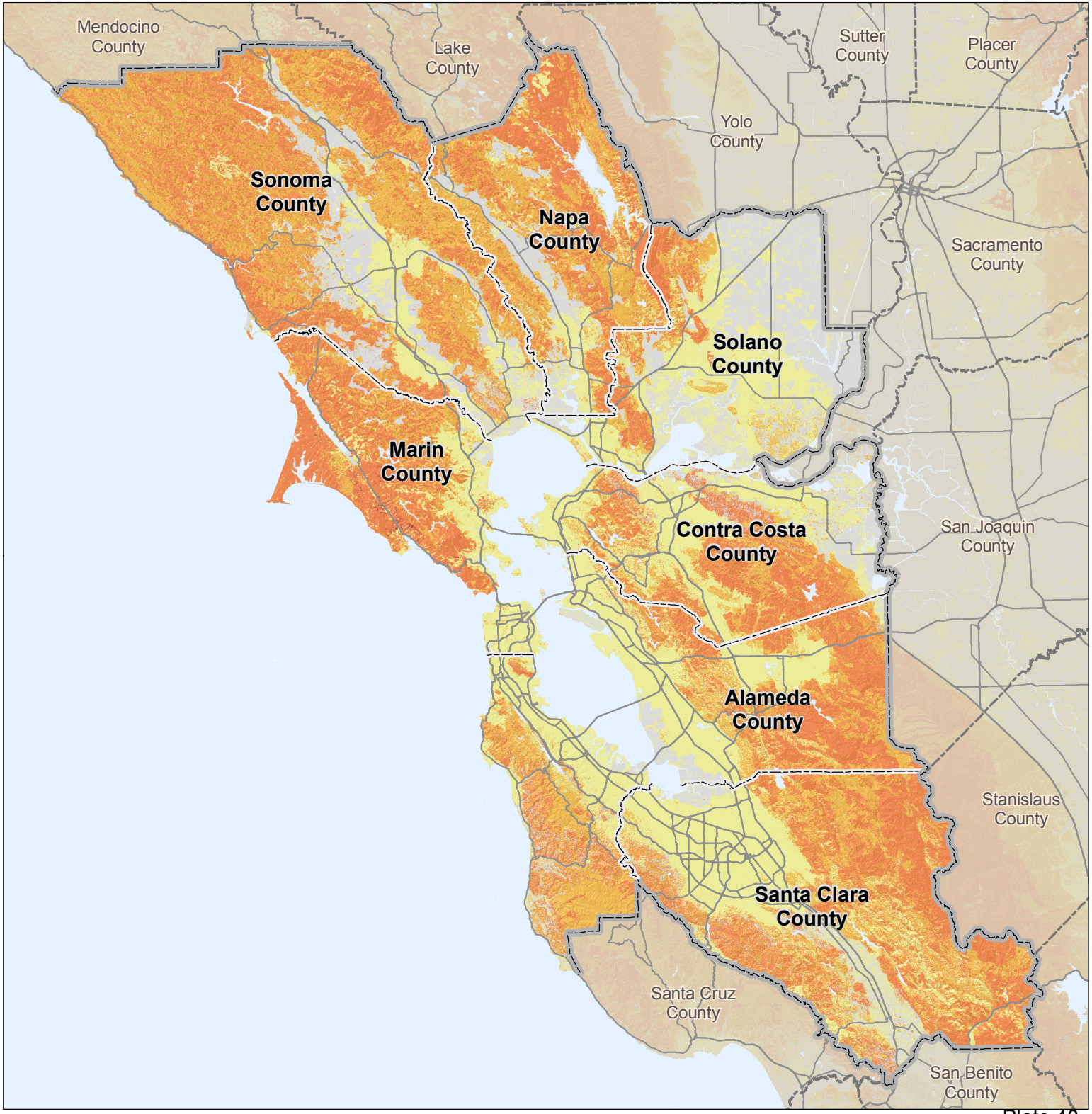
This map is intended for planning use only and is not intended to be site-specific. Rather, it depicts the general risk within neighborhoods and the relative risk from community to community.

