

Our view

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Summer isn't even here, and already there are concerns about the Pine River in Gratiot County.

In March, Gary Rayburn, a board chair for the Healthy Pine River organization, noticed globs of a green and brown substance floating down the Pine River.

Rayburn and his wife Susan Hunter documented the pollution seven different times over the last month, making video recordings of the mass of algae as it moved through the water.

Upstream, near where the Honeyoye Creek empties into the Pine, Jane Keon, a director-at-large for the HPR group, also noticed a "nice big patch" of the

brown and green growth from her home; she recognized it as brown algae from past experience and reached out to Rayburn.

A sample of algae was tested at Alma College, and Murray Borrello, who is the director and chair of the Program of Environmental Studies, told the Morning Sun for a story this week that while a source isn't determined, there are some possibilities.

The sample showed levels of nitrogen, ammonia and phosphorus commonly found in fertilizers and animal waste, but the amount found in the test is ahead of a typical spring schedule, Borrello said.

"The levels of both the ammonia and phosphorus were at

concentrations where we normally find them several weeks from now - when application of manures is widespread on fields," he said.

Further testing showed "excessive amounts" of *E. coli* and coliform bacteria and, while none of the results are conclusive of a specific cause, they are more like what the college would find during a normal summer sampling in the Pine River. It is easy to understand why residents are concerned.

Last year, the health department had to post warning signs alerting residents to high levels of *E. coli* and other bacteria in the river.

This issue does not impact the city's drinking water supply, but it could, in theory, be a risk

factor for someone who came in contact with the river, such as if they were fishing or tubing.

The city is partnering with Borrello and the college to determine once and for all if the cause of the problem is human or animal waste, after years of testing and questions.

Borrello said he will expand the analysis.

We believe two things are crucial: Ultimately the source of the *E. coli* has to be determined. Once that is known, the proper authorities have to take steps to address the issue.

It is hard to say exactly what those steps should be without knowing what the source is and how extensive it is.

The second thing that has to happen is the community needs

to be kept informed.

That will be especially true as the weather warms up and more people are near the river. If signs need to be posted, that has to be done in a timely manner.

Gratiot County is fortunate to have a group of concerned residents who have learned to take environmental issues seriously. It also is fortunate to have Alma College as a resource to help with testing and education.

Any issue with the river is an important issue for the community, and the water crisis in Flint has made everyone aware of how quickly something can get out of hand.

For now, testing and monitoring seem to be the best response to the situation.