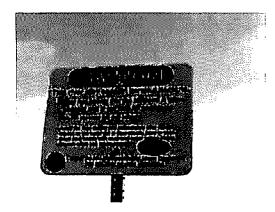
The Morning Sun (<a href="http://www.themorningsun.com">http://www.themorningsun.com</a>)

## State officials to explain sources of Pine, Chippewa contamination

By Morning Sun staff

Friday, January 5, 2018



A citizens group formed in Alma to support a healthier Pine River expects answers next week on the source of skyrocketing bacterial contamination in both the Pine and the Chippewa.

Most-recent data shows 12 of the 13 upstream tributaries of the Pine River, which provides drinking water to Alma and St. Louis, contaminated with E. coli bacteria.

Similarly, the Chippewa near Mt. Pleasant has seen increasing levels of E. coli in recent years, leading to frequent advisories to avoid contact with the water and, just this month, implementation of sewer system testing in home sales after studies showed human bacteria

sources coming from the Beal City area.

Members and guests of the Healthy Pine River citizens group will hear the data explained at a 7 p.m. meeting next Thursday at the Alma Public Library.

The public is invited.

Senior Aquatic Biologist Molly Rippke of the Michigan Department of Environmental Quality will speak about the sampling project conducted by MDEQ last summer. Her presentation will explain the results, and there will be questions and answers afterwards.

Streams that flow into both the Pine and Chippewa rivers were sampled in July and August to help determine the sources of the bacterial contamination. Streams sampled were in Mecosta, Isabella and Gratiot counties.

DNA analysis of the samples is underway at a bacteriological research lab at Saginaw Valley State University.

The analysis will determine if the E. coli bacteria are human are bovine.

"We expect to see both," said Gary Rayburn, chair of the Healthy Pine River group. "We know there are leaking septic tanks along the river, and our group is working to address that issue. We also know that agricultural runoff is a big problem in our county with 23 CAFOs and other large farms located here."

The Mid-Michigan District Health Department determined two summers ago that signs should be put up warning people about the contaminants in the river to help prevent illnesses caused by E. coli and other bacteria present in the Pine River. There are signs in Alma and Arcada Township at access points near the river.

About 25 percent of the drinking water for Alma and St. Louis is drawn from the Pine River.