This map is available at http://quake.abag.ca.gov

Combines expected fire frequency with potential fire behavior to create 4 threat classes

Source:
California Department of Forestry and Fire Protection, 2005

ABAG Geographic Information Systems



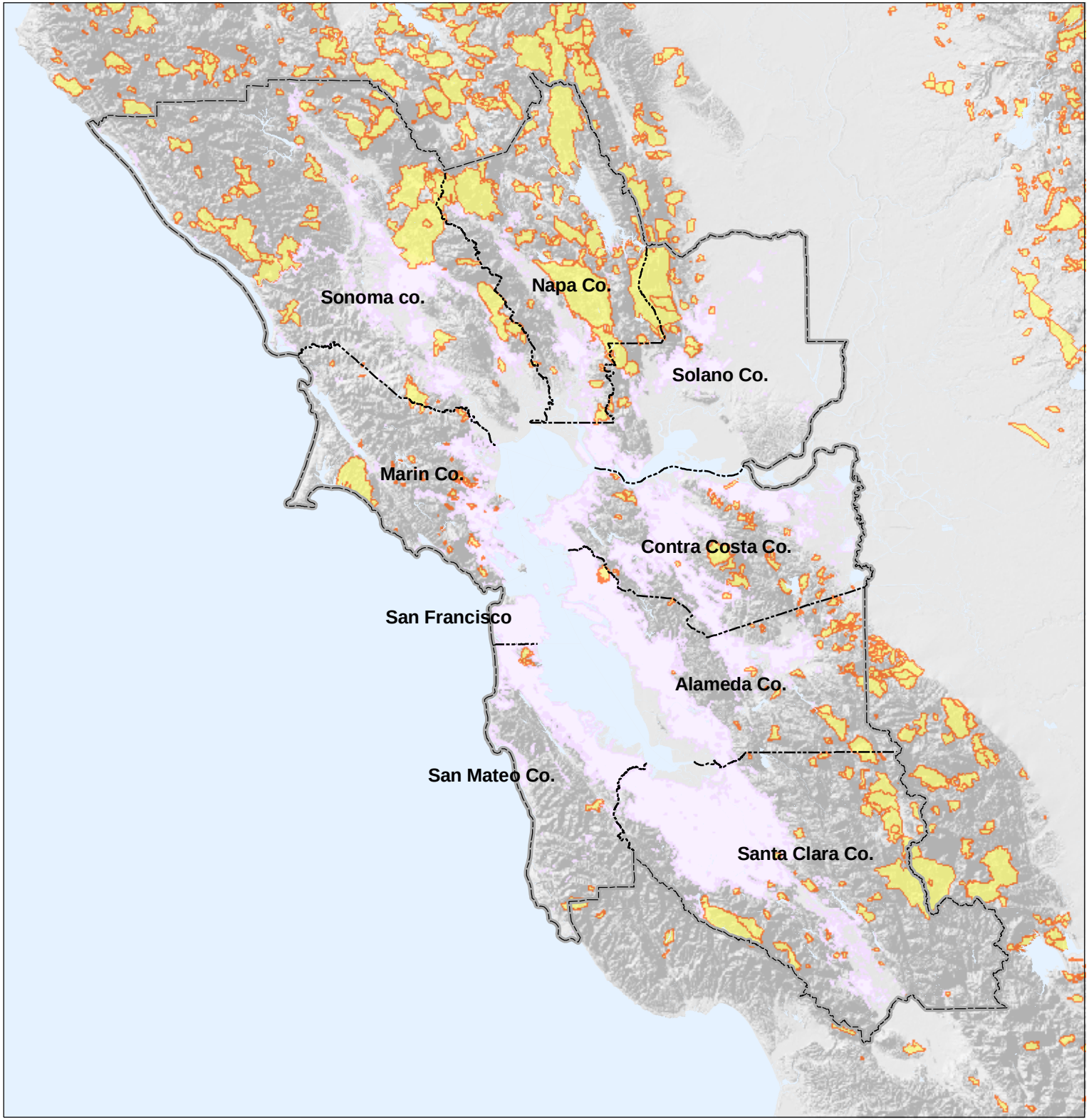
Fire Perimeters - 1950 to Present

Fire Perimeter

Urbanized Area

N

1 inch equals 19.09 miles



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This map is available at http://quake.abag.ca.gov

