An Explanatory Text to Accompany the Fault Activity Map of California

Scale 1:750,000

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INTRODUCTION

The 2010 edition of the FAULT ACTIVTY MAP OF CALIFORNIA was prepared in recognition of the 150th Anniversary of the California Geological Survey (CGS). It replaces the *FAULT ACTIVITY MAP OF CALIFORNIA AND ADJACENT AREAS* (Jennings, 1994) and is more complete with the addition of recent data. The map shows the locations of known faults that can be portrayed at 1:750,000 scale and indicates the latest age when displacements took place, according to available data. The displacements may have been associated with earthquakes or may have been the result of gradual creep along the fault surface. Faults exhibiting creep or triggered creep are identified on the map with appropriate symbols. The faults are color-coded and designated into one of five categories: historic (red), Holocene (orange), late Quaternary (green), undivided Quaternary (purple), and pre-Quaternary (black).

Fault names are indicated on the map where space permits, including newly named faults. Some of the faults on the 1994 map were deleted or revised to reflect new, more detailed studies. The ages of faults on the 1994 map have been revised where improved dating methods were available. Lastly, occurrences of surface faulting caused by earthquakes since 1994 have been added.

In order to effectively catalog the information, the faults have generally retained the reference numbers originally assigned in 1994. These numbers are referenced in Appendix A and Appendix B accompanying this map and report. Each entry in these appendices includes: the name of the fault, its most recent age of activity, and the sources for fault location and recency. If the fault has been encompassed in an Official Earthquake Fault Zone, the 7.5 minute quadrangle maps prepared and issued by CGS are listed.

The 1994 version of the Fault Activity Map of California showed selected faults that exhibited Quaternary displacement in Oregon, Nevada, and Baja California. We decided to limit the data to within California's boundaries for the 2010 version of the Fault Activity Map. Consult the National Quaternary Fault and Fold Database for fault trace data for states adjacent to California (http://earthquake.usgs.gov/hazards/qfaults/). The aligned seismicity and locations of Quaternary volcanoes are not shown on the 2010 Fault Activity Map. However, the location of Quaternary volcanoes can be found on the 2010 version of the Geologic Map of California (Jennings and others, 2010).

Digital Compilation

A significant difference from the 1994 version of the Fault Activity Map of California is the method of fault compilation. Almost all of the Quaternary faults shown in the 2010 version of the Fault Activity Map have been digitally compiled from original-scale source maps (1:12,000 to 1:250,000) used for the 1975 and 1994 maps, as well as more recent mapping when available. This compilation method insures that locations of these faults are more accurate than those depicted on previous editions of the Fault Activity Map. Also, the line width for faults depicted on the 2010 Fault Activity Map has been reduced from 0.35 mm to 0.2 mm (260 m to 150 m width at a scale of 1:750,000). This was done in order to more accurately portray the location and complexity of faults showing evidence of displacement during Quaternary time. The Pre-Quaternary faults remain the same as in the 1994 version.

Base Materials

The base map for the new Fault Activity Map of California consists of a shaded relief image and a combination of cultural, political, transportation, geographic, and hydrologic features. The onshore shaded relief image was derived from 90-meter Digital Elevation Models (DEM) available from the National Elevation Data Set (http://ned.usgs.gov). The offshore bathymetric shaded relief image was derived from DEMs available from the California Department of Fish and Game (http://dfg.ca.gov/biogeodata/gis/mr_bathy.asp). The cultural, political, transportation, geographic and hydrologic features depicted in the base map were largely derived from data obtained from the Cal-Atlas Geospatial Clearinghouse (http://atlas.ca.gov).

Select geographic features throughout the state and in the offshore region were digitized from USGS 1:500,000-scale topographic maps and include a selection of peaks in the Sierra Nevada named after historic survey members. Projection of the base map layers is Teale Albers, 1983 North American Datum.

FAULTS

Introduction

The Fault Activity Map of California shows where faults have been recognized and mapped. Many of the faults are assigned numbers and are keyed to descriptions in Appendix A and Appendix B. In addition, Table 1 describes surface fault rupture associated with earthquakes that are known to have occurred in California. If a Quaternary fault has no number, it was taken from the initial *Fault Map of California* (Jennings, 1975). Refer to Bulletin 201 (Jennings, 1985) for the source on which the fault and its age were based.

As with the 1994 Fault Map of California, a conservative approach was followed for this new edition - we felt it is better to show those faults where evidence is questionable rather than to ignore them. Hence, some questionable faults may have been included as long as they are based on some reasonable data. Omission of such information may lead decision-makers for building critical structures to assume no fault hazard exists. The prudent course should be to include questionable data to suggest where future investigations are needed before any final design and construction takes place.

Although it is not possible to tell if a fault will be reactivated, we assume that if a fault has been active for millions of years and has been active in historic or recent geologic (Quaternary) time, it is very likely to become active again. This assumption is borne out by studies of historically active faults in California and elsewhere.

Fault Activity Definitions

The terms "active," "potentially active," "capable," and "inactive," have been interpreted differently by geologists, seismologists, and agencies, depending on the purpose on hand. To avoid confusion, this Fault Activity Map does not use these terms. Instead, faults are classified according to the age of latest displacement and, hence, are as factual as the geologic data upon which the fault is based. This procedure continues the practice used for the 1994 Fault Activity Map of California. Because a common understanding of terms is essential, the following excerpts from *BULLETIN 201, An Explanatory Text to Accompany the 1:750,000 Scale Fault and Geologic Maps of California* (Jennings, 1985) are restated here.

> "In defining the term "fault," geologists have no significant disagreement; the various definitions differ only in the elaboration. All agree in defining a fault as a tectonic fracture or break in the earth's crust along which displacement (horizontal, vertical, or diagonal movement) has taken place. In elaborating, some definitions further specify: (1) that the fracture or break may be either a discrete surface or a wide zone of fractures; (2) that the fault may be a result of repeated displacements which took place suddenly or very slowly as a result of creep slippage; and (3) that the cumulative displacement may be measurable from millimeters to kilometers.
>
> All definitions of "active faults" in common use imply future movement commonly constituting a geologic hazard. In recent years, specialized definitions vary according to the type of structure to be built in the vicinity of a fault and the degree of risk acceptable for a particular type of structure. The most conservative definition is that of the U.S. Nuclear Regulatory Commission (NRC). In defining fault activity for its special uses, the NRC sought to avoid the misunderstanding that might arise from its use of the term "active" by using the term "capable" in its place. A "capable fault" is defined as a fault that exhibits one or more of the following characteristics:
> (1) movement at or near the ground surface at least once within the past 35,000 years, or movement of a recurring nature within the past 500,000 years; (2) macro seismicity instrumentally determined with records of sufficient precision to demonstrate a direct relationship with the fault; (3) a structural relation to a fault deemed "capable" such that movement on one can be reasonably expected to be accompanied by movement on the other.
>
> In California, special definitions for active faults were devised to implement the Alquist-Priolo Earthquake Fault Zoning Act of 1972, which regulates development and construction in order to avoid the hazard of surface fault rupture. The State Mining and Geology Board established Policies and Criteria in accordance with the Act. They defined an "active fault" as one which has "had surface displacement within Holocene time (about the last 11,000 years). A "potentially active fault" was considered to be any fault that "showed evidence of surface displacement during Quaternary time (last 1.6 million years). Because of the large number of potentially active

Table* 1. *Known surface fault rupture associated with earthquakes in California.

Year	Fault (location)	Magnitude[1]	Surface Rupture Length (kilometers)	Maximum Displacement and Type of Slip[2] (centimeters)	References[3]
1812	San Andreas (Wrightwood)	7±	25+	No data	Jacoby and others, 1988
1838	San Andreas (San Francisco-Mission Santa Clara?)	7	60+	No data	Louderback, 1947 Toppozada and Borchardt, 1998 Bakun, 1999
1857	San Andreas (Parkfield-Fort Tejon to Wrightwood)	7.9	322±	RL 950	Wood, 1955 Bonilla, 1970 Agnew and Sieh, 1978 Sieh, 1978b
1861	Calaveras (Dublin)	5.3	13±	No data	Radbruch, 1968 (p. 52-53) Toppozada and others, 1981 (p. 148)
1868	Hayward (Oakland to Warm Springs)	6.8	48±	RL 90 V 30	Lawson and others, 1908 Bonilla, 1970 Toppozada and others, 1981 (p. 152)
1868	San Andreas (Dos Palmos)	No data	“long fissure”	No data	Townley and Allen, 1939 (p. 500
1872	Owens Valley[4] (Big Pine to Olancha)	7.8[4]	100+	RL 600 Some LL V 700	Hobbs, 1910 Knopf, 1918 Bonilla, 1970 Beanland and Clark, 1994
1875	Surface rupture previously reported at Clio[5]	6.0?	No data	No data	Bonilla, 1970 Toppozada and others, 1981 (p. 156)
1890	San Andreas (Chittenden)	6.3	8±	30? Lateral	Holden, 1898 (p. 150) Lawson and others, 1908 (p. 110) Toppozada and others, 1981 (p. 162)
1892	Unamed[6] (Allendale, Sacramento Valley)	6.4	1.6	No data	Toppozada and others, 1981 (p. 164)
1899	San Jacinto[7]	6.6	3.2?	No data	Daneš, 1907 Bonilla, 1970 Toppozada and others, 1981 (p. 169)
1901	San Andreas (Parkfield)	6+	“several miles”	V 30	Lawson and others, 1908 (p.40) Townley and Allen, 1939 Brown and others, 1967 (p. 10)
1906	San Andreas (Shelter Cove to San Juan Bautista)	7.8	432	RL 600 V 90	Lawson and others, 1908 Bonilla, 1970
1916	San Andreas[8] (Gorman area)	6±	No data	O data	Branner, 1917 Bonilla, 1959 (p. 134)
1922	San Andreas (Cholame area)	6.5	0.4?	No data	Townley and Allen, 1939 Richter, 1958 (p. 533)
1934	San Andreas (Parkfield area)	6.3	3	No data	Byerly and Wilson, 1935 (p. 233) Richter, 1958 (p. 534)
1940	Imperial (Calif.-Mex.)	6.9	64+	RL 580 V 120	Ulrich, 1941 Bonilla, 1970 Hileman and others, 1973
1947	Manix (Mojave Desert)	6.2	1.6	LL 7.6	Richter, 1958 Bonilla, 1970 Hileman and others, 1973
1950	Fort Sage (Honey Lake Valley)	5.6	8.9	V 20	Gianella, 1957 Bonilla, 1970
1951	Superstition Hills	5.6	3.2±	RL slight	Allen and others, 1965 Bonilla, 1970

Table 1 - continued

Year	Fault (location)	Magnitude[1]	Surface Rupture Length (kilometers)	Maximum Displacement and Type of Slip[2] (centimeters)	References[3]
1952	White Wolf (Arvin-Tehachapi)	7.4 and 6.4	57	LL 76 V 122	Buwalda and St. Amand, 1955 Bonilla, 1970 Hileman and others, 1973
1966	Imperial	3.6	9.7	RL 1.5	Brune and Allen, 1967b Bonilla, 1970
1966	San Andreas (Parkfield)	6.4	37	RL 17.8 [9] V 5 [9]	Brown and others, 1967 Bonilla, 1970
1966	Unnamed (Truckee)[10]	5.9	16.1	No data	Carter, 1966 Kachadoorian and others, 1967
1968	Unnamed (La Habra)[11]	?	0.32	LL 5 V 2.5±	Yerkes, 1972 (p. 31) Lamar, 1972
1968	Coyote Creek (Borrego Mountain)	6.6	31	RL 38+	Allen and others, 1968 Hileman and others, 1973 Clark, 1972a
1971	San Fernando	6.6	15.3	LL 100 V 100	U.S. Geological Survey, 1971 (p.55) Hileman and others, 1973 Allen and others, 1975 (p. 275)
1975	Galway Lake	5.2	6.8	RL 1.5	Hill and Beeby, 1977 Bryant and Hart, 2007
1975	Cleveland Hill (Oroville Dam area)	5.7	5.7	RL 4 V 5	Hart and Rapp, 1975
1975	Brawley	4.7	10.4	V20	Sharp, 1976 Bryant and Hart, 2007
1978	Stephens Pass (E. of Mt. Shasta)	4.6	2+	V 30	Bennett and others, 1979 Bryant and Hart, 2007
1979	Homestead Valley	5.2	3.25	RL 10 V 4	Hill and others, 1980
1979	Johnson Valley	5.2	1.45	RL 1 V 1	Hill and others, 1980
1979	Calaveras (Coyote Lake area)	5.8	39?	RL 0.5	Urhammer, 1980 Lee and others, 1979 Armstrong, 1979
1979	Imperial Brawley Rico (Imperial County)	6.6	30 13 1	RL 55 V 15 V10	U.S. Geological Survey, 1982
1980	Greenville (Livermore Valley area)	5.8	6.5	RL 3	Hart, 1981b
1980	Hilton Creek (Mammoth Lakes area)	6.0 - 6.5	20	V 30	Taylor and Bryant, 1980 Bryant and Hart, 2007
1981	"Lompoc Quarry"[12]	2.5	0.6	V 25	U.S. Geological Survey, 1984
1982	Little Lake	5.2	10	RL slight V slight	Roquremore and Zellmer, 1983 Bryant and Hart, 2007
1983	"Coalinga Nose"	6.7	0.005	V 5	Rymer and Ellsworth, 1990 Bryant and Hart, 2007
1983	Nunez (Coaling area)	5.2-5.9	3.3	V 60	Rymer and Ellsworth, 1990 Hart and McJunkin, 1983
1984	Calaveras (Morgan Hill area)[13]	6.1	1.2	RL 20?	Hart, 1984c
1986	Banning	6.1	9	RL 7	Sharp and others, 1986b
1986	White Mountains (Chalfant Valley area)	6.2	13	RL 11	Kahle and others, 1986 Lienkaemper and others, 1987

Table 1 - continued

Year	Fault (location)	Magnitude[1]	Surface Rupture Length (kilometers)	Maximum Displacement and Type of Slip[2] (centimeters)	References[3]
1987	Elmore Ranch	6.2	12	LL 12	Hanks and Allen, 1989 Kahle and others, 1988
1987	Superstition Hills	6.6	28	RL 80	Hanks and Allen, 1989 Kahle and others, 1988
1989	San Andreas (Loma Prieta area)	6.9	1[14]	RL 2.5	U.S. Geological Survey, 1989
1992	Parts of Johnson Valley, Homestead Valley, Emerson, Camp Rock, Eureka Peak, Burnt Mountain (Landers)	7.3	85	RL 460-600	Hart and others, 1993 Bryant, 1993b, 1994, 2004 Treiman, 1992
1994	Various ground deformations, but not on causative fault. Earthquake hypocenter on blind fault (Northridge)	6.7	-	-	Rymer and others, 2001
1995	Airport Lake Kern and Inyo counties)	5.4-5.8	2.5	1	Treiman, 1995
1999	Lavic Lake, Bullion, Mesquite Lake (Hector Mine area)	7.1	45	RL 525	Treiman and others, 2002
2004	San Andreas (Parkfield)	6.0	32	RL 15[15] V 3[15]	Rymer and others, 2006

[1]Earthquake magnitudes greater than 6 prior to 1985 are mostly from Toppozada and others, 1986. Magnitudes listed after 1985 are either surface wave magnitude (Ms) or moment magnitude (Mw). The scale is logarithmic so that M8 is 10 times that of M7 and 100 times that of M6. In energy terms a M8 earthquake radiates 30 times that of M7 and 900 times the energy of M6.

[2]RL=right lateral, LL=left lateral; V=vertical.

[3]Complete references listed in Appendix C.

[4]Four large earthquakes: M8 and 6.5, and a few days later M6.1 and 6.6 (Toppozada and others, 1986).

[5]The 1875 earthquake was thought to have occurred in Mohawk Valley as shown on the Fault Map of California, 1975. Turner (1897), 22 years after the event, thought he could locate ground ruptures for this event described by local residents near Clio. New data and isoseismal maps (Toppozada and others, 1981) indicate the earthquake was centered to the east, probably on the Honey Lake Fault.

[6]Two early newspaper accounts (Toppozada and others, 1981) describe a fissure about 1.6 Kilometers (1 Mile) long near Allendale, 8 kilometers (5 miles) west of Dixon (not plotted on Fault Activity Map of California for lack of data).

[7]Questionable fault rupture — may have been landslides (Allen and others, 1965; Sharp, 1972). Not plotted on Fault Activity Map of California.

[8]Questionable fault rupture — cracking may have been caused by shaking only.

[9]Includes tectonic creep that occurred within 50 days following main shock.

[10]Surface fault rupture not conclusive.

[11]Some uncertainty regarding earthquake associated with 1968 ground rupture near La Habra (Yerkes, 1972); probably related to oil and brine withdrawal.

[12]Lompoc quarry "fault" triggered by unloading of mined-out diatomite.

[13]Questionable faulting (may be landsliding).

[14]Surface rupture possibly triggered slip.

[15]Includes tectonic creep that accumulated for several months following main shock.

faults in California, the State Geologist adopted additional definitions and criteria in an effort to limit zoning to only those faults with a relatively "high" potential for surface rupture. Thus, the term "sufficiently active" was defined as a fault for which there was evidence of Holocene surface displacement. This term was used in conjunction with the term "well-defined," which relates to the ability to locate a Holocene fault as a surface or near-surface feature (Bryant and Hart, 2007).

Another special definition is used by the U.S. Bureau of Reclamation in the design of dams. According to this agency, any fault exhibiting relative displacement within the past 100,000 years is an active fault.

Table 2 is a summary of the fault definitions in common use and the factors on which they are based. Each of these definitions is concerned with future fault activity and this is based on the recent history of the fault. Depending on the type of structure being planned and the acceptable risk to be taken, the definition of an active fault may be based on the last 11,000 to 100,000 years or on repeated movements during the past 500,000 years.

Of recent concern is the possibility that faults, even geologically ancient ones (that is, pre-Quaternary), can be reactivated by the influences of man. For example, there are now several authenticated cases showing that the filling of a reservoir can induce fault activity and earthquakes of significant size. In this way, what may have been considered "inactive faults" can become "active faults."

The term "active fault" is best avoided altogether when seismic risk is not a consideration. For simply describing the characteristics of faults, such terms as "historic

Table 2. Comparison of various commonly used fault definitions.

	Design Structure	Fault Term	Time of Last Displacement on Fault	Other Criteria
NRC (U.S. Nuclear Regulatory Comm.), 1978	Nuclear power plants	Capable	1) at least once within past 35,000 yrs. or 2) two or more times within past 500,000 yrs.	1) Macroseismicity relatable to specific fault. 2) Structural relationship to a capable fault such that movement on one can cause movement on another.
California Geological Survey (Bryant and Hart, 2007)	Structures for human occupancy	Active	Within Holocene (11,000 yrs.).	
		Potentially Active	During Quaternary (last 1.6 million years)	
USBR (U.S. Bureau Reclamation), 1976	Dams	Active	Within past 100,000 yrs	
Grading Codes Board (Assoc. Eng. Geol.), 1973	Not specified	Active	Historic	a) Ground water barrier or anomaly within Holocene deposits. b) Related earthquake epicenters
		Potentially Active	No Historic evidence but strong evidence of geologically recent activity	
		High Potential	Holocene	
		Low Potential	Pleistocene (less than 1 Myrs)	
Louderback, 1950	Not specified	Active	Historic or Recent	Related earthquake epicenters.

fault," "Holocene fault," "Quaternary fault, "pre-Quaternary fault," or "seismically active fault" are preferable. With these designations, a project geologist, after confirming the designation of a fault, can then go on and make an independent determination of its activity relative to the type of structure to be built and the acceptable risk."

Fault Age

The fault map depicts what is known about the recency of displacement along faults. However, future studies may find additional faults, require replotting of faults, or, in some cases, change the age classification shown here. The age classifications are based on geologic evidence to determine the youngest faulted unit and the oldest unfaulted unit along each fault or fault section. If Quaternary displacement is indicated, the fault is classified into one of three categories within Quaternary time (Holocene, late Quaternary, or Quaternary undifferentiated). Faults with reported surface rupture during historic time are further classified as historically active.

The reliability of the age classifications on this map is dependent upon several factors. First, and perhaps foremost, fault-related geomorphic features may have been destroyed by natural or human activities. Geomorphic features, such as scarps, troughs, offset drainage channels, triangular faceted spurs and sag ponds, are geologically temporary. They may be easily destroyed by erosion or covered by vegetation and their preservation is strongly affected by climate. Likewise, fault features may be modified or destroyed by works of humans, especially in urban areas. Second, geologists may have different interpretations of faults after examining incomplete geologic evidence for recency of faulting. Third, the ages of the rock units used to classify the faults may not be accurately known, or in some cases, Quaternary rocks may be absent. Fourth, some of the data used to classify faults on this map were based on studies not done directly to determine the recency of fault activity.

The color code on the Fault Activity Map of California reflects the *latest* age at which fault rupture has occurred and not the age the fault originated. Thus, a fault showing Holocene or Quaternary displacement may have originated several million years before and may have had several previous displacements.

The age of some faults listed in Appendix A, referenced by Clark and others (1984), is given in years. These are generally minimum and maximum ages of offset features. These features include a wide range of geologic, biologic and cultural features that allow fault displacements to be measured or estimated and dated. Among the dating methods used were: radiometric dating of volcanic rocks; soil profile development; soil or geomorphology correlations; historic records; dendrochronology (tree rings); amino acid and uranium series on mollusks; carbon 14 on charcoal and organic sediments; paleontology; and sea-level curves.

Blind Thrust Faults

Blind thrust faults typically are low angle structures in areas of active folding, such as the Transverse Ranges of southern California. The upper extent of the fault plane may terminate several kilometers below the ground surface and the surface expression is often delineated by young anticlines. These faults can be seismogenic (Stein and Yeats, 1989) and have produced strong earthquakes in California, such as the 1983 Mw 6.4 Coalinga and 1994 Mw 6.7 Northridge earthquakes. Although significant work has been done on identifying blind thrust faults and associated folds, especially in the southern California area (Plesch and others, 2007), we have decided to continue the practice of showing faults that displace the surface, as well as near surface concealed faults, on the 2010 Fault Activity Map of California. The National Seismic Hazard Maps incorporate blind thrust fault models in California, specifically in the southern Transverse Ranges/northern Peninsula Ranges boundary, Santa Barbara Channel, and along the western margin of the Great Valley (WGCEP, 2008). Consult this reference for information on location and characterization of blind thrust faults.

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APPENDIX A

CLASSIFIED FAULTS

(For complete references see Appendix C)
Note: The names following the abbreviation EFZ (Earthquake Fault Zone) are the quadrangles issued by the State showing the boundaries of officially zoned faults.

1
MAHOGANY MOUNTAIN FAULT ZONE
Holocene; Quaternary
Bryant, W A, 1990a
Hart and others, 1991
EFZ: Dorris, Red Rock Lakes

2
IKES MOUNTAIN FAULT AND UNNAMED FAULTS OF BUTTE VALLEY
Late Quaternary; Quaternary
Williams, H., 1949 (p. 54, Plate 1)
Wood, P. R., 1960
Bryant, WA, 1990a
Hart and others, 1991

2A
MEISS LAKE FAULT
Late Quaternary; Holocene
Bryant, W A, 1990a
Hart and others, 1991

3
MOUNT HEBRON FAULT ZONE
Late Quaternary?
Bryant, W.A., 1990a
Wood, P.R., 1960

4
CEDAR MOUNTAIN FAULT ZONE
Late Quaternary; Holocene
Bryant, W.A., 1990a
Hart and others, 1991
EFZ: Sams Neck, Dorris, Macdoel, Sheep Mtn., Bray, Sharp Mtn., Tennant, Gamer Mtn.

5
GILLEM FAULT
Late Quaternary; Quaternary
Donnelly-Nolan and Champion, 1987
Donnelly-Nolan, J.M., 1989
Bryant, W.A., 1990e
Hart and others, 1991

6
BIG CRACK FAULT
Late Quaternary
Donnelly-Nolan and Champion, 1987
Donnelly-Nolan, J.M., 1989
Bryant, W.A., 1990e
Hart and others, 1991

7
SURPRISE VALLEY FAULT
Holocene; Late Quaternary
Clark and others, 1984 (5,600-13,000 yrs.)
Bryant, W.A., 1990b
Hart and others, 1991
Hedel, C.W., 1984
EFZ: Fort Bidwell, Lake City, Cedarville, Warren Peak, Eagle Peak, Eagleville, Snake Lake

7A
GOOSE LAKE FAULT
Late Quaternary
Bryant, W.A., 1990d
Hart and others, 1991
Lydon, P.A., 1969

7B
DAVIS CREEK FAULT
Late Quaternary
CDWR, 1963
Lydon, P.A., 1969
Bryant, W.A., 1990d
Hart and others, 1991

7C
FITZHUGH CREEK FAULT
Quaternary
CDWR, 1963
Bryant, W.A., 1990d
Hart and others, 1991

7D
JESS VALLEY FAULT
Quaternary
CDWR, 1963
Bryant, W.A., 1990d
Hart and others, 1991

8
UNNAMED FAULT
Late Quaternary
Donnelly-Nolan, J.M., 1989
Muffler and others, 1989 (p. 200)

9
UNNAMED FAULTS
Holocene
Donnelly-Nolan, J.M., 1989

10
UNNAMED FAULTS
Quaternary
Bryant, W.A., 1990a
Hart and others, 1991

11
EAST CEDAR MOUNTAIN FAULT ZONE (SOUTHERN PART)
Holocene
Bryant, W.A., 1990a
Donnelly-Nolan, J.M., 1989
Hart and others, 1991
EFZ: Bray, Sharp Mountain, Tennant

12
YELLOW BUTTE FAULT
Quaternary
Mack, S., 1960
Williams, H., 1949 (p. 53)

13
LOST MAN FAULT (OFFSHORE)
Quaternary
Clarke and Field, 1989
Clarke, S.H., Jr., 1992 (age, p. 215)
Kelsey and Carver, 1988 (age, p. 4812)

13A
UNNAMED FAULT SOUTH OF CRESCENT CITY (OFFSHORE)
Quaternary?
Clarke and Field, 1989
Clarke, S.H., Jr., 1993

14
GROGAN FAULT (OFFSHORE)
Quaternary
Clarke and Field, 1989
Clarke, S.H., Jr., 1992 (age, p. 215)
Kelsey and Carver, 1988 (age, p. 4812)

15
SEAWARD EDGE OF CASCADIA SUBDUCTION ZONE (OFFSHORE)
Holocene
Clarke and Field, 1989
Clarke, S.H., Jr., 1992 (p. 199, Fig. 2, p. 220)
Carver, GA, 1993
Kelsey and others, 2005
Nelson and others, 2006

16
BALD MOUNTAIN-BIG LAGOON FAULT ZONE (OFFSHORE)
Late Quaternary
Clarke and Field, 1989
Clarke, S.H., Jr., 1992 (age, p. 215)
Kelsey and Carver, 1988 (age, p. 4812)

17
LOST MAN FAULT
Quaternary
Aalto and others, 1981
Kelsey and Carver, 1988

18
SURPUR CREEK FAULT
Quaternary
Aalto and others, 1981
Kelsey and Carver, 1988 (Fig. 2)
Wagner and Saucedo, 1987

19
FAULTS BENEATH MOUNT SHASTA
Quaternary
Williams, H., 1934 (p. 232, 234-236, 244)

20
ASH CREEK FAULT ZONE
Quaternary
Bryant, WA, 1990a
Hart and others, 1991

21
BLACK FOX MOUNTAIN FAULT ZONE
Quaternary
Bryant, W.A, 1990a
Hart and others, 1991

22
STEPHENS PASS FAULT
Historic (1978 earthquake rupture)
Bennett and others, 1979
Bryant, WA, 1990a
Hart and others, 1991
Cramer, C.H., 1979
EFZ: Rainbow Mtn.

