

Cause of pipe failure clarified, liability still murky

City still researching county's responsibilities

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CAPITOLA — A city-commissioned report on the cause of the stormdrain failure that led to two flash floods in March

has pinpointed the initial point of rupture, but has not cleared the muddy waters of assigning responsibility.

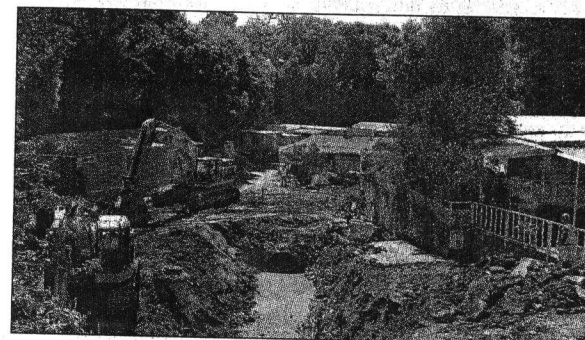
URS Corp., a San Francisco-based engineering and construction firm, concluded the

pipe failure probably originated where a concrete culvert under Bay Avenue linked with a nearly 50-year-old corrugated steel pipe that runs under Pacific Cove Mobile Home Park.

The report adds, "debris in the water flow may have caught the edge of the [corrugated metal

pipe] at the junction, causing the [corrugated metal pipe] to fold, thereby significantly impeding the flow of stormwater through the stormdrain system."

Once the pipe ruptured, water eroded the soil around the pipe



DAN COYRO/SENTINEL FILE

Crews work to repair the broken Noble Creek pipe that runs beneath the Pacific Cove Mobile Home Park in March.

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creating a sinkhole directly underneath one mobile home.

URS said in the report that the age of the pipe, installed in 1963, may have contributed to the culvert's inability to resist the pressures from the high flow.

The URS report compares the water flow seen the day of the initial flood, March 24, to a 25-year storm.

The city has since replaced the damaged portion of metal pipe with a stronger concrete pipe and added a manhole, which facilitates inspections and improves the connection to the culvert, Capitola Public Works Director Steve Jesberg said.

"When the pipe was built in 1963, there were no manholes installed, and we are attributing a big part of the problem to that," said Jesberg. "It's typical these days to use manholes with connections like that, but back then it wasn't. There wasn't a good connection between the two different types of pipes, one was stubbed into the other one. Nothing was structurally holding the two together."

While the report detailed the probable cause of the pipe's failure, who is ultimately responsible for the damage is still an open question.

The city estimates the total cost of damage for its property at \$1.5 million. Also, the city has received a total of 35 liability claims relating to the flood totaling

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Read the URS Corp. report detailing the probable cause of the Capitola stormdrain failure at santacruzsentinel.com.

roughly another \$1.4 million.

In 2008, the Santa Cruz County Flood Control and Water Conservation District Zone 5 replaced a section of pipe and installed a hardened plastic liner inside other portions of pipe directly upstream from the Bay Avenue culvert.

The city was interested to see if that work would have contributed to the pipe failure downstream, but the report mentions no adverse effects from that project.

The county has informed the city that it does not feel it is responsible for the pipe in Pacific Cove or the culvert under Bay Avenue, county Senior Civil Engineer Rachel Fatoohi said. However, the city is still investigating the issue and City Attorney John Barisone said he is reviewing documents from the county dating back five decades.

The Flood Control District, which manages Capitola's storm drainage system, was formed in 1955. In 1969, Zone 5 was established, which initially included part of Capitola and then eventually encompassed the whole city.

The city purchased Pacific Cove in 1983, turning the upper level into a parking lot and continuing to operate the lower level, which flooded in March along

with the village, as a mobile home park. There are no county easements on the park, and the county said the pipe is the property owner's responsibility.

Yet, the pipe is part of the storm drainage system, emptying stormwater from Noble Gulch into Soquel Creek.

A resident on the other side of the culvert from Pacific Cove, Richard Tessen, told the city that on the day of the pipe failure, water was backing up at the culvert entrance and he struggled to remove debris from the area until the water rose too high.

The URS report, specifically addressing Tessen's account, said that the water level would have risen that high from a 25-year storm, and was not related to blockage.

Clark Stoner, a civil engineer who has offices in the Capitola Village, said URS' description of the sequence of events leading to the pipe failure seemed reasonable.

He also said that rainfall totals from March 24 would indicate a two-year storm rather than a 25-year storm. Yet, he added that if the rainfall records were off by even a quarter-inch, that could mean the difference between a two-year storm and a 25-year storm.

The flash flood that followed on March 26, resulting from a storm that dropped 2.75 inches of rain in four hours, would have created water flows not seen since the winter of 1990-1991, Stoner said.

The city is self-insured and participates in a insurance pool with several Monterey Bay area municipalities, and the claims have been forwarded to the insurance administrators.