Citing the Public Trust Doctrine, Moore said that both the state and federal government "have a responsibility to maintain the integrity of our waterways for the enjoyment of the citizens."

Also of importance is the fact that the DEQ has said that there are connections between the Pine River and "our aquifer."

On the day of the tour, Moore said he heard a troubling comment from a DEQ official who said the Pine River is typical of a river in a agricultural area.

"It sounds like this may be a statewide problem," he wrote. "As a state, we can and should do better."

Agriculture, Moore said, is a major part of the local economy and everyone wants it to thrive and succeed.

"However, sound agricultural practices, like sound industrial practices should include protecting our environment," he wrote.

Moore said that the city is willing to work with the state 'when it decides to study this issue in depth."

He provided several suggestions or "recommended actions:"

- 1) The DEQ and the Department of Agriculture should review the study and data collected by the college.
- 2) The state should collect its own data to confirm.
- 3) The state should review the watershed to determine the possible sources of the pollutants.
- 4) The state should review the GAAMPS to ensure that the manure management protocols are sufficient to protect the watershed.
- 5) And, the state should check to see if GAAMPS are being followed.

He closed by said that it is a "major issue" for Alma residents.

Alma College Geology Professor Murray Borrello, who led the study on the river, said he fully supports the city's attempt "to call on our representatives to do more than talk about helping the community. After years of ineffective regulatory action, we need to know what is going to be done to help restore the most important natural recreational water body in the county.

"This river can be fixed," he continued. "But it will require heroic actions on the part of our legislators."

URL: http://www.themorningsun.com/general-news/20141023/alma-asks-the-state-to-take-the-lead-in-finding-a-cure-for-the-sick-pine-river

© 2018 The Morning Sun (http://www.themorningsun.com)

The Morning Sun (http://www.themorningsun.com)

## Alma asks the state to take the lead in finding a cure for the sick Pine River

By Linda Gittleman, The Morning Sun

Thursday, October 23, 2014

At the tour of the water treatment plant last week, Alma City Manager Phil Moore said he didn't believe he had provided a complete answer to state Rep. Rick Outman's question on the quality of the Pine River.

The question was asked because Alma currently gets 25 percent of its water from the river.

Moore answered that there were "major concerns" about the river water but wasn't able to elaborate on the serious issue as he would have liked.

So he wrote a letter dated Oct. 16 to Outman and sent copies to several others in attendance, including state Sens. Roger Kahn, Judy Emmons and John Moolenaar along with Michigan Department of Environmental Quality Director Dan Wyant.

Noting that he has lived in Alma for 23 years, Moore said the river, "has visually changed. At one time, the river had very few lily pads. Over time, this has changed and now the river has become choked with lily pads. The river even has a different odor."

On Thursday, Moore said that particularly during high water events or floding, the river smells like manure.

In the letter, Moore told about the study begun by Alma College professors and students about 10 years ago and what they have learned through the years from the data collected.

He listed the "substantial" amount of antibiotic resistant E.coli and coliform bacteria present, and the decreasing oxygen levels. He also noted the increasingly high concentrations of nutrients (nitrogen and phosphorus) in the river.

He pointed out that the tributaries of the Pine and Maple rivers are "heavily impacted by agricultural waste."

- "The Pine River is a sick river and needs attention," he wrote. "It appears that there are potentially three scenarios that are causing our problems:
- 1) There may be direct dumping or application of animal waste and therefore, Generally Accepted Agricultural and Management Practices (GAAMPS) are not being followed.
- 2) Farmers and CAFO (concentrated animal feeding operations) operators are following GAAMPS but the established standards are not strict enough to prevent harm to the environment.
- 3)Something else that we have not identified or considered."

Moore said that sources of contamination are outside the city and beyond the city's control, yet the impacts are felt strongly within the city limits.

Pointing out that the state has jurisdiction over the sources of these problems, the state "should be taking the lead to find solutions."