Source:
California Department of Forestry and Fire Protection, 2004

ABAG Geographic Information Systems

Distribution of Wildland-Urban Interface Housing Unit Density

- Rural (1 unit/5 acres to 1 unit/20 acres)
- Interface (1 unit/acre to 1 unit/5 acres)
- Urban (greater than 1 unit/acre)

N

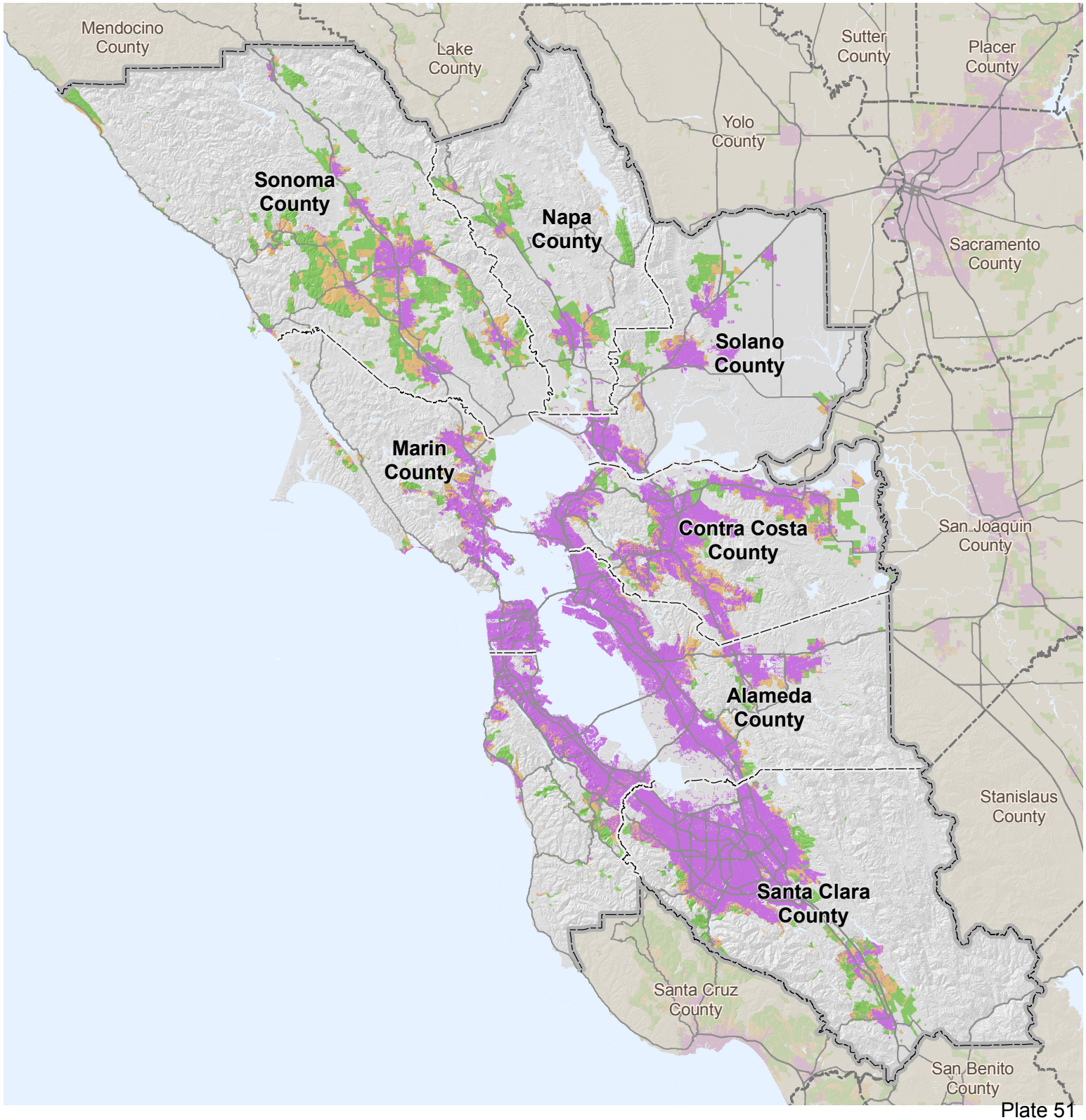
1 inch = 17.47 miles

This map is intended for planning use only.

