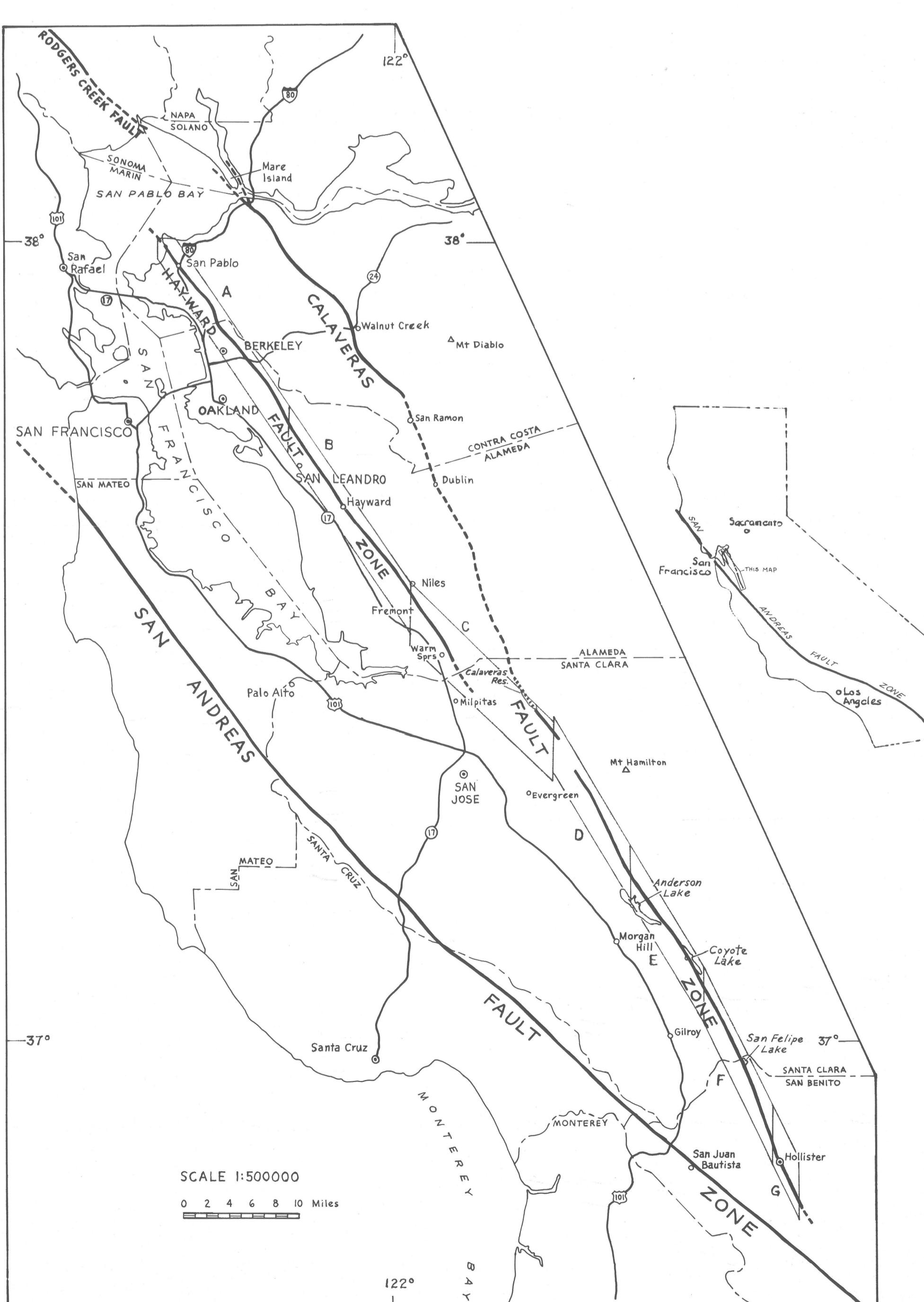


MAP SHOWING RECENTLY ACTIVE BREAKS ALONG THE HAYWARD FAULT ZONE AND THE SOUTHERN PART OF THE CALAVERAS FAULT ZONE, CALIFORNIA

90V

Dorothy H. Radbruch

Note: Other recently active breaks that have not produced distinctive surficial features may be present



of faults along the west-Bay. It extends north-
n, and may extend in either
s zone has caused two
ne in 1836 and one in 1868.
in 1836 (Louderback, 1947)
son, 1908); 1868 cracking
nia in Berkeley (Radbruch,
in 1960, and since then
lo to Fremont (Radbruch,
s, railroad tracks, pipe-
s appears to be about 0.2
No historic surface
documented south of the
ins (1968) indicate that
alluvium from the known
as far as Evergreen.

