

Earthquakes

We're not at all ready should the big 'quake hit

By BOB SMITH
(First of two parts)

April 18, 1906 — the earth under Northern California shook.

San Francisco was left in ruins and in flames.

Damage was reported throughout Northern California.

Santa Cruz County, nearly 100 miles from the epicenter, found its communications with the outside world cut. The railroad through the Santa Cruz mountains was blocked by collapsed tunnels.

Telephone and telegraph systems were out.

Santa Cruz County business districts suffered moderate damage. Many of the homes in the county had fireplace chimneys toppled.

Two dozen men lost their lives in Hinckley Basin above Soquel when a landslide buried a sawmill.

For the next 75 years, the earth slept. Northern Californians have lived in comparative peace with only an occasional tremor over the years to remind us that we do live in earthquake country.

Each year, California waits for the BIG quake.

And every year that goes by, scientists say, increases the likelihood of another major earthquake hitting Northern and Central Califor-

nia.

In 1980, the National Security Council and the Federal Emergency Management Agency (FEMA) examined the likelihood of a major earthquake hitting some part of California. Southern California stands a five percent chance each year that an 8.3 magnitude quake on the Richter scale will strike.

The Bay area risk is one percent a year, but the area, because of its geographical conditions and population, would probably suffer more damage.

The 1906 quake was catastrophic for the people who lived through it or died as a result of it.

The effect of an equally powerful quake on the millions who now inhabit the San Francisco and Monterey Bay areas would be almost incalculable.

The FEMA-National Security Council report estimates that an 8.3 magnitude quake on the San Andreas fault would kill 3,000 people if it occurred at 2:30 a.m. when most people are home and asleep.

Move the quake time to 2 p.m. and the death toll rises to 10,000. Time it for the rush hour traffic at 4:30 p.m. and it rises to 11,000.

The injured requiring hospitalization would be 12,000 at night, 37,000

at 2 p.m. and 44,000 at 4:30 in the afternoon. Injured not requiring hospitalization would be 15 to 30 times the hospital estimates, FEMA estimates.

As many as 200,000 families in the greater Bay area would require temporary housing.

Telephone systems would be knocked out for 24 to 72 hours.

All major transportation systems, the federal study shows, would be affected — highways, streets, overpasses and bridges, mass transit systems, railroads, airports, pipelines and ocean terminals.

East-west arteries — those crossing the San Andreas or other major fault lines — would be the most severely affected, the study says, but major damage could be expected on all major transportation links.

The 1971 San Fernando Valley earthquake demonstrated vividly that business and industry would be damaged. Several buildings of the kind typically used for light industry and warehouses suffered collapsed roofs and walls.

Ten percent of the nation's population and industrial resources are in California. Over 85 percent of these resources (or about 8.5 percent of the nation's total), are located in the 21 Northern and Southern California

counties considered subject to a major quake. About 56 percent of the guided missiles and space vehicles, 40 percent of the semiconductors, 25 percent of the electronic computer equipment, and approximately 21 percent of the optical instruments and lenses manufactured in the nation are produced in the 21 (high risk) California counties.

The probability of all these counties being affected by the same event is very remote, but the federal report worries about the concentration of key industries in some areas.

For example, 25 percent of the nation's semiconductors are manufactured in Santa Clara County, an area that suffered very heavy damage in the 1906 quake.

There is no study that specifically deals with the impact of an 8.3 San Francisco-type quake on Santa Cruz County today. But public officials believe the county would be isolated from the outside world, with its residents dependent on their own resources for hours, days, and perhaps longer.

Every major transportation artery into the county crosses the San Andreas Fault at the crest of the Santa Cruz Mountains. Portions of the San Andreas Fault during the 1906 quake were displaced 21 feet

horizontally.

CALTRANS has said most of the freeway bridges on Highway 1 between the Pajaro River and Santa Cruz could collapse during a major shake. It plans to spend more than \$30,000 in the 1983-84 budget year to put "restrainers" on the bridges over the railroad in Watsonville, Struve Slough, 41st Avenue, Soquel Avenue, State Park Drive, Highway 1-129, and the Aptos Creek Bridge.

(It has no plans to strengthen any of the bridges on the Santa Cruz County portion of Highway 17 at the present time, a San Francisco spokesman said recently.) A PG&E spokeswoman said the county could expect to be without electricity or natural gas for three days or more after a major quake.

Experience with the 1979 Imperial Valley quake and the 1978 Santa Barbara quake shows that railroads could be cut, major airports rendered inoperative or crippled because of power losses, telephone systems overloaded to the point of unusability, and many radio and television stations cut off the air because of the power outage or failures of their emergency generators.

How prepared is Santa Cruz County today to deal with the after-

math of the Big Quake?

The consensus at all levels — federal, state and local — is that we are not ready.

The federal and state governments are prepared to provide an umbrella of support and assistance to any locality involved in a major natural disaster.

But the responsibility for the comprehensive advance planning needed to set up the plans and cooperation to deal with an emergency and the on-the-scene operations following a major disaster devolves onto the local governments and private organizations, like the Red Cross.

But here, the county has been without an effective civil defense or disaster organization for several years.

The County Office of Civil Defense was abolished by the Board of Supervisors in 1977, and the county's disaster planning and emergency preparedness organization fell into disuse.

In 1980, Sheriff Al Noren and Lt. Bill Plageman were given the job by a new Board of Supervisors to rebuild the county's emergency response ability.

(Part two: Starting from scratch.)