590 Nutrient Management Standard Team

DRAFT MEETING NOTES
Tuesday, March 25, 2014 | 9:00am – 3:00pm
Wilderness Resort, Glacier Canyon Lodge, 45 Hillman Rd, Wisconsin Dells, WI 53965

Attendees: Sara Walling, Tony Smith, Carrie Laboski, Todd Schaumberg, Nikki Wagner, Sue Porter, Pat Murphy, Andrew Craig, Kevin Masarik, Gini Knight, Joe Bragger

Management Practices for NE WI Shallow Carbonate Rock
The group heard brief presentations from Kevin Erb and Ken Bradbury regarding their experience with the NE Karst Task Force. Kevin presented background information on the intent of the NE Karst Task Force, created in 2006, and summarized their recommendations, including nutrient application setbacks from karst features. They also recommended mapping of tile drainage systems and karst features. The Task Force created brochures based on their recommendations and sent them to all of the area farmers. Overall, the Task Force significantly raised awareness of the concerns around karst features. Kevin also briefed the group what recommendations and restrictions Canada has come up with and is using.

Ken discussed ongoing research on the vulnerability of the soils that were 5 – 15’ to bedrock? There is agreement that less than 5’ is extremely vulnerable, what about the next level? Consider the 10 – 20’ of soil over dolomite. How does recharge affect water quality? Recharge mainly occurs just after rain events. Ken also briefed the group on a project for the Town of Byrne, which included a groundwater susceptibility map, diagrams, and a recharge model. The map was based on existing well construction reports and field observations. There was a question about whether the farmers in the area were under nutrient management plans or what crops were they growing? Ken said that he could find that out.

Karst features can cause very rapid movement of water. The water can travel ¼ mile in 20 minutes in the cracks and fissures versus a fraction of inch in a year through regular soil structure. When the water gets to these cracks, it can move very quickly. There is no filtration of the water once it arrives in the cracks and fissures.

There is still some concern in the group about accuracy of maps. However all soil maps have some inaccuracies. How can we make some progress forward, given the imperfections? Implementation is really important. We could at least include recommendations in the considerations section and the Tech Note. Kevin is communicating with NRCS about the 60” to bedrock soil layer.

There is agreement that we can use the map Tony created in the Tech Note and potentially in considerations as a reference. Next, we need to determine which practices to recommend farmers use if these features exist on the farms. The first step will be to inform farmers of the risk of these features.
These features are similar to tile lines. Pathogens and bacteria can also be detected. The difference is we know depth to tile lines and where that water is going. We need to address the more obvious features. Avoid the hole. Most of loading occurs in February and March.

The karst group can continue to work on this before the May meeting.

**Using SnapPlus to calculate acute winter loss PI**

The group listened to a presentation by Laura Ward Good. Q & A afterward.

**Winter Spreading Group**

The group discussed the winter spreading risk assessment. The group needs to refine the initial assessment procedure to determine the level of risk on all fields. This will be added to the Technical Note. What is the threshold for lowest risky fields? The Acute Winter PI may help identify the lower threshold. They will further consider how to use the Acute Winter PI in SnapPlus as another approach and learning/decision-making tool. There is concern that we are putting more and more weight on the P Index and on SnapPlus, when this tool was not created with all of these uses in mind. Caution and more thinking is needed. There will be separate discussions with agencies and Laura on the weight of the PI.

Kent and Pat are working on getting standardized, topographic maps with water bodies and upland draws with GIS watershed size. They are working on maps that are on a 5’ contour. Where we do have LiDar data, then we could use those maps. Standardized assessment procedure for figuring out the level of risk.

The team also discussed grazing as the option for spreading in a SWQMA. Soil test P helps farmer know if the system is in balance. This alternative lets you know if you’re building or losing P. We also need to address winter spreading on P, W, R soils in Criteria B.

**Manure Land Base Estimate**

Do we already meet this requirement from national standard? We need to review the existing tool for CNMP planning. Discuss additional options for a simple tool and designate who will do follow up work. Dairy – 1.5 acres per animal unit averaged over the rotation. The numbers are in Livestock Siting Rule.

**Review Action Items and Next Meeting details**

Next Meeting: April 10, May 14 at Hancock Ag Research Station

**Action Items**

- Carrie will work on incorporating updated A2809 information into Criteria A. 1. a – f.