are in some places
trenches, and scarps,
of Strawberry Creek at
occupied by Lake Temescal
edges in Fremont (strip C)
f California, for example
from historic records that
Lawson, 1908; Louderback,

of faults that extends
erge with the San Andreas
alaveras Reservoir, and
sland and across San
n County. The accompanying
ne, from the town of
ly originating in the
anying the quake was noted
est side of San Ramon
are presumed to have been

e San Andreas and Hayward
ult zone. Creep has off-
(Rogers and Nason, 1967a)
er, in the San Felipe
nication, 1968). Damage
ment (Radbruch, 1968), and
appears to have been
l I-beam girders that
ve been distorted both
them slightly south of the
up and to the east with
s of piers, one set on the
the southwest shore; and
ears to lie between the
the first and second sets
n (northernmost) sets, with
sets. The exact amount of
es, both lateral and
anner as the girders; in
ently the bridge has been
f the forces, particularly
there is no evidence of
e south abutment and are

ne bridge) appears to be
ing trench southeast of
ent. The complex bridge
compression, and uplift of
usting along a fault ex-
t, with the rocks on the
respect to those on the

The pattern of recent movement within the length of the zone. In some places the features such as sag ponds, trenches, terraceably straight lines visible for relatively long on the map south of San Felipe Creek, northeast E.). North of San Felipe Creek (strip D) short en echelon segments, which can be identified gouge. Field work shows that rock in the ridge highly fractured. East of Anderson Lake (strip E) of anastomosing fault traces, clearly delineated and trenches.

Near Cochrane Bridge the fault zone also breaks, whereas northeast of the bridge is a linear traces where the physiographic features anastomosing fault traces, landsliding, or a

Engineers, planners, and others dealing should be aware that the characteristics of a specific character of the zone in a particular planning and development.

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averas fault zone appears to vary along traces, as indicated by physiographic and offset drainage, appear to be remarkable. One of these lines is shown the north end of Anderson Lake (strip zone seems to consist of a band of by sag ponds, linear trenches, and clay between the trenches in this area is also the fault zone consists of a wide band by numerous hillside terraces, sag ponds, and

ars to consist of straight, narrow sed area of ponds, landslides, and vague be due to a number of en echelon or nation of both.

land utilization along fault zones t zone may vary from place to place; the a should be considered in land use

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EX

Fa

Solid line, obvious photogeologic or
by scarp lines, trenches, sag
Short dash, less obvious photogeologic
but very probably a fault break
Brief notes along fault breaks indicate
are especially clear. Visible
locations noted, but are present
fault lines.

Location of surface rupture formed
as shown on unpublished map prepared
Investigation Commission of 1906.*

Approximate location of surface rupture
October 21, 1868; based on published
shown on unpublished maps prepared
Investigation Commission of 1906.*

X

Locality of a crack

Location of cracks formed during the
on unpublished maps prepared for the
Commission of 1906.* (In some places
of the approximate location of surface
much as 250 feet in error, due to old
township maps.)

(cas)

Location of fault traces taken from
showing source of data. Dotted where
concealed.

*Maps courtesy of Dr. Perry Byerly.

*(San Andreas fault: Hayward - C
cop. 1.)*

TION

races

— — ? — — ?

ld evidence of recent movement shown
, offset streams, or gouge zones.
or field evidence of recent movement,
erred where uncertain.
locations where features mentioned
t features are not limited to the
o some degree all along the mapped

— — — — —

ng the earthquake of October 21, 1868;
r the California State Earthquake

— — — — —

s formed during the earthquake of
scriptions and on locations of cracks
the California State Earthquake

⊗

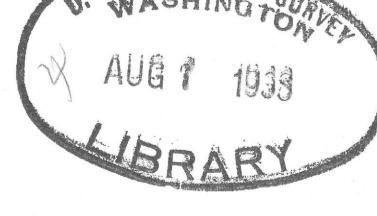
Probable locality of a crack

earthquake of October 21, 1868; as shown
lifornia State Earthquake Investigation
the location of symbols, and therefore
ruptures inferred from them, may be as
culties in transferring data from old

.....
53)

s prepared by other investigators,
robable trace is shown by them as

versity of California

A circular stamp with the text "U. S. GEOLOGICAL SURVEY" and "WASHINGTON" curved along the top edge. In the center, there is a handwritten mark resembling a checkmark or 'X' followed by the date "AUG 1 1938". Below the date, the word "LIBRARY" is stamped.

laveras portion). Fault.

ifornia (San Andreas fault: Hay
sheet 1, cop. 1.