

ALMA

Explaining the compounding issues of Honeyoye

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Murray Borrello is certain the health of Honeyoye Creek affects the overall health of the Pine River, and he says data supports it.

"I know it does, there's no question," said Borrello, who is the director of environmental science at Alma College. "We can show test results at the water plant intake down river from Honeyoye; the nitrogen and phosphorous levels are higher than up stream. You can see a bloom where the Honeyoye comes in the river."

Borrello said the dramatic changes landowners on the Honeyoye have seen over a short time frame can be explained by ecosystem science.

The creek and, Borrello said, the watershed in general, show signs of nutrient loading, or high amounts of nitrogen and phosphorous in the water that can be caused naturally or by human or agricultural sources.

In slow moving or stagnant water, like the Honeyoye, those nutrients continuously feed algae growth, causing eutrophication, or increases in growth. That's exactly what can be seen in the creek, Borrello said.

As that algae dies and

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LISA YANICK-JONAITIS — THE MORNING SUN

A few years ago, motor boats could use this dock on Honeyoye Creek. Now, even kayaks can't get to it.

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decomposes, it can cause other problems such as depleted oxygen in the water; low oxygen levels make it difficult for more complex plants, fish and other aquatic animals to survive, which in turn affects the overall health of the water.

"It affects our ability to enjoy the river. There is a potential for toxins from certain types of algae," Borrello said, referencing toxic blooms like the a recent situation on Lake Erie.

It could eventually affect drinking water, Borrello said.

"About 20 percent of the drinking water (in Alma) comes from the Pine River, and the Honeyoye flows into

the river," Borrello said.

"We know it's from agricultural runoff," Borrello said, "Either from application of manure or from the facilities themselves." Borrello points to water testing, which shows huge spikes in e. Coli particularly in Honeyoye, and especially after it rains.

"It's not septic systems, the numbers are too high and are consistently higher when it rains," Borrello said, a sign that run off from farm fields is a contributing factor.

E. coli, a harmful bacteria that has spurred health warnings regarding bodies of water all over the state and in Alma this year, doesn't like to live, "outside of the guts of animals," Borrello said. The right conditions, like warm, still water, have to exist for the bacteria to survive; a healthy flowing body of water will naturally, eventually clean itself.

Borrello points to drastic changes along the Pine and its watershed over three or four years, evidenced in particular on Honeyoye in that time; in the 10 years that encapsulate that time frame. CAFOs along the watershed have at least doubled, he said.

"What goes into Honeyoye goes into the Pine River, and so on." Borrello said.

Raleigh Quakenbush

May 4, 1929 – November 14, 2010



They say there is a reason,
They say that time will heal.
But neither time nor reason
Will change the way we feel.
For no one knows the heartache
That lies behind our smiles.
No one knows how many times
We have broken down and cried.
We want to tell you something
So there won't be any doubt,
You're so wonderful to think of
But so hard to be without.

We Miss You!
Love, Your Family