Map is available at
http://quake.abag.ca.gov

Source:
California Department of Forestry and Fire Protection, 2003
http://frap.cdf.ca.gov/

ABAG Geographic Information Systems



Fire-related Risks to Ecosystem Health as Measured by Condition Class

- Low - Condition Class 1
- Moderate - Condition Class 2
- High - Condition Class 3
- Non-Forests & Rangelands

N

1 inch = 17.07 miles

Condition Classes are defined as the relative risk of losing key components that define an ecosystem (Hardy et al., 2001).

This map is intended for planning use only.

Map is available at http://quake.abag.ca.gov

Source:
California Department of Forestry and Fire Protection, 2003
http://frap.cdf.ca.gov/

ABAG Geographic Information Systems

Post-Wildfire Soil Erosion Potential

- Area without a Fuel Rank (generally Ag or Barren)
- Water and Urban Areas
- Low
- Moderate
- High

N

1 inch = 16.74 miles

This map is based on data created by CDF's Fire and Resource Assessment Program that shows estimated erosion potential after a wildfire, based on the Universal Soil Loss Equation.

This map is intended for planning use only and is not intended to be site specific.

Map is available at http://quake.abag.ca.gov

Source:
California Department of Forestry and Fire Protection, 2004
http://frap.cdf.ca.gov/

ABAG Geographic Information Systems

Dam Failure Inundation Areas

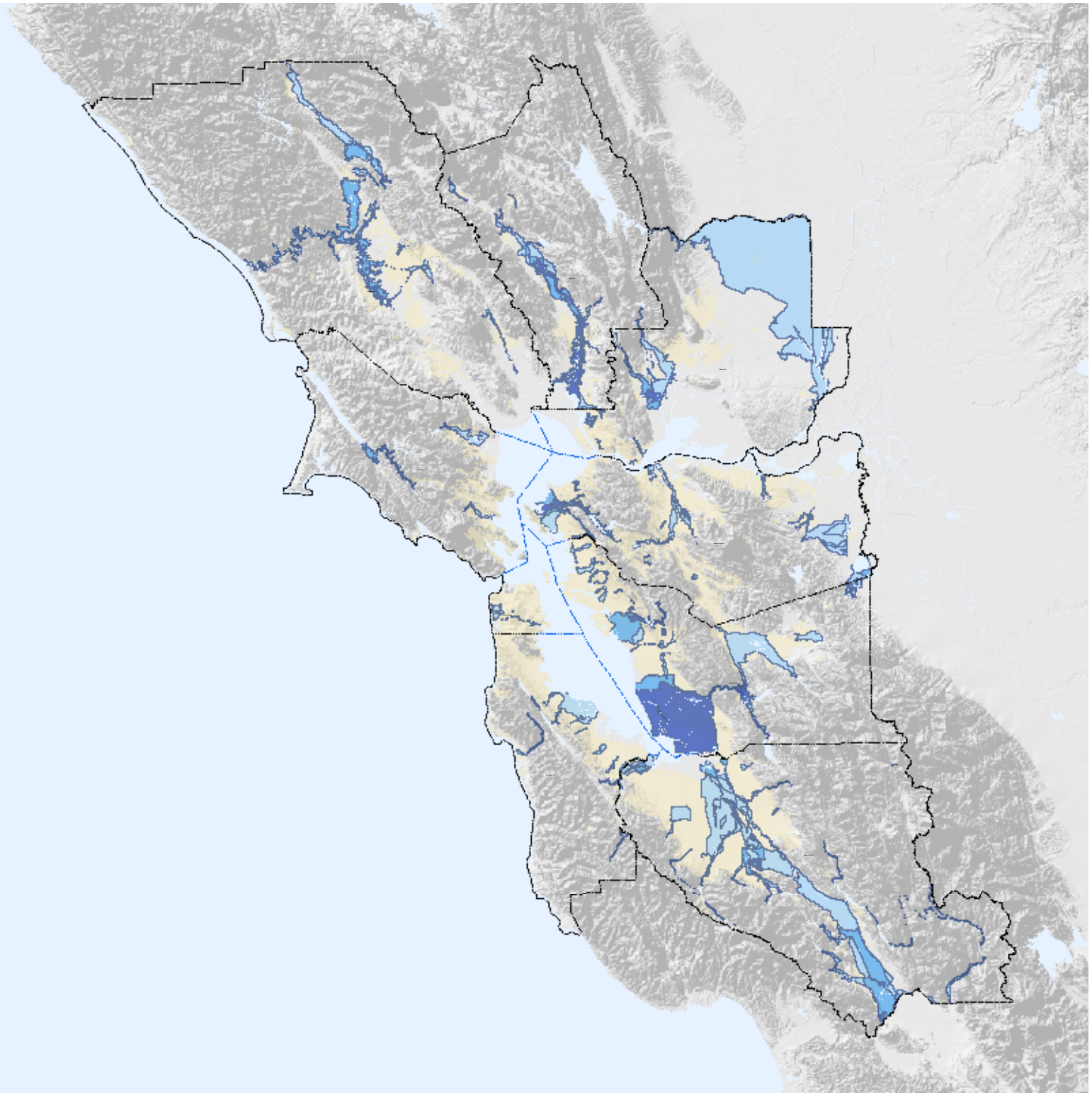
Areas that can be inundated by any one of:

