Monitoring the St. Joseph River

By JOSEPH DITS

South Bend Tribune

7:31 PM EDT, September 19, 2012

SOUTH BEND -- First came the family saying prayers by the St. Joseph River to mark the Jewish new year. Then came a unicyclist rolling down Northside Trail.

Minutes later Wednesday, six canoes docked near the pedestrian bridge at Indiana University South Bend.

Seven college students offloaded with their faculty from Goshen College to test the waters with glass tubes and an electronic device that peers into a vial of water and chemicals to find nitrates and phosphates.

First-time paddler Krystel Pierre is from Haiti, where she hopes to return and "see if I can apply sustainable agriculture in Haiti."

As a Notre Dame rowing crew raced by on the water, Pierre spoke of the teamwork she's learning on the trip: "You get in a rhythm and then work as a team."

All seven students are spending the semester living and studying at Merry Lea Environmental Learning Center, south of Ligonier, a nearly 1,200-acre nature preserve that Goshen College uses to study ecosystems.

They're inaugurating the new residential study program with a five-day canoe trip, which started Tuesday in the Mallard Roost Wetland Conservation Area, 12 miles from Merry Lea.

They've paddled a fraction of the way so far and drove the rest, starting with the south branch of the Elkhart River, then onto the St. Joseph. They'll finish in Benton Harbor.

They test river water twice a day and spend a lot of time talking with people who influence it -- farmers, a Noble County commissioner, advocates and even a Goshen College religion professor who spoke of water's importance in the Bible.

Today they'll visit a gravel pit in Niles and on Friday see a sustainable farm at Andrews University.

On Wednesday they met up with students from IUSB's Center for a Sustainable Future, who helped to take readings. The nitrates were in the "fair" range here, according to standards from the state's Hoosier Riverwatch program. Runoff from farms and fertilized yards can boost nitrates levels.

Water temperature was almost 20 degrees Celsius, a bit warmer than the 16 degrees found in Goshen in the morning, said Emma Regier, a student from Bethel College in Kansas. Runoff and the amount of tree shade can affect that, she said.

The water's clarity of the St. Joe struck a lot of students. The turbidity, or sediment in the water, tested low. Summer drought kept sediment from flushing into the river. But Regier also observed a lot of stones and retaining walls to limit erosion.
Since they're mobile, the students aren't able to do the more complicated tests for pollutants and bacteria.

But they found oxygen levels were normal. If these were low, that would have signaled too much fertilizer runoff had caused excess growth and decay, eating up oxygen, said Goshen professor Lisa Zinn.

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