23
UNNAMED FAULTS
Late Quaternary; Holocene?
Hart and others, 1991

24
MAYFIELD FAULT ZONE
Holocene
Donnelly-Nolan, J.M., 1990
Wills, C.J., 1990a
Hart and others, 1991
EFZ: Porcupine Butte, Indian Spring Mtn., East of Pondosa

25
UNNAMED FAULTS (PART OF MAYFIELD FAULT ZONE)
Late Quaternary; Holocene
Champion and Donnelly-Nolan, 1989
Donnelly-Nolan, J.M., 1989
Wills, C.J., 1990a
Woodward-Clyde Consultants, 1987b
Hart and others, 1991

26
LIKELY FAULT
Quaternary; Late Quaternary
Bryant, WA, 1990c and written communication 8/2/93 (late Quaternary in part)
CDWR, 1963
Grose and Saucedo, 1993
Hart and others, 1991
Howard, J.K., 1988 (pre-Quaternary?)
Potter, S.L., 1988 (pre-Quaternary)
Weick, R.J., 1990 (Holocene in part?)

26A
NELSON CORRAL FAULT
Late Quaternary
Bryant, WA, 1990c
CDWR, 1963
Hart and others, 1991

27
PITTVILLE FAULT
Late Quaternary; Holocene
Wills, C.J., 1990a
Woodward-Clyde Consultants, 1987b
Hart and others, 1991
EFZ: Timbered Crater, Day, Pittville

28
McARTHUR FAULT
Holocene
Wills, C.J., 1990a
Hart and others, 1991
Woodward-Clyde Consultants, 1987b
EFZ: Fall River Mills, Cable Mtn., Jellico, Swains Hole

29
HAT CREEK FAULT
Holocene
Wills, C.J., 1990a
Hart and others, 1991
Woodward-Clyde Consultants, 1987b
EFZ: Hogback Ridge, Murken Bench, Old Station

30
UNNAMED FAULTS (PARTS OF HAT CREEK AND McARTHUR FAULT ZONES)
Late Quaternary and Holocene
Wills, C.J., 1990a
Hart and others, 1991
Woodward-Clyde Consultants, 1987b

30A
ROCKY LEDGE FAULT
Holocene
Wills, C.J., 1990a
Hart and others,1991
EFZ: Burney, Cassel, Burney Falls, Dana

31
WILLOW SPRINGS FAULT
Not Holocene as earlier published (Sanborn, 1960)
Howard, J.K., 1987

32
GROGAN FAULT (ALSO RED MOUNTAIN FAULT-NO. 77)
Quaternary
Aalto and others, 1988
Cashman and others, 1981, 1982
Carver, G.A., 1989b
Manning and Ogle, 1950
McLaughlin and others, 2000
Kelsey and Carver, 1988
Wagner and Saucedo, 1987

33
BALD MOUNTAIN FAULT
Quaternary
Aalto and other, 1981
Carver, G.A., 1989b
Cashman and others, 1982
Manning and Ogle, 1950
Wagner and Saucedo, 1987

34
BIG LAGOON FAULT
Quaternary
Aalto and other, 1981
Kelsey and Carver, 1988 (Fig. 2)
Wagner and Saucedo, 1987

35
TRINIDAD FAULT (OFFSHORE)
Late Quaternary
Clarke and Field, 1989
Clarke, S.H., Jr., 1990

36
MAD RIVER FAULT ZONE (OFFSHORE)
Holocene
Clarke and Field, 1989
Clarke, S.H., Jr., 1990

37
LITTLE SALMON FAULT (OFFSHORE)
Holocene
Carver and others, 1989 (Holocene age)
Clarke and Field, 1989
Clarke, S.H., Jr., 1992 (age, p. 211)

37A
UNNAMED FAULTS (OFFSHORE)
Late Quaternary; Quaternary
Clarke and Field, 1989
Clarke. S.H., Jr., 1993

38
TRINIDAD FAULT
Holocene
Aalto and others, 1981
Carver, G A, 1989b
Carver and others, 1982
Coppersmith, K.J., 1980 (Fig. B-1)
Kilbourne, 1985a
Rust, D., 1982
Smith, T.C., 1982b
EFZ: Trinidad

39
BLUE LAKE FAULT
Holocene
Carver, G.A., 1989b
Kelsey and Carver, 1988 (p. 4802)
McLaughlin and others, 2000

40
MAD RIVER FAULT
Holocene
Carver, G.A., 1989b
Hart and others, 1983
Kelsey and Carver, 1988 (p. 4802)
McLaughlin and others, 2000
Smith, T.C., 1982b
EFZ: Arcata North

41
BAY ENTRANCE FAULT
Late Quaternary
Woodward-Clyde Consultants, 1980 (Fig. C-1 and C-56)
Wills, C.J., 1990e
Hart and others, 1991

42
FICKLE HILL FAULT
Holocene; Late Quaternary
Carver, GA, 1989b
Hart and others, 1983
Kelsey and Carver, 1988 (p. 4802)
McLaughlin and others, 2000
EFZ: Arcata South, Arcata North

43
McKINLEYVILLE FAULT
Holocene
Carver, GA, 1989b
Hart and others, 1983
Kelsey and Carver, 1988 (p. 4802)
Smith, T.C., 1982b
EFZ: Arcata North, Arcata South, Korbel

44
EATON ROUGHS FAULT ZONE
Quaternary
Kelsey and Carver, 1988
Aalto and others, 1988
McLaughlin and others, 2000
Kelsey and Allwardt, 1987

45
NORTH SPIT FAULT
Quaternary
Earth Sciences Associates, 1976 (p. 10 and 11)
Woodward-Clyde Consultants, 1980 (Fig. B-1)

46
EAST TRACE LITTLE SALMON FAULT
Late Quaternary
Carver, GA, 1989a
Wills, C.J., 1990e

47
LITTLE SALMON FAULT
Holocene
Carver, G.A., 1989a, 1989b
Carver and others, 1989
Clarke and Carver, 1991, (250 Years B.P.)
Wills, C.J., 1990e
Hart and others, 1983, 1991
Kelsey and Carver, 1988
Woodward-Clyde Consultants, 1980 (Appendix, C43, and Fig. C-1)
EFZ: Fields Landing, Fortuna, Hydesville

47A
TABLE BLUFF FAULT
Late Quaternary
Carver, GA, 1993
McLaughlin and others, 2000

47B
UNNAMED FAULTS WEST OF HUMBOLDT BAY (OFFSHORE)
Late Quaternary
Clarke, S.H., Jr., 1993

48
RUSS FAULT ZONE (OFFSHORE)
Late Quaternary
Clarke, S.H., Jr., 1992 (p. 208, late Quaternary?)
Clarke and Field, 1989
McLaughlin and others, 2000

49
BEAR RIVER FAULT ZONE (OFFSHORE)
Quaternary
McLaughlin and others, 2000
Clarke and Field, 1989; personal communication 3/12/90

50
FRESHWATER FAULT
Quaternary
Carver, G.A., 1989b
Ellen and others,, 1989
McLaughlin and others, 2000

51
YAGER FAULT
Late Quaternary
Carver, G.A., 1989b
Hart and others, 1983; 1991
McLaughlin and others, 2000
Wills, C.J., 1990e

52
GOOSE LAKE FAULT
Holocene
Carver and others, 1982
Hart and others, 1983
Kelsey and Carver, 1988 (p. 4803)
Wills, C.J., 1990e
Woodward-Clyde Consultants, 1980
EFZ: Hydesville

53
SALT CREEK FAULT
Pre-Quaternary
Blake, M.C., Jr., 1989 (personal communication)
Ellen and others, 1989
Fraticelli and others, 1987

54
BEAR WALLOW FAULT
Pre-Quaternary
Blake, M.C., Jr., 1989 (personal communication)
Ellen and others, 1989
Fraticelli and others, 1987

55
BATTLE CREEK FAULT
Late Quaternary; Quaternary
Harwood and Helley, 1987 (p. 23)
Helley and others, 1981
U.S. Army Corps of Engineers, 1986 (p. 29)

56
ALMANOR FAULT ZONE
Late Quaternary; Quaternary
Dudley, T., 1986
Wills, C.J., 1990c
Kelson and others, 1995

57
UNNAMED FAULT ON SOUTHEAST SIDE OF EAGLE LAKE
Late Quaternary
Clark and others,1984 (100,000 -240,000 yrs.)
Wills, C.J., 1990b

58
UNNAMED FAULT NORTHWEST OF SUSANVILLE
Quaternary
Clark and others, 1984 (700,000-1,900,000 yrs)
Grose and others, 1991
Wills, C.J., 1990b

59
UNNAMED FAULT AT NORTHWEST CORNER OF HONEY LAKE
Holocene
Grose and others, 1991
Roberts, C.T., 1985
Wills, C.J., 1990d (Holocene)
Hart and others, 1991

60
HONEY LAKE FAULT ZONE
Holocene; Quaternary
Grose and others, 1991
Wills, C.J., 1990d
Hart and others, 1991
EFZ: Standish, Stony Ridge, Milford, Herlong. McKesick Peak, Doyle, Constantia

61
WARM SPRINGS VALLEY FAULT AND UNNAMED FAULTS
Holocene
Wills, C.J., 1990d
Hart and others, 1991
EFZ: Milford, Herlong, Calneva Lake. Doyle

62
FORT SAGE FAULT
Historic (1950 earthquake rupture)
Gianella. V.P., 1957
Grose and others, 1991
Wills, C.J., 1990d
Hart and others, 1991
EFZ: Doyle

63
UNNAMED FAULTS BORDERING LONG VALLEY (PART OF HONEY LAKE FAULT ZONE)
Holocene
Wills, C.J., 1990d
Hart and others, 1991
Grose, T.L.T., 2000a
Saucedo, G.J., 1992
EFZ: Constantia

64
DIAMOND MOUNTAINS FAULT (LAST CHANCE FAULT ZONE)
Late Quaternary
Grose, T.L.T., 2000a
Saucedo, G.J., 1992

65
UNNAMED FAULT (LAST CHANCE FAULT ZONE)
Late Quaternary
Grose, T.L.T., 2000a

66
INDIAN VALLEY FAULT
Holocene? (in part)
Dudley, T., 1986
Woodward-Clyde Consultants, 1978b

66A
FAULTS SOUTH OF LAKE ALMANOR, INCLUCING CANTERBURY, MULESHOE MINE, PONDEROSA FLAT, ROCK LAKE, SKINNER FLAT, AND STOVER MOUNTAIN FAULTS OF THE BUTT CREEK FAULT ZONE
Quaternary, Late Quaternary
Sawyer and others, 1995
Pacific Gas & Electric Company, 1994

67
MEADOW VALLEY FAULT
Quaternary
Page and Sawyer, 2004

68
RICH BAR FAULT AT MEADOW VALLEY (BOTTLE SPRINGS FAULT)
Quaternary
Saucedo, G.J., 1992
Woodward-Clyde Consultants, 1977
Pacific Gas & Electric Company, 1993

68A
HASKINS VALLEY FAULT
Quaternary
Pacific Gas & Electric Company, 1993

68B
LITTLE GRASS VALLEY FAULT
Late Quaternary'
Pacific Gas & Electric Company, 1993

69
PARADISE FAULT
Late Cenozoic; Quaternary?
Dudley, T., 1988
Pacific Gas & Electric Company. 1993

70
COHASSET RIDGE FAULT
Quaternary
Woodward-Clyde Consultants, 1977
Pacific Gas & Electric Company, 1993

70A
BEAVER CREEK FAULT
Quaternary
Pacific Gas & Electric Company, 1993

71
MAGALIA FAULT
Late Cenozoic; Quaternary?
Dudley, T., 1988
Pacific Gas & Electric Company, 1993

72
CHICO MONOCLINE FAULT
Quaternary
Harwood and Helley, 1987 (p. 20)
Saucedo, G.J., 1992

73
CORNING FAULT
Quaternary
Blake and others, 1989
Harwood and Helley, 1987 (p. 9, 34)

74
RED BLUFF FAULT
Pre-Quaternary
Harwood and Helley, 1987 (p. 26)

75
WILLOWS FAULT ZONE
Pre-Quaternary
Harwood and Helley, 1987 (p. 7, 9)

76
COAST RANGE FAULT
Pre-Quaternary
Jayko and others, 1987

77
GROGAN-RED MOUNTAIN FAULT ZONE
Age?
Blake, M.C., Jr., 1989 (personal communication)
Ellen and others, 1989

78
LAKE MOUNTAIN FAULT ZONE
Late Quaternary
Jayko and others, 1989
McLaughlin and others, 2000
Ellen and others, 1989
Herd, D.G., 1978a

79
GARBERVILLE FAULT ZONE
Quaternary
McLaughlin and others, 2000
Ellen and others, 1989

80
RUSS FAULT ZONE
Late Quaternary; Quaternary
Carver and others, 1982 (map p. 97)
Ellen and others, 1989
Kelsey and Carver, 1988
McLaughlin and Ellen, 1989
McLaughlin and others, 2000
Ogle, B.A., 1953

81
BEAR RIVER FAULT ZONE
Quaternary
McLaughlin and others, 2000
McLaughlin and Ellen, 1989

82
PETROLIA THRUST FAULT
Quaternary
McLaughlin and others, 2000
McLaughlin and Ellen, 1989

83
MENDOCINO FAULT ZONE (OFFSHORE)
Holocene?; Late Quaternary
Clarke and Field, 1989
Clarke, S.H., Jr., 1990
McLaughlin and others, 2000

84
FAULT ALONG MATTOLE CANYON (OFFSHORE) (PART OF MENDOCINO FAULT ZONE)
Late Quaternary?
McLaughlin and others, 2000

85
KING RANGE THRUST ZONE
Quaternary-Late Quaternary
McLaughlin and Ellen, 1989
McLaughlin and others, 2000

86
BRICELAND FAULT (GARBERVILLE-BRICELAND FAULT ZONE)
Quaternary
Ellen and others, 1989
McLaughlin and others, 2000

87
SAN ANDREAS FAULT (SHELTER COVE)
Historic (1906 earthquake ruptures)
Brown, R.D., 1995
Hart, E.W., 1996
Prentice and others, 1999
EFZ: Shelter Cove

88
WHALE GULCH FAULT
Late Quaternary
McLaughlin and Ellen, 1989
McLaughlin and others, 2000

89
BEAR HARBOR FAULT ZONE
Late Quaternary
Beutner and others, 1980
McLaughlin and others, 2000

90
ROUND VALLEY FAULT ZONE (PART OF BARTLETT SPRINGS FAULT SYSTEM)
Quaternary
Bryant, W.A., 1993
dePolo and Ohlin, 1984
Jayko and others, 1989
McLaughlin and others, 2000

91
ETSEL RIDGE FAULT
(PART OF BARTLETT SPRINGS FAULT SYSTEM)
Quaternary?
Bryant, W.A., 1993
Jayko and others, 1989

91A
COTTONEVA FAULT
Pre-Quaternary
O'day, M.S., 1974

91B
UNNAMED FAULT BY FORT BRAGG
Pre-Quaternary
Kramer, J.C., 1976

91C
CHAMBERLAIN FAULT
Pre-Quaternary
Kramer, J.C., 1976

92
BARTLETT SPRINGS FAULT ZONE
(PART OF BARTLETT SPRINGS FAULT SYSTEM)
Historic (creep); Holocene; Quaternary
Bryant, W.A., 1993
dePolo and Ohlin, 1984
McLaughlin and others, 1985a (age, p. 14)
McLaughlin and others, 1990
Taylor and Swan, 1986
McFarland and others, 2009 (creep)

93
STONY CREEK FAULT
Late Quaternary in part
Earth Sciences Associates, 1980
Steele, W.C., 1979

94
UNNAMED FAULTS IN SUTTER BUTTES
Quaternary
Saucedo, G.J., 1992

95
CLEVELAND HILL FAULT
Historic (1975 earthquake ground rupture);
Quaternary
Akers and McQuilkin, 1975
Clark and others, 1976
Hart and Rapp, 1975
Saucedo, G.J., 1992
EFZ: Bangor

96
SWAIN RAVINE FAULT (FOOTHILLS FAULT SYSTEM)
Late Quaternary
Bryant, W.A., 1983b
Page and Sawyer, 2004
Saucedo, G.J., 1992
Woodward-Clyde Consultants, 1977

97
MOHAWK VALLEY AREA (EAST OF CLIO)
1875 earthquake faults of Turner, 1897, not verified
Grose, T.L.T., 2000c
Smith, T.C., 1983b (p. 9)

98
MOHAWK VALLEY FAULT
Holocene and Late Quaternary
Grose, T.L.T., 2000c, 2000d
Hawkins and others, 1986
Saucedo, G.J., 1992
Sawyer and others, 1993

99
DOG VALLEY FAULT
UNNAMED FAULT (?) EFFECTS OF 1966 TRUCKEE EARTHQUAKE
Historic (1966 earthquake ground breakage)
Carter, B.H., 1966
Grose, T.L.T., 2000b
Hawkins and others, 1986
Kachadoorian and others, 1967

99A
UNNAMED FAULTS (SOUTHERN LAST CHANCE FAULT ZONE)
Quaternary
Grose, T.L.T., 1992, 2000b

100
UNNAMED FAULTS SOUTH AND EAST OF TRUCKEE
Late Quaternary
Latham, T.S., Jr., 1985
Saucedo, G.J., 1992
Wise and Sylvester, 2004

101
AGATE BAY FAULT
Quaternary
Saucedo, G.J., 2005
Schweickert and others, 2000

102
NORTH TAHOE FAULT
Holocene
Hyne and others, 1972 (p. 1440)
Hawkins and others, 1986 (p. 56)
Saucedo, G.J., 2005

103
MELONES FAULT ZONE OF CLARK (GIANT GAP FAULT) (FOOTHILLS FAULT SYSTEM)
Quaternary?
Saucedo, G.J., 1992
Woodward-Clyde Consultants, 1977
Pacific Gas & Electric Company, 1993
Page and Sawyer, 2004

104
BEAR MOUNTAINS FAULT ZONE (HIGHWAY 49 FAULT)
Late Quaternary
Borchardt and others, 1980 (p. 18-21: Smith property site)
Bryant, W.A., 1983a
Saucedo, G.J., 1992
Woodward-Clyde Consultants, 1977, 1978b
Page and Sawyer, 2004

105
SPENCEVILLE FAULT
(FOOTHILLS FAULT SYSTEM)
Late Quaternary; Holocene?
Borchardt and others,1980
Bryant, W.A., 1983b
Saucedo, G.J., 1992
Woodward-Clyde Consultants, 1977
Page and Sawyer, 2004

106
RESORT FAULT ZONE
Quaternary
McLaughlin and others, 1985a (p. 15-16)
McLaughlin and others, 1990

107
BAD RIDGE FAULT
Quaternary (Possibly late Pleistocene)
McLaughlin and others, 1985a (p. 16)
McLaughlin and others, 1990

108
LITTLE INDIAN VALLEY FAULT
Quaternary
McLaughlin and others, 1985a (p. 15)
McLaughlin and others, 1990

109
CROSS SPRING FAULT
Quaternary (in part)
McLaughlin and others, 1985a
McLaughlin and others, 1990

110
CLOVER VALLEY FAULT ZONE
Quaternary
Hearn and others, 1988 (Fig. 2)
Sims and Rymer, 1976

111
FAULTS IN MT. KONOCTI AREA
Holocene; Late Quaternary
Bortugno, E.J., 1982
Bryant, W.A., 1982c
Hart and others, 1983
EFZ: Clearlake Highlands, Kelseyville

112
BIG VALLEY FAULT
Late Quaternary; Historic (1906 earthquake ruptures)
Bryant, W.A., 1982c
Clark and others, 1984
Hearn and others, 1981
Hearn and others, 1988 (p. 15)
EFZ: Kelseyville

113
ADOBE CREEK FAULT
Late Quaternary
Clark and others, 1984 (120,000-450,000 yrs.)
Hearn and others, 1988

114
MAACAMA FAULT ZONE (NORTHERN AND CENTRAL PARTS)
Holocene; Historic (creep)
Hart and others, 1983
McFarland and others, 2009
Pampeyan and others, 1981
Smith, T.C., 1981a,b,d
Smith, T.C., 1982a
Upp, R.R., 1989
EFZ: Hopland, Purdys Gardens, Elledge Peak, Ukiah, Redwood Valley, Willits NE, SE, and NW, Longvale, Laytonville

114A
TWO ROCK FAULT
Pre-Quaternary
Kramer, J.C., 1976
Kilbourne, R.T., 1984

115
UNNAMED FAULTS
Pre-Tertiary
Manson, M.W., 1984

116
SPLAYS OFF SAN ANDREAS FAULT
Late Quaternary
Pacific Gas & Electric Company, 1971
Prentice, C.S., 1989 and personal communication 9/17/89

117
NAVARRO STRUCTURAL DISCONTINUITY (OFFSHORE)
Age?
Clarke and Field, 1989

118
HATHAWAY CREEK FAULT (AND UNNAMED FAULT TO WEST)
Late Quaternary
Prentice, C.S., 1989 (p. 110) and personal communication 9/17/89

119
SAN ANDREAS FAULT ZONE (FORT ROSS TO MANCHESTER)
Historic (1906 earthquake rupture); Late Quaternary
Blake and others, 1971
Brown and Wolfe, 1972
Prentice, C.S., 1989, written communication 2008
EFZ: Arched Rock, Fort Ross, Plantation, Annapolis, Stewarts Point, SW 1/4 Ornbaun Valley, Gualala, NE 1/4 Point Arena, Point Arena, Mallo Pass Creek

120
COLLAYOMI FAULT
Late Quaternary
Bortugno, E.J., 1982
Bryant, WA, 1982c (p. 15, Figs. 2b, 2c, 2d)
Hart and others, 1983
Hearn and others, 1976
McLaughlin, R.J., 1978

121
HUNTING FAULT
Quaternary
Bortugno, E.J., 1982
Lawton, J.E., 1956

122
HUNTING CREEK FAULT
Holocene
Bryant, WA, 1982b
Hart and others, 1983
EFZ: Jericho Valley, Knoxville

123
CAPAY FAULT
Pre-Quaternary?
Harwood and Helley, 1987 (p. 29)

124
DUNNIGAN HILLS (ZAMORA) FAULT AND ADJACENT AREA
Late Pleistocene; Holocene?
Bryant, WA, 1982e (questions Holocene age)
Bryant, W.A., 2010 (may be fold scarp rather than surface fault)
Helley and Herd, 1977
Harwood and Helley, 1987 (p. 29)
Helley and Barker, 1979

125
DEWITT FAULT
(FOOTHILLS FAULT SYSTEM)
Late Quaternary; Holocene?
Borchardt and others, 1980
Bryant, WA, 1983b
Woodward-Clyde Consultants, 1977
Page and Sawyer, 2004

126
BEAR MOUNTAINS FAULT ZONE (MAIDU EAST FAULT)
(FOOTHILLS FAULT SYSTEM)
Late Quaternary?
Bryant, W.A., 1983a
Woodward-Clyde Consultants, 1977, 1978b
Borchardt and others, 1980
Page and Sawyer, 2004

127
BEAR MOUNTAINS FAULT ZONE (RESCUE FAULT)
(FOOTHILLS FAULT SYSTEM)
Late Quaternary
Bryant, W.A., 1983d
Woodward-Clyde Consultants, 1977, 1978b
Page and Sawyer, 2004

128
GENOA FAULT (ALSO CALLED CARSON VALLEY FAULT)
Holocene
Clark and others, 1984
Armin and John, 1983
Dohrenwend, J.C., 1982
Smith, T.C., 1984a
EFZ: Markleeville, Woodfords, Minden

129
UNNAMED FAULT
Late Quaternary and/or Holocene
Dohrenwend, J.C., 1981a, 1982

129A
UNNAMED FAULT
Quaternary; Pre-Quaternary
Dohrenwend, J.C., 1982
John and others, 1981
Stewart and others, 1982