- 5 different dams
- 4 different dams
- 3 different dams
- 2 different dams
- 1 dam only
- Urbanized Area
- Dam Location

Shaded to show topographical relief

N

Scale: 1 inch equals 18.74 miles



This map is intended for planning use only and is not intended to be site specific. Rather it depicts the general risk within neighborhoods and the relative risk from community to community.

This hazard map is generalized from maps dam owners are required to prepare and file with the State Office of Emergency Services.

Source: ABAG, 1995

This map is available at http://quake.abag.ca.gov

ABAG Geographic Information Systems

Shoreline Areas Vulnerable to Sea Level Rise in the San Francisco Bay Region

Area vulnerable to an approximate 16-inch sea level rise

Area vulnerable to an approximate 55-inch sea level rise

Urbanized Area

Shaded to show topographical relief

N

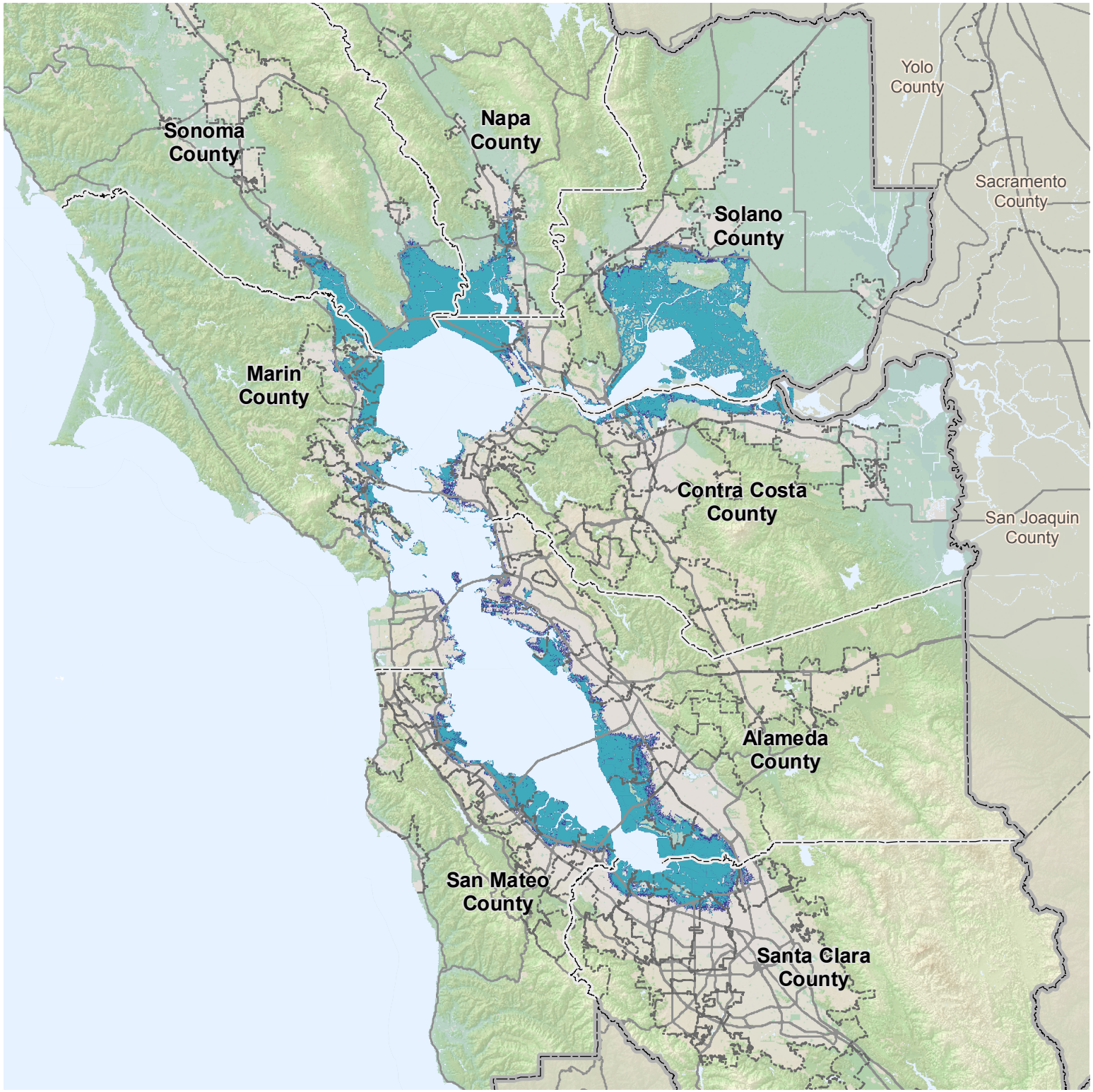
Scale: 1 inch = 11.88 miles

Source: Inundation data from Knowles, 2008. Additional salt pond elevation data by Siegel and Bachand, 2002.

This map is available at http://quake.abag.ca.gov

