

The county has learned to be ready for disaster

EDITOR'S NOTE: This story was published in Sunday's edition, but is being run again because part of it was inadvertently dropped.

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SANTA CRUZ — When the sun's shining and there hasn't been a drop of rain for weeks, perhaps it's unfair — even cruel — to wonder whether the county is prepared for another disaster.

But it was just two years ago that 22 people died in the worst storm to hit Central California in decades. The question arises: What have we learned since then?

In interviews with dozens of officials and citizens, the most frequent answer is that we've learned to prepare for the worst.

From the government revising its lines of authority, to citizens stocking their homes with extra food and batteries, the county seems ready.

But it's a "conditional" readiness, for as county Office of Emergency Services coordinator Bill Plageman said recently, "I don't think any emergency services coordinator in his right mind would say he's 'ready.'"

"One of the most difficult things is that we never know when disaster will strike, to what degree it will hit, and in what form," said Fifth District (San Lorenzo Valley) Supervisor Joe Cucchiara recently. "No amount of preparation will ever guarantee that you can avoid the inevitable difficulties that result when Mother Nature decides to act."

"To put the most recent experience in context, all that really happened in 1982 and '83 was that it rained a lot. What would we do in the event of an earthquake or major fire?" Cucchiara wondered.

The damage from storms in those years is staggering. In 1983, 13 homes were destroyed, primarily along the beach. Forty-six were damaged, nine businesses and the cliffs in Capitola sustained severe damage. In 1982, many more millions of dollars worth of damage was seen across the county to roads, homes and hillsides.

The county Public Works Department has nearly tripled its budget to try to handle the repairs for 38 county-owned roads, said Assistant Director Phil Sanfilippo. Also, the county saw extensive sewer damage to beach-front residential areas of Aptos.

The person charged with directing the government's response to disasters is County Administrative Officer George Newell.

Two years ago, the grand jury criticized the county's handling of the disaster and suggested redefining the lines of authority.

Since then, Newell and emergency coordinator Plageman have worked together to identify which government and private agen-

cies can be called upon to help in emergencies.

They helped write an emergency pamphlet which was distributed to 72,000 homes, at the direction of the Board of Supervisors.

And they've held meetings with members of the Red Cross, Salvation Army, Council of Churches, Human Resources Agency, volunteer ham radio operators, firemen and sheriff's deputies, as well as PG&E and public works officials.

The discussions have centered on what the various agencies and people are expected to do when called upon for assistance.

"The only thing we haven't done is walk through a response from beginning to end," says Plageman.

They're not the only ones holding meetings. Since February 1983, Connie Benson, seniors council member, has called informal get-togethers for many of the emergency responders.

Plageman says it's often these agencies that provide the lifeline of food and other supplies to stranded areas.

Benson concurs. "We work with the people (in distress) on an almost daily basis. We know who needs help and where they are."

In 1982, the seniors council handed out 5,000 emergency food bags to elderly residents. The agency provided physical labor to haul away five feet of mud from the more than two dozen homes damaged in Gold Gulch near Felton.

They financed some of their food giveaway through donations from primarily two private foundations — the Lucille and David Packard foundation, and Luke B. Hancock foundation.

Nearly everyone interviewed believes that the response to the Lompico slide last winter illustrated how well the system can work. While 2,000 persons remained isolated in their mountainous community by an oozing mass of mud, county, federal and state officials planned how to get to their aid.

One of the chief changes was that county officials called on the Human Resources Agency — formerly the welfare agency — to give information on the numbers of people affected, and the kinds of services the community had available, said Newell. "They really swung into gear," he said.

There's no way to predict when a major fire or earthquake will occur. However, the accuracy of weather forecasting is better than it once was.

Still, some of the technology is a little like Rube Goldberg's. According to lead National Weather Service forecaster John Plankinton, every time a commercial aircraft flies over a longitudinal line on the earth's surface, the pilot is required to report the weather conditions he sees.