130
ANTELOPE VALLEY FAULT AND ADJACENT FAULTS
Holocene; Quaternary
Bryant, W.A., 1984a
Hayes, G.F., 1985 (p. 66-68)
Dohrenwend, J.C., 1982
John and others, 1981
EFZ: NE 1/4 and SE 1/4 Topaz Lake, SW 1/4 Desert Creek Peak

131
SLINKARD VALLEY FAULT
Late Quaternary
Bryant, WA. 1983c
Dohrenwend, J.C., 1982
John and others, 1981
Hayes, G.F., 1985 (p. 69)

131A
UNNAMED FAULTS
Pre-Quaternary
Stewart and others, 1982

132 WEST WALKER RIVER FAULT
Holocene; Late Quaternary
Bryant. W.A., 1983c
Dohrenwend, J.C., 1982
Clark, M.M., 1967
Clark and others, 1984
Hayes, G.F., 1985
EFZ: Fales Hot Springs

133
MONO LAKE FAULT (LEE VINING FAULT)
ROBINSON CREEK FAULT (IN PART BRIDGEPORT BASIN FAULT OF M. CLARK)
UNNAMED FAULTS
Holocene; Late Quaternary; Quaternary
Bryant, W.A., 1984b
Bryant, W.A., 1984d
Clark and others, 1984 (10,000 -13,000 yrs)
Dohrenwend, J.C., 1982
Hayes, G.F., 1985 (p. 88-90)
Bailey, R.A., 1989
EFZ: NW 1/4 and NE 1/4 Mono Craters, SW 1/4 and NW 1/4 Bodie, NE 1/4 Matterhorn Peak, SW 1/4 Bridgeport, Fales Hot Springs. SE 1/4 Fales Hot Springs

134
UNNAMED FAULTS
Quaternary
Dohrenwend, J.C., 1982

135
MELONES FAULT ZONE (POORMAN GULCH FAULT) (FOOTHILLS FAULT SYSTEM)
Late Quaternary; Holocene?
Bryant. W.A., 1983a (Fig. 3)
Woodward-Clyde Consultants, 1977, 1978c (Fig. C.4-2)
Page and Sawyer, 2004

136
BEAR MOUNTAINS FAULT ZONE (YOUNGS CREEK FAULT) (FOOTHILLS FAULT SYSTEM)
Quaternary
Bryant. W.A., 1983d (Fig. 3)
Woodward-Clyde Consultants, 1977, 1978c (Fig. C.4-2)
Pacific Gas & Electric Company, 1993
Page and Sawyer, 2004

137
MIDLAND FAULT ZONE
Quaternary (possibly Holocene in part)
Harwood and Helley, 1987 (Plate 1)
Weber-Band, J., 1998

138
EAST VALLEY FAULT
Pre-Quaternary
Harwood and Helley, 1987 (p. 27)

139
WEST VALLEY FAULT
Pre-Quaternary
Harwood and Helley, 1987 (p. 27, 29)

140
UNNAMED FAULTS EAST OF LAKE BERRYESSA
Quaternary?
Bortugno, E.J., 1982
Hart and others, 1983
Helley and Herd, 1977

141
MAACAMA FAULT ZONE (SOUTHERN PART)
Holocene
Bortugno, E.J., 1982
Bryant. W.A., 1982a
Hart and others, 1983
McLaughlin, R.J., 1978
McLaughlin and others, 2004
Smith, T.C., 1982a
EFZ: Mark West Springs, Mount St. Helena. Jimtown, Geyserville, Asti

142
HEALDSBURG FAULT
Quaternary
Bortugno, E.J., 1982
Bryant, WA. 1982a
EFZ: Healdsburg, Santa Rosa

143
BENNETT VALLEY FAULT ZONE
Late Quaternary
Bortugno, E.J., 1982
Delattre and others, 2007
McLaughlin and others, 2008
Herd and Helley, 1977
Wagner and others, 2003

144
UNNAMED FAULTS NORTHWEST OF SANTA ROSA NEAR TRENTON
Late Quaternary
Bortugno, E.J., 1982
Herd and Helley, 1977

145
SAN ANDREAS FAULT ZONE (OFFSHORE)
Late Quaternary
Bortugno, E.J., 1982
McCulloch, D.S., 1989a

146
BLOOMFIELD FAULT
Quaternary
Bezore and others, 2003
Bortugno, E.J., 1982

146A
AMERICANO CREEK FAULT
Quaternary
Bortugno, E.J., 1982

147
SAN ANDREAS FAULT ZONE (BODEGA HEAD TO BOLINAS)
Historic (1906 earthquake rupture); Holocene
Brown and Wolfe, 1972
EFZ: Duncans Mills. Bodega Head, Valley Ford, Tomales, Drakes Bay, Point Reyes NE, Inverness, Double Point, Bolinas

148
POINT REYES FAULT (OFFSHORE)
Quaternary
Bortugno, E.J., 1982
McCulloch and Greene, 1990
Ryan and others, 2008

149
RODGERS CREEK FAULT
Holocene
Bortugno, E.J., 1982
Bryant, W.A., 1982a
Hart, E.W., 1982, 1992
Jennings, CW., 1988
Randolph-Loar, 2002
Wagner and others, 2002a, 2002b, 2003
EFZ: Sears Point, Petaluma River, Glen Ellen, Cotati, Santa Rosa, Mark West Springs, Healdsburg

150
TOLAY FAULT
Quaternary?
Clahan and others, 2003
Hart and others, 1981
Lawton and others, 1977

150A
BURDELL MOUNTAIN FAULT
Quaternary
Bortugno, E.J., 1982
Bezore and others, 2002
Wagner and others, 2002b

151
UNNAMED FAULT WEST OF CARNEROS CREEK
Quaternary
Bortugno, E. J., 1982
Hart and others, 1983
Helley and Herd, 1977

152
WEST NAPA FAULT ZONE
Holocene in southern part; late Quaternary in northern part
Bortugno, E.J., 1982
Bryant, W.A., 1982g
Clahan and others, 2004
Hart and others, 1983
Helley and Herd, 1977
EFZ: Cuttings Wharf, Cordelia

153
SODA CREEK FAULT
Late Quaternary
Bortugno, E.J., 1982
Hart and others, 1983
Bezore and others, 2005
Clahan and others, 2004

154
GREEN VALLEY FAULT
Holocene; creep
Bortugno, E.J., 1982
McFarland and others, 2009 (creep)
Hart and others, 1983
Baldwin and others, 1998
Bryant, W.A., 1982f, 1992c
EFZ: Mt. George. Cordelia, Fairfield South, Port Chicago (Vine Hill)

155
CORDELIA FAULT
Holocene in southern part; late Quaternary in northern part
Bortugno, E.J., 1982
Bryant, W.A., 1981a, 1991b
Hart and others, 1983
Helley and Herd, 1977
EFZ: Cordelia

156
VACA FAULT
KIRBY HILL FAULT
Late Quaternary?
Clark and others, 1984 (10.000-120,000 yrs)
Hart and others, 1983
Knuepfer, P.L., 1977
Graymer and others, 2006

157
RIO VISTA FAULT
Quaternary?
Bryant. W.A., 1982d
Hart and others, 1983
Shlemon and Begg, 1975

158
FERNDALE FAULT
Quaternary
McLaughlin and others, (2000)

159
DAVIS FAULT (ANTIOCH FAULT REMOVED)
Quaternary
Bortugno and others, 1991
Wills, C.J., 1991, 1992 (not Holocene)

160
CONCORD FAULT
Historic (active creep); Holocene
Bortugno and others, 1991
Wills and Hart, 1992a, 1992b
McFarland and others, 2009 (creep)
Helley and Herd, 1977
Sharp, R.V., 1973
Sims and others, 1973
EFZ: Port Chicago (Vine Hill), Walnut Creek, Clayton

161
PINOLE FAULT
Quaternary
Graymer and others, 2006

162
SAN ANDREAS FAULT (BOUNDARY FAULTS)
Late Quaternary
Bortugno and others, 1991
Galloway, A.J., 1977
Wagner, D.L, 1977
EFZ: Bolinas

163
HAYWARD FAULT (NORTHERN PART)
Historic (1868 earthquake rupture; creep); Holocene
Bonilla, M.G., 1970
Bortugno and others, 1991
Hart, E.W., 1979c
Hart and others, 1981
Louderback, G.D., 1947
Lienkaemper, J.J., 2008
McFarland and others, 2009
Smith, T.C., 1980a, 1980b
EFZ: Mare Island, Richmond, Oakland East, Oakland West, San Leandro, Hayward, Newark, Niles, Milpitas

164
SHERBURNE HILLS FAULT
Quaternary
Bortugno and others, 1991
Hart and others, 1981

165
MARSH CREEK FAULT AND CLAYTON FAULT
Holocene; Quaternary;
Bortugno and others, 1991

166
MIDWAY FAULT
Late Quaternary
Clark and others, 1984 (100,000-600,000 yrs)
Sowers and others, 1993b

167
VERNALIS FAULT
Quaternary?
Bartow, J.A., 1991 (p.8)

168
BEAR MOUNTAINS FAULT ZONE (BOWIE FLAT FAULT)
(FOOTHILLS FAULT SYSTEM)
Late Quaternary
Bryant, W.A., 1983d (Fig. 3)
Woodward-Clyde Consultants, 1977, 1978a, 1978c (Fig. C.4-2)
Pacific Gas & Electric Company, 1993
Page and Sawyer, 2004

169
MELONES FAULT ZONE (RAWHIDE FLAT EAST FAULT)
(FOOTHILLS FAULT SYSTEM)
Late Quaternary
Bryant, W.A., 1983d (Fig. 3)
Woodward-Clyde Consultants, 1977, 1978a, 1978c (Fig. C.4-2)
Page and Sawyer, 2004

170
MELONES FAULT ZONE (RAWHIDE FLAT WEST FAULT)
(FOOTHILLS FAULT SYSTEM)
Late Quaternary
Bryant, W.A., 1983d (Fig. 3)
Woodward-Clyde Consultants, 1977, 1978a, 1978c (Fig. C.4-2)
Page and Sawyer, 2004

171
BEAR MOUNTAINS FAULT ZONE (NEGRO JACK POINT FAULT)
(FOOTHILLS FAULT SYSTEM)
Late Quaternary
Bryant, W.A., 1983d (Fig. 3)
Woodward-Clyde Consultants, 1977, 1978a, 1978c (Fig. C.4-2)
Pacific Gas & Electric Company, 1993
Page and Sawyer, 2004

172
BLACK BUTTE FAULT
Quaternary
Bartow, J.A., 1991 (p.8)
Bortugno and others, 1991
Noller and others, 1993
Sowers and others, 1993b

172A
CARNEGIE FAULT
Holocene in part
Carpenter and others, 1991
Sowers and others, 1993b

173
CORRAL HOLLOW FAULT
Quaternary
Bortugno and others, 1991
Sowers and others, 1993b

174
GREENVILLE FAULT
Late Quaternary; Historic (1980 earthquake rupture); Quaternary
Bolt and others, 1981
Bortugno and others, 1991
Hart, E.W., 1981b
EFZ: Tassajara, Byron Hot Springs, Altamont, Midway, Cedar Mtn., Eylar Mountain

175
LIVERMORE FAULT
Quaternary
Carpenter and others, 1984

176
PLEASANTON FAULT
Holocene; Quaternary
Hart, E.W., 1981a
Herd, D.G., 1978b
EFZ: Dublin, Livermore, La Costa Valley

177
CALAVERAS FAULT (NORTHERN PART)
Historic (1861); Holocene; Late Quaternary
Radbruch, D.H., 1968
Bortugno and others, 1991
Brewer, W.H., 1930 (1861 ground cracks, p. 185)
Bryant, W.A., 1981d
Graymer and others, 2006
Hart. E.W., 1981a
Hart and others, 1981
Herd, D.G., 1978b
EFZ: Diablo, Dublin, Niles, La Costa Valley, Calaveras Reservoir, Mt. Day, Lick Observatory

178
SAN BRUNO FAULT (DELETED)
Bonilla and others, 2000
U.S. Geological Survey, 1997

179
SERRA FAULT ZONE
Late Quaternary, Holocene in part
Bortugno and others, 1991
Brabb and others, 1998a
Brabb and Olson, 1986
Hart and others, 1981
Kennedy, D.G., 2002
Hengesh and others, 1996

179A
HILLSIDE FAULT
Pre-Quaternary
Brabb and Pampeyan, 1983

180
STRUCTURAL DISCONTINUITIES (OFFSHORE)
Age?
McCulloch and Greene, 1990 (Discontinuities separating differing Neogene structural domains. May indicate discontinuities between basement rocks)

181
SEAL COVE FAULT (SAN GREGORIO FAULT ZONE)
Holocene; Late Quaternary; creep?; Quaternary
Bortugno and others, 1991
Brabb and Olson, 1986 (creep)
Brabb and others, 1998a
Galehouse, J.S., 1992
Hart and others, 1981
Ryan and others, 2008
EFZ: Montara Mountain, Half Moon Bay

182
MISSION FAULT
Quaternary
Bortugno and others, 1991
Bryant, W.A, 1980a
Graymer and others, 2006

183
VERONA FAULT
Holocene?
Bortugno and others, 1991
Hart and others, 1981
Herd and Brabb, 1980
Smith, D.P., 1981
EFZ: La Costa Valley

184
LAS POSITAS FAULT
Historic (possible 1980 and 1981 ruptures); Holocene; Late Quaternary
Bortugno and others,,1991
Hart and others, 1981
Herd, D.G., 1977
Smith, T.C., 1981h
EFZ: Altamont

185
WILLIAMS FAULT
Late Quaternary?
Bortugno and others, 1991
Hart and others, 1981
Smith, D.P., 1981
Graymer and others, 2006

186
SECONDARY CRACKS (?) ADJACENT TO HAYWARD FAULT
Historic; 1868 earthquake cracks?
Bonilla, M.G., 1970
Lawson and others, 1908
Radbruch, D.H., 1974

187
CALAVERAS FAULT (CENTRAL PART)
Holocene; Historic (minor 1979 and 1984 fault break at Anderson Lake and south of Coyote Reservoir); Late Quaternary
Armstrong, C.F., 1979
Bortugno and others, 1991
Bryant and others, 1981
Hart and others, 1981
Lee and others, 1979
EFZ: Calaveras Reservoir, Mt. Day, San Jose East, Lick Observatory, Morgan Hill, Mt. Sizer, Gilroy, Gilroy Hot Springs, San Felipe, Hollister, Tres Pinos, Paicines, Cherry Peak

188
CROSLEY FAULT
Holocene (in part)
Bortugno and others, 1991
Hart and others, 1981
Bryant, W.A., 1980a
EFZ: Calaveras Reservoir

189
CONCEALED FAULTS IN SOUTH S.F. BAY AREA
Quaternary; Late Quaternary
Bortugno and others, 1991
California Department Water Resources, 1967
Parnpeyan, E.H., 1979
Wentworth and others, 2010

190
MONTE VISTA FAULT
Late Quaternary, Holocene
Bortugno and others, 1991
Brabb and Olson, 1986
Brabb and others, 1998b, 2000
Graymer and others, 2006
Hart and others, 1981
Hitchcock and others, 1994
Hitchcock and Kelson, 1999
Sorg and McLaughlin, 1975, 1980

191
PILARCITOS FAULT
Quaternary
Bortugno and others, 1991
Brabb and Olson, 1986
Brabb and others, 1998b

192
FRIJOLES FAULT
Holocene; Quaternary
Bortugno and others, 1991
Brabb and Olson, 1986
Clark and others, 1984 (8,400-200,000 yrs)
Hart and others, 1981
Smith, T.C., 1981f
Weber and Lajoie, 1979, 1980

193
BUTANO FAULT
Quaternary ?
Bortugno and others, 1991
Brabb and Olson, 1986
Brabb and others, 1998b
McLaughlin and others, 2001

194
SAN ANDREAS FAULT ZONE (SAN FRANCISCO TO WATSONVILLE)
Holocene Historic (1906, 1838 earthquake ruptures; 1989 Lorna Prieta1989 local earthquake fractures)
Louderback, G.D., 1947
Bonilla, M.G., 1970
Brown, R. 1972
Bryant, W.A., 1981f, 1991a
Hall and others, 1974
Graymer and others, 2006
EFZ: San Francisco South, Montara Mountain, San Mateo, Half Moon Bay, Woodside, Palo Alto, Mindego Hill, Cupertino, Castle Rock Ridge, Los Gatos, Laurel, Lorna Prieta, Mt. Madonna, Watsonville East, Chittenden

195
BERROCAL FAULT
Quaternary
Bortugno and others, 1991
Brabb and others, 2000
Graymer and others, 2006
Hart and others, 1981
McLaughlin and others, 2001
Sorg and McLaughlin, 1975, 1980

196
HAYWARD FAULT (SOUTHERN PART)
Holocene
Bortugno and others, 1991
Bryant, W.A., 1980a
Hart and others, 1981
EFZ: Calaveras Reservoir, Milpitas, San Jose East, Lick Observatory

197
EVERGREEN FAULT
Holocene
Bortugno and others, 1991
Bryant, W.A., 1980a, 1981e
Hart and others, 1981
EFZ: San Jose East

198
SILVER CREEK FAULT (SEE ALSO 189)
Quaternary
Bortugno and others, 1991
Hart and others, 1981
Wentworth and others, 2010

199
HAYWARD FAULT (SOUTHEAST EXTENSION)
Holocene
Bortugno and others, 1991
Bryant, W.A., 1980a, 1981e
Graymer and others, 1995
Hart and others, 1981
EFZ: Calaveras Reservoir, San Jose East, Lick Observatory

200
SAN JOAQUIN FAULT
Late Quaternary
Bartow, J.A., 1991 (p. 8-9)
Clark and others, 1984 (100,000 – 600,000 yrs)
Herd, D.G., 1979
Lettis, W.R., 1985 (p. 97, 107, 108)
Lettis, W.R., 1988 (p. 343)
Noller and others, 1993
Sowers and others, 1993a

201
HARTLEY SPRINGS FAULT
SILVER LAKE FAULT (PARKER LAKE FAULT)
UNNAMED FAULTS
Historic (1980); Holocene; Late Quaternary; Quaternary
Bailey, R.A., 1989
Bryant, W.A., 1984f
Clark and others, 1984
Taylor and Bryant, 1980
EFZ: NE ¼ Devils Postpile, SE ¼ Mono Craters

202
HILTON CREEK FAULT, UNNAMED FAULTS
Historic (1980); Holocene; Quaternary
Bailey and Koeppen, 1977
Berry, E.B., 1990
Bryant, W.A., 1981b
Clark and others, 1982
Clark and others, 1984 (10,000-20,000 yrs)
Sherburne, R.W., 1980
Taylor and Bryant, 1980
EFZ: NE 1/4, NW ¼, and SE ¼ Mt. Morrison

202A
LONG VALLEY FAULT ZONE
Holocene
Bailey, R.A., 1989

203
FAULTS EAST OF LAKE CROWLEY
Late Quaternary; Holocene?
Bryant, W.A., 1984e
Bailey, R.A., 1989

204
WHITE MOUNTAINS FAULT ZONE (NORTHERN PART), BENTON VALLEY FAULT
Holocene
Hart, E.W., 1984a
Smith, T.C., 1984b
dePolo, C.M., 1989
EFZ: Montgomery Peak SW and NW

205
EARTHQUAKE FAULT FRACTURES IN CHALFANT VALLEY
Historic (1986 earthquake)
Lienkaemper and others, 1987
dePolo and Ramelli, 1987

206
FAULTS IN THE VOLCANIC TABLELAND, MONO AND INYO COUNTIES
Holocene
Bateman, P.C., 1965
Bryant, W.A., 1984e
Crowder and Sheridan, 1972
EFZ: Rovana, SW ¼ and NW ¼ Bishop, White Mtn. SW

207
ROUND VALLEY FAULT
Holocene
Bateman, P.C., 1965
Bailey, R.A., 1989
Bryant, W.A., 1984c, 1984i
Rinehart and Ross, 1957
EFZ: Mount Tom, Mt. Morgan, SW ¼ Casa Diablo Mtn., Tungsten Hills

208
FISH SLOUGH FAULT
Holocene
Bryant, 1984c, 1984g
Crowder and Sheridan, 1972
EFZ: NW ¼ Bishop, White Mtn. SW

209
WHITE MOUNTAINS FAULT ZONE (SOUTHERN PART)
Historic (1986 earthquake); Holocene; Late Quaternary
Bryant, W.A., 1984d, 1988c
Hart and others, 1989
Lienkaemper and others, 1987
EFZ: White Mtn. SE, NE ¼ and SE ¼ Bishop, NE ¼ Big Pine, Tinemaha Reservoir, Uhlmeyer Spring, Fish Springs

210
DEEP SPRINGS FAULT
Holocene; Late Quaternary
Bryant, W.A., 1988a, 1989a
Hart and others, 1989
Lee and others, 2001
Reheis and Sawyer, 1997
EFZ: Chocolate Mountain, Deep Springs Lake, Soldier Pass

211
NORTHERN DEATH VALLEY FAULT ZONE (NORTH-CENTRAL SECTION DEATH VALLEY FAULT SYSTEM)
Holocene; Late Quaternary
Brogan and others, 1991
Bryant, W.A., 1988b
Machette and others, 2001b
Reheis and Noller, 1991
EFZ: Ubehebe Crater, Scottys Castle, East of Tin Mountain, Dry Bone Canyon, Fall Canyon, Mesquite Flat, Stovepipe Wells NE, Grotto Canyon, Beatty Junction

212
OWENS VALLEY FAULT
Holocene; Historic (1872 earthquake ground rupture)
Beanland and Clark, 1994
Brogan and others, 1991
Bryant, W.A., 1984c, 1984g, 1984h, 1988e
Hobbs, W.H., 1910
Knopf, A., 1918
Martel, S.J., 1989
Nelson, C.A., 1966
Ross, D.C., 1965
Slemmons and others, 2008
Hart and others, 1989
EFZ: Fish Springs, Tinemaha Reservoir, Blackrock, Independence, Bee Springs Canyon, Manzanar, Union Wash, Lone Pine, Bartlett, Olancha

212A
LONE PINE FAULT
Historic (1872 earthquake); Late Quaternary
Bryant, W.A., 1988e
Lubetkin and Clark, 1988
EFZ: Lone Pine

212B
BIRCH MOUNTAIN FAULT
Holocene
Clark, M.M., 1993

213
KINGS CANYON LINEAMENT
Age?
Antonnen and others, 1974 (satellite imagery lineament)
Bartow, J.A., 1991 (p. 5-6)

214
ORTIGALITA FAULT
Holocene
Anderson and others, 1982
Clark and others, 1984 (5,000-15,000 yrs)
Hart, E.W., 1985b
Lettis, W.R., 1982, 1985 (p. 97)
Manson, M.W., 1985a
EFZ: Mustang Peak, Crevison Peak, Pacheco Pass, San Luis Dam, Los Banos Valley, Ortigalita Peak, Ortigalita Peak NW

215
COYOTE CREEK FAULT
Quaternary
Bortugno and others, 1991
Dibblee, T.W., Jr., 1973b
Hart and others, 1981

216
SHANNON FAULT (INCLUDES BLOSSOM HILL FAULT)
Holocene; Quaternary
Bortugno and others, 1991
Hart and others, 1981
Hitchcock and others, 1994
Hitchcock and Kelson, 1999
McLaughlin, R.J., 1989
McLaughlin and others, 2001
Rubin and others, 2004

217
GROUND "FRACTURES' ASSOCIATED WITH LOMA PRIETA EARTHQUAKE
Historic (1989 earthquake)
Plafker and Galloway, 1989
U.S. Geological Survey Staff, 1989
Bryant, W.A., 1991a
Aydin and others, 1992
EFZ: Los Gatos, Laurel

218
SAN GREGORIO FAULT
Holocene; creep
Bortugno and others, 1991
Brabb and Olson, 1986
Galehouse, J.S., 1992 (creep)
Hart and others, 1981
McCullough and Greene, 1990 (offshore)
Wagner and others, 2002c
EFZ: Ano Nuevo, Franklin Point

219
ASCENCION FAULT (OFFSHORE)
Quaternary
McCulloch and Greene, 1990

220
ZYANTE FAULT
Late Quaternary; Quaternary; Holocene
Brabb and others, 1998b
Bortugno and others, 1991
Buchanan-Banks and others, 1978
Clark and others, 1984 (5,000-15,000 and 75,000-115,000 yrs)
Clark and others, 2001
Hall and others, 1974
Hart and others, 1981
McLaughlin and others, 2001
Pampeyan, E.H., 1979
EFZ: Watsonville East, Watsonville West

221
BEN LOMOND FAULT
Late Quaternary at southern end
Stanley and McCaffrey, 1983

222
SARGENT FAULT
Holocene; Historic (creep)
Bortugno and others, 1991
Bryant and others, 1981
Buchanan-Banks and others, 1978
Hart and others, 1981
McLaughlin and others, 2001
Sorg and McLaughlin, 1975
Prescott and Burford, 1976
EFZ: Watsonville East, Chittenden, San Felipe

223
FISH LAKE VALLEY FAULT ZONE
(NORTHERN SECTION DEATH VALLEY FAULT SYSTEM)
Holocene
Brogan and others, 1991
Bryant, W.A., 1988b
Machette and others, 2001b
Reheis, M. C., 1991
Reheis and Noller, 1991
Sawyer, T.A., 1991
EFZ: Dyer, Station Peak, Indian Garden Creek, Chocolate Mtn., Sylvania Canyon, Horse Thief Canyon, Last Chance Mtn., Tule Canyon

224
CALAVERAS FAULT (SOUTHERN PART)
Historic (creep); Holocene; Late Quaternary
Bryant, W.A., 1979, 1981c, 1985c
Rogers, T.H., 1980
EFZ: Hollister, San Felipe

225
QUIEN SABE FAULT
Holocene; Late Quaternary
Bryant, W.A., 1985c
Hart and others, 1986
Dibblee and Rogers, 1975
EFZ: Three Sisters

226
O'NEILL FAULT SYSTEM
Late Quaternary
Bartow, J.A., 1991 (p. 9)
Bortugno and others, 1991
Clark and others, 1984 (100,000-600,000 yrs)
Lettis, W.R., 1982
Lettis, W.R., 1985 (p. 97,107,108)

227
PAICINES FAULT
SAN BENITO FAULT ZONE
Holocene; Late Quaternary; Quaternary
Bryant, W.A., 1985c
Dibblee, T.W., Jr., 1979a, 1979b, 1979c
Hart and others, 1986
EFZ: Tres Pinos, Paicines, Cherry Peak

228
VERGELES FAULT
Late Quaternary;
Buchanan-Banks and others, 1978
Coppersmith, K.J., 1979
Clark and others, 1984 (75,000-115,000 yrs)
Wagner and others, 2002c

229
MONTEREY BAY FAULT ZONE (OFFSHORE)
Holocene; Quaternary
McCulloch and Greene, 1990
Wagner and others, 2002c

230
PALO COLORADO FAULT (OFFSHORE AND ONSHORE)
Quaternary; Holocene?
Bryant, W.A., 1985a
Clark and Rosenberg, 1999
Dibblee, T.W., Jr., 1974a
Hart, E.W., 1989
McCulloch and Greene, 1990 (offshore)
Wagner and others, 2002c

231
CYPRESS POINT FAULT
Quaternary (offsets Quaternary deposits offshore)
Clark and others, 1974
Rosenberg and Clark, 1994

232
NAVY FAULT
Quaternary
Clark and others, 1974, 1997
Hart and others, 1986
Wagner and others, 2002c

233
ORD TERRACE FAULT
Quaternary?
Clark and others, 1974, 1997
Hart and others, 1986
Wagner and others, 2002c

234
SAN ANDREAS FAULT ZONE (SAN JUAN BAUTISTA TO PRIEST VALLEY)
Historic (1906, 1890 earthquake ruptures)
Brown, R.D., Jr., 1970
Bryant, W.A., 1980c, 1985c
Clark, J.C., 1970
Dibblee, T.W., Jr., 1971a
Holden, E.S., 1898
Lawson and others, 1908
Wilson, I.F., 1943
EFZ: San Juan Bautista, Hollister, Paicines, Cherry Peak, Bickmore Canyon, San Benito, Topo Valley, Rock Spring Peak, Lonoak. Hepsedam Peak, Monarch Peak, Priest Valley

235
CHUPINES FAULT
Quaternary
Bowen, O.E., Jr., 1969
Clark and others, 1974, 1997, 2000
Hart and others, 1986

236
TULARCITOS FAULT
Quaternary; Late Quaternary (in part)
Clark and others, 1997
Dibblee, T.W., Jr., 1974a
Hart and others, 1986
McKittrick, M.A., 1987
Rosenberg, L.I., 1993

237
SUR FAULT
Quaternary
Hart and others, 1986
Hall, C.A., 1991
Bryant. W.A., 1985a
McCulloch and Greene, 1990

238
PALEO-SUBDUCTION ZONE (OFFSHORE)
Age?
McCulloch and Greene. 1990

239
RINCONADA FAULT ZONE
RELIZ FAULT
Late Quaternary
Clark and others, 2000
Dibblee, T.W., Jr., 1971a, 1976 (p. 36, 52, 53, late Quaternary)
Greene and others, 1973
Hart, E.W., 1976, 1985a
Hart and others, 1986 (Table 1 and Plate 1 -Espinosa and San Marcos segments)
Tinsley, J.C., III, 1975 (age of faulting p.149-155.)

