

GRATIOT COUNTY

Data presented about E. coli cause in Pine and Chip rivers

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Although a solution to, and culprit of, the E. coli problem in the Pine and Chippewa rivers is still far away, more information has been provided as to where it's found most.

"The data is showing us where the biggest problems in the watershed are," said Molly Rippke, Aquatic Biologist Specialist with the Michigan Department of Environmental Quality. "This is phase one of solving the problem."

Data gathered from testing done last summer over five weeks

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E. Coli

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along several sites on the Pine and Chippewa rivers was presented by Rippke during a Health Pine River citizens group meeting Thursday at the Alma Public Library.

Testing is ongoing to determine whether the E. coli bacteria in the rivers are caused by humans or bovine animals.

E. coli is a bacteria found in the digestive systems of mammals and birds. The state uses its presence in surface water as an indicator of pollution by feces.

The results of the DNA testing will help to narrow down the source of the E. coli, whether it's from bovine or human sources.

The DNA samples gathered from water at the sites will be compared to a collection of samples known to be from a bovine or human source.

"I think by the end of this summer we'll have a final report on that at the latest," Rippke said.

The data found that most of the sites on the Pine River exceeded the water quality standard for E. coli at least once, except for the south branch of the Pine River at South Brinton Road.

The Pine River study was from June 7 to July 7 last year and the Chippewa River study including Salt Creek was done from July 12 to Aug. 9.

Testing was done at 13 sites upstream of Alma on the Pine River, and seven sites along the Chippewa River.

"(The Chippewa River) had fewer exceedances (of the water quality standard) overall," Rippke said. "It still has E. coli contamination issues."

"If a water body exceeds the water quality standard, the risk of illness is elevated at that time," Rippke said.

The state's water quality standard is designed to pro-

tect human health during recreation on water bodies.

State of Michigan water quality standards for daily geometric mean for E. coli safe levels is 300 colonies per 100 milliliters while the 30-day geometric mean is 130 colonies per 100 milliliters.

Now, with this data available, other steps can be taken.

A watershed management plan is being developed by the Gratiot Conservation District.

"They are going to take that and make a plan," Rippke said.

In addition, rules to address failing septic systems could be put in place in municipalities in the future, including the Time of Sale program, which means a septic system and well needs to be inspected, or fixed if necessary, before a home sale can be finalized.

As of Jan. 1, every home sold in Isabella County will need to have a septic system inspected and fixed if

necessary before it can be sold.

The new rule from the Central Michigan District Health Department came about after approximately a year of studying of the issue that was brought on by septic systems in the Beal City area that caused tainted groundwater to leak into the Chippewa River.

In rural areas, E. coli may spread because of livestock and septic systems people rely on.

There are approximately 1.4 million septic systems in Michigan, thousands of which could be failing, and which puts approximately 240 million gallons per day of wastewater into the ground and pollutes the water, according to the Detroit Free Press.

Signs posted by local health departments on the Pine and Chippewa rivers indicate the potential danger of E. coli because of partial body contact or full-body contact with the water.