Disclaimer: Inundation data does not account for existing shoreline protection or wave activity. This map is for informational purposes only. Users, by their use, agree to hold harmless and blameless the Association of Bay Area Governments along with the State of California and its representatives and its agents for any liability associated with its use in any form. The maps and data shall not be used to assess actual coastal hazards, insurance requirements, or property values or be used in lieu of Flood Insurance Rate Maps issued by teh Federal Emergency Management Agency (FEMA).

ABAG Geographic Information Systems



Repetitive Loss Properties in Floods

Repetitive Loss Property

Creeks, Streams and Rivers

Urbanized Area

FEMA Flood Hazard Areas

Zone V- (100 yr. Flood Zone)

Zone A- (100 yr. Flood Zone)

Zone X500- (500 yr. Flood Zone or other concerns)

Shaded to show topographical relief

Detailed FEMA Explanation

Flood Zone	Description
Zone V	This code identifies an area inundated by 1% annual chance flooding with velocity hazard (wave action).
Zone A	This code identifies an area inundated by 1% annual chance flooding.
Zone X500	This code identifies an area inundated by 0.2% annual chance flooding; an area inundated by 1% annual chance flooding with average depths of less than 1 foot or with drainage areas less than 1 square mile; or an area protected by levees from 1% annual chance flooding.

