The water detectives

By LOUISE WREGE - HP Staff Writer | Posted: Friday, July 1, 2016 6:00 am

Initial results of water testing from several creeks that drain into Lake Michigan between Stevensville and the Indiana border found that many of them contain human waste.

Such waste causes E. coli contamination, and when E. coli counts are high, beaches are closed, said Marcy Hamilton, senior planner with the Southwest Michigan Planning Commission in Benton Harbor.

This summer, the planning commission is studying 11 small streams that flow into Lake Michigan that are not part of a larger watershed plan, she said. The study is funded by a $472,185 state grant. She said they are creating the Lake Michigan Tributaries Watershed Management Plan.

Hamilton said she sent 18 water samples to a lab in Lansing last week, where specially trained dogs found that six of the samples contained human waste.

“We’re doing first screenings. They’re not measuring the levels of E. coli right now,” she said. “We know there’s been high E. coli counts up and down the coast over the years. So now, we want to try to figure out where it’s coming from.”

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Marcy Hamilton, senior planner for the Southwest Michigan Planning Commission, prepares to take a water sample from a storm drain that empties into a tributary of Tanner Creek, which flows to Lake Michigan just south of Weko Beach in Bridgman. The agency is using a state grant to study small streams between Stevensville and the Indiana border.

On Wednesday, Hamilton was back in the field gathering more water samples to try to track sources for the human waste.

Peg Kohring, The Conservation Fund’s midwest regional manager, said they may bring dogs in to track down the source.

“We’re trying to figure out which stretch to run the dogs instead of running the whole creek,” she said.

Hamilton said we can never get rid of all E. coli because some comes from wild animals. If a beach has high E. coli counts and it’s not coming from human waste, then she said it may be coming from a farm or some other source.

Shannon Briggs, who works in the Water Resources Division of the Michigan Department of Environmental Quality, said there was a case last summer in Traverse City where officials couldn’t figure out why there was always a spike in E. coli counts after a heavy rain. After discovering it wasn’t from human waste, she said they set up cameras in the storm drain to see what was going on.

“In that particular instance, they found that it was raccoons,” she said.

Briggs said the raccoons were living in a storm drain, and when it rained, their waste was washed into the nearest natural waterway, which led to Lake Michigan. She said the problem was solved by relocating the raccoons.

State guidelines are that E. coli needs to be less than 300 parts per 100 milliliters of water to be considered safe for swimming. Briggs said local health departments gather water samples at beaches once a week.

Even if the count is higher than 300 parts per 100 milliliters of water, she said local officials may still opt to keep the beach open. She said water quality changes very fast and it usually takes a day for the test results to come back. She said a beach can test high for E. coli in the morning and be fine just a few hours later. She said that’s why it is left up to local officials to decide whether to close a beach.

She said people can use the Michigan BeachGuard System to check the quality of beach water throughout the state. The system reports the results of 1,225 public beaches and 514 private ones.

On Wednesday, there were seven beaches in the state with high E. coli counts, including Warren Dunes State Park Beach in Berrien County.

“We just want to make sure that people have safe places to swim,” Hamilton said. “You see kids in the creek and you don’t want to have to worry about them getting sick from playing in the creek.”

She said it would wreck Southwest Michigan’s tourism if beaches were closed too often due to high E. coli counts.

“If I was taking my kids swimming, I would never take them after a heavy rain,” said Kohring. “We’ve seen pretty consistently that E. coli is high after a heavy rain.”

In addition, she said she would avoid the water when the waves are high.

“It’s that breaking of the E. coli out of the sand by heavy rain or by wave action is what they’re finding and we’re seeing,” she said.

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