240
FURNACE CREEK FAULT
Quaternary
Reheis and Noller, 1991

241
NUNEZ FAULT
Historic (1983 earthquake break)
Hart, E.W. 1984b
Hart and McJunkin, 1983
Rymer and others, 1990
EFZ: Alcalde Hills

242
CLOVIS FAULT
Pre-Quaternary
dePolo, C.M., 1983 (p. 2-4)
Page and Leblanc, 1969

243
INDEPENDENCE FAULT
Late Quaternary; Holocene
Bryant, W.A., 1989b
Gillespie, A.A., 1982
Clark and others, 1984 (10,500-18,000 yrs)
Hart and others, 1989
EFZ: Kearsarge Peak, Mt. Williamson, Manzanar, Mt. Langley, Lone Pine

244
HUNTER MOUNTAIN FAULT
Holocene; Late Quaternary
Bryant, W.A., 2009 (aerial photographic interpretation)
Burchfiel and others, 1987
Zellmer, J.T., 1980

244A
KEANE WONDER FAULT
Quaternary
Reheis and Noller, 1991

245
TOWNE PASS FAULT
Holocene; Quaternary
Bryant, W.A., 1989c
Hart and others, 1989
Reheis, M.C., 1991
EFZ: Panamint Butte, Nova Canyon

246
ASH HILL FAULT
Holocene; Late Quaternary
Bryant. W.A., 1989c
Hart and others, 1989
EFZ: Panamint Springs, Revenue Canyon, Maturango Peak NE and SE

247
PANAMINT VALLEY FAULT
Holocene; Late Quaternary; Quaternary
Bryant, W.A, 1989c
Clark and others, 1984 (8,000-20,000 yrs)
Hsu and Wagner, 1990
Smith, R.S.U., 1979
Hart and others, 1989
Zhang and others, 1990
EFZ: The Dunes, Panamint Butt, Nova Canyon, Emigrant Pass, Maturango Peak NE, Jail Canyon, Ballarat, Manly Fall, Copper Queen Canyon, Sourdough Spring. Wingate Pass

248
SOUTHERN DEATH VALLEY FAULT ZONE
(SOUTHERN SECTION DEATH VALLEY FAULT SYSTEM)
Holocene; Late Quaternary
Brady, R.H., III, 1986
Butler, P.R., 1984
Hart and others, 1989
Machette and others, 2001b
Wills, C.J., 1989a
Wright and Troxel, 1984
EFZ: Shore Line Butte, Confidence Hills West, Confidence Hills East, East of Owl Lake, Old Ibex Pass

248A
NOPAH FAULT (AND YOUNG FAULTS IN THE RESTING SPRING RANGE)
Late Quaternary and/or Holocene
McKittrick, M.A, 1988

248B
PAHRUMP FAULT
Late Quaternary
Donovan, D.E., 1991
Hoffard, J.L., 1991

249
SIERRA NEVADA FAULT ZONE (HAIWEE RESERVOIR AREA)
Holocene; Late Quaternary
Slemmons and others, 2008
Wills, C.J., 1989b

250
AIRPORT LAKE FAULT ZONE
Holocene; Late Pleistocene; Historic (1995 earthquake cracks)
Duffield and Bacon, 1981
Roquemore, G.A., 1981
Wills, C.J., 1988a, 1989c
Hart and others, 1989
Bryant, W.A., 2009 (aerial photographic interpretation)
Treiman, J.A, 1995
EFZ: Cactus Peak, Volcano Peak, Pearsonville, White Hills

251
FAULT WEST OF COSO JUNCTION IN SIERRA NEVADA
Pre-Tertiary
Duffield, W.A., 1975
Duffield and Bacon, 1981
Hsu and Wagner, 1990

252
KERN CANYON FAULT
Holocene (formerly pre Quaternary)
Kelson and others, 2009
Kozaci and others, 2009

253
GOLD HILL THRUST FAULT
Pre-Quaternary
Sims, J.D., 1988, 1990

254
SOUTHWEST FRACTURE ZONE (SAN ANDREAS FAULT ZONE)
Historic (1966, 2004 earthquake rupture)
Manson, M.W., 1985b
Rymer and others, 2006
Sims, J.D, 1988, 1990
Sims and others, 1988
EFZ: Parkfield, Cholame Hills

255
SAN SIMEON FAULT
Holocene
Buchanan-Banks and others, 1978
Hall and others, 1979a
Hanson and others, 2004
Hart and others, 1986
Manson, M.W., 1985c
McCulloch, D.S., 1989b
EFZ: San Simeon, Piedras Blancas, Burro Mountain

256
ARROYO LAGUNA FAULT
Late Quaternary
Buchanan-Banks and others, 1978
Hall and others, 1979
Manson, M.W., 1985c

257
STRUCTURAL DISCONTINUITY (OFFSHORE)
Age?
McCulloch, D.S., 1989b (Discontinuity separating differing Neogene structural domains. May indicate discontinuities between basement rocks)

258
ARROYO DELOSO FAULT
Late Quaternary
Buchanan-Banks and others, 1978
Hall and others, 1979
Pacific Gas and Electric Company, 1988

259
OCEANIC FAULT
Late Quaternary
Buchanan-Banks and others, 1978
Hall and others, 1979

260
WHITE CANYON FAULT
Holocene
Sims, J.D., 1988
Sims and others, 1991

261
RED HILLS FAULT
Holocene
Sims and others, 1991

262
GILLIS CANYON FAULT
Holocene
Sims and others, 1991

263
POND FAULT
Historic, with creep caused by groundwater withdrawal
Holzer, T.L., 1980
Smith, T.C., 1983c
EFZ: Pond

264
KERN FRONT FAULT
NEW HOPE FAULT
PREMIER FAULT
Historic, actively creeping fault triggered by fluid withdrawal; Quaternary
Bartow, J.A., 1984
Castle and others, 1983
Hart and others, 1984
Smith, T.C., 1983a
EFZ: Oildale, North of Oildale

265
KERN GORGE FAULT
Late Quaternary
Bartow, J.A., 1984
Hart and others, 1984

266
SIERRA NEVADA FAULT (INYOKERN AREA)
Holocene; Late Quaternary
Hsu and Wagner, 1990
Roquemore, G.A., 1981
Wills, C.J., 1988a
Hart and others, 1989
EFZ: Inyokern

267
LITTLE LAKE FAULT
Holocene; Late Quaternary; Historic (1982 earthquake cracks)
Hsu and Wagner, 1990
Roquemore, G.R., 1981
Roquemore and Zellmer, 1983
Wills, C.J., 1988a
Hart and others, 1989
EFZ: Little Lake, Volcano Peak, Pearsonville, Inyokern, Ridgecrest North, Ridgecrest South

268
TANK CANYON FAULT
Holocene
Clark and others, 1984 (5,000-10,000 yrs)
Hsu and Wagner, 1990
Smith and others, 1968

269
BROWN MOUNTAIN FAULT
Holocene
Bryant, W.A., 1989c
Clark, M.M., 1973
Hart and others, 1989
EFZ: Hidden Spring, Wingate Pass

270
GARLOCK FAULT ZONE
Holocene; late Quaternary
Clark and others, 1984
Hsu and Wagner, 1990
Pampeyan and others, 1988
EFZ: Cantil, Garlock, Saltdale SE, El Paso Peaks, Klinker Mtn., Spangler Hills East, SE 1/4 Searles Lake, NW 1/4 Cuddeback Lake, SW 1/4 and SE 1/4 Wingate Pass, SW 1/4 and SE 1/4 Quail Mountains, SW 1/4 and SE 1/4 Leach Lake, SW 1/4 Avawatz Pass

271
CRACKS NEAR GARLOCK FAULT
Historic
Zellmer and others, 1985
Hart and others, 1989
EFZ: Spangler Hills East

272
GROUND BREAKS IN GARLOCK FAULT ZONE (FREMONT VALLEY)
Holocene; Historic (owing to ground water withdrawal)
Pampeyan and others, 1988
Hart and others, 1989

273
EL PASO FAULT
Late Quaternary
Clark, M.M., 1973
Dibblee, T.W., Jr., 1952
Hsu and Wagner, 1990
Hart and others, 1989
Nitchman, S.P., 1989

274
SURFACE BREAK ON GARLOCK FAULT ZONE
Historic (1952 earthquake)
Clark, M.M., 1973

275
WHEELER RIDGE FAULT
Holocene; late Quaternary
Hart and others, 1984
Keller and others, 1989
Smith, T.C., 1984c
EFZ: Conner SW, Eagle Rest Peak

275A
WHITE WOLF FAULT
Historic (1952)
Buwalda and St. Amand, 1955
EFZ: SE1/4 and SW1/4 Breckenridge Mtn., Bear Mtn., Arvin, Mettler, Coal Oil Canyon

275B
GROUND BREAKS (UNNAMED) OF 1952 ARVIN-TEHACHAPI EARTHQUAKE
Historic (1952); Holocene; late Quaternary
Hart and others, 1984
Smith, T.C., 1984d
EFZ: Oil Center, Rio Bravo Ranch, Edison

276
BUENA VISTA FAULT
Historic (creep owing to oil withdrawal)
Hart and others, 1984
Wilt, J.W., 1958
EFZ: Taft

277
CENTRAL OWENS LAKE FAULT
(SOUTHERN OWENS VALLEY FAULT ZONE)
Historic; Holocene
Slemmons and others, 2008

278
SAN ANDREAS FAULT ZONE (PRIEST VALLEY TO CUYAMA)
Historic (1857, 1901, 1906, 1922, 1934, 1966, 2004 earthquake ruptures)
Brown and others, 1967
Brown, R.D., Jr., 1970
Byerly and Wilson, 1935
Dibblee, T.W., Jr., 1971a, 1972a, 1972b, 1972c, 1974b
Lawson and others, 1908
Manson, M.W., 1985b
Richter, C.F., 1958
Rymer and others, 2006
Sims, J.D., 1990
Sims and Hamilton, 1991
Townley and Allen, 1939
Vedder, J.G., 1970
Vedder and Wallace, 1970
EFZ: Priest Valley, Slack Canyon, Smith Mountain, Stockdale Mtn., Parkfield, Cholame Hills, Cholame Valley, Cholame, Orchard Peak, Holland Canyon, Packwood Creek, La Panza NE, Las Yeguas Ranch, Simmler, McKittrick Summit, Painted Rock, Panorama Hills, Wells Ranch, Elkhorn Hills, Cuyama

279
SAN JUAN FAULT
Quaternary
Buchanan-Banks and others, 1978
Dibblee, T.W., Jr., 1972a, 1974b
Pacific Gas and Electric Company, 1988
Sims and Hamilton, 1991
Vedder and others, 1986c, 1986d

280
LA PANZA FAULT
Quaternary
Buchanan-Banks and others, 1978
Dibblee, T.W., Jr., 1972e
Pacific Gas and Electric Company, 1988
Vedder and others, 1986a, 1986c, 1986d, 1988, 1989b

281
CAMBRIA FAULT
Late Quaternary
Hall and others, 1979
Pacific Gas and Electric Company, 1988

282
EDNA FAULT ZONE
Quaternary
Buchanan-Banks and others, 1978
Hall, C.A., 1973
Hall and others, 1979
Pacific Gas and Electric Company, 1988

283
SAN LUIS BAY FAULT
Late Quaternary
Hall, C.A., 1982
Lettis and others, 2004
Pacific Gas and Electric Company, 1988 (p. 3-16)

284
SAN MIGUELITO FAULT
Pre-Quaternary
Buchanan-Banks and others, 1978
Hall and others, 1979
Pacific Gas and Electric Company, 1988 (p. 3-16)

285
LOS OSOS FAULT ZONE
Holocene; late Quaternary
Hall, C.A., 1973
Hall and Corbató, 1967
Hall and others, 1979
Pacific Gas and Electric Company, 1988
Treiman, J.A., 1989a
Hanson and others, 2004
Hart and others, 1989
Lettis and Hall, 1994
Nitchman, S.P., 1988
EFZ: San Luis Obispo

286
WILMER AVENUE FAULT
Late Quaternary; Holocene?
Pacific Gas and Electric Company, 1988 (p. 3-16)
Lettis and others, 2004
Nitchman, S.P., 1988

287
HOSGRI FAULT ZONE (OFFSHORE)
Quaternary; Holocene
Hanson and others, 2004
Hoskins and Griffiths, 1971
McCulloch, D.S., 1989b

288
OCEANO FAULT
Late Quaternary
Buchanan-Banks and others, 1978
Lettis and others, 2004
Pacific Gas and Electric Company, 1988 (p. 3-16)

289
WEST HUASNA FAULT
Late Quaternary
Buchanan-Banks and others, 1978
Dibblee, T.W., Jr., 1994c
Hall, C.A., 1973
Hall and Corbató, 1967
Hall and others, 1979
Pacific Gas and Electric Company, 1988

290
EAST HUASNA FAULT
Quaternary
Dibblee, T.W., Jr., 1994b
Hall and Corbató, 1967
Vedder and others, 1986a, 1988, 1989a, 1991
Vedder, J.G., 1989 –written communication

291
SOUTH CUYAMA FAULT
Quaternary
Dibblee, T.W., Jr., 1971c
Buchanan-Banks and others, 1978
Pacific Gas and Electric Company, 1988
Vedder and Repenning, 1975
Vedder and others, 1986c, 1988, 1989b, 1994

292
SUR -NACIMIENTO FAULT ZONE OF VEDDER, HOWELL, AND McLEAN
Pre-Quaternary
Vedder and others, 1986a, 1988

293
SANTA MARIA FAULT
Quaternary
Buchanan-Banks and others, 1978
Pacific Gas and Electric Company, 1988
Sylvester and Darrow, 1979 (p. 396)

294
BRADLEY CANYON FAULT
Quaternary
Buchanan-Banks and others, 1978
Hart and others, 1986
Pacific Gas and Electric Company, 1988
Sylvester and Darrow, 1979

295
CASMALIA FAULT
Late Quaternary
Clark, D.G., 1990
Dibblee, T.W., Jr., 1989a, 1989b, 1994a
Gray, L.D., 1980
Hanson and others, 2004
Pacific Gas and Electric Company, 1988
Sylvester and Darrow, 1979

296
LIONS HEAD FAULT
Late Quaternary
Dibblee, T.W., Jr., 1989a
Hanson and others, 2004
Hart and others, 1986
Pacific Gas and Electric Company, 1988
Sylvester and Darrow, 1979
Clark, D.G., 1990

296A
ORCUTT OIL FIELD FAULTS (CASMALIA FAULT ZONE)
Quaternary; Late Quaternary
Buchanan-Banks and others, 1978
Dibblee, T.W., Jr., 1989a

297
SANTA LUCIA BANK FAULT (OFFSHORE)
Quaternary
McCulloch, D.S., 1989b

298
PALEO-SUBDUCTION ZONE (OFFSHORE)
Age?
McCulloch, D.S., 1989b

299
SANTA YNEZ RIVER FAULT
Late Quaternary?
Buchanan-Banks and others, 1978
Dibblee, T.W., Jr., 1993c
Pacific Gas and Electric Company, 1988
McCulloch, D.S., 1989b
Sylvester and Darrow, 1979

300
HONDA FAULT
Late Quaternary?
Pacific Gas and Electric Company, 1988
Sylvester and Darrow, 1979

301
PACIFICO FAULT
Late Quaternary?
Dibblee, T.W., Jr., 1988a, 1988b, 1988d
Hart and others, 1977
Pacific Gas and Electric Company, 1988
Sylvester and Darrow, 1979
Ziony and others, 1974

302
LOS ALAMOS FAULT
Holocene; Late Quaternary
Guptill and others, 1981
Hart and others, 1986
EFZ: Zaca Creek

303
GAREY FAULT
Quaternary
Buchanan-Banks and others, 1978
Hall, CA, Jr., 1981
Hart and others, 1986
Pacific Gas and Electric Company, 1988

304
FOXEN CANYON FAULT
SANTA MARIA RIVER FAULT
Late Quaternary
Dibblee, T.W., Jr., 1994a, 1994b
Buchanan-Banks and others, 1978
Hall, C.A., Jr., 1981
Lettis and others, 2004
Pacific Gas and Electric Company, 1988
Sylvester and Darrow, 1979

305
BASELINE FAULT
Late Quaternary
Guptill and others, 1981
Hart and others, 1977
Sylvester and Darrow, 1979
Yerkes and Lee, 1987 (Plate 4.1)

306
LITTLE PINE FAULT
Late Quaternary (northwestern part); Quaternary and Pre-Quaternary (southeastern part)
Buchanan-Banks and others, 1978
Dibblee, T.W., Jr., 1987a, 1993a, 1993b
Hall, C.A., Jr., 1981
Pacific Gas and Electric Company, 1988
Sylvester and Darrow, 1979
Vedder and Stanley, 2001

307
BIG PINE FAULT
(WESTERN SECTION OF BIG PINE FAULT ZONE)
Quaternary
Vedder and others, 1973, 1995
Vedder and Stanley, 2001

308
OZENA FAULT
Quaternary
Dibblee, T.W., Jr., 1971c
Minor, S.A., 2004
Vedder and Repenning, 1975
Yerkes and Lee, 1987 (Plate 4.1)

309
PLEITO FAULT
Holocene; Quaternary
Bortugno, E.J., 1986
Clark and others, 1984 (280-8,500 and 18,000-30,000 yrs.)
Dibblee, T.W., Jr., 1973a
Hall, N.T., 1984
Hart and others, 1984
McGill, 1951
Smith, T.C., 1984c
EFZ: Pleito Hills, Grapevine

310
GARLOCK FAULT, SOUTH BRANCH
Holocene
Clark, M.M., 1973
Clark and others, 1984
Crowell, J.C., 1952
Wiese, J.H., 1950
EFZ: Lebec, Winters Ridge, Pastoria Creek, Liebre Twins, Tylerhorse Canyon, Tehachapi South, Monolith, Mojave, NW 1/4 and NE 1/4 Mojave, Cinco

311
SAN ANDREAS FAULT ZONE (CUYAMA TO PALMDALE)
Historic (1857, 1916 earthquake ruptures)
Wood, H.O., 1955
Barrows and others, 1985
Bonilla, M.G., 1970
Carman, M.F., 1964
Crowell, J.C., 1947, 1952, 1964
Dibblee, T.W., Jr., 1971b
Agnew and Sieh, 1978
Sieh, K.E., 1978b
Sierveld, F.G., 1957
Branner, J.C., 1917
Ross, D.C., 1969
Van Amringe, J.H., 1957
Vedder and Wallace, 1970
EFZ: Cuyama, Ballinger Canyon, Maricopa, Santiago Creek, Sawmill Mountain, Cuddy Valley, Frazier Mtn., Lebec, La Liebre Ranch, Liebre Mtn., Burnt Peak, Lake Hughes, Del Sur, Sleepy Valley, Ritter Ridge, Palmdale

312
UNNAMED FAULT NEAR FAIRMONT RESERVOIR
ADJACENT TO SAN ANDREAS FAULT
Holocene
Dibblee, T.W., Jr., 1961
EFZ: Lake Hughes

313
UNNAMED FAULT AT EAST END OF BOUQUET CANYON
Holocene
Barrows and others, 1985
Kahle and others, 1977
EFZ: Sleepy Valley

314
CLEARWATER FAULT
Late Quaternary
Smith, T.C., 1977a
Dibblee, T.W., Jr., 1997a, 1997b, 1997c, 2002f
Ziony and Yerkes, 1985 (p. 55 and Fig.11)
Ziony and Jones, 1989

315
PELONA FAULT
Quaternary
Dibblee, T.W., Jr., 1997b
Smith, T.C., 1978

316
SAN GABRIEL FAULT (WESTERN PART)
Late Quaternary; Holocene near Castaic
Cotton, W.R., 1986
Weber, F.H., Jr., 1982, 1986
Kahle, J.E., 1986
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 55)
EFZ: Newhall

317
ALAMO MOUNTAIN THRUST
DRY CREEK THRUST
FRAZIER MOUNTAIN THRUST
Quaternary
Yerkes and Lee, 1987 (Plate 4.1)
Crowell, J.C., 1954
Jennings and Strand, 1969
Weber, F.H., Jr., 1982
Weber and others, 1976

318
BIG PINE FAULT (CENTRAL SECTION BIG PINE FAULT ZONE)
Late Quaternary
Minor, S.A., 1999, 2004
Hart and others, 1977
Vedder and others, 1973
Yerkes and Lee, 1987 (Plate 4.1)

319
PINE MOUNTAIN FAULT
Late Quaternary
Dibblee, T.W., Jr., 1985, 1987g, 1996a, 1996b
Minor, S.A., 2004
Vedder and others, 1973
Yerkes and Lee, 1987 (Plate 4.1)

320
SANTA YNEZ FAULT
Late Quaternary; Holocene near Lake Cachuma
Clark and others, 1984 (10,000-70,000 yrs)
Dibblee, T.W., Jr., 1985, 1986a, 1986b, 1986c, 1987a, 1987c, 1987d, 1987g, 1988b, 1988c, 1988d, 1996a, 1996b
Darrow and Sylvester, 1984
Yerkes and Lee, 1987 (Plate 4.1)
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 53)

321
SANTA YNEZ FAULT, SOUTH BRANCH
Late Quaternary
Clark and others, 1984 (5,000-15,000 yrs)
Dibblee, T.W., Jr., 1988b, 1988d,
Hart and others, 1977
McCulloch, D.S., 1989b
Yerkes and Lee, 1987 (Plate 4.1)

322
MORE RANCH FAULT
(MISSION RIDGE FAULT SYSTEM)
Late Quaternary
Clark and others, 1984 (40,000-60,000 yrs)
Gurrola, L.D., 2006
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 53)

323
LAVIGIA FAULT
Late Quaternary
Gurrola, L.D., 2006
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 53)

324
SAN JOSE FAULT (SANTA BARBARA COUNTY)
Late Quaternary
Dibblee, T.W., Jr., 1987h
Gurrola, L.D., 2006
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 53)

325
MESA -RINCON CREEK FAULT ZONE
Late Quaternary
Dibblee, T.W., Jr., 1986c, 1987d
Gurrola, L.D., 2006
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 53)

326
CARPINTERIA FAULT
Late Quaternary
Dibblee, T.W., Jr., 1986c, 1987d
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 51)