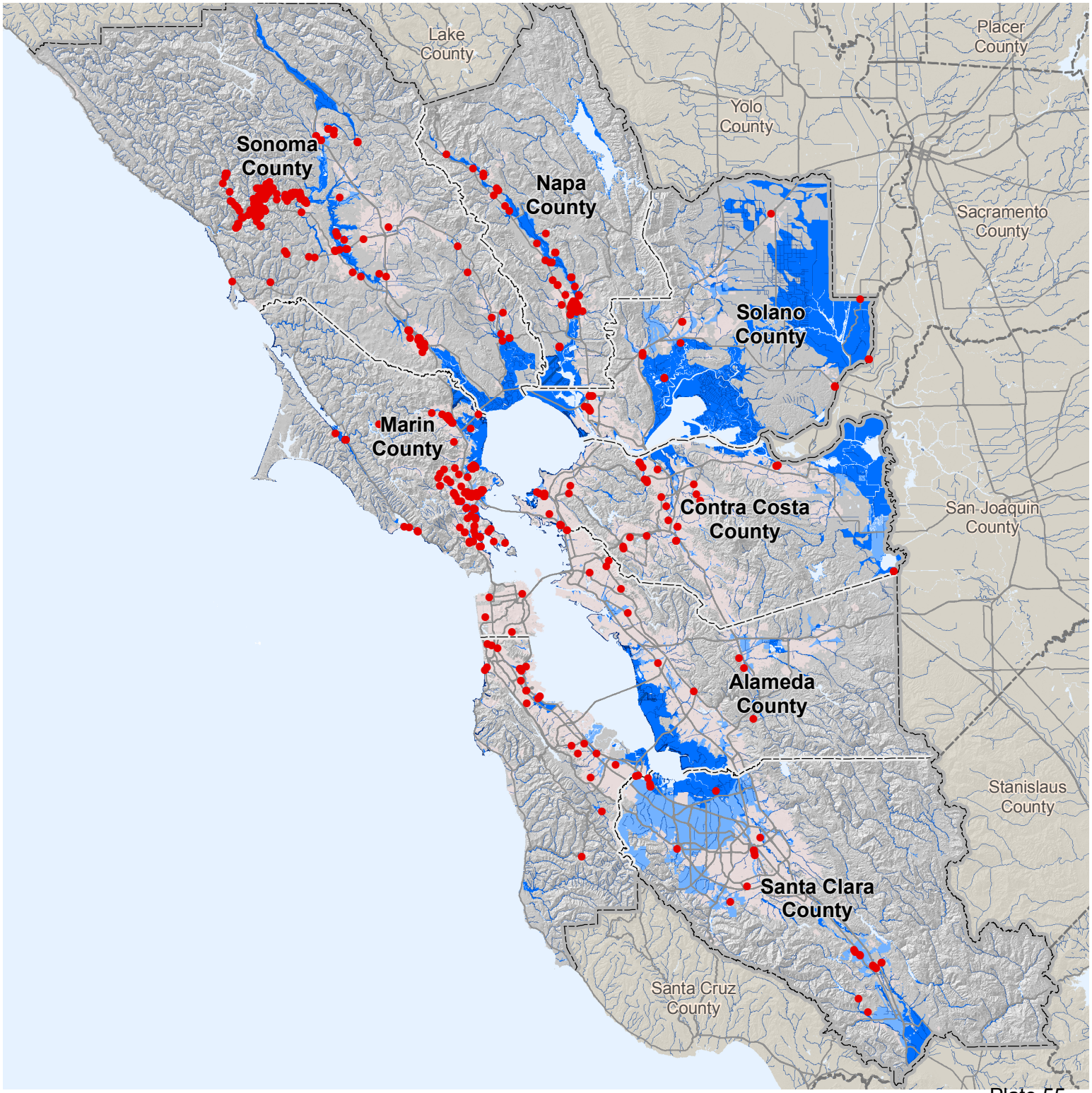
N

Scale: 1 inch = 16.84 miles

Sources:
Repetitive Loss Properties - FEMA National Flood Insurance Program and ABAG (2004)
Flood Zones - FEMA Q3 (2003) and DFIRM (2009) Flood Data
Base Data - TeleAtlas (2008)

The product has been designed to support planning activities.
A more detailed version of this map is available at http://quake.abag.ca.gov

