

Geologist targets coastal erosion

By BOB SMITH
STAFF WRITER

California has spent billions in public and private money in an often futile attempt to protect its coast from ocean onslaughts.

And as population and political pressures continue to grow, said UC-Santa Cruz earth sciences instructor Gary Griggs yesterday, billions more will be spent in the same futile quest.

Speaking at the annual conference of the California Association of Local Agency Formation Commissions at Santa Cruz's Chaminate conference center, Griggs called for a set of state laws and public policies similar to the Coastal Act of two decades ago, but specifically targeted at the issue of shoreline erosion.

Griggs said it is time for the state, which has no policy on coastal erosion, to take charge of the coast and to do several things, including:

- Establish a state Coastal Hazards Act;
- Write a model coastal hazards ordinance for communities;

There are 28,000 people for each mile of coastline — 2.2 inches of shoreline for each resident.

- Phase out the coastal protective devices that interfere with the sand supply that keeps beaches replenished year after year; and

- Initiate planning to deal with the expected rise in sea levels from global warming.

Griggs, the director of UCSC's Institute of Marine Sciences, is considered an expert on Santa Cruz County's geology and its threatened coast. He said the erosion problems are not confined to Santa Cruz and Monterey counties, nor to the bluffs of Malibu and San Diego County in Southern California.

Griggs said 950 of the state's 1,100 miles of coast are actively eroding.

And while the coastline is receding, the state's population is growing. Eighty percent of the state's

30 million residents live within a few miles of the ocean.

And in the next 20 years, the population could grow to 50 million.

Figured on population per coastal mile, there are 28,000 people for each mile of coastline — 2.2 inches of shoreline for each resident, Griggs said. In the most populated regions, such as Los Angeles County, there's about half an inch of beach for each person.

Those kinds of population pressures have resulted in intense development along many portions of the state's coast — which has proven to be a costly blunder.

Santa Cruz County's experiences in the last 20 years are just a sampler of the difficulties affecting the entire state, including places such as Half Moon Bay, Isla

Vista, San Diego and Malibu, Griggs said.

For instance, homes were built on top of ocean bluffs, on the beaches themselves and in the mouths of streams. That was followed by bluffs crumbling from waves, rain and earthquakes; ocean storms undermining seawalls and foundations; and waves pounding through the front windows of homes, he said.

Millions in insurance and tax dollars were spent to repair and protect those homes, Griggs said.

It now costs between \$750 and \$3,000 a running foot — about \$15.9 million a mile — to build a seawall, Griggs said.

"I believe that those dollars come out of your and my pockets," he said.

A UCSC survey of coastal cities and counties found a wide variety of policies on setbacks and on coastal protection.

Many city officials told the surveyors they needed more information to assess their problems and possible solutions.