327
MISSION RIDGE FAULT
ARROYO PARIDA FAULT
(MISSION RIDGE FAULT SYSTEM)
Late Quaternary
Clark, M.N., 1982
Gurrola, L.D., 2006
Clark and others, 1984 (28,500-39,500 yrs)
Dibblee, T.W., Jr., 1986c, 1987d
Rockwell and others, 1984
Weber and others, 1976
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 53)

328
SHEPARD MESA FAULT
Late Quaternary
Dibblee, T.W., Jr., 1987d
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 53)

329
SANTA ANA FAULT (MISSION RIDGE FAULT SYSTEM)
Late Quaternary
Clark, M.N., 1982
Dibblee, T.W., Jr., 1987f
Hart and others, 1986 (p. 26 and Plate 1)
Kahle, J.E., 1985
Rockwell and others, 1984
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 54)

330
FAULTS NEAR OAKVIEW AND MEINERS OAKS
Holocene; Late Quaternary
Clark, M.N., 1982
Dibblee, T.W., Jr., 1987e, 1987f
Hart and others, 1986 (p. 25 and Plate 1)
Kahle, J.E., 1985
Rockwell and others, 1984
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 54)
EFZ: Matilija

331
RED MOUNTAIN FAULT
Late Quaternary; Holocene
Clark and others, 1984 (45,000-60,000 yrs)
Dibblee, T.W., Jr., 1988e
Smith, T.C., 1977b
Tan and others, 2003a
Kamerling, M.J., 2000
Weber and others, 1976
Yeats and others, 1987 (p. 161)
Yerkes and Lee, 1987 (p. 77 and Plate 4.1)
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 54)
EFZ: Pitas Point

332
JAVON CANYON FAULT
Holocene
Sarna-Wojcicki and others, 1987
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 54)
Treiman, J.A., 1989c
Hart and others, 1991
EFZ: Pitas Point

333
SANTA ROSA ISLAND FAULT
Late Quaternary; Quaternary
Clark and others, 1984 (45,000-700,000 yrs)
McCulloch, D.S., 1989b
Vedder and others, 1987
Ziony and Yerkes, 1985 (p. 56)

334
SANTA CRUZ ISLAND FAULT
Late Quaternary; Holocene; Quaternary
Patterson, R.H., 1979
Vedder and others, 1986b (offshore)
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 56)
Pinter and Sorlien, 1991 (<11,800 yrs)

334A
SANTA CRUZ-SANTA CATALINA RIDGE FAULT ZONE (OFFSHORE)
Quaternary; Holocene
Ziony and Jones, 1989 (p. 3)

335
OAK RIDGE FAULT (ONSHORE AND OFFSHORE)
Late Quaternary; Holocene south of Fillmore
Vedder and others, 1986b (offshore)
Yeats, R.S., 1987 (p. 151-153)
Yerkes and Lee, 1987 (p. 78)
Tan and others, 2004a, 2005
Treiman, J.A., 1990a (onshore)
Fisher and others, 2005
Hart and others, 1991 (onshore)
Yerkes and Campbell, 2005
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 55)
EFZ: Fillmore, Moorpark

336
VENTURA FAULT (PITAS POINT -VENTURA FAULT)
Holocene; Quaternary
Hart and others, 1986
Smith, T.C., 1976
Vedder and others, 1986b (offshore)
Yerkes and Lee, 1987 (p. 77-78)
Yerkes and others, 1987 (p. 169, 174, 175)
Ziony and Jones, 1989
EFZ: Saticoy, Ventura

337
LION CANYON FAULT
Late Quaternary
Dibblee, T.W., Jr., 1987e, 1987f
Hart and others, 1986
Tan and Irvine, 2005a
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 54)

338
UNNAMED FAULTS AT ALISO CANYON AND WEST OF SANTA PAULA
Late Quaternary
Yerkes and Lee, 1987 (Plate 4.1)

339
FAULTS OF ORCUTT AND TIMBER CANYONS
Holocene; Late Quaternary
Clark and others, 1984 (4,500-5,000 and 25,000-30,000 yrs)
Hart and others, 1986 (p. 20 and Plate 1)
Rockwell, T.K., 1988
Tan and Irvine, 2005b
Ziony and Jones, 1989
EFZ: Santa Paula Peak

340
SAN CAYETANO FAULT
Holocene; Late Quaternary
Clark and others, 1984 (8,000-12,000 yrs)
Dibblee, T.W., Jr., 1987f
Hart and others, 1986
Kahle, J.E., 1985
Rockwell, T.K., 1983, 1988
Yerkes and Campbell, 2005
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 54)
EFZ: Fillmore, Santa Paula Peak, Ojai

341
SANTA FELICIA FAULT
Late Quaternary?
Yeats and others, 1986 (p.1 and Plate II)
Ziony and Jones, 1989

342
HOLSER FAULT
Late Quaternary?
Winterer and Durham, 1962
Yerkes and Campbell, 2005
Weber, F.H., 1982
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 55)

343
DEL VALLE FAULT
Late Quaternary?
Yeats and others, 1986 (Plate II)
Yerkes and Campbell, 2005
Ziony and Jones, 1989

344
SANTA SUSANA FAULT
Late Quaternary; Historic (1971 rupture accompanying San Fernando earthquake)
Barrows and others, 1975a
Lung and Weick, 1987 (p. 69)
Yeats, R.S., 1987 (p. 137, 158)
Yerkes and Campbell, 2005
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 55)

345
BIG MOUNTAIN FAULT (REMOVED)
Quaternary (Plio-Pleistocene)
Yerkes and Campbell, 2005 – fold axis, not fault

346
SIMI-SANTA ROSA FAULT ZONE
Holocene
Treiman, J.A., 1998
Yeats, R.S., 1983
Yerkes and Campbell, 2005
Yerkes and Lee, 1987 (Plate 4.1)
EFZ: Newbury Park, Moorpark, Simi Valley West, Simi Valley East

347
UNNAMED FAULTS NEAR MOORPARK
Late Quaternary
Yerkes and Lee, 1987 (Plate 4.1)

348
SPRINGVILLE FAULT AND VICINITY
Holocene; Late Quaternary
Treiman, J.A., 1997
Yerkes and Lee, 1987 (Plate 4.1)
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 55)
EFZ: Camarillo, Santa Paula

349
CAMARILLO FAULT
Holocene
Treiman, J.A., 1997
EFZ: Camarillo

350
BAILEY FAULT
Late Quaternary
Hart and others, 1978
Tan and others, 2004b
Yerkes and Lee, 1987 (Plate 4.1)

351
BONEY MOUNTAIN FAULT
SYCAMORE CANYON FAULT
Quaternary
Hart and others, 1978
Tan and Clahan, 2003
Yerkes and Campbell, 2005

352
CHATSWORTH FAULT
Late Quaternary
Hart and others, 1978
Yerkes and Lee, 1987 (Plate 4.1)
Yerkes and Campbell, 2005
Ziony and others, 1974 (Sheet 2)

353
NORTHRIDGE HILLS FAULT
Late Quaternary or Holocene
Baldwin and others, 2000
Weber, F.H., Jr., 1980 (p. B-53)
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 56)
Yerkes and Campbell, 2005

354
MISSION HILLS FAULT ZONE
Late Quaternary or Holocene
Saul, R.B., 1975, 1979
Yerkes and Campbell, 2005
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 56)

355
UNNAMED FAULT (UPPER VAN NORMAN LAKE AREA)
Holocene
Allen and others, 1975
Barrows and others, 1975a, 1975b
U.S. Geological Survey, 1971
Spellman and others, 1984

356
SAN FERNANDO FAULT
Historic (1971 earthquake ruptures)
Allen and others, 1975
Barrows and others, 1975a, 1975b
U.S. Geological Survey, 1971
Weber, F.H., Jr., 1982
EFZ: San Fernando, Sunland, Oat Mountain

357
SIERRA MADRE FAULT ZONE
Holocene; Late Quaternary (Holocene -western part between Big Tujunga and Dunsmore canyons; late Quaternary -eastern part)
Bortugno, E.J., 1986
Clark and others, 1984 (1,000-11,000 and 200,000-500,000 yrs)
Crook and others, 1987 (p. 41-53)
Dibblee, T.W., Jr., 2002d
Morton and Miller, 2003
Smith, D.P., 1978
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 57)
EFZ: Sunland, Burbank

358
SAN ANDREAS FAULT ZONE (PALMDALE TO CAJON CANYON)
Historic (1857 earthquake rupture)
Barrows and others, 1985
Morton and Miller, 2003
Morton and others, 1991
Perez and others, 2007
EFZ: Palmdale, Littlerock, Juniper Hills, Valyermo, Mescal Creek, Mount San Antonio, Telegraph Peak, Cajon

359
FAULTS IN LAKE ALMANOR REGION, INCLUDING KEDDIE RIDGE AND WALKER SPRING FAULTS
Late Quaternary; Quaternary
Grose and others, 1991

360
WATERS PEAK FAULT
(FOOTHILLS FAULT SYSEM)
Quaternary
Page and Sawyer, 2004

361
LLANO FAULT
Holocene?
Bortugno, E.J., 1986
Guptill and others, 1979
Ponti and Burke, 1980
Ziony and Jones, 1989

362
MIRAGE VALLEY FAULT
Late Quaternary
Bortugno, E.J., 1986
Bryant, W.A., 1987d
Hart and others, 1988

363
LEUHMAN FAULT
Quaternary; Late Quaternary at southeast end
Bortugno, E.J., 1986
Bryant, W.A., 1987d
Hart and others, 1988

364
KRAMER HILLS FAULT
Late Quaternary
Bortugno, E.J., 1986
Bryant, W.A., 1987d
Hart and others, 1988

365
LOCKHART FAULT
SOUTH LOCKHART FAULT
Holocene
Bortugno, E.J., 1986
Bryant, W.A., 1987c
Hsu and Wagner, 1990
Manson, M.W., 1986c
EFZ: Kramer Hills, The Buttes, Lockhart

366
UNNAMED FAULT ON WEST SIDE OF HARPER LAKE
Holocene
Bryant, W.A., 1987c
EFZ: Lockhart

367
NORTH LOCKHART FAULT
Late Quaternary
Bryant, W.A., 1987c

368
GRAVEL HILLS FAULT
Holocene
Bryant, W.A., 1987c
Dibblee, T.W., Jr., 1968b
Hsu and Wagner, 1990
EFZ: Fremont Peak

369
HARPER FAULT ZONE
Holocene
Bortugno, E.J., 1986
Bryant, W.A., 1987c
Dibblee, T.W., Jr., 1968b
Hsu and Wagner, 1990
EFZ: Bird Spring, Lockhart, Water Valley, Mud Hills

370
BLACKWATER FAULT
Holocene; Quaternary
Bortugno, E.J., 1986
Bryant, W.A., 1987c
Dibblee, T.W., Jr., 1968b
Hsu and Wagner, 1990
EFZ: Opal Mountain, Superior Lake

371
COYOTE LAKE FAULT
Quaternary?
Byers, F.M., Jr., 1960
Wesnousky, S.G., 1986

371A
UNNAMED FAULT
Late Quaternary; Undivided Quaternary
Howard, K.A., 1993

372
MANIX FAULT
Holocene; Historic (1947 earthquake rupture)
Bortugno, E.J., 1986
Dibblee and Bassett, 1966a, 1966b
Hileman and others, 1973
Keaton and Keaton, 1977
Richter, C.F., 1958 (p. 516-518)
EFZ: NE 1/4 Newberry, NW 1/4 Cady Mountains

372A
UNNAMED FAULT
Holocene or Late Quaternary
Slemmons, D.B., 1992

373
HARPER LAKE FAULT
Late Quaternary; Holocene?
Bryant, W.A., 1987c
Dibblee, T.W., Jr., 1968b

374
MT. GENERAL FAULT
Holocene in part
Bortugno, E.J., 1986
Bryant, W.A., 1987c
EFZ: Barstow

375
LENWOOD FAULT CREEP
Historic (creep?, not verified by Manson)
Church and others, 1974
Manson, M.W., 1986b
Morton and others, 1980

376
CALICO FAULT
Holocene
Bortugno, E.J., 1986
Bortugno, E.J., 1987
Hart, E.W., 1994
Morton and others, 1980
EFZ: Yermo, Harvard Hill, Newberry Springs, Troy Lake, Silver Bell Mine

376A
UNNAMED FAULTS NEAR TROY LAKE
Historic (1992 earthquake)
Hart, E.W., 1994
EFZ: Harvard Hill, Newberry Springs

377
CHEMEHUEVI GRABEN
Late Quaternary
Purcell and Miller, 1980

378
PISGAH FAULT
Holocene
Bortugno, E.J., 1986
Hart, E.W., 1987
Hart and others, 1988
Morton and others, 1980
EFZ: Hector, Sunshine Peak, Lavic Lake, Lavic SE

378A
SOUTH BRISTOL MTNS. FAULT
Quaternary
Howard, K.A., 1993

378B
BROADWELL LAKE FAULT
Early Quaternary
Howard, K.A., 1993

379
RODMAN FAULT
Quaternary
Bortugno, E.J., 1986
Hart and others, 1988

380
CAMP ROCK FAULT
Holocene; Historic (earthquake rupture 1992)
Bryant, W.A., 2004
Hart and others, 1988, 1993
Manson, M.W., 1986a
Morton and others, 1980
EFZ: Minneola, Ord Mountain, Camp Rock Mine, Fry Mountains, Iron Ridge

381
LENWOOD FAULT
Holocene
Bortugno, E.J., 1986
Bryant, W.A., 1986b
Hart and others, 1988
Manson, M.W., 1986b
Morton and others, 1980
Ziony and Yerkes, 1985
EFZ: Rattlesnake Canyon, Old Woman Springs, Fry Mountains, Grand View Mine, Ord Mountain, West Ord Mtn., Daggett, Barstow SE

382
HELENDALE FAULT
Holocene; Late Quaternary
Bortugno, E.J., 1986
Bryant, W.A., 1986b
Dibblee, T.W., Jr., 1964a
Manson, M.W., 1986c
Morton and others, 1980
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 52)
EFZ: Turtle Valley, Apple Valley North, Fairview Valley, Fifteenmile Valley, Lucerne Valley, Cougar Buttes, Big Bear City

383
SQUAW PEAK FAULT
Pre-Quaternary
Matti and others, 1985
Meisling and Weldon, 1989 (age p. 117)

384
SAN GABRIEL FAULT (EASTERN PART)
Quaternary
Bortugno, E.J., 1986
Dibblee, T.W., Jr., 1998, 2002a, 2002b, 2002c, 2002d, 2002e
Morton and others, 1991
Morton and Matti, 2001a
Morton and Miller, 2003
Weber, F.H., Jr., 1982

385
CLAMSHELL-SAWPIT CANYON FAULT ZONE
Late Quaternary
Bortugno, E.J., 1986
Crook and others, 1987 (p. 49 and Plate 2.3)
Dibblee, T.W., Jr., 1998, 2002d
Morton, D.M., 1973 (p. 17-18)
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 57)

386
EAGLE ROCK FAULT
SAN RAFAEL FAULT
Late Quaternary?
Lamar, D.L., 1970 (p. 39)
Weber, F.H., Jr., 1980 (p. A-3, A-4)
Yerkes and Campbell, 2005
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 56)

387
VERDUGO FAULT
Holocene; Late Quaternary
Weber and others, 1980 (p. A-2, A-3, A-4)
Yerkes and Campbell, 2005
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 56)

388
POSSIBLE FAULT IN NORTH HOLLYWOOD
Holocene?
Weber, F.H., Jr., 1980 (p. B-99)
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 56)

389
MALIBU COAST FAULT
Late Quaternary; Holocene
Campbell and others, 1996
Clark and others, 1984 (185,000-200,000 yrs)
Fall and others, 1987 (Holocene faulting at Malibu Point)
Leighton and Associates, 1989
Treiman, J.A., 1994a, 2007
Yerkes and Campbell, 2005
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 56)

390
MALIBU COAST FAULT (OFFSHORE)
Late Quaternary
Fisher and others, 2005
Treiman, J.A., 1994a
Vedder and others, 1986b

391
SANTA MONICA FAULT
Holocene; Late Quaternary
Clark and others, 1984 (122,000-126,000 yrs)
Dolan and others, 2000
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 57)

392
HOLLYWOOD FAULT
Holocene
Clark and others, 1984 (4,000-6,000 yrs)
Dolan and others, 1997
Weber and others, 1980 (p. A-3 and Plate 1)
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 57)

393
FAULT WEST OF MONTEREY PARK
Late Quaternary?
Ziony and Jones, 1989

394
RAYMOND FAULT
Holocene
Crook and others, 1987 (p. 58)
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 57)
Treiman, J.A., 1991b
Hart and others, 1991
EFZ: Los Angeles, El Monte. Mt. Wilson

395
DUARTE FAULT
Late Quaternary; possibly Holocene along northern strand near Azusa
Bortugno, E.J., 1986
Crook and others, 1987 (p. 50, 52)
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 57)

396
SAN JOSE FAULT
Late Quaternary
Bortugno, E.J., 1986
Morton and Miller, 2003
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 58)

397
INDIAN HILL FAULT
Late Quaternary
Bortugno, E.J., 1986
Morton and Miller, 2003
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 57)

398
RED HILL-ETIWANDA AVENUE FAULT
Late Quaternary except Holocene at eastern end
Hart and others, 1978
Bortugno, E.J., 1986
Burnett and Hart, 1994
Morton and Miller, 2003
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 58)
EFZ: Cucamonga Peak

399
CUCAMONGA FAULT
Holocene
Bortugno, E.J., 1986
Burnett and Hart, 1994
Morton and Matti, 1987 (p. 179)
Morton and Miller, 2003
Ziony and Jones, 1989
EFZ: Devore, Cucamonga Peak, Mt. Baldy

400
LYTLE CREEK FAULT
Late Quaternary; Quaternary
Bortugno, E.J., 1986
Burnett and Hart, 1994
Matti and others, 1985
Morton and Matti, 1987, 2001b
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 48)
EFZ: Devore

401
SAN JACINTO FAULT (SAN JACINTO FAULT ZONE)
Holocene; Late Quaternary; Historic (1899?)
Bonilla, M.G., 1970
Bortugno, E.J., 1986
Burnett and Hart, 1994
Daneš, J.V., 1907
Matti and others, 1985
Morton and others, 1987
Morton and Miller, 2003
Morton and Matti, 2001b
Sharp, R.V., 1972
Toppozada and others, 1981
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 48)
EFZ: Devore, San Bernardino North, San Bernardino South, Redlands, Sunnymead, El Casco, Lakeview, San Jacinto. Hemet, NE 1/4 Hemet

402
GLEN HELEN FAULT
(SAN JACINTO FAULT ZONE)
Holocene
Bortugno, E.J., 1986
Burnett and Hart, 1994
Matti and others, 1985
Morton and others, 1987
Morton and Miller, 2003
Sharp, R.V., 1972
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 48)
EFZ: Devore

403
CLEGHORN FAULT (PART OF CLEGHORN FAULT ZONE)
Late Quaternary; Holocene?
Bryant, W.A., 1987b
Meisling, K.E., 1984 (p. 171-177, 268. 271-288)
Meisling and Weldon, 1989 (p. 121)
Clark and others, 1984 (50,000-100,000 yrs)
Morton and Miller, 2003
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 58)

404
GRASS VALLEY FAULT (PART OF CLEGHORN FAULT ZONE)
Late Quaternary?
Bryant, W.A. 1987b
Meisling, K.E., 1984 (p. 178-179)
Ziony and Jones, 1989

405
ORD MOUNTAINS FAULT
(WESTERN SECTION OF NORTH FRONTAL THRUST SYSTEM)
Holocene
Bryant. W.A., 1986c
Hart and others, 1988
Meisling, K.E., 1984 (p. 182.295-298)
Ziony and Jones, 1989
EFZ: Apple Valley South

406
BOWEN RANCH FAULT
Late Quaternary?
Bryant, W.A., 1986c
Meisling, K.E., 1984 (p. 196, 197,309)
Ziony and Jones, 1989

407
NORTH FRONTAL FAULT ZONE
(NORTHERN AND EASTERN SECTION OF NORTH FRONTAL THRUST SYSTEM)
Late Quaternary; Holocene
Bortugno, E.J., 1986
Bryant, W.A., 1986b
Meisling, K.E., 1984
Miller, F.K., 1987 (p. 83, 94)
Ziony and Yerkes, 1985 (p. 58)
EFZ: Rattlesnake Canyon, Bighorn Canyon

408
SKY HI RANCH FAULT
(PART OF NORTH FRONTAL THRUST SYSTEM)
Holocene
Bryant, W.A., 1986b, 1986c
Meisling, K.E., 1984 (p. 289-294)
Meisling and Weldon, 1989 (p. 122)
Ziony and Jones, 1989
EFZ: Fifteenmile Valley, Lucerne Valley, Fawnskin

409
ARRASTRE CANYON NARROWS FAULT
Late Quaternary?
Bryant, W.A., 1986c
Meisling, K.E., 1984 (p. 197-200,308,309)
Ziony and Jones, 1989

410
TUNNEL RIDGE FAULT
Late Quaternary?
Bryant, W.A., 1986c
Meisling, K.E., 1984 (p. 180-182,299)
Meisling and Weldon, 1989 (p. 120)
Ziony and Jones, 1989

411
WATERMAN CANYON FAULT
Late Quaternary
Dibblee, T.W., Jr., 1968a, 1974c
Meisling and Weldon, 1989 (p. 108, 117)
Miller and Matti, 2001

412
SANTA ANA FAULT
Quaternary
Bortugno, E.J., 1986
Dibblee, T.W., Jr., 1964b, 1974c
Matti and others, 1985

413
HELENDALE FAULT (SOUTHEAST EXTENSION)
Quaternary
Bortugno, E.J., 1986
Bryant, W.A., 1986b
Dibblee, T.W., Jr., 1964a, 1964b
Hart and others, 1988

414
OLD WOMAN SPRINGS FAULT
SILVER REEF FAULT
Holocene
Bortugno, E.J., 1986
Bryant, W.A., 1986b
Manson, M.W., 1986b
Morton and others, 1980
EFZ: Old Woman Springs, Rattlesnake Canyon

415
JOHNSON VALLEY FAULT
Holocene; Historic (1979, 1992 earthquake ruptures)
Bortugno, E.J., 1986
Bryant, W.A., 1986b, 1992b, 1994
Dibblee, T.W., Jr., 1967b
Hart and others, 1988, 1993
Hill and others, 1980
Manson, M.W., 1986b
Morton and others, 1980
EFZ: Landers, Bighorn Canyon, Melville Lake, Old Woman Springs

416
GALWAY LAKE FAULT
Historic (ground rupture, 1975 and 1992 earthquakes)
Bryant, W.A., 1994
Hill and Beeby, 1977
Manson, M.W., 1986a
Hart and others, 1993
EFZ: Galway Lake

417
WEST CALICO FAULT
Holocene
Bortugno, E.J., 1986
Bortugno, E.J., 1987
Dibblee, T.W., Jr., 1967d, 1967e, 1967f
Morton and others, 1980
EFZ: Silver Bell Mine, Sunshine Peak, Galway Lake, Lavic SE, Hidalgo Mtn.

418
BULLION FAULT
Holocene; Historic (earthquake rupture 1999)
Bortugno, E.J., 1986
Dibblee, T.W., Jr., 1967e, 1967f, 1968a
Hart, E.W., 1987
Hart and others, 1988
Howard, K.A., 2002
Treiman, J.A., 2002a
EFZ: Lavic SE, Hidalgo Mtn., Deadman Lake NW

419
HIDALGO FAULT
Holocene; Quaternary
Bortugno, E.J., 1987
Dibblee, T.W., Jr., 1967e, 1968a
Hart and others, 1988
EFZ: Deadman Lake SW, Hidalgo Mtn.

420
EMERSON FAULT
Holocene; Historic (earthquake rupture 1992)
Bryant, W.A., 1994, 2004
Bortugno, E.J., 1986
Hart and others, 1988, 1993
Manson, M.W., 1986a
Morton and others, 1980
EFZ: Iron Ridge, Melville Lake, Emerson Lake, Hidalgo Mtn., Goat Mtn.