ABAG Geographic Information Systems



Liquefaction Susceptibility Map

Susceptibility Level

- Very High
- High
- Moderate
- Low
- Very Low
- Major Roads
- Local Roads

Scale: 1 inch = 19.66 miles

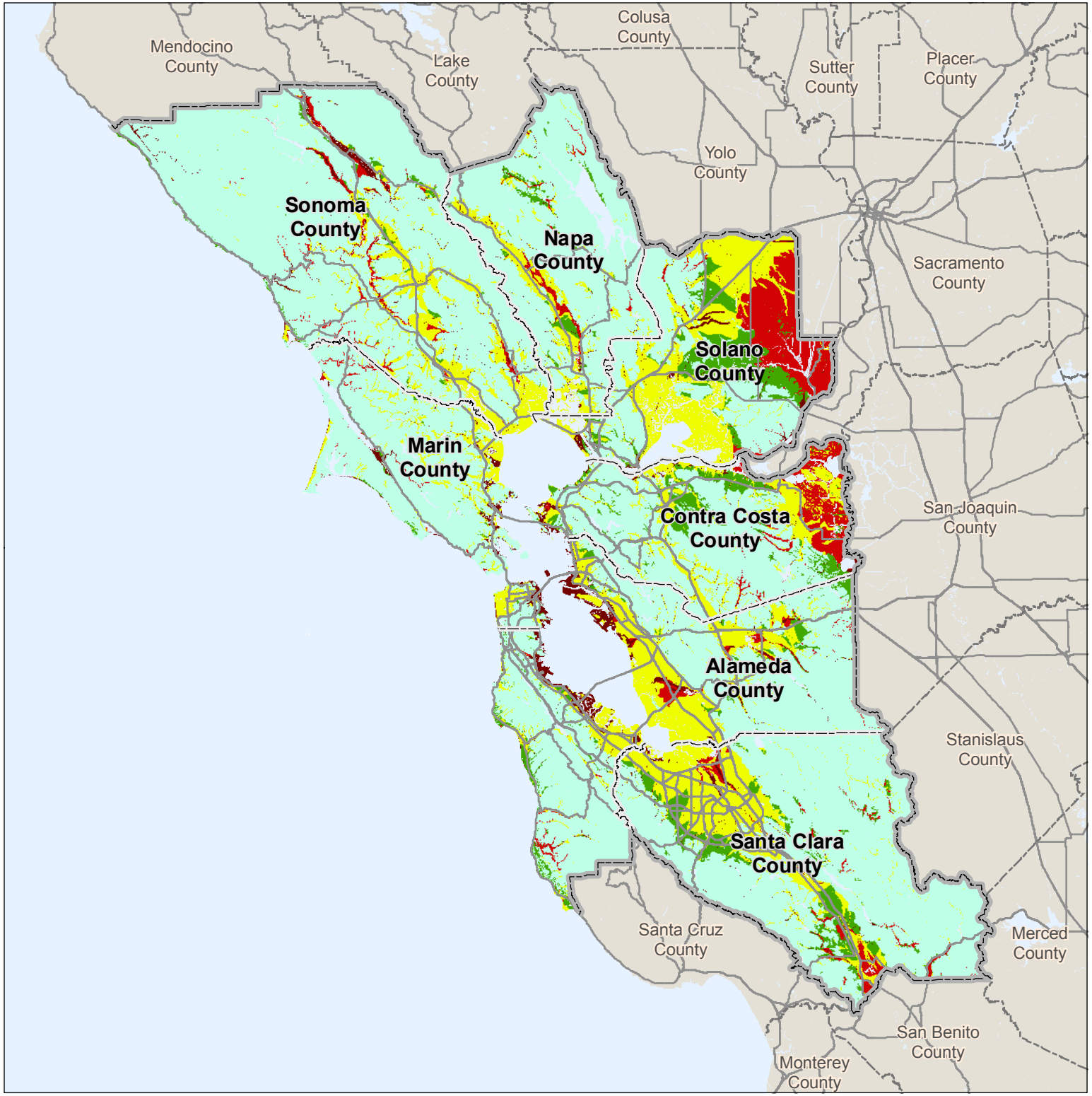
This map is intended for planning use only and is not intended to be site-specific. Rather, it depicts the general hazard level of a neighborhood and the relative hazard levels from community to community. Hazard levels are less likely to be accurate if your neighborhood is on or near the border between two zones. This information is not a substitute for a site-specific investigation by a licensed professional.

This map is available at http://quake.abag.ca.gov

Sources:
This map is based on work by William Lettis & Associates, Inc. and USGS.
USGS Open-File Report 00-444, Knudsen & others, 2000 and
USGS Open-File Report 2006-1037, Witter & others, 2006

For more information visit:
http://pubs.usgs.gov/of/2000/of00-444/
http://pubs.usgs.gov/of/2006/1037/

ABAG Geographic Information Systems



Plate