Earthquake faults in the South Bay

By Stephanie Walton Staff Writer
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Earthquake faults

How many earthquake fault lines do we have in the South Bay and where are they?

- VICKI THIELMAN

Torrance

A Southern California Earthquake Data Center map of fault lines in the Los Angeles region shows two faults - one with two branches - that run through or near the South Bay.

The Web site also notes that "Indeed, since these maps show only surface traces of faults, some potentially damaging faults - namely, blind thrust faults, like the one that caused the Northridge earthquake of 1994 - are not shown. Some of the faults which are shown may never rupture again. This map is not meant to be used as a zoning guide, nor for risk assessment."

The two faults running through the South Bay are the Palos Verdes and the Newport-Inglewood faults.

The Palos Verdes Fault Zone, which traverses the southern portion of the South Bay, has two branches - the Cabrillo Fault and the Redondo Canyon Fault - which join the main fault at different points along its route.

According to a Southern California Earthquake Center scientist interviewed for a previous Ask Us column, the P.V. Fault extends from the Pacific Ocean and comes ashore somewhere near the southwest point of the Redondo Beach-Torrance border. The fault then curves around the base of the Palos Verdes Peninsula roughly midway between Pacific Coast Highway and the Peninsula and continues this southerly course until it runs into the Los Angeles

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Harbor. More information on the Palos Verdes Fault

The SCEDC map shows the Redondo Canyon Fault joining the Palos Verdes Fault offshore and extending west into Santa Monica Bay.

The map shows the Cabrillo Fault joining the Palos Verdes Fault offshore, just outside San Pedro Bay, and continuing northwest through San Pedro and into the communities of the Palos Verdes Peninsula.

The SCEDC Web

(Paul Penzella/Staff Illustrator)

site notes that the roughly 50-mile-long fault line continues southward, offshore, as the Palos Verdes-Coronado Bank Fault Zone.

A map on the Broadband Seismic Data Collection Center Web site, eqinfo.ucsd.edu/tools (click on interactive map), shows the Newport-Inglewood Fault starting northwest of Kenneth Hahn State Recreation Area and heading southeast. The fault line runs through portions of Culver City, Baldwin Hills, Inglewood, Athens, Gardena, Harbor Gateway, Rosewood, Carson, Rancho Dominguez, Long Beach and Signal Hill before it traverses into Orange County.

The Newport-Inglewood Fault, the Web site says, "can easily be noted there by the existence of a chain of low hills extending from Culver City to Signal Hill.

The most recent major rupture on this fault line is the 1933 Long Beach earthquake, the Web site says.

The Broadband Seismic Data Collection Center is a joint project of the Institute of Geophysics and Planetary Physics, the Scripps Institution of Oceanography and the University of California, San Diego.

- Stephanie Walton

To ask us: Curious about something in the South Bay or Harbor Area? Let us know, and we'll try to get answers. You can 1) leave us a message at 310-543-6698, 2) fax us at 310-540-6272, 3) mail us a letter to Ask Us, Daily Breeze, 5215 Torrance Blvd., Torrance, CA 90503-4077 or 4) e-mail us at askus@dailybreeze.com. Include your name, address and daytime phone number.

Palos Verdes Fault

By Stephanie Walton Staff Writer
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I know the Palos Verdes Fault comes onshore in the South Bay in south Redondo Beach and runs along the bottom of Palos Verdes Peninsula. But what street in south Redondo follows the path of that fault ? Where could I find out more information on this subject? -- Vicki Thielman, Torrance

The exact land route of the Palos Verdes Fault has been erased by years of paved streets, housing developments and land modifications, said Tom Henyey, director of the Southern California Earthquake Center at USC.

"It's unfortunate we don't know the location more precisely," he aid. "Man has pretty well wiped out the evidence."

The fault line that extends into the Pacific Ocean makes shore somewhere near the southwest point of the Redondo Beach-Torrance border, curves around the base of the Palos Verdes Peninsula roughly midway between Pacific Coast Highway and the Peninsula. It continues this southerly course until it eventually runs into the Los Angeles Harbor, Henyey said.

SCEC scientists have a better picture of the fault 's course in the harbor after mapping the strike-slip fault for the Port of Los Angeles's current expansion project. "We are pretty sure it runs under the Vincent Thomas Bridge," he said.

For more information, visit the center's Web site at www.usc.edu/dept/earth/-quake.

The California Department of Conservation's Division of Mines and Geology office in downtown

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Los Angeles has a library of publications about the South Bay's other fault , the Inglewood-Newport Fault .

That earthquake fault travels from Newport Beach in a northwest line through Signal Hill, Dominguez Hills and Baldwin Hills before terminating somewhere in the vicinity of Beverly Hills, Henyey said. -- Stephanie