421
HOMESTEAD VALLEY FAULT
Holocene; Historic (1979, 1992 earthquake ruptures)
Bortugno, E.J., 1986
Bryant, W.A., 1992b, 1994, 2004
Hart and others, 1988, 1993
Hill and others, 1980
EFZ: Landers, Emerson Lake, Melville Lake, Iron Ridge

422
MESQUITE LAKE FAULT
Holocene; Historic (earthquake rupture 1999)
Bortugno, E.J., 1986
Bryant, W.A., 1986a
Hart and others, 1988
Morton and others, 1980
Treiman, J.A., 2002a
Treiman and others, 2002
EFZ: Deadman Lake SE, Twentynine Palms, Valley Mtn., Twentynine Palms Mountain

422A
CLEGHORN LAKE FAULT
Quaternary
Howard, K.A., 2002

423
COPPER MOUNTAIN FAULT
Holocene; Late Quaternary
Bortugno, E.J., 1986
Bryant, W.A., 1986a
Dibblee, T.W., Jr., 1967d, 1968a
Hart and others, 1988
Morton and others, 1980
EFZ: Sunfair, Joshua Tree North

424
UNNAMED FAULT AT FLAMINGO HEIGHTS
(JOHNSON VALLEY FAULT ZONE)
Holocene?; Historic (earthquake rupture 1992)
Bryant, W.A., 1986a, 1992b
EFZ: Yucca Valley North

424A
EUREKA PEAK FAULT
Historic (1992 earthquake rupture); Holocene
Treiman, J.A., 1992
Rymer, M.J., 1993
EFZ: Joshua Tree South

424B
BURNT MOUNTAIN FAULT
Historic (1992 earthquake ruptures); Holocene
Treiman, J.A., 1992
Rymer, M.J., 1993
EFZ: Yucca Valley South, Yucca Valley North

425
PINTO MOUNTAIN FAULT
Holocene; Late Quaternary
Bortugno, E.J., 1986
Bryant, W.A., 1986a
Dibblee, T.W., Jr., 1967a, 1967g
Howard, K.A., 2002
EFZ: SW 1/4 and SE 1/4 Morongo Valley, Yucca Valley South, Yucca Valley North, Joshua Tree North, Sunfair, Queen Mtn., Twentynine Palms

426
SAN GORGONIO MOUNTAIN FAULT
Late Quaternary
Bortugno, E.J., 1986
Dibblee, T.W., Jr., 1964b, 1967a
Wesnousky, S.G., 1986

427
MILL CREEK FAULT (NORTH BRANCH SAN ANDREAS FAULT)
Late Quaternary
Bortugno, E.J., 1986
Dibblee, T.W., Jr., 1964b, 1967a, 1974c
Hope, R.A., 1969
Matti and others, 1985, 1992
Miller and Matti, 2001
Morton and Matti, 2001b
Smith, R.A., 1959
Treiman, J.A., 1994b
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 48)
EFZ: SW 1/4 Morongo Valley, SE 1/4 and SW 1/4 San Gorgonio Mtn., Yucaipa, Keller Peak, Harrison Mountain

427A
SAN ANDREAS FAULT (CAJON CANYON TO BURRO FLATS)
Holocene
Bortugno, E.J., 1986
Burnett and Hart, 1994
Dibblee, T.W., Jr., 1964b, 1974c
Hope, R.A., 1969
Miller and Matti, 2001
EFZ: Cabazon, SE 1/4 and SW 1/4 San Gorgonio, Yucaipa, Redlands, Harrison Mountain, San Bernardino North, Devore

428
CRAFTON HILLS FAULT ZONE
Holocene; Late Quaternary
Bortugno, E.J., 1986
Hart and others, 1978
Matti and others, 2003b
Morton, D.M., 1978c
Smith, D.P., 1977
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 58)
EFZ: Yucaipa

429
RIALTO-COLTON FAULT
Late Quaternary
Morton and Miller, 2003
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 49)

430
INFERRED FAULT NEAR FONTANA
Possibly Late Quaternary; numerous closely aligned small earthquakes
Morton, D.M., 1976
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 58)

431
CHINO FAULT
Holocene; Late Quaternary
Treiman, J.A., 2002b
Ziony and Jones, 1989

432
CENTRAL AVENUE FAULT
Late Quaternary?
Greenwood and Morton, 1991
Morton, D.M., 1976
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 49)

433
FAULTS IN WEST COYOTE HILLS
Late Quaternary; 1968 surface rupture probably related to oil withdrawal
Yerkes, R.F., 1972
Tan and others, 1984 (p. 29-30)
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 50)
EFZ: La Habra

434
POTRERO FAULT
INGLEWOOD FAULT
AVALON COMPTON FAULT
(NEWPORT-INGLEWOOD FAULT ZONE)
Holocene; Late Quaternary; surface faulting (creep) on Inglewood Fault since 1957 due to oil and gas withdrawal
Barrows, A.G., 1974 (p. 18 and Plate 1)
Bryant, W.A., 1985e, 1988d
Hart and others, 1986 (p. 21-23, Plate 1)
Poland and others, 1959
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 51)
EFZ: Beverly Hills, Hollywood, Inglewood, Torrance

435
CHARNOCK FAULT
OVERLAND AVENUE FAULT
Late Quaternary
Castle, R.O., 1960
Poland and others, 1959
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 52)

436
REDONDO CANYON FAULT (OFFSHORE)
Holocene
Clarke and others, 1985 (p. 365)
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 52)

436A
SAN PEDRO BASIN FAULT ZONE (OFFSHORE)
Quaternary; Late Quaternary?
Vedder and others, 1986b
Ziony and Jones, 1989 (late Quaternary)

437
PALOS VERDES FAULT
Late Quaternary; Holocene offshore, in part
Clark and others, 1984 (10,000 yrs. offshore)
Darrow and Fischer, 1983
Vedder and others, 1986b (offshore)
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 52)

438
CABRILLO FAULT
Late Quaternary onshore; Holocene offshore
Bryant and Raub, 1986
Cleveland, G.B., 1976
Vedder and others, 1986b
Ziony and Jones, 1989

439
SOUTH BRANCH FAULT
(NEWPORT-INGLEWOOD FAULT ZONE)
Late Quaternary
Bryant. W.A., 1985b
CDWR, 1966
Hart and others, 1986 (p. 24 and Plate 1)
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 51)

440
NORTH BRANCH FAULT
(NEWPORT-INGLEWOOD FAULT ZONE)
Holocene
Bryant. W.A., 1985b, 1988d
Guptill and Heath, 1981
Hart and others, 1986 (p. 24 and Plate 1)
Woodward-Clyde Consultants, 1987a
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 51)
EFZ: Newport Beach, Seal Beach, Los Alamitos

441
CHERRY HILL FAULT
RESERVOIR HILL FAULT
SEAL BEACH FAULT
(NEWPORT-INGLEWOOD FAULT ZONE)
Holocene
Bryant, W.A., 1985b, 1985e, 1988d
Hart and others, 1986 (p. 21-24, Plate 1)
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 51)
EFZ: Long Beach. Los Alamitos. Seal Beach

442
LOS ALAMITOS FAULT
Late Quaternary?
Ziony and Jones, 1989

443
NORWALK FAULT?
Age?
Hill, M.L., 1989 (no good evidence for fault)
Tan and others, 1984 (p. 12. 13, 28, 29)
Yerkes. R.F., 1972 (p. 31)
Ziony and Jones, 1989 (p. 14)
Ziony and Yerkes, 1985 (p. 50)

444
WHITTIER FAULT
(ELSINORE FAULT ZONE)
Late Quaternary; Holocene
Hart, E.W., 1979b
Treiman, J.A., 1991a (Holocene age)
Greenwood and Morton, 1991
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 49)
Rockwell, T.K., 1990 (Holocene age)
Hart and others, 1991
EFZ: Yorba Linda, Prado Dam. El Monte, La Habra

445
PERALTA HILLS FAULT
Late Quaternary
Greenwood and Morton, 1991
Morton and others, 1999
Wills, C.J., 1988b
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 50)
Hart and others, 1989

446
FRESNO FAULT
TIN MINE FAULT
MAIN STREET FAULT
(ELSINORE FAULT ZONE)
Holocene; Late Quaternary
Weber, F.H., Jr., 1977
Treiman, J.A., 2002c
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 49)
EFZ: Corona South

447
CLAREMONT FAULT
(SAN JACINTO FAULT ZONE)
Holocene
Hart, E.W., 1979a
Kahle, J.E., 1987
Morton, D.M., 1978a
Riverside County, 2001
Sharp, R.V., 1972
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 48)
EFZ: Sunnymead, San Bernardino South, El Casco

448
SAN GORGONIO PASS FAULT ZONE (WESTERN EXTENSION)
Late Quaternary
Matti and others, 1985
Molinari and others, 1988

449
BANNING FAULT (WESTERN PART)
Late Quaternary; Holocene
Matti and others, 1985
Treiman, J.A., 1994b
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 58)
EFZ: Cabazon, Whitewater

450
MISSION CREEK FAULT
(SAN ANDREAS FAULT ZONE)
Late Quaternary
Dibblee, T.W., Jr., 1964b, 1967a,
Matti and others, 1985, 1992
Proctor, R.J., 1968
EFZ: SE 1/4 and SW 1/4 Morongo Valley, SE 1/4 and SW 1/4 San Gorgonio Mtn.

451
MORONGO VALLEY FAULT
Holocene; Late Quaternary
Bortugno, E.J., 1986
Dibblee, T.W., Jr., 1967a
Proctor, R.J., 1968
EFZ: SE 1/4 Morongo Valley

451A
LONG CANYON FAULT
Holocene
Rymer, M.J., 1993

452
SOUTH BRANCH SAN ANDREAS FAULT (BANNING STRAND)
Holocene; Historic (1986 earthquake ruptures; 1983 creep)
CDWR, 1964
Hope, R.A., 1969
Popenoe, F.W., 1959
Matti and others, 1985
Sharp and others, 1986b
Smith, D.P., 1979c
Treiman, J.A., 1994b
EFZ: Whitewater, Desert Hot Springs, Seven Palms Valley, Cathedral City, Myoma

453
NORTH BRANCH SAN ANDREAS FAULT (COACHELLA STRAND)
Holocene
CDWR, 1964
Clark, M.M., 1984 (p. 4)
Hope, R.A., 1969
Popenoe, F.W., 1959
Smith, D.P., 1979c
EFZ: Desert Hot Springs, Seven Palms Valley, NE 1/4 Thousand Palms, Myoma

454
GARNET HILL FAULT
(SAN ANDREAS FAULT ZONE)
Holocene; Late Quaternary
Treiman, J.A., 1994b
Matti and others, 1985, 1992
EFZ: Whitewater

455
SAN GORGONIO PASS FAULT ZONE
Holocene
Treiman, J.A., 1994b
Matti and others, 1985
Ziony and Jones, 1989
EFZ: Cabazon, Whitewater

456
BEAUMONT PLAIN FAULT ZONE
Late Quaternary
Hart and others, 1979
Matti and others, 1985 (p. 14)
Matti and Morton, 1993
Riverside County, 2001
Ziony and Jones, 1989

457
CASA LOMA FAULT
Holocene; creep since 1939 probably owing to groundwater withdrawal; 1899?
Hart, E.W., 1979a
Kahle, J.E., 1987
Morton, D.M., 1978b
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 49)
EFZ: El Casco, Lakeview, San Jacinto

458
HOT SPRINGS FAULT
(SAN JACINTO FAULT ZONE)
Late Quaternary; Holocene (at north end)
Riverside County, 2001
Hart, E.W., 1979a
Matti and others, 1985
Sharp, R.V., 1967
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 49)
EFZ: San Jacinto, NE 1/4 Hemet, NW 1/4 Idyllwild

459
CLARK FAULT
(SAN JACINTO FAULT ZONE)
Holocene; Quaternary
Hart, E.W., 1979a
Riverside County, 2001
Sharp, R.V., 1972
Janecke and others, 2008
Ziony and Jones, 1989
EFZ: SW 1/4 and SE 1/4 Idyllwild, Bucksnort Mtn., Collins Valley, Clark Lake NE, Clark Lake, Fonts Point

460
WILDOMAR FAULT
(ELSINORE FAULT ZONE)
Holocene
Greenwood, R.B., 1992
Hart and others, 1979 (Table 1)
Kennedy, M.P., 1977 (p. 9 and Plate 1)
Morton and Weber, 2003
Saul, R.B., 1979
Smith, D.P., 1979e
Wills, C.J., 1988c
Ziony and Jones, 1989
Hart and others, 1989
EFZ: Elsinore, Wildomar, Murrieta, Temecula, Pechanga, Pala

461
GLEN IVY NORTH FAULT
(ELSINORE FAULT ZONE)
Holocene
Greenwood, R.B., 1992
Hart and others, 1979 (Table 1)
Morton and Weber, 2003
Smith, D.P., 1979e
Treiman, J.A., 2002c
Weber, F.H., Jr., 1977
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 50)
EFZ: Corona South, Lake Mathews, Alberhill

462
GLEN IVY SOUTH FAULT
(ELSINORE FAULT ZONE)
Holocene; Late Quaternary in southeastern part
Greenwood, R.B., 1992
Smith, D.P., 1979e
Weber, F.H., Jr., 1977
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 50)
EFZ: Alberhill, Lake Mathews

463
PELICAN HILL FAULT
Late Quaternary
Clark and others, 1986 (age, p. 46)
Miller and Tan, 1976
Tan and Edgington, 1976
Vedder, J.G., 1975
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 51)

464
UNNAMED FAULTS ON CATALINA ISLAND
Pre-Quaternary
Boundy-Sanders and others, 1990

465
NEWPORT INGLEWOOD-ROSE CANYON FAULT ZONE (OFFSHORE)
Quaternary
Clarke and others, 1987
Ryan and others, 2009

466
CRISTIANITOS FAULT ZONE (OFFSHORE)
Quaternary
Clarke and others, 1987

467
WILLARD FAULT
(ELSINORE FAULT ZONE)
Late Quaternary; Holocene
Greenwood, R.B., 1992
Hart and others, 1979 (Table 1 and Plate 1)
Kennedy, M.P., 1977, 2000
Kennedy and Morton, 2003
Rockwell, T.K., 1990 (partly Holocene)
Morton and Weber, 2003
Tan and Kennedy, 2000
Wills, C.J., 1988c
Ziony and Jones, 1989
EFZ: Murrieta

468
MURRIETTA HOT SPRINGS FAULT
Late Quaternary; Holocene?
Greenwood and Morton, 1991
Kennedy, M.P., 1977 (p. 10 and Plate 1)
Kennedy and Morton, 2003
Rockwell, T.K., 1990 (probably Holocene)
Ziony and Jones, 1989
Ziony and Yerkes, 1985 (p. 50)

469
WOLF VALLEY FAULT AND GROUND CRACKS
Holocene; Late Quaternary
Kennedy, M.P., 1977 (p. 9-10 and Plate 1)
Tan and Kennedy, 2000
Wills, C.J., 1988c
Ziony and Yerkes, 1985 (p. 50)
Hart and others, 1989
EFZ: Pechanga

470
FAULTS FLANKING AGUA TIBIA MOUNTAIN (PART OF ELSINORE FAULT)
Late Quaternary?
Kennedy, M.P., 2000
Vaughan and Rockwell, 1986 (p. 188)
Ziony and Jones, 1989

471
BUCK RIDGE FAULT
Late Quaternary
Sharp, R.V., 1967, 1972
EFZ: Clark Lake, Collins Valley, SW 1/4 Palm Desert, SE 1/4 Idyllwild

472
SAN ANDREAS FAULT ZONE (INDIO TO SALTON SEA)
Holocene; Historic (1979, 1968 ground ruptures; 1992, 1999 triggered creep)
Babcock, E.A., 1969
Bryant, W.A., 2010
CDWR, 1964
Clark, M.M., 1984
Dibblee, T.W., Jr., 1954
Hope, R.A., 1969
Popenoe, F.W., 1959
Rymer and others, 2002
Ware, G.C., 1958
Williams and others, 1988 (triggered creep)
Bilham and others, 1992 (triggered creep)
EFZ: Indio, SW 1/4 Lost Horse Mtn., Thermal Canyon, Mecca, Mortmar, Orocopia Canyon, Salton, Durmid, Frink NW, Frink

473
UNNAMED FAULTS EAST OF SAN ANDREAS FAULT
Late Quaternary
Clark, M.M., 1984
Hope, R.A., 1969
Popenoe, F.W., 1959

473A
CHIRIACO FAULT
Pre-Quaternary
Powell, RE., 1975, 1981

474
BLYTHE GRABEN
Late Quaternary
Purcell and Miller, 1980

475
HIDDEN SPRINGS FAULT
Late Quaternary
Crowell, J.C., 1962
Riverside County, 2001
EFZ: Durmid, Orocopia Canyon, Mortmar

476
HOT SPRINGS FAULT
Holocene
Bryant, W.A., 1987a
EFZ: Frink NW, Frink

477
SAN ANDREAS FAULT (AT BOMBAY BEACH AND VICINITY)
Holocene; Late Quaternary
Bryant, W.A., 1987a
Clark, M.M., 1984
Hope, R.A., 1969
Popenoe, F.W., 1959
Townley and Allen, 1939 (1868 fissure)
EFZ: Frink, Frink NW, Durmid

478
COYOTE MOUNTAIN FAULT AND OTHER YOUNG FAULTS IN VICINITY
Holocene; Late Quaternary
Sharp, R.V., 1972
Theodore and Sharp, 1975

479
COYOTE CREEK FAULT
Holocene; Historic (1968 earthquake rupture; creep)
Allen and others, 1972
Clark, M.M., 1972a
Dibblee, T.W., Jr., 1954
Harsh, P.W., 1977
Sharp and Clark, 1972
Sharp, R.V., 1967, 1972, 1992 (triggered creep)
EFZ: Bucksnort Mtn., Collins Valley, Clark Lake NE, Borrego Palm Canyon, Clark Lake, Borrego Sink, Borrego Mountain, Shell Reef, Borrego Mountain SE, Harpers Well

480
IONE FAULT
(FOOTHILLS FAULT SYSTEM)
Late Quaternary
Page and Sawyer, 1994

481
UNNAMED FAULTS
Late Quaternary; Holocene?
Clark, M.M., 1982, and written communication 8/15/1989
Kahle, J.E., 1988a

482
EARTHQUAKE VALLEY FAULT
Holocene; late Quaternary
Steely and others, 2009
Clark, M.M., 1982, and written communication, 8/15/89
Smith, D.P., 1979d
Hart and others, 1979
EFZ: Earthquake Valley, Julian, Ranchita

483
ELSINORE FAULT
(JULIAN SECTION ELSINORE FAULT ZONE)
Holocene; Late Quaternary
Clark, M.M., 1982
Hart and others, 1979
Kennedy, M.P., 1977
Smith, D.P., 1979a
EFZ: Carrizo Mtn., Sweeney Pass, Arroyo Tapiado, Agua Caliente Springs, Monument Peak, Julian, Earthquake Valley, Mesa Grande, Warners Ranch

484
CORONADO BANK FAULT ZONE (OFFSHORE CORONADO BANK-PALOS VERDES SECTION)
Holocene; Late Quaternary
Ryan and others, 2009
Clarke and others, 1987
Legg and Kennedy, 1993
Vedder and others, 1986b

484A
THIRTY MILE BANK FAULT (OFFSHORE)
Quaternary; Pre-Quaternary
Legg and Kennedy, 1993

485
SAN CLEMENTE FAULT (OFFSHORE)
Late Quaternary; Holocene; Undivided Quaternary; Historic? (1951 earthquake)
Clarke and others, 1987
Legg and Kennedy, 1979 (p. 42); 1993
Legg and others, 1989 (late Quaternary age, p. 1727)
Richter, C.F., 1958 (p. 446)
Vedder and others, 1986b

486
SAN DIEGO TROUGH FAULT (OFFSHORE)
Holocene; Late Quaternary
Ryan and others, 2009
Clarke and others, 1987
Legg, M.A., 1985
Legg and Kennedy, 1993

487
MISSION BAY FAULT
Late Quaternary
Kennedy and Peterson, 1975
Treiman, J.A., 1984

488
POINT LOMA FAULT ZONE
Late Quaternary
Kennedy and others, 1975 (p. 13, Plate 1)
Treiman, J.A., 1993

489
CORONADO BANK FAULT ZONE (OFFSHORE CORONADO BANK SECTION)
Holocene; Late Quaternary; Undivided Quaternary
Clarke and others, 1987
Ryan and others, 2009
Legg, M.R., 1985
Legg and others, 1989

490
CORONADO FAULT
Holocene; Late Quaternary
Clarke and others, 1987
Kennedy and Clark, 1999
Treiman, J.A., 2002d
Legg and Kennedy, 1993

490A
SPANISH BIGHT FAULT
Holocene; Late Quaternary
Clarke and others, 1987
Kennedy and Clark, 1999
Kennedy and Welday, 1980
Treiman, J.A., 2002d
Legg and Kennedy, 1993

491
ROSE CANYON FAULT ZONE
Holocene; Late Quaternary; Quaternary
Kennedy and Peterson, 1975
Treiman, J.A., 1984, 1990b
Hart and others, 1991
Lindvall and Rockwell, 1995
Legg and Kennedy, 1993
EFZ: La Jolla, Point Loma

492
OLD TOWN FAULT (ROSE CANYON FAULT SEGMENT)
Late Quaternary?
Kennedy and Peterson, 1975
Treiman, J.A., 1993

493
LA NACION FAULT ZONE
SWEETWATER FAULT
Quaternary
Kahle, J.E., 1988b
Kennedy and Tan, 1977
Hart and others, 1989

493A
SILVER STRAND FAULT (OFFSHORE)
Late Quaternary
Kennedy and Welday, 1980
Kennedy and Clark, 1999
Clarke and others, 1987
Legg and Kennedy, 1993
Treiman, J.A., 2002d

494
THING VALLEY FAULT
PINE VALLEY FAULT
OTHER UNNAMED FAULTS
Pre-Tertiary; Quaternary
Todd, V.A., 1979
Kahle, J.E., 1988a (Quaternary)

494A
UNNAMED FAULTS
Pleistocene; Holocene
Kahle, J.E., 1988a

495
LAGUNA MEADOW FAULT
Quaternary in part; Pre-Tertiary in part
Todd, V.A., 1979

496
ELSINORE FAULT
(COYOTE MOUNTAIN SECTION ELSINORE FAULT ZONE)
Holocene
Kahle, J.E., 1988a
Smith, D.P., 1979a
Rockwell and Pinault, 1986 (p. 193-196)
Todd, V.R., 2004
EFZ: Carrizo Mtn.

497
TAHOE VALLEY FAULT ZONE
Quaternary
Schweickert and others, 2000

498
KANE SPRING FAULT (SAN JACINTO FAULT ZONE)
Late Quaternary; Historic (1987 earthquake rupture)
Hudnut and others, 1989
Sharp and others, 1989
Treiman, J.A., 1989b
EFZ: Kane Spring

499
ELMORE RANCH FAULT AND ELMORE RANCH EAST FAULT
(SAN JACINTO FAULT ZONE)
Historic (1987 earthquake rupture; 1992 triggered creep)
Hudnut and others, 1989
Kahle and others, 1988
Sharp and others, 1989
Sharp, R.V., 1992 (triggered creep)
Treiman, J.A., 1989b
Hart and others, 1989
EFZ: Kane Spring

500
LONE TREE FAULT
(SAN JACINTO FAULT ZONE)
Historic (1987 earthquake rupture); Late Quaternary
Hudnut and others, 1989
Sharp and others, 1989
Treiman, J.A., 1989b
EFZ: Kane Spring

501
SMOKETREE WASH FAULT
Late Quaternary
Riverside County, 2001

502
BRAWLEY SEISMIC ZONE
Historic
Johnson and Hill, 1982

503
UNNAMED FAULTS AND LINEAMENTS
Late Quaternary or Holocene
Heath, E.G., 1980 (p. 470, 471)

504
SUPERSTITION HILLS FAULT
(SAN JACINTO FAULT ZONE)
Historic (1987, 1979, 1968, 1951 earthquake ruptures; 1992, 1999 triggered creep); Late Quaternary
Allen and others, 1965
Fuis, G.S., 1982 (Plate 2)
Grantz and Wyss, 1972 (Plate 2)
Kahle and others, 1988
Rymer and others, 2002
Sharp and others, 1986a (1981 triggered creep)
Sharp and others, 1989
Sharp, R.V., 1992 (triggered creep)
Treiman, J.A., 1989b
Hart and others, 1991
EFZ: Superstition Mtn., Kane Spring, Brawley NW, El Centro

505
SUPERSTITION MOUNTAIN FAULT ZONE
(SAN JACINTO FAULT ZONE)
Late Quaternary; Quaternary; Holocene in part
Allen and others, 1972
Rockwell. T.K., 1990 (Holocene north end)
Sharp and Clark, 1972 (Fig. 35)
Treiman, J.A., 1989b (Holocene in part)
Hart and others, 1989
EFZ: Harpers Well, Plaster City NW, Superstition Mtn., Brawley NW

506
WIENERT FAULT (SAN JACINTO FAULT ZONE)
Late Quaternary; Historic (1987 earthquake rupture)
Sharp and others, 1989
Treiman, J.A., 1989b
Hart, E.W., 1989
EFZ: Seeley, El Centro

507
BRAWLEY FAULT ZONE
Historic (1979, 1975, and 1940 earthquake ruptures; triggered creep 1968)
Cohn and others, 1982 (creep)
Sharp and others, 1982
Sharp. R.V., 1976, 1982b (p. 219. triggered creep)
Hart, E.W., 1989
EFZ: Brawley, Alamorio. Holtville West

508
RICO FAULT
Historic (1979 earthquake rupture)
Sharp and others, 1982
Hart, E.W., 1989
EFZ: Holtville West

509
IMPERIAL FAULT
Historic (1979, 1966, 1940 earthquake ruptures; 1968 and 1971 triggered creep)
Brune and Allen, 1967b
Cohn and others, 1982 (creep)
Hart, E.W., 1989
Sharp and others, 1982
Sharp. R.V., 1982b (p. 214, triggered creep)
Sharp and others, 1986a (1981 triggered creep)
Ulrich, F.P., 1941
Hart and others, 1989
EFZ: Brawley, El Centro, Holtville West, Calexico, Bonds Corner

509A
CRACKS NEAR DIXIELAND
Historic
Allen, C.A., 1972 (possible triggered creep)
Sharp, R.V., 1989 (probably desiccation features)
Smith, D.P., 1979b
Kahle, J.E., 1988a

510
YUHA WELLS FAULT
Late Quaternary
Rockwell, T.K., 1990

511
LAGUNA SALADA FAULT IN CALIFORNIA
Holocene
Hart and others, 1979
Isaac, S., 1987
Kovach and others, 1962
Kahle and others, 1984
Kahle, J.E., 1988a

512
UNNAMED FAULTS EAST SIDE MADELINE PLAINS
Quaternary
Wagner and Saucedo, 1993

513
AMEDEE FAULT
Historic (creep due to fluid withdrawal), Holocene, Quaternary
Bryant and others, 1993
Grose and others, 1991

514
SADDLE BLANKET FLAT FAULT ZONE
Late Quaternary; Quaternary
Bryant, W.A., 1990e

515
POLARIS FAULT
Holocene; Late Quaternary
Hunter, L.E., 2009
Melody, A.D., 2009

516
WEST TAHOE-DOLLAR POINT FAULT ZONE
Holocene; Late Quaternary; Quaternary
Brothers and others, 2009b
Burnett, J.L., 1982
Franks, A.L., 1980
Schweickert and others, 2000

517
EXTRA FAULT
Holocene
Brothers and others, 2009a
Janecke and others, in press

518
TAHOE-SIERRA FRONTAL FAULT ZONE
Quaternary
Harwood and Fisher, 2002
McCaughey, J.W., 2003
Saucedo, G.J., 2005
Schweickert and others, 2000

