

## Desert highway bridge revived after collapse

By Marisa Agha Special to The Bee

Just 50 miles west of the Arizona state line, motorists zipped through the Tex Wash Bridge on a recent morning. The newly rebuilt bridge, repairing one that collapsed last summer during a flash flood, is part of a key route that links Los Angeles to Phoenix.

The \$5 million project to fix the bridge was completed in late September. The sun blazed on a dry day – a sharp contrast to the heavy rains that pummeled the area and caused the eastbound span of the bridge to collapse on July 19, prompting the closure of Interstate 10.

Nonetheless, with predictions of an El Niño weather pattern bringing heavy storms and flooding to Southern California this winter, possibly beginning in January, some experts warn that what happened at Tex Wash could happen at other bridges in the desert region.

“Chances are it will again,” said Henry Koffman, professor of engineering at the University of Southern California and director of the university’s Viterbi Construction Engineering and Management program.

The challenge for engineers is balancing safety with cost. “Do we design (for) something that would happen every 100 years or every 50 years?” Koffman said. “There’s an economics involved. We have to draw the line in the sand some place.” He explained that the July storm that hit Tex Wash “was a freaky thing.”

Desert areas are susceptible to flash floods and heavy rain because the desert water forms its own pattern and there are often no design precautions to handle the excess water, Koffman said. “You don’t need it 99 percent of the time,” he said.

That’s not a fear that we have – that our structures will fail.

Tyeisha Prunty, Caltrans spokeswoman based in San Bernardino

California Department of Transportation officials inspect bridges every two years, and if there is a storm, crews examine certain areas and assess any damage, said Tyeisha Prunty, a Caltrans spokeswoman based in San Bernardino.

“That’s not a fear that we have – that our structures will fail,” Prunty said. If something is deemed unsafe, officials immediately close it, she said. The bridge was deemed to have no deficiencies before the flash flood caused its collapse this year, Prunty said.

She and Koffman each warned about using caution and not driving through storms in desert regions. Prunty said motorists who begin to experience low visibility should pull off the highway at the nearest exit or to a part of the highway with a broad shoulder or safe area. She said motorists should carry supplies like water, blankets and snacks while traveling and should not resume until the storm clears.

Activity has returned to its usual level for those who regularly drive over the Tex Wash Bridge, said Mike Pierson, general manager of the General Patton Memorial Museum in Chiriaco Summit.

Like other area businesses, the museum saw a steep decline in customers during the days after the bridge collapse. He recalled his commute was “eerie” because there was “not another soul on the freeway,” and he sent his staff home that week.

Traffic will get much heavier during the holidays. Caltrans officials estimate that traffic along the Tex Wash Bridge on Interstate 10 doubles, from about 24,000 vehicles daily to about 48,000, at Thanksgiving and Christmas.

Meanwhile, years of stalemate in Congress on a bill that would fund repairs to many of the nation's aging roads and highways ended last week with an agreement that calls for spending about \$300 billion over five years. President Barack Obama signed the law Friday.

California will receive about \$26 billion of that money, some of it for repairs.

"We need to do improvements," Koffman said. "We have not been doing deferred maintenance for much too long."

Journalist Marisa Agha is based in Southern California.