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## MONROE COUNTY DRAINAGE BOARD REGULAR MEETING MINUTES JULY 2, 2008

**MEMBERS PRESENT:** James Faber, Bill Riggert (arrived after start of meeting), Scott Dompke, Kevin Enright *(ex officio)* 

MEMBERS ABSENT: Robert Autio

**STAFF PRESENT**: Todd Stevenson (Drainage Engineer), Donna Barbrick (Secretary) Chris Spiek (Planning)

OTHERS PRESENT: Todd Royer, Garth Lindner, Kristen Gardner

CALL TO ORDER: The meeting called to order by Stevenson at 9:09 a.m.

## **DRAINAGE ENGINEER'S REPORT**

Todd mentioned that he thought that Robert Autio might attend today's meeting.

## **RAINFALL RUN-OFF STUDY**

Todd Royer (SPEA) brought us up to date on who is conducting the run-off study. Previously, Kelly Kaylor had been directing. He has left Indiana University. Now Todd Royer has taken over. Royer's area of expertise is water chemistry. There were three stream gauges installed. Since that time, Jack Wittman has left the Drainage Board and Kaylor has left IU. Royer said they've continued to do the work, and Kelly is still involved even though he is at Princeton now. They are going to continue to monitor runoff and water quality. Garth has been studying the hydrology of the Jack's Defeat Creek basin. This could help to inform future development in the watershed. Ideally, it would be applicable to other areas of Monroe County as well, that have similar hydrology. Kristen will be looking at road solvent. She has added some sites on Clear Creek south of Bloomington. They also have a reference site at Flatwoods Park west of Ellettsville. It is hard to find a stream here of any size that doesn't have paved roads by it. That was the closest that they could find.

Dompke asked who wrote up the abstract for what was supposed to be studied. Stevenson said Jack Wittman wrote up an abstract. There was a discussion about which watersheds potentially are affected by the building of the new Wal-Mart.

Royer said they have not spent all the money and will carry on until they do. He said they are not exactly sure how much is left in the account, but should find out soon. There is now an invoice for the entire amount that has been presented to the County.

Stevenson asked if there was something that Drainage Board members were intensely interested in; would there be room to study that? He expressed the desire to find out what's happening around Wal-Mart.

Dompke asked that the presenters use English units of measurement, since that is what engineers use.

Garth asked about remote access capabilities. He said they are still working on the code to get it automated. Stevenson said when it's raining hard, he would like to be able to call up a number and find out how much it's been raining. Garth said the equipment is all Campbell Scientific equipment, so to be actually able to call it, you need Loggernet, a proprietary software. The station uses a cell phone that goes through Verizon network. It was a one-time fee of \$500 for academic use. It uses solar powered batteries, two 12-volts with a nice size solar panel. This is located at the Ellettsville water treatment plant. Garth is working on getting this automated before he leaves Bloomington in about one month. There needs to be some code written in order to get it automated.

There was a discussion about hardware and collection of data. The biggest drain on the battery is the modem. So if there were a lot of calls at night, it might wear down the battery. The site is about 100 feet from the stream, in a clear, grassy area, inside a dog kennel and padlocked.

Faber asked about how much extra money that the Drainage Board or the Surveyor Office might have. Kevin said you would have to talk to the County Council. There used to be money in the Surveyor budget for Drainage Board for fixing things. There's a stormwater fund in the Commissioners's budget. At some point in the not-too-distant future, there will be a stormwater utility.

Garth moved on to the present his study of hydrology in the area. He showed a Powerpoint presentation that he had given recently at a conference in Boston at the Association of American Geographers' conference.

Dompke observed that this data showed, based on these results, perhaps the curve number would increase to account for impervious surface. To give direction to developers, Drainage Board could say that we have found what a curve number might be, based on the data from Jack's Defeat Creek rainfall run off study.

Stevenson drew a conclusion that curve number averaging, especially when there are dry conditions, is a problem, based on the data.

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Garth stated that other general conclusions will be forthcoming because he is still putting the data together and talking to his advisor.

Royer introduced Kristen. While Garth is just about finished with his master's degree, Kristin is about halfway through hers. Royer commented that Garth's presentation showed that when soil is saturated, it behaves like impervious surface. But as far as water quality, it behaves differently. This is illustrated by Kristen's work on water run-off chemistry.

Kristen gave a presentation on her study of chloride concentrations in selected streams of Monroe County. Many studies in the 1970s showed high concentrations in streams, most of which could be attributed to road salt. There is also some evidence of baseline salinity increasing, due to decades of road salt use.

Dompke commented that the City of Bloomington uses salt on icy roads, whereas the County uses sand and salt and the State uses a molasses/brine mixture.

After the presentation by Kristen, Stevenson mentioned that the Highway Department had recently erected a storage barn area for their road salt.

## **APPROVAL OF MINUTES:**

Bill Riggert motioned to approve the March meeting minutes. James Faber seconded. The March minutes were approved as submitted.

There being no further business, the meeting adjourned at 11:00 a.m.

Approved: 8-4-2008

Signed:

Attest:

Bill Riggert, President

Donna Barbrick, Secretary