519
ALGODONES FAULT
Quaternary
Mattick and others, 1973
Olmsted and others, 1973

520
ATLAS PEAK-FOSS VALLEY LINEAMENT ZONE
Quaternary
Baldwin and others, 1998

521
WEST NAPA FAULT ZONE (NORTHERN SECTION)
Quaternary
Clahan and others, 2005

522
FRANKLIN FAULT
Quaternary
Graymer and others, 2006

523
CACHAGUA FAULT
Quaternary
Dibblee, T.W., Jr., 1974a
Cotton and Associates, 1995

524
HATTON CANYON AND SYLVAN THRUST FAULTS
Holocene, Quaternary
Clark and others, 1997

525
WHITE MOUNTAINS FAULT ZONE (HAMMIL SECTION)
Quaternary
dePolo, C.M., 1989

526
GRAPEVINE FAULT
Late Quaternary
Reheis, M.C., 1991

527
TIN MOUNTAIN FAULT
Late Quaternary
Reheis, M.C., 1991
Reheis and Noller, 1991

528
UNNAMED FAULTS WEST OF DRY MOUNTAIN
Late Quaternary
Burchfiel, B.C., 1969
Bryant, W.A., 2009 (aerial photographic interpretation)
Wrucke and Corbett, 1990

529
MILLER CREEK AND MORAGA FAULTS
Quaternary
Graymer and others, 1995, 2006

530
OWENS RIVER FAULT
Historic
Slemmons and others, 2008

531
CENTENNIAL FLAT FAULT
Late Quaternary
Slemmons and others, 2008

532
UNNAMED FAULTS IN EUREKA VALLEY
Quaternary; Historic (1993 earthquake rupture)
Hecker and Pezzopane, 2009
Nelson, C.A., 1971
Wrucke and Corbett, 1990

533
LOCKWOOD VALLEY AND SOUTH LOCKWOOD VALLEY FAULTS
(EASTERN SECTION BIG PINE FAULT ZONE)
Late Quaternary; Quaternary
Carman, M.F., 1964
Kellogg and Miggins, 2002
Kellogg, K.S., 2003
Minor, S.A, 1999

534
LAVIC LAKE FAULT ZONE
Holocene; Historic (1999 earthquake rupture)
Treiman, J.A., 2002a
Treiman and others, 2002
EFZ: Hector, Sunshine Peak, Sleeping Beauty, Lavic Lake, Lavic SE, Hidalgo Mtn., Deadman Lake NW

535
EAST WIDE CANYON FAULT
(BURNT MOUNTAIN FAULT ZONE)
Holocene
Treiman, J.A., 1992

536
WRIGHT ROAD FAULT
Holocene
Treiman, J.A., 1997
EFZ: Camarillo, Santa Paula

537
SANTA ROSA VALLEY FAULT
(SIMI-SANTA ROSA FAULT ZONE)
Holocene
Treiman, J.A., 1998
EFZ: Camarillo, Newbury Park

538
EAST MONTEBELLO FAULT
Holocene
Treiman, J.A., 1991a
EFZ: El Monte

539
BLUE CUT FAULT ZONE (EASTERN END FORMALLY PRE-QUATERNARY)
Quaternary
Riverside County, 2001
Schell and Schell, 1994

540
SOUTHERN INYO MOUNTAINS FAULT
Quaternary
Slemmons and others, 2008
Stinson, M.C., 1977

541
SAN FELIPE FAULT ZONE
Late Quaternary; Quaternary
Steely and others, 2009

542
GREEN SPRINGS RUN FAULT
(FOOTHILLS FAULT SYSTEM)
Late Quaternary
Page and Sawyer, 2004

543
HAUPT CREEK FAULT
(FOOTHILLS FAULT SYSTEM)
Quaternary
Page and Sawyer, 2004

544
BLACK MOUNTAIN FAULT ZONE
(SOUTH-CENTRAL SECTION DEATH VALLEY FAULT SYSTEM)
Holocene; Quaternary
Brogan and others, 1991
Drewes, H., 1963
Machette and others, 2001a, 2001b
Reheis and Noller, 1991
Wills, C.W., 1989a
EFZ: Furnace Creek, Devils Golf Course, Hanaupah Canyon, Badwater, Dantes View, Mormon Point, Gold Valley, Shore Line Butte

NOTE: The names following the abbreviation EFZ (Earthquake Fault Zone) are the 7.5-minute quadrangles issued by the State Geologist showing the boundaries of officially zoned faults. For more information see:

Bryant, W.A., and Hart, E.W., 2007. Fault-rupture hazard zones in California: California Geological Survey Special Publication 42, 42p. (digital version only, electronic document available at ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sp/Sp42.pdf).

APPENDIX B

ALPHABETICAL TABLE OF FAULTS DESCRIBED IN APPENDIX A

FAULT	REF. No.	AGE
ADOBE CREEK FAULT	113	Late Quaternary
AGATE BAY FAULT	101	Quaternary
AIRPORT LAKE FAULT ZONE	250	Holocene; Late Pleistocene; Historic (1995 earthquake cracks)
ALAMO THRUST	317	Quaternary
ALMANOR FAULT ZONE	56	Quaternary
AMEDEE FAULT	513	Historic (creep due to fluid withdrawal), Holocene, Quaternary
AMERICANO CREEK FAULT	146A	Quaternary
ANTELOPE VALLEY FAULT	130	Holocene; Quaternary
ARRASTRE CANYON NARROWS FAULT	409	Late Quaternary?
ARROYO DEL OSO FAULT	258	Late Quaternary
ARROYO LAGUNA FAULT	256	Late Quaternary
ARROYO PARIDA FAULT	327	Late Quaternary
ASCENCION FAULT (OFFSHORE)	219	Quaternary
ASH CREEK FAULT ZONE	20	Quaternary
ASH HILL FAULT	246	Holocene; Late Quaternary
ATLAS PEAK-FOSS VALLEY LINEAMENT ZONE	520	Quaternary
AVALON -COMPTON FAULT	434	Holocene; Late Quaternary
BAD RIDGE FAULT	107	Quaternary (Possibly late Pleistocene)
BAILEY FAULT	350	Late Quaternary
BALD MOUNTAIN FAULT	33	Quaternary
BALD MOUNTAIN-BIG LAGOON FAULT ZONE (OFFSHORE)	16	Late Quaternary
BANNING FAULT (EASTERN PART) (SOUTH BRANCH SAN ANDREAS FAULT)	452	Holocene; Historic; (1986 earthquake ruptures; 1983 creep)
BANNING FAULT (WESTERN PART)	449	Late Quaternary; Holocene
BARTLETT SPRINGS FAULT	92	Holocene; Quaternary
BASELINE FAULT	305	Late Quaternary
BATTLE CREEK FAULT	55	Late Quaternary; Quaternary
BAY ENTRANCE FAULT	41	Late Quaternary
BEAR HARBOR FAULT ZONE	89	Late Quaternary
BEAR MOUNTAINS FAULT ZONE (BOWIE FLAT FAULT) (FOOTHILLS FAULT SYSTEM)	168	Late Quaternary
BEAR MOUNTAINS FAULT ZONE (HIGHWAY 49 FAULT) (FOOTHILLS FAULT SYSTEM)	104	Late Quaternary
BEAR MOUNTAINS FAULT ZONE (MAIDU EAST FAULT) (FOOTHILLS FAULT SYSTEM)	126	Late Quaternary?
BEAR MOUNTAINS FAULT ZONE (NEGRO JACK POINT FAULT) (FOOTHILLS FAULT SYSTEM)	171	Late Quaternary
BEAR MOUNTAINS FAULT ZONE (RESCUE FAULT) (FOOTHILLS FAULT SYSTEM)	127	Late Quaternary

FAULT	REF. No.	AGE
BEAR MOUNTAINS FAULT ZONE (YOUNGS CREEK FAULT) (FOOTHILLS FAULT SYSTEM)	136	Quaternary
BEAR RIVER FAULT ZONE	81	Quaternary
BEAR RIVER FAULT ZONE (OFFSHORE)	49	Quaternary
BEAR WALLOW FAULT	54	Pre-Quaternary
BEAUMONT PLAIN FAULT ZONE	456	Late Quaternary
BEAVER CREEK FAULT	70A	Quaternary
BEN LOMOND FAULT	221	Late Quaternary at southern end
BENTON VALLEY FAULT	204	Holocene
BERROCAL FAULT	195	Quaternary
BIG CRACK FAULT	6	Late Quaternary
BIG LAGOON FAULT	34	Quaternary
BIG MOUNTAIN FAULT (REMOVED)	345	
BIG PINE FAULT (CENTRAL SECTION BIG PINE FAULT ZONE)	318	Late Quaternary
BIG PINE FAULT (WESTERN SECTION OF BIG PINE FAULT ZONE)	307	Pre-Quaternary
BIG VALLEY FAULT	112	Late Quaternary; Historic (1906 earthquake ruptures)
BIRCH MOUNTAIN FAULT	212B	Holocene
BLACK BUTTE FAULT	172	Quaternary
BLACK FOX MOUNTAIN FAULT ZONE	21	Quaternary
BLACK MOUNTAIN FAULT ZONE (SOUTH-CENTRAL SECTION DEATH VALLEY FAULT SYSTEM)	544	Holocene; Quaternary
BLACKWATER FAULT	370	Holocene; Quaternary
BLOOMFIELD FAULT	146	Quaternary
BLUE CUT FAULT ZONE (EASTERN END FORMALLY PRE-QUATERNARY)	539	Quaternary
BLUE LAKE FAULT	39	Holocene
BLYTHE GRABEN	474	Late Quaternary
BONEY MOUNTAIN FAULT	351	Quaternary
BOTTLE SPRINGS FAULT	68	Quaternary
BOWEN RANCH FAULT	406	Late Quaternary?
BOWIE FLAT FAULT (BEAR MOUNTAINS FAULT ZONE) (FOOTHILLS FAULT SYSTEM)	168	Late Quaternary
BRADLEY CANYON FAULT	294	Quaternary
BRAWLEY FAULT ZONE	507	Historic (1979. 1975, and 1940 earthquake ruptures; triggered creep 1968)
BRAWLEY SEISMIC ZONE	502	Historic
BRICELAND FAULT	86	Quaternary
BRIDGEPORT BASIN FAULT OF M. CLARK (IN PART ROBINSON CREEK FAULT)	133	Holocene; Late Quaternary; Quaternary
BROADWELL LAKE FAULT	378B	Early Quaternary
BROWN MOUNTAIN FAULT	269	Holocene
BUCK RIDGE FAULT	471	Late Quaternary
BUENA VISTA FAULT	276	Historic (creep owing to oil withdrawal)

FAULT	REF. No.	AGE
BULLION FAULT	418	Holocene
BURDELL MOUNTAIN FAULT	150A	Quaternary
BURNT MOUNTAIN FAULT	424C	Historic (Landers. 1992 earthquake rupture); Holocene
BUTANO FAULT	193	Quaternary ?
CABRILLO FAULT	438	Late Quaternary onshore; Holocene offshore
CACHAGUA FAULT	523	Quaternary
CALAVERAS FAULT (CENTRAL PART)	187	Holocene; Historic (minor 1979 fault break at Anderson Lake and south of Coyote Reservoir); Late Quaternary
CALAVERAS FAULT (NORTHERN PART)	177	Historic (1861); Holocene; Late Quaternary
CALAVERAS FAULT (SOUTHERN PART)	224	Historic (creep); Holocene; Late Quaternary
CALICO FAULT	376	Holocene
CAMARILLO FAULT	349	Holocene
CAMBRIA FAULT	281	Late Quaternary
CAMP ROCK FAULT	380	Holocene; Historic (1992 earthquake ruptures)
CAPAY FAULT	123	Pre-Quaternary?
CARNEGIE FAULT	172A	Holocene in part
CARPINTERIA FAULT	326	Late Quaternary
CARSON VALLEY FAULT	128	Holocene
CASA LOMA FAULT	457	Holocene; creep since 1939 probably owing to groundwater withdrawal; 1989?
CASCADIA SUBDUCTION ZONE, SEAWARD EDGE OF (OFFSHORE)	15	Holocene
CASMALIA FAULT	295	Late Quaternary
CEDAR MOUNTAIN FAULT ZONE	4	Late Quaternary; Holocene
CENTENNIAL FLAT FAULT	531	Late Quaternary
CENTRAL AVENUE FAULT	432	Late Quaternary?
CENTRAL OWENS LAKE FAULT (SOUTHERN OWENS VALLEY FAULT ZONE)	277	Historic; Holocene
CHAMBERLAIN FAULT	91C	Pre-Quaternary
CHARNOCK FAULT	435	Late Quaternary
CHATSWORTH FAULT	352	Late Quaternary
CHEMEHUEVI GRABEN	377	Late Quaternary
CHERRY HILL FAULT (NEWPORT-INGLEWOOD FAULT ZONE)	441	Holocene
CHICO MONOCLINE FAULT	72	Quaternary
CHINO FAULT	431	Late Quaternary
CHIRIACO FAULT	473A	Pre-Quaternary
CHUPINES FAULT	235	Quaternary
CLAMSHELL-SAWPIT CANYON FAULT ZONE	385	Late Quaternary
CLAREMONT FAULT	447	Holocene
CLARK FAULT (SAN JACINTO FAULT ZONE)	459	Holocene
CLAYTON FAULT	165	Holocene; Quaternary
CLEARWATER FAULT	314	Late Quaternary

FAULT	REF. No.	AGE
CLEGHORN FAULT	403	Late Quaternary; Holocene?
CLEGHORN LAKE FAULT	422A	Quaternary
CLEVELAND HILL FAULT (FOOTHILLS FAULT SYSTEM)	95	Historic (1975 earthquake ground rupture); Quaternary
CLOVER VALLEY FAULT ZONE	110	Quaternary
CLOVIS FAULT	242	Pre-Quaternary
COAST RANGE FAULT	76	Pre-Quaternary
COHASSET RIDGE FAULT	70	Quaternary?
COLLAYOMI FAULT	120	Late Quaternary
COLTON FAULT	429	Late Quaternary
COMPTON FAULT	434	Holocene; Late Quaternary
CONCORD FAULT	160	Historic (active creep); Holocene
COPPER MOUNTAIN FAULT	423	Holocene; Late Quaternary
CORDELIA FAULT	155	Holocene in southern part; Late Quaternary in northern part
CORNING FAULT	73	Quaternary
CORONADO BANK FAULT ZONE (OFFSHORE CORONADO BANK-PALOS VERDES SECTION)	484	Holocene; Late Quaternary
CORONADO BANK FAULT ZONE (OFFSHORE CORONADO BANK SECTION)	489	Holocene; Late Quaternary; Undivided Quaternary
CORONADO FAULT (OFFSHORE)	490	Holocene; Late Quaternary
CORRAL HOLLOW FAULT	173	Quaternary
COTTONEVA FAULT	91A	Pre-Quaternary
COYOTE CREEK FAULT (SANTA CLARA COUNTY)	215	Quaternary
COYOTE CREEK FAULT (SAN DIEGO COUNTY)	479	Holocene; Historic (1968 earthquake rupture; creep)
COYOTE CREEK FAULT SEGMENT?	480	Holocene
COYOTE LAKE FAULT	371	Quaternary?
COYOTE MOUNTAIN FAULT	478	Holocene; Late Quaternary
CRAFTON HILLS FAULT ZONE	428	Holocene; Late Quaternary
CRISTIANITOS FAULT ZONE (OFFSHORE)	466	Quaternary
CROSLEY FAULT	188	Holocene (in part)
CROSS SPRING FAULT	109	Quaternary (in part)
CUCAMONGA FAULT	399	Holocene
CYPRESS POINT FAULT	231	Quaternary (offsets Quaternary deposits offshore)
DAVIS FAULT	159	Quaternary
DAVIS CREEK FAULT	7B	Late Quaternary
DEEP SPRINGS FAULT	210	Holocene; Late Quaternary
DEL VALLE FAULT	343	Late Quaternary?
DEWITT FAULT (FOOTHILLS FAULT SYSTEM)	125	Late Quaternary; Holocene?
DIAMOND MOUNTAINS FAULT (LAST CHANCE FAULT ZONE)	64	Quaternary
DRY CREEK THRUST	317	Quaternary
DUARTE FAULT	395	Late Quaternary; possibly Holocene along northern strand near Azusa 124

FAULT	REF. No.	AGE
DUNNIGAN HILLS (ZAMORA) FAULT	124	Late Quaternary; Holocene?
EAGLE ROCK FAULT	386	Late Quaternary?
EARTHQUAKE VALLEY FAULT	482	Holocene
EAST CEDAR MOUNTAIN FAULT ZONE (SOUTHERN PART)	11	Holocene
EAST HUASNA FAULT	290	Quaternary
EAST MONTEBELLO FAULT	538	Holocene
EAST TRACE LITTLE SALMON FAULT	46	Late Quaternary
EAST VALLEY FAULT	138	Pre-Quaternary
EAST WIDE CANYON FAULT (BURNT MOUNTAIN FAULT ZONE)	535	Holocene
EATON ROUGHS FAULT ZONE	44	Quaternary
EDNA FAULT ZONE	282	Quaternary
EL PASO FAULT	273	Late Quaternary
ELMORE RANCH FAULT AND ELMORE RANCH EAST FAULT	499	Historic (1987 earthquake rupture; 1992 triggered creep)
ELSINORE FAULT (JULIAN SECTION ELSINORE FAULT ZONE)	483	Holocene; Late Quaternary
ELSINORE FAULT (COYOTE MOUNTAIN SECTION ELSINORE FAULT ZONE)	496	Holocene
EMERSON FAULT	420	Holocene; Historic (1992 earthquake ruptures)
ETSEL RIDGE FAULT	91	Quaternary?
EUREKA PEAK FAULT	424B	Historic (1992 earthquake rupture); Holocene
EXTRA FAULT	517	Holocene
EVERGREEN FAULT	197	Holocene
FAULTS IN LAKE ALMANOR REGION, INCLUDING KEDDIE RIDGE AND WALKER SPRING FAULTS	359	Late Quaternary; Quaternary
FERNDALE FAULT	158	Quaternary
FICKLE HILL FAULT	42	Holocene
FISH LAKE VALLEY FAULT ZONE (NORTHERN SECTION DEATH VALLEY FAULT SYSTEM)	223	Holocene
FISH SLOUGH FAULT	208	Holocene
FITZHUGH CREEK FAULT	7C	Quaternary
FORT SAGE FAULT	62	Historic (1950 earthquake rupture)
FOXEN CANYON FAULT	304	Late Quaternary
FRANKLIN FAULT	522	Quaternary
FRAZIER MOUNTAIN THRUST	317	Quaternary
FRESHWATER FAULT	50	Quaternary
FRESNO FAULT (ELSINORE FAULT ZONE)	446	Holocene; Late Quaternary
FRIJOLES FAULT	192	Holocene; Quaternary
FURNACE CREEK FAULT	240	Quaternary
GALWAY LAKE FAULT	416	Historic (ground rupture, 1975 and 1992 earthquakes)
GARBERVILLE FAULT ZONE	79	Quaternary
GAREY FAULT	303	Quaternary

FAULT	REF. No.	AGE
GARLOCK FAULT, SOUTH BRANCH	310	Holocene
GARLOCK FAULT ZONE	270	Holocene; Late Quaternary
GARLOCK FAULT ZONE (GROUND BREAKS IN FREMONT VALLEY)	272	Holocene; Historic (owing to ground water withdrawal)
GARLOCK FAULT ZONE (SURFACE BREAK ON)	274	Historic (1952 Arvin-Tehachapi earthquake)
GARNET HILL FAULT (SAN ANDREAS FAULT ZONE)	454	Holocene; Late Quaternary
GENOA FAULT (ALSO CALLED CARSON VALLEY FAULT)	128	Holocene
GIANT GAP FAULT (MELONES FAULT ZONE OF CLARK) (FOOTHILLS FAULT SYSTEM)	103	Quaternary
GILLEM FAULT	5	Late Quaternary; Quaternary
GILLIS CANYON FAULT	262	Holocene
GLEN HELEN FAULT (SAN JACINTO FAULT ZONE)	402	Holocene
GLEN IVY NORTH FAULT (ELSINORE FAULT ZONE)	461	Holocene
GLEN IVY SOUTH FAULT (ELSINORE FAULT ZONE)	462	Holocene; Late Quaternary in southeastern part
GOLD HILL THRUST FAULT	253	Pre-Quaternary
GOOSE LAKE FAULT (MODOC COUNTY)	7A	Late Quaternary
GOOSE LAKE FAULT (HUMBOLDT COUNTY)	52	Holocene
GRAPEVINE FAULT	526	Late Quaternary
GRASS VALLEY FAULT (PART OF CLEGHORN FAULT ZONE)	404	Late Quaternary?
GRAVEL HILLS FAULT	368	Holocene
GREEN VALLEY FAULT	154	Holocene; Historic (creep)
GREEN SPRINGS RUN FAULT (FOOTHILLS FAULT SYSTEM)	542	Late Quaternary
GREENVILLE FAULT	174	Late Quaternary; Historic (1980 earthquake rupture); Quaternary
GROGAN FAULT	32	Quaternary
GROGAN FAULT (OFFSHORE)	14	Quaternary
GROGAN-RED MOUNTAIN FAULT ZONE	77	Age?
HARPER FAULT ZONE	369	Holocene
HARPER LAKE FAULT	373	Late Quaternary; Holocene?
HARTLEY SPRINGS FAULT	201	Holocene; Late Quaternary; Quaternary
HASKINS VALLEY FAULT	68A	Quaternary
HAT CREEK FAULT	29	Holocene
HATHAWAY CREEK FAULT	118	Late Quaternary
HATTON CANYON THRUST FAULT	524	Holocene, Quaternary
HAUPT CREEK FAULT (FOOTHILLS FAULT SYSTEM)	543	Quaternary
HAYWARD FAULT (NORTHERN PART)	163	Historic (1868 earthquake rupture; creep); Holocene
HAYWARD FAULT (SECONDARY CRACKS (?) ADJACENT TO)	186	Historic (1868 earthquake cracks?)
HAYWARD FAULT (SOUTHEAST EXTENSION)	199	Holocene
HAYWARD FAULT (SOUTHERN PART)	196	Holocene

FAULT	REF. No.	AGE
HEALDSBURG FAULT	142	Quaternary
HELENDALE FAULT	382	Holocene; Late Quaternary
HELENDALE FAULT (SOUTHEAST EXTENSION)	413	Quaternary
HIDALGO FAULT	419	Holocene; Quaternary
HIDDEN SPRINGS FAULT	475	Late Quaternary
HIGHWAY 49 FAULT (BEAR MOUNTAINS FAULT ZONE) (FOOTHILLS FAULT SYSTEM)	104	Late Quaternary
HILLSIDE FAULT	179A	Pre-Quaternary?
HILTON CREEK FAULT	202	Historic (1980); Holocene; Quaternary
HOLLYWOOD FAULT	392	Holocene
HOLSER FAULT	342	Late Quaternary?
HOMESTEAD VALLEY FAULT	421	Holocene; Historic (1979,1992 earthquake ruptures)
HONDA FAULT	300	Late Quaternary?
HONEY LAKE FAULT ZONE	60	Holocene; Quaternary
HOSGRI FAULT ZONE (OFFSHORE)	287	Quaternary; Holocene
HOT SPRINGS FAULT (IMPERIAL COUNTY)	476	Holocene
HOT SPRINGS FAULT (RIVERSIDE COUNTY)	458	Late Quaternary; Holocene (at north end)
HUNTER MOUNTAIN FAULT	244	Holocene; Late Quaternary
HUNTING CREEK FAULT	122	Holocene
HUNTING FAULT	121	Quaternary
IKES MOUNTAIN FAULT	2	Late Quaternary; Quaternary
IMPERIAL FAULT	509	Historic (1979, 1966, 1940 earthquake ruptures; 1968 and 1971 triggered creep)
INDEPENDENCE FAULT	243	Holocene; Late Quaternary
INDIAN HILL FAULT	397	Late Quaternary
INDIAN VALLEY FAULT	66	Holocene? (in part)
INGLEWOOD FAULT (NEWPORT-INGLEWOOD FAULT ZONE)	434	Holocene; Late Quaternary; surface faulting (creep) since 1957 due to oil and gas withdrawal
IONE FAULT (FOOTHILLS FAULT SYSTEM)	480	Late Quaternary
JAVON CANYON FAULT	332	Holocene
JESS VALLEY FAULT	70	Quaternary
JOHNSON VALLEY FAULT	415	Holocene; Historic (1979, 1992 earthquake ruptures)
KANE SPRING FAULT	498	Late Quaternary; Historic (1987 earthquake rupture)
KEANE WONDER FAULT	244A	Quaternary
KERN CANYON FAULT	252	Holocene
KERN FRONT FAULT	264	Historic, actively creeping fault triggered by fluid withdrawal; Quaternary
KERN GORGE FAULT	265	Late Quaternary
KING RANGE THRUST ZONE	85	Quaternary-Late Quaternary
KINGS CANYON LINEAMENT	213	Age?
KIRBY HILL FAULT	156	Late Quaternary?
KRAMER HILLS FAULT	364	Late Quaternary
LA NACION FAULT ZONE	493	Quaternary

