

# Landowners, experts facing Delta standoff

Mike Taugher, Bay Area News Group, 8-2-11

Karen Cunningham's cows were resting in the pasture below while muscled-up power boats raced back and forth 10 to 15 feet above them on the other side of the levee.

Should the levee break, the pasture would fill like a giant bowl and destroy, at least temporarily, Cunningham's ranch on Bradford Island -- a remote spot accessible only by ferry on the edge of east Contra Costa County. It could also have an outsized effect on water supplies across California.

But Cunningham isn't worried about a levee break, which she considers highly unlikely. It is the fix being worked up to protect water supplies that is the bigger threat, she says.

"This whole system as it is will be destroyed," she predicted.

The tension between landowners like Cunningham, who want to preserve the Delta as it is, and outside experts, who warn that the state faces a potential catastrophe in the Delta, is heading toward a standoff of sorts. It is a standoff that, while welcome to those who think things are headed in the wrong direction, is causing some experts to worry that whatever slow progress has been made in addressing the region's fragile levees could be further stalled or delayed.

"If the locals simply refuse to believe the experts from around the world, you're set up for a stalemate, which is bad for everybody. Nature will be in charge of planning in the Delta," said Jeff Mount, a geologist at the University of California, Davis, who earned the nickname "Dr. Doom" several years ago for his prediction that an earthquake would inevitably break numerous Delta levees.

Mount said he doesn't blame Delta residents for rejecting such forecasts because it's their lifestyles at stake.

But he is convinced they are mistaken and that a flooding risk in the Delta is severe.

"Eventually, you're going to have a major issue in there," he said.

The plan that worries Cunningham centers on tunnels that would be driven through the Delta to divert Sacramento River water directly to pumps near Tracy that send the water south. That would permit brackish water from the saltier San Joaquin River and the San Francisco Bay to penetrate deeper into the Delta, which Cunningham fears could degrade her green pastures.

Once the tunnels go in, there is also considerable fear the state will cut spending to maintain levees now channeling fresh water to the pumps.

That would leave island landowners less protected from flooding and more vulnerable to plans to convert their properties to wetlands, she said.

For years, a procession of outside experts has warned that the Delta's network of levees are so unstable and of such critical statewide importance that California could face a catastrophe taking lives, endangering water supplies and disrupting transportation, energy and communications links.

Landowners like Cunningham say much of the scary talk is intended to grease the skids for the tunnels.

No earthquake has ever collapsed a Delta levee, they note, and the threat of storms overtopping levees has been greatly reduced as the most vulnerable levees have been raised in recent decades.

Still, big water agencies in Southern California and the San Joaquin Valley are pursuing the Bay Delta Conservation Plan which would, if built, probably rely on a \$13 billion set of tunnels for water supply and a mosaic of new wetlands to improve habitat.

Cunningham and others have already sued, with limited success, to block studies on their properties that are needed for the plan. More lawsuits from Delta landowners are certain if it continues to move forward.

But outside experts say more than just agriculture and a water supply are at stake.

The Delta is an infrastructure choke point where the lives of millions could be disrupted if a levee failure takes out the electrical transmission lines, natural gas pipelines, telecommunications, railroad tracks, state highways or the aqueduct that carries water to 1.4 million East Bay Municipal Utility District customers.

One prominent expert on levees and engineering failures around the world has said the Delta is the biggest mess he has ever seen.

Bob Bea, a professor of civil and environmental engineering at UC Berkeley, has been working with students and others to develop ways, as he says, "not to abandon the Delta, but begin to migrate the infrastructure in the Delta to something that is resistant and resilient."

But a lack of clear answers and leadership, Bea said, is leading to inertia.

"It's patch and pray time," he said.

Are we doomed to a catastrophe?

"It looks like it," Bea said.

First built by Chinese laborers after the Gold Rush, the levees turned a vast tidal marsh into a network of channels and sunken "islands."

Over time, the soft peat on the islands sank so that some islands are now as much as 25 feet below sea level. Even though many no longer are subsiding, the sea level continues to rise.

That combination of sinking land and rising water increases pressure on the levees, scientists say.

More than 1,000 miles of levees protect more than 60 such islands.

Bradford Island, where Cunningham's ranch is located, is one of a handful of key islands because they are in an area of the western Delta that, should it flood at the wrong time, could draw brackish water toward the Tracy pumps that send drinking water as far away as San Diego.

Scientists also have become concerned that simultaneous levee failures in an earthquake could cause a catastrophic flood of salty water that might take weeks to years to flush out, depending largely on when the earthquake occurs.

Throw into the mix of threats burrowing rodents, believed to have caused the Delta's last major levee failure in 2004.

Still, a stalemate is OK with Ron Baldwin, a recently retired top emergency response official in San Joaquin County.

Baldwin is seeking funding for flood protection in the five counties with land in the Delta to bring maps up to date, improve funding for basic levee maintenance, open up communications among emergency responders and increase stockpiles of material to fight floods.

The intense focus on protecting statewide water supplies from catastrophic floods has sapped resources from preparations that could be made for smaller, more likely, floods, he said. And, as preparedness and levee maintenance is allowed to slip, floods can become more likely and more dangerous than they need to be.

To many in the Delta, that feels like a self-fulfilling prophecy.

The fight over water security is overwhelming common sense, Baldwin said.

"Let's get prepared for the flood we know will happen," he said. "I'm not saying you don't prepare for earthquakes. But let's start with what we do know."