Likewise, captains of ships report in their

observations on winds, air pressure, temperatures and precipitation.

These data are incorporated into information from satellite pictures, said Plankinton. By using simple physics equations, the information leads to weather predictions.

Sometimes those forecasts aren't very accurate. For instance, over the 1983 Christmas weekend, the National Weather Service had predicted a massive storm for the Santa Cruz area. Instead of hitting here, though, the bad weather went up the coast and paralyzed Portland, Ore., with several inches of snow.

Plankinton said a problem with forecasting is that the computer uses only a small percentage of the samples that theoretically could be applied.

The satellites pick up data from points that are 80-90 miles apart.

"There's a lot of weather between those grid points," Plankinton observed. "My job is to take all those nice charts and detail the weather picture. Essentially what you end up with is saying that the traditionally wet spots will get rain, while the drier ones won't have as much," said Plankinton.

Seasonal forecasts are issued from Washington, D.C. They cover the expected weather conditions for the entire country, Plankinton said.

At best, he said their probability of accuracy is only 5 out of 8.

Both Plankinton and Scripps Institution meteorologist Jerome Namias predict a higher-than-normal rainfall here this winter.

While nothing can be done to stop the rain or the waves from pounding the coast, several people are working on solutions to at least give residents warnings of dangerous conditions.

The County Planning Department, according to assistant planner Susan Williamson, encourages residents of mountain areas to keep a rain gauge in the yard. The intensity and duration of any storm is a crucial factor in whether trouble lies ahead, she said.

"One of the first steps people should take (to protect their homes) is to determine whether the steep hillside is dangerous," she said. That's best done by calling a professional for advice.

The county has dozens of pamphlets on how to prevent erosion (as pictured here) and what to do in case of emergencies.

One of the professionals who gives advice to both the county and residents is UCSC Chairman of the Earth Sciences Department Gary Griggs.

Griggs is currently working on a project to measure the effectiveness of coastal structures, such as seawalls, rip rap and the like.

"What '83 showed us was that many aren't very effective," said Griggs.

Griggs raises the question, "How long can you afford to protect those structures when they're sitting right on the beach?"

As to the steep slopes that make up much of the county's interior, Griggs said half have been earmarked as potential landslide areas.

"What we know about landslides is what it takes to produce those situations," said Griggs. That's an intense rainfall in a short amount of time.

One of Griggs' students is currently working on a device that would tell when the ground has reached saturation level. It's called a piezometer and "has some potential," said Griggs.

From observations in the '82 storm, Griggs said researchers have learned that when the earth reached saturation level, underground water percolated back to the surface, like an artesian well.

The student has made a pipe and cork device that measures this phenomenon, said Griggs.

As to flood dangers, Griggs says the ALERT system will help. Recently, the Board of Supervisors approved funding for the early-warning flood control system for the Soquel Creek.

While it won't stop flooding, Steve Singer of the U.S. Department of Agriculture's Soil Conservation Service said it will give Soquel residents and businessmen at least an hour of warning.

In the long run, bad weather, earthquakes and waves are inevitable. It has fallen on county supervisors to define the policy affecting building permits in areas that are prone to flooding or intense wave action.

Cucchiara said generally speaking, there's been a concerted effort to provide permits for existing homesites. This means people with homes are most often allowed to rebuild.

"The county has had one of the most aggressive land-use policies with regard to geological inadequacies," said Cucchiara. "But what we've been faced with is having inherited decades of poor land-use planning."

While strict adherence to the no-building policy in hazardous areas pleases some people, it irritates others, and has become one of most controversial topics in Santa Cruz politics.

It has led supervisors and planners to take a parcel-by-parcel approach to the problem. As Cucchiara said, "There's no broad-brush approach."

The caution, the planning, the research into new systems for predicting dangerous weather all stem from the county's recent trauma.

"If there's any fortunate side to the '82-'83 disasters, our community was allowed to experience first-hand what it's like to be in a state of emergency," said Cucchiara.