

Truckee residents skeptical of dam's safety concerns

Tom Knudson, Sacramento Bee, 12-5-10

TRUCKEE – Amid dark clouds and wind, rain pummels the Sierra Nevada crest outside this quaint resort community. Near the airport, water begins to gush from the base of a big federal dam, undermining its foundation.

Then the earth shudders and the dam gives way, sending a giant wall of water hurtling down Martis Creek and the Truckee River Canyon. Pine trees snap like matchsticks. Bridges are blown out.

Downstream, Reno turns into an inland sea.

That is the nightmare scenario the U.S. Army Corps of Engineers described at a meeting here last week to discuss the Martis Creek Dam, which the agency calls one of the riskiest in America.

"Frankly, it's not safe to operate in a normal manner," said Matt Allen, leader of the corps' dam safety study team.

Townpeople, though, responded warily, saying they fear the government is inflating the risk to build support for a new dam that would destroy large portions of picturesque Martis Valley.

"I would bet the driving force behind all of this is politics and water storage," said Kathleen Eagan, a Truckee resident active in community affairs. "There is no question in my mind there is a much larger agenda."

Corps officials insisted that is not the case, saying they called the meeting simply to hear from the community as they begin a multi-year planning process to decide what to do with the dam. Options include building a new structure, repairing the old one or tearing it down completely.

"This is a very preliminary stage," said Allen. "We don't know if keeping Martis Creek Dam is the right thing to do or not.

"We're not predisposed one way or the other."

Seepage poses danger

One thing, though, is not in dispute: The dam, which is 113 feet high and located three miles east of town not far from the Northstar-at-Tahoe ski resort, is not as rock-solid as it looks.

Just two years ago, for example, corps officials discovered a new earthquake fault running through the left side of the structure.

"This area is seismically active," Allen told residents at the meeting. "There are magnitude 7 earthquakes or greater within about three miles of the dam."

But the biggest threat, he emphasized, is the porous glacial cobble the dam is built on.

That subsurface bouillabaisse of boulders, that slurry of stones, has naturally carried groundwater down the valley for centuries, he said. But storing millions of pounds of water on top of it adds energy to the flow, like turning up the pressure on a garden hose, he said.

Each time the corps has started to fill the reservoir behind Martis Creek Dam, water begins to seep through the base of the big dam itself – threatening to undermine it. "We need that seepage to stay underground," Allen said.

Because of the danger, the corps stores only 800 acre-feet of water behind the dam, a mere puddle compared with the 20,400 acre-feet reservoir anticipated when the dam was built, largely for flood control, in 1971.

But corps officials fear Mother Nature could one day fill the reservoir with a torrential deluge – perhaps a warm winter storm on the steep, snow-covered slopes above the dam.

"The amount of water that can come into the reservoir can far exceed what can go through the gates," Allen said. "We can't guarantee that lake won't rise."

If that were to happen, water could burst like a fire hose through the dam's base and topple it. "In theory, it could completely wash out the dam," Allen said. "That's the worst-case scenario. That's why the gates are open. We need to ensure that never happens."

Terror fears restrict info

But how serious is the threat? Would the dam be in danger in a 100-year storm, which has a 1 percent chance of happening in any given year? Or would it take something bigger?

Corps officials say the risk of failure is actually low, despite the picture they're painting of a devastating flood. But they offered little detailed information at the meeting, frustrating town residents.

"I understand the need to hear from the community early in the process, but the lack of details makes it very confusing," said Eagan.

Corps officials also said little about downstream impacts of a dam collapse, citing concerns about terrorism. "It's sensitive information that we don't want the wrong people to get a hold of," said Adam Riley, program manager of the dam safety study effort.

They were vague on other matters, too.

Someone asked why the government agency said nothing about the potential costs of the project.

"We hesitate to do that because we know so little about them at this stage," said Allen. "It could be misleading. ... It isn't meaningful."

Last week's meeting comes after years of studies and tests at the dam and is the opening chapter of what corps officials say will be a final decision-making effort. It will include a risk assessment study and environmental impact statement that will provide more solid information and guidance. A final verdict is expected in 2012.

Some wonder if the review is worth it, given the low risk of a collapse.

"It may not warrant the attention and the dollars compared to other priorities in our nation," said Truckee resident Marilyn Disbrow.

Others said they fear the planning and study process is a bureaucratic exercise to build support for a new dam to deliver more water to thirsty communities downstream.

"This is not an opportunity. It's a threat," said John Eaton, a retired neurologist and Truckee resident. "If they build a dam and store water and it breaks, it will cause a far bigger catastrophe than not having the dam there in the first place."

Allen said the corps is weighing all of its options.

"It may be that the best thing to do might be to remove the dam completely. And we are considering that seriously," he said.

"Or we may have to build a whole new one."