FAULT	REF. No.	AGE
LA PANZA FAULT	280	Quaternary
LAGUNA MEADOW FAULT	495	Quaternary in part; Pre-Tertiary in part
LAGUNA SALADA FAULT	511	Holocene
LAKE MOUNTAIN FAULT ZONE	78	Late Quaternary
LAS POSITAS FAULT	184	Historic (possible 1980 and 1981 ruptures); Holocene; Late Quaternary
LAVIC LAKE FAULT ZONE	534	Holocene; Historic (1999 earthquake rupture)
LAVIGIA FAULT	323	Late Quaternary
LENWOOD FAULT	381	Holocene
LEUHMAN FAULT	363	Quaternary; Late Quaternary at southeast end
LIKELY FAULT	26	Quaternary; Late Quaternary
LION CANYON FAULT	337	Late Quaternary
LIONS HEAD FAULT	296	Late Quaternary
LITTLE GRASS VALLEY FAULT	68B	Late Quaternary
LITTLE INDIAN VALLEY FAULT	108	Quaternary
LITTLE LAKE FAULT	267	Holocene; Late Quaternary; Historic (1982 earthquake cracks)
LITTLE PINE FAULT	306	Late Quaternary (northwestern part): Quaternary and pre-Quaternary (southeastern part)
LITTLE SALMON FAULT	47	Holocene
LITTLE SALMON FAULT (OFFSHORE)	37	Holocene
LIVERMORE FAULT	175	Quaternary
LLANO FAULT	361	Holocene?
LOCKHART FAULT	365	Holocene
LOCKWOOD VALLEY AND SOUTH LOCKWOOD VALLEY FAULTS (EASTERN SECTION BIG PINE FAULT ZONE)	533	Late Quaternary; Quaternary
LOMA PRIETA EARTHQUAKE (GROUND "FRACTURES' ASSOCIATED WITH)	217	Historic (17 October 1989)
LONE PINE FAULT	212A	Historic (1872 earthquake); Late Quaternary
LONE TREE FAULT	500	Historic (1987 earthquake rupture); Late Quaternary
LONG CANYON FAULT	451A	Holocene
LONG VALLEY FAULT ZONE	202A	Holocene
LOS ALAMITOS FAULT	442	Late Quaternary?
LOS ALAMOS FAULT	302	Holocene; Late Quaternary
LOS OSOS FAULT ZONE	285	Holocene; Late Quaternary
LOST MAN FAULT	17	Quaternary
LOST MAN FAULT (OFFSHORE)	13	Quaternary
LYTLE CREEK FAULT	400	Late Quaternary; Quaternary
MAACAMA FAULT ZONE (NORTHERN AND CENTRAL PARTS)	114	Holocene
MAACAMA FAULT ZONE (SOUTHERN PART)	141	Holocene
MAD RIVER FAULT	40	Holocene
MAD RIVER FAULT ZONE (OFFSHORE)	36	Holocene
MAGALIA FAULT	71	Late Cenozoic; Quaternary?
MAHOGANY MOUNTAIN FAULT ZONE	1	Holocene; Quaternary

FAULT	REF. No.	AGE
MAIDU EAST LINEAMENT (BEAR MOUNTAINS FAULT ZONE) (FOOTHILLS FAULT SYSTEM)	126	Late Quaternary?
MAIN STREET FAULT (ELSINORE FAULT ZONE)	446	Late Quaternary; Holocene
MALIBU COAST FAULT	389	Late Quaternary; Holocene
MALIBU COAST FAULT (OFFSHORE)	390	Late Quaternary
MANIX FAULT	372	Holocene; Historic (1947 earthquake rupture)
MARSH CREEK FAULT	165	Holocene; Quaternary
MAYFIELD FAULT	24	Holocene
McARTHUR FAULT	28	Holocene
McKINLEYVILLE FAULT	43	Holocene
MEADOW VALLEY FAULT (MELONES FAULT ZONE OF CLARK)	67	Quaternary
MEISS LAKE FAULT	2A	Late Quaternary; Holocene
MELONES FAULT ZONE (POORMAN GULCH FAULT) (FOOTHILLS FAULT SYSTEM)	135	Late Quaternary; Holocene?
MELONES FAULT ZONE (RAWHIDE FLAT EAST FAULT) (FOOTHILLS FAULT SYSTEM)	169	Late Quaternary; Holocene?
MELONES FAULT ZONE (RAWHIDE FLAT WEST FAULT) (FOOTHILLS FAULT SYSTEM)	170	Late Quaternary
MELONES FAULT ZONE OF CLARK (MEADOW VALLEY FAULT) (FOOTHILLS FAULT SYSTEM)	67	Quaternary
MELONES FAULT ZONE OF CLARK (GIANT GAP FAULT) (FOOTHILLS FAULT SYSTEM)	103	Quaternary ?
MENDOCINO FAULT ZONE (OFFSHORE)	83	Holocene?; Late Quaternary
MESA FAULT	325	Late Quaternary
MESQUITE LAKE FAULT	422	Holocene; Historic (1999 earthquake rupture)
MIDLAND FAULT ZONE	137	Quaternary (possibly Holocene in part)
MIDWAY FAULT	166	Late Quaternary
MILL CREEK FAULT	427	Late Quaternary
MILLER CREEK FAULT	529	Quaternary
MIRAGE VALLEY FAULT	362	Late Quaternary
MISSION FAULT	182	Quaternary
MISSION BAY FAULT	487	Late Quaternary
MISSION CREEK FAULT	450	Late Quaternary
MISSION HILLS FAULT	354	Late Quaternary or Holocene
MISSION RIDGE FAULT	327	Late Quaternary
MOHAWK VALLEY FAULT	98	Holocene and Late Quaternary
MONO LAKE FAULT (LEE VINING FAULT)	133	Holocene; Late Quaternary; Quaternary
MONTE VISTA FAULT	190	Late Quaternary; Holocene
MONTEREY BAY FAULT ZONE (OFFSHORE)	229	Holocene; Quaternary
MORAGA FAULT	529	Quaternary
MORE RANCH FAULT	322	Late Quaternary
MORONGO VALLEY FAULT	451	Holocene; Late Quaternary
MOUNT HEBRON FAULT ZONE	3	Late Quaternary?
MT. GENERAL FAULT	374	Holocene in part

FAULT	REF. No.	AGE
MURRIETA HOT SPRINGS FAULT	468	Late Quaternary; Holocene?
NAVARRO STRUCTURAL DISCONTINUITY (OFFSHORE)	117	Age?
NAVY FAULT	232	Quaternary
NEGRO JACK POINT FAULT (BEAR MOUNTAINS FAULT ZONE) (FOOTHILLS FAULT SYSTEM)	171	Late Quaternary
NELSON CORRAL FAULT	26A	Late Quaternary
NEW HOPE FAULT	264	Historic, actively creeping fault triggered by fluid withdrawal; Quaternary
NEWPORT-INGLEWOOD FAULT ZONE (SOUTH BRANCH FAULT)	439	Late Quaternary
NEWPORT-INGLEWOOD-ROSE CANYON FAULT ZONE (OFFSHORE)	465	Quaternary
NOPAH FAULT	248A	Late Quaternary and/or Holocene
NORTH BRANCH FAULT (NEWPORT-INGLEWOOD FAULT ZONE)	440	Holocene
NORTH BRANCH SAN ANDREAS FAULT (COACHELLA STRAND)	453	Holocene
NORTH FRONTAL FAULT ZONE (NORTHERN AND EASTERN SECTION NORTH FRONTAL THRUST SYSTEM)	407	Late Quaternary; Holocene
NORTH LOCKHART FAULT	367	Late Quaternary
NORTH SPIT FAULT	45	Quaternary?
NORTH TAHOE FAULT	102	Holocene
NORTHERN DEATH VALLEY FAULT ZONE (NORTH-CENTRAL SECTION DEATH VALLEY FAULT SYSTEM)	211	Holocene; Late Quaternary
NORTHRIDGE HILLS FAULT	353	Late Quaternary or Holocene
NORWALK FAULT?	443	Age?
NUNEZ FAULT	241	Historic, 1983 earthquake break
O'NEILL FAULT SYSTEM	226	Late Quaternary
OAK RIDGE FAULT (ONSHORE AND OFFSHORE)	335	Late Quaternary; Holocene south of Fillmore
OCEANIC FAULT	259	Late Quaternary
OCEANO FAULT	288	Late Quaternary
OLD TOWN FAULT (ROSE CANYON FAULT SECTION)	492	Late Quaternary?
OLD WOMAN SPRINGS FAULT	414	Holocene
ORCUTT OIL FIELD FAULTS	296A	Quaternary; Late Quaternary
ORD MOUNTAINS FAULT (WESTERN SECTION OF NORTH FRONTAL THRUST SYSTEM)	405	Holocene
ORD TERRACE FAULT	233	Quaternary?
ORTIGALITA FAULT	214	Holocene
OVERLAND AVENUE FAULT	435	Late Quaternary
OWENS RIVER FAULT	530	Historic
OWENS VALLEY FAULT	212	Holocene; Historic (1872 earthquake ground rupture)
OZENA FAULT	308	Quaternary
PACIFICO FAULT	301	Late Quaternary?
PAHRUMP VALLEY FAULT	248B	Late Quaternary
PAICINES FAULT	227	Holocene; Quaternary
PALO COLORADO FAULT (OFFSHORE AND ONSHORE)	230	Quaternary; Holocene?

FAULT	REF. No.	AGE
PALOS VERDES FAULT (ALSO KNOWN AS PALOS VERDES HILLS FAULT)	437	Late Quaternary; Holocene offshore, in part
PANAMINT VALLEY FAULT	247	Holocene; Late Quaternary; Quaternary
PARADISE FAULT	69	Late Cenozoic; Quaternary?
PARKER LAKE FAULT (SILVER LAKE FAULT)	201	Holocene; Late Quaternary; Quaternary
PELICAN HILL FAULT	463	Late Quaternary
PELONA FAULT	315	Quaternary
PERALTA HILLS FAULT	445	Late Quaternary
PETROLIA THRUST FAULT	82	Quaternary
PILARCITOS FAULT	191	Quaternary
PINE MOUNTAIN FAULT	319	Late Quaternary
PINE VALLEY FAULT	494	Pre-Tertiary; Quaternary
PINOLE FAULT	161	Quaternary
PINTO MOUNTAIN FAULT	425	Holocene; Late Quaternary
PISGAH FAULT	378	Holocene
PITAS POINT-VENTURA FAULT (OFFSHORE)	336	Quaternary; Holocene
PITTVILLE FAULT	27	Late Quaternary; Holocene
PLEASANTON FAULT	176	Holocene; Quaternary
PLEITO FAULT	309	Holocene; Quaternary
POINT LOMA FAULT ZONE	488	Late Quaternary
POINT REYES FAULT (OFFSHORE)	148	Quaternary
POLARIS FAULT	515	Holocene; Late Quaternary
POND FAULT	263	Historic, with creep caused by groundwater withdrawal
POORMAN GULCH FAULT (MELONES FAULT ZONE) (FOOTHILLS FAULT SYSTEM)	135	Late Quaternary; Holocene?
POTRERO FAULT	434	Holocene; Late Quaternary
PREMIER FAULT	264	Historic, actively creeping fault triggered by fluid withdrawal; Quaternary
QUIEN SABE FAULT	225	Holocene; Late Quaternary
RAWHIDE FLAT EAST FAULT (MELONES FAULT ZONE) (FOOTHILLS FAULT SYSTEM)	169	Late Quaternary; Holocene?
RAWHIDE FLAT WEST FAULT (MELONES FAULT ZONE) (FOOTHILLS FAULT SYSTEM)	170	Late Quaternary
RAYMOND FAULT	394	Holocene
RED BLUFF FAULT	74	Pre-Quaternary
RED HILL-ETIWANDA AVENUE FAULT	398	Late Quaternary except Holocene at eastern end
RED HILLS FAULT	261	Holocene
RED MOUNTAIN FAULT (VENTURA COUNTY)	331	Late Quaternary; Holocene
RED MOUNTAIN FAULT (TRINITY COUNTY)	77	Age?
REDONDO CANYON FAULT (OFFSHORE)	436	Holocene
RELIZ FAULT (RINCONADA FAULT ZONE)	239	Late Quaternary
RESCUE LINEAMENT (BEAR MOUNTAINS FAULT ZONE)	127	Late Quaternary

FAULT	REF. No.	AGE
RESERVOIR HILL FAULT (NEWPORT-INGLEWOOD FAULT ZONE)	441	Holocene
RESORT FAULT ZONE	106	Quaternary
RIALTO-COLTON FAULT	429	Late Quaternary
RICH BAR FAULT AT MEADOW VALLEY (BOTTLE SPRINGS FAULT)	68	Quaternary
RICO FAULT	508	Historic (1979 earthquake rupture)
RINCON CREEK FAULT	325	Late Quaternary
RINCONADA FAULT ZONE	239	Late Quaternary
RIO VISTA FAULT	157	Quaternary?
ROBINSON CREEK FAULT (IN PART BRIDGEPORT BASIN FAULT OF M. CLARK)	133	Holocene; Late Quaternary; Quaternary
ROCKY LEDGE FAULT	30A	Holocene
RODGERS CREEK FAULT	149	Holocene
RODMAN FAULT	379	Quaternary
ROSE CANYON FAULT ZONE	491	Holocene; Late Quaternary; Quaternary
ROUND VALLEY FAULT ZONE (PART OF BARTLETT SPRINGS FAULT SYSTEM)	90	Quaternary
ROUND VALLEY FAULT (NW OF BISHOP)	207	Holocene
RUSS FAULT ZONE	80	Late Quaternary; Quaternary
RUSS FAULT ZONE (OFFSHORE)	48	Late Quaternary
SADDLE BLANKET FLAT FAULT ZONE	514	Late Quaternary; Quaternary
SALT CREEK FAULT	53	Pre-Quaternary
SAN ANDREAS FAULT (AT SHELTER COVE)	87	Historic (1906 earthquake ruptures)
SAN ANDREAS FAULT (SPLAYS OFF OF)	116	Late Quaternary
SAN ANDREAS FAULT ZONE (FORT ROSS TO MANCHESTER)	119	Historic (1906 earthquake rupture); Late Quaternary
SAN ANDREAS FAULT ZONE (OFFSHORE)	145	Late Quaternary
SAN ANDREAS FAULT ZONE (BODEGA HEAD TO BOLINAS)	147	Historic (1906 earthquake rupture); Holocene
SAN ANDREAS FAULT (BOUNDARY FAULTS)	162	Late Quaternary
SAN ANDREAS FAULT ZONE (SAN FRANCISCO TO WATSONVILLE)	194	Historic (1906, 1838 earthquake ruptures; 1989 Lorna Prieta local earthquake fractures)
SAN ANDREAS FAULT ZONE (1989 GROUND FRACTURES)	217	Historic (1989 Lorna Prieta earthquake)
SAN ANDREAS FAULT ZONE (SAN JUAN BAUTISTA TO PRIEST VALLEY)	234	Historic (1906, 1890 earthquake ruptures)
SAN ANDREAS FAULT ZONE (PRIEST VALLEY TO CUYAMA)	278	Historic (1857,1901,1906.1922.1966 earthquake ruptures)
SAN ANDREAS FAULT ZONE (CUYAMA TO PALMDALE)	311	Historic (1857. 1916 earthquake ruptures)
SAN ANDREAS FAULT ZONE (PALMDALE TO CAJON CANYON)	358	Historic (1857 earthquake rupture)
SAN ANDREAS FAULT	360	Historic? (1812 earthquake rupture?)
SAN ANDREAS FAULT (CAJON CANYON TO BURRO FLATS)	427A	Holocene
SAN ANDREAS FAULT (SOUTH BRANCH – BANNING STRAND)	452	Holocene; Historic (1986 earthquake ruptures, 1983 creep)
SAN ANDREAS FAULT (NORTH BRANCH – COACHELLA STRAND)	453	Holocene
SAN ANDREAS FAULT ZONE (INDIO TO SALTON SEA)	472	Holocene; Historic (1979. 1968 ground ruptures; 1992 triggered creep)
SAN ANDREAS FAULT (AT BOMBAY BEACH AND VICINITY)	477	Holocene; Late Quaternary

FAULT	REF. No.	AGE
SAN BENITO FAULT ZONE	227	Quaternary; Late Quaternary
SAN BRUNO FAULT (DELETED)	178	
SAN CAYETANO FAULT	340	Holocene; Late Quaternary
SAN CLEMENTE FAULT (OFFSHORE)	485	Late Quaternary; Holocene; Undivided Quaternary; Historic? (1951 earthquake)
SAN DIEGO TROUGH FAULT (OFFSHORE)	486	Holocene; Late Quaternary
SAN FELIPE FAULT ZONE	541	Late Quaternary; Quaternary
SAN FERNANDO FAULT	356	Historic (1971 earthquake ruptures)
SAN GABRIEL FAULT (EASTERN PART)	384	Quaternary
SAN GABRIEL FAULT (WESTERN PART)	316	Late Quaternary; Holocene near Castaic
SAN GORGONIO MOUNTAIN FAULT	426	Late Quaternary
SAN GORGONIO PASS FAULT ZONE	455	Holocene
SAN GORGONIO PASS FAULT ZONE (WESTERN EXTENSION)	448	Late Quaternary
SAN GREGORIO FAULT	218	Holocene; creep
SAN JACINTO FAULT (SAN JACINTO FAULT ZONE)	401	Holocene; Late Quaternary
SAN JOAQUIN FAULT	200	Late Quaternary
SAN JOSE FAULT (LOS ANGELES COUNTY)	396	Late Quaternary
SAN JOSE FAULT (SANTA BARBARA COUNTY)	324	Late Quaternary
SAN JUAN FAULT	279	Quaternary
SAN LUIS BAY FAULT	283	Late Quaternary
SAN MIGUELITO FAULT	284	Pre-Quaternary
SAN PEDRO BASIN FAULT ZONE (OFFSHORE)	436A	Quaternary; Late Quaternary?
SAN RAFAEL FAULT	386	Late Quaternary?
SAN SIMEON FAULT	255	Holocene
SANTA ANA FAULT (SAN BERNARDINO COUNTY)	412	Quaternary
SANTA ANA FAULT (VENTURA COUNTY)	329	Late Quaternary
SANTA CATALINA RIDGE FAULT ZONE (OFFSHORE)	334A	Quaternary; Holocene
SANTA CRUZ-SANTA CATALINA RIDGE FAULT ZONE (OFFSHORE)	334A	Quaternary; Holocene
SANTA CRUZ ISLAND FAULT	334	Late Quaternary; Holocene; Quaternary
SANTA FELICIA FAULT	341	Late Quaternary?
SANTA LUCIA BANK FAULT (OFFSHORE)	297	Quaternary
SANTA MARIA FAULT	293	Quaternary
SANTA MARIA RIVER FAULT	304	Late Quaternary
SANTA MONICA FAULT	391	Holocene; Late Quaternary
SANTA ROSA ISLAND FAULT	333	Late Quaternary; Quaternary
SANTA ROSA VALLEY FAULT (SIMI-SANTA ROSA FAULT ZONE)	537	Holocene
SANTA SUSANA FAULT	344	Late Quaternary; Historic (1971 rupture accompanying San Fernando earthquake)
SANTA YNEZ FAULT	320	Late Quaternary; Holocene near Lake Cachuma
SANTA YNEZ FAULT, SOUTH BRANCH	321	Late Quaternary
SANTA YNEZ RIVER FAULT	299	Late Quaternary?

FAULT	REF. No.	AGE
SARGENT FAULT	222	Holocene; Historic (creep)
SEAL BEACH FAULT (NEWPORT-INGLEWOOD FAULT ZONE)	441	Holocene
SEAL COVE FAULT (SAN GREGORIO FAULT ZONE)	181	Holocene; Late Quaternary; creep?; Quaternary
SERRA FAULT ZONE	179	Late Quaternary
SHANNON FAULT	216	Quaternary
SHEPARD MESA FAULT	328	Late Quaternary
SHERBURNE HILLS FAULT	164	Quaternary
SIERRA MADRE FAULT ZONE	357	Holocene; Late Quaternary (Holocene -western part between Big Tujunga and Dunsmore canyons; late Quaternary -eastern part)
SIERRA NEVADA FAULT (INYOKERN AREA)	266	Holocene; Late Quaternary
SIERRA NEVADA FAULT ZONE (HAIWEE RESERVOIR AREA)	249	Holocene; Late Quaternary
SILVER CREEK FAULT	198	Quaternary
SILVER LAKE FAULT (PARKER LAKE FAULT)	201	Holocene; Late Quaternary; Quaternary
SILVER REEF FAULT	414	Holocene
SILVER STRAND FAULT (OFFSHORE)	493A	Late Quaternary
SIMI-SANTA ROSA FAULT ZONE	346	Holocene
SKY HI RANCH FAULT (NORTH FRONTAL THRUST SYSTEM)	408	Holocene
SLINKARD VALLEY FAULT	131	Late Quaternary
SMOKETREE WASH FAULT	501	Late Quaternary
SODA CREEK FAULT	153	Late Quaternary
SOUTH BRANCH FAULT (NEWPORT-INGLEWOOD FAULT ZONE)	439	Late Quaternary
SOUTH BRISTOL MTNS. FAULT	378A	Quaternary
SOUTH CUYAMA FAULT	291	Quaternary
SOUTH LOCKHART FAULT	365	Holocene
SOUTHERN DEATH VALLEY FAULT ZONE (SOUTHERN SECTION DEATH VALLEY FAULT SYSTEM)	248	Holocene; Late Quaternary
SOUTHERN INYO MOUNTAINS FAULT	540	Quaternary
SOUTHWEST FRACTURE ZONE (SAN ANDREAS FAULT ZONE)	254	Historic (1966 and 2004 earthquake rupture)
SPANISH BIGHT FAULT (OFFSHORE)	490A	Late Quaternary
SPENCEVILLE FAULT	105	Late Quaternary; Holocene?
SPRINGVILLE FAULT	348	Holocene; Late Quaternary
SQUAW PEAK FAULT	383	Pre-Quaternary
STEPHENS PASS FAULT	22	Historic (1978 earthquake rupture)
STONY CREEK FAULT	93	Late Quaternary in part
SUPERSTITION HILLS FAULT (SAN JACINTO FAULT ZONE)	504	Historic (1987, 1979, 1968, 1951 earthquake ruptures; 1992 triggered creep); Late Quaternary
SUPERSTITION MOUNTAIN FAULT ZONE (SAN JACINTO FAULT ZONE)	505	Late Quaternary; Quaternary; Holocene in part
SUR FAULT	237	Quaternary
SUR-NACIMIENTO FAULT OF VEDDER, HOWELL, AND McLEAN	292	Pre-Quaternary

FAULT	REF. No.	AGE
SURPRISE VALLEY FAULT	7	Holocene; Late Quaternary
SURPUR CREEK FAULT	18	Quaternary
SWAIN RAVINE FAULT (FOOTHILLS FAULT SYSTEM)	96	Late Quaternary
SWEETWATER FAULT	493	Quaternary
SYCAMORE CANYON FAULT	351	Quaternary
SYLVAN THRUST FAULT	524	Holocene, Quaternary
TABLE BLUFF FAULT	47A	Late Quaternary
TAHOE-SIERRA FRONTAL FAULT ZONE	518	Quaternary
TAHOE VALLEY FAULT ZONE	497	Quaternary
TANK CANYON FAULT	268	Holocene
THING VALLEY FAULT	494	Pre-Tertiary; Quaternary
THIRTY MILE BANK FAULT (OFFSHORE)	484A	Quaternary; Pre-Quaternary
TIN MINE FAULT (ELSINORE FAULT ZONE)	446	Late Quaternary; Holocene
TIN MOUNTAIN FAULT	527	Late Quaternary
TOLAY FAULT	150	Quaternary?
TOWNE PASS FAULT	245	Holocene; Quaternary
TRINIDAD FAULT	38	Holocene
TRINIDAD FAULT (OFFSHORE)	35	Late Quaternary
TULARCITOS FAULT	236	Quaternary; Late Quaternary (in part)
TUNNEL RIDGE FAULT	410	Late Quaternary?
TWO ROCK FAULT	114A	Pre-Quaternary
UNNAMED FAULTS WEST OF DRY MOUNTAIN	528	Late Quaternary
UNNAMED FAULTS IN EUREKA VALLEY	532	Quaternary; Historic (1993 earthquake rupture)
VACA FAULT	156	Late Quaternary?
VENTURA FAULT (PITAS POINT VENTURA FAULT)	336	Holocene; Quaternary
VERDUGO FAULT	387	Holocene; Late Quaternary
VERGELES FAULT	228	Late Quaternary;
VERNALIS FAULT	167	Quaternary?
VERONA FAULT	183	Holocene?
WARM SPRINGS VALLEY FAULT AND UNNAMED FAULTS	61	Holocene
WATERMAN CANYON FAULT	411	Late Quaternary
WATERS PEAK FAULT (FOOTHILLS FAULT SYSEM)	360	Quaternary
WEST CALICO FAULT	417	Holocene
WEST HUASNA FAULT	289	Late Quaternary
WEST NAPA FAULT ZONE	152	Holocene in southern part; Late Quaternary in northern part
WEST NAPA FAULT ZONE (NORTHERN SECTION)	521	Quaternary
WEST TAHOE-DOLLAR POINT FAULT ZONE	516	Holocene; Late Quaternary; Quaternary
WEST VALLEY FAULT	139	Pre-Quaternary
WEST WALKER RIVER FAULT	132	Holocene; Late Quaternary

FAULT	REF. No.	AGE
WHALE GULCH FAULT	88	Late Quaternary
WHEELER RIDGE FAULT	275	Holocene; Late Quaternary
WHITE CANYON FAULT	260	Holocene
WHITE MOUNTAINS FAULT ZONE (NORTHERN PART)	204	Holocene; 1986
WHITE MOUNTAINS FAULT ZONE (SOUTHERN PART)	209	Holocene; Late Quaternary
WHITE MOUNTAINS FAULT ZONE (HAMMIL SECTION)	525	Quaternary
WHITE WOLF FAULT	275A	Historic (1952)
WHITTIER FAULT (ELSINORE FAULT ZONE)	444	Late Quaternary; Holocene
WIENERT FAULT	506	Holocene; Historic (1987 earthquake rupture)
WILDOMAR FAULT (ELSINORE FAULT ZONE)	460	Holocene
ZAMORA (DUNNIGAN HILLS) FAULT	124	Late Quaternary; Holocene?

APPENDIX C

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