



In the aftermath of the 1995 Pajaro floods, a backhoe rebuilds the breached Pajaro River levee.

Farmers wait for El Nino's

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WATSONVILLE — Last week, scientists at the University of California announced that the coming El Nino could bring as much as 40 inches of rain to Los Angeles this winter and the worst storms in at least 15 years to the central coast.

Two years ago strawberry farmer Richard Uyematsu lost his entire crop when the Pajaro River ran over and broke through the levee. He believes vegetation in the channels is the reason. "Last winter the channel was a lot cleaner and we didn't have a problem," Uyematsu said. "They say there was not as much water but I could tell the water was running much faster than in '95. This year, the channel looks better than '95, but it's not nearly as clear as last year."

Even during a normal winter, sandbags piled around doorways are a common sight in Watsonville, Pajaro and surrounding areas. Preparing for, contending with and cleaning up after floodwaters is a fact of life.

This coming winter, South County is facing what may well be the strongest El Nino of the century. Many local farmers believe cleaning the channels is the only way to avoid another disaster. County Supervisor Ray Belgard said last week, however, that although there is an ongoing program to maintain the area's creeks, major construction for flood prevention will not happen in time for the coming winter.

Causes of flooding

Chris George, Senior Engineer with Haro Kasunich and Associates in Watsonville, said a flood happens when several different events occur

in just the right sequence. "Certainly a large amount of rainfall in a short amount of time will cause rivers and streams to overflow their banks, but other factors come into play as well."

"Often flooding results from the cumulative effect of earlier events," George said. "In some areas the rains that fell last season scoured banks and weakened levees that may not give way until now or sometime in the future."

Another factor is man-made impermeable surfaces such as roofs, roads and parking lots. By decreasing the surface area, there is less exposed soil to absorb the rain, thus increasing the amount of run-off. George doubts that these structures are as culpable as some people claim, however. "All one needs to do is fly over the area to see just how much ground is covered with impermeable surfaces. It may seem like a lot, but in reality only a very minute fraction of the surface has been developed in relation to the total area," George said.

A third factor, and by far the most politically sensitive, is culvert plugs and flow restriction which occurs when trees and brush overgrow in watershed areas. Riparian vegetation, plants and trees that grow naturally along stream banks, create a shaded, moist micro-climate that is necessary for many forms of wildlife. It also decreases the amount of water that can flow through the watershed.

Pajaro River Task Force

The Pajaro River Task Force, a technical advisory committee, was set up by the Board of Supervisors after the 1995 floods. Their purpose is to study all facets of the problem

winter floods

and make recommendations for future actions.

One tool not available to the committee is the ability to predict the future. "What is normal?" asked Diana Henderson, National Weather Service forecaster. "We really don't know. Aside from tree rings, we only have reliable data from the last 70 or 80 years. That is nothing in the broad scheme of time."

The committee must also decide how much preparation is too much. At what point does dredging, tree and brush removal, levee construction and alteration of the landscape cost more, both monetarily and environmentally, than rebuilding after a flood?

"The environmental impact of clearing out the streams and river bed would be huge," said David Suddjian of the Santa Cruz Bird Club. After extensive testing and monitoring, Suddjian has concluded that the few remaining riparian habitats are essential to at least 134 species of birds. Instead of clearing trees, Suddjian proposes we allow more to grow.

Another question is how large of a flood should we prepare for? One that occurs once every 50 years or once every 100 years?

Pajaro farmer Clint Miller, member of the Pajaro Levee Citizens Committee, feels that the cost/benefit figures that were used when assessing the potential risk of flooding previous to 1995 were too low. "The Army Corps of Engineers were

surprised by the value of the crops, both in the fields and in storage that were lost last year," Miller said. "The damage was in the hundreds of millions of dollars."

According to Miller, another argument against the cost/benefit approach to risk assessment is that it does not take into account the psychological toll on the affected residents. "Emotions run high here and people are scared. The stress can be devastating," Miller said, referring to times when the river begins to rise. scott: take out this he said she said about the birds?

"Because of the trees in the channel, the river can only handle 25 percent of what we need for a 100 year flood. For the environmentalists to suggest we need more trees and brush which will reduce the capacity another five percent is ridiculous," Miller said.

Another Pajaro resident, Tony Olivera, put it more succinctly. "I know birds need trees, but they can fly, we can't."

"That type of logic sounds good, but it is not accurate," Suddjian said. "Although some species can live elsewhere, many cannot." According to Suddjian, riparian vegetation accounts for approximately one percent of the total vegetation in the western United States, yet it exceeds all other areas in providing nesting habitats.

"I'm not just concerned about birds, I care about people too and in the long run, taking care of our natural resources will help people. If we worry only about flow rates and cubic feet per second we miss the bigger picture. This is a river, not a drainage ditch and we have already lost 243 acres of habitat, how much more are we willing to sacrifice?" Suddjian asked.

Miller points out that he is not unsympathetic to the plight of wildlife, and agrees with Suddjian that preserving nature is important. At the same time he believes that there are ways to protect the environment that don't require sacrificing the rights of people.

One such plan was proposed by Santa Cruz hydrologist Mitchell Swanson, following an extensive study of the problem in 1990. Some of Swanson's recommendations included: Clearing the center of the channel while leaving riparian growth on the banks to help reduce erosion; creating a low spot in the levee to allow overflow during times of peak runoff; and the construction of a network of weirs or small dams to de-energize the excess water and divert it into ponds.

The overflow would then be channeled through a system of ditches, pump stations and culverts and re-introduced into the river farther downstream in a controlled manner.

Swanson believes his proposal was not adopted because the county felt the estimated \$50 million cost of the project was too expensive. "In addition to the cost, the plan called for easements and there was resistance from landowners, who believed it was really a county land grab," Swanson said.

After the huge losses to farmers, businesses and homeowners incurred by flooding in 1995, Swanson believes it is time for the county take another look at his plan. "The original plan cost \$50 million, damage in the '95 flood was over \$100 million," Swanson said. "In my opinion the county is playing a dice game, but future floods are inevitable. By not going ahead and spending the money now, the county is positioning itself for massive lawsuits in the future."