City experiencing more erosion after wet season



By Jeanette Kendall

East Peoria Public Works employee Bentley Hall looks over a ravine in East Peoria where an erosion problem needs attention. Hall said the storm water run-off pipe jutting out of the side of the hill would not be allowed by today's standards.

By Jeanette Kendall East Peoria Times-Courier Wed Sep 02, 2009, 01:48 AM CDT East Peoria, Ill. -

Farmers with problem crops are not the only ones who were affected adversely from heavy rains this year.

East Peoria city officials are battling more erosion problems than normal.

Streets supervisor Ric Semonski said normally the city hears about one to two major issues every couple of years, but this year, they have heard about four or five.

The city is paying about \$250,000 to fix erosion problems at homes where the earth around the storm sewer pipes is eroding behind the properties.

"Right now there are three or four that are pretty bad and the rest of them are a bunch of small issues," Semonski said.

In one instance, there is a 30-foot drop in a ravine that has eroded.

On Thursday, public works employee Bentley Hall drove to Highview Terrace where a ravine behind two homes has heavy erosion.

Hall said when the older street, which has a downhill slope, was constructed, two inlet drains were put in, which is not enough to handle the water run off. The excess water goes up and over the inlets and drains down the ravine.

If an inlet drain becomes clogged with grass clippings or other debris, it compounds the problem. Hall said it is important for residents to keep these street drains clear.

"We try to keep them clean, but the city's full of them," he said. "In a storm, they can clog in five minutes."

Behind the two homes on Highview Terrace, Hall looked down the ravine where a black plastic pipe and a metal pipe jutted from the dirt. Hall said the developer installed the piping long ago.

"The idea would have been to put a pipe down to the bottom. There's a possibility there was a pipe put in and it broke apart," he said.

Hall guessed that over time, about 300 tons of dirt have washed away from the ravine. A tree's roots were exposed near the pipes.

If the problem is not fixed, homeowners could lose their backyards over time. Hall said he has seen cases where the erosion has come within 2 to 3 feet of the house.

"Once it erodes underneath, everything just falls in," Hall said. "Once it's gone, it's gone."

Problem typography

This year, heavy rainfalls have increased the amount of phone calls city officials have received about erosion.

But generally, Semonski said he thinks erosion happens more in East Peoria than other places simply due to the typography of the land.

However, some of these nature-driven problems are compounded when homeowners alter the storm water pipes to extend their yard.

"We've been in a lot of situations it's something the property owner has done. They've thrown brush into the ravine and blocked the pipe," Semonski said.

"People take 55 gallon drums and cut the top and bottom out of them and use that as pipe. After years those aren't going to hold up. We've seen hot water heaters ... or maybe they put in the proper pipe but they didn't bed it properly with the right fill. There's a whole bunch of scenarios we've run into. If the property owner has messed with it, we won't mess with it until they take it back to the original condition," Semonski said.

Improvements

City staff are working to improve the storm water sewer maintenance program, which Semonski said is lacking.

"Storm sewer ... isn't something we typically go out and look after but it is something we are trying to initiate," he said.

For city staff to become involved in an erosion problem, there has to be a dedicated storm water easement in place.

For those current erosion jobs that are not being bid out to a contractor, city crews will fix them. On some of the larger erosion jobs, Hall said some contractors refuse the work due to the steep slopes.

To repair major erosion problems, the contractor has to go down the gully with equipment to find the original soil that has not been disturbed to put footings into. Wire baskets with large stones are also used for support and to slow the flow of the water.

"It holds everything they put in behind it ... and lets water run through the rocks," Hall said. Hall said with today's development, there is a much better system with retention and detention of water. There are also erosion control guidelines from the city and the Environmental Protection Agency.

"It's much better than what we had 20 to 30 years ago. Today, just putting a pipe out of a hillside wouldn't be allowed," Hall said.

At Cottonwood Estates, a new subdivision in East Peoria, Hall showed a newer retention system where the water is more controlled.

The water is contained in two retention ponds behind the homes and released slowly through pipes that narrow.

The city will pay for the erosion repairs from road and street program funds.

"That's just the norm. Drainage is streets. If we didn't have drainage, we wouldn't have streets. They are one in the same to me ... but yeah, it is a drain as far as what we could be doing on paving," Semonski said.

In order to prevent future problems, Semonski recommends that anyone who lives near a ravine to not alter the drainage without some type of engineering first.



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A ravine was recently filled with rock to prevent erosion.



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Hall said this retention pond at a new subdivision called Cottonwood Estates is the improved way to handle water run off.