

Non-Ag Advisory Committee
Meeting #3
December 14, 2007

Mary Anne indicated that the Bureau of Watershed Management would like to set up a separate meeting to address just TMDLs. The meeting would likely be in late January or early February for a half a day and both the Non-Agricultural and the Agricultural Advisory Committees would be invited to attend.

There was discussion about the process. Following this meeting, the advisory committee would like to have a draft that they could share with others. This would necessitate getting the draft with at least three weeks or so to review it. DNR Legal staff still needs to review the proposed language. Perhaps the legal review and the committee review can be concurrent. The committee's comments would be taken into consideration along with the legal comments and incorporated as appropriate. The advisory committee will then have a final opportunity to comment before the proposed language goes for public comment. The committee has asked for a fourth meeting to address the non-ag performance standards. Mary Anne agreed. This would most likely take place in Feb.

Shirley noted that the discussion of stage 1 and stage 2 developed urban area performance standards were inadvertently left out of the meeting minutes from the previous meeting. While there wasn't intent to change the 20/40%, there had been a discussion about the implications of the existing rule and that should be incorporated into the minutes. Mary Anne indicated she would go back and add that discussion.

Peak Discharge Discussion

Roger Bannerman discussed the science behind peak flow control and percent connected impervious.

- USGS agrees with the comments from the committee that the 2-yr, 24-hr. flood concept is not be protective enough for the bank full condition.
- It has been discovered that even smaller recurrence interval floods (ones that stay within the banks) cause damage (scouring, habitat degradation, sediment transport).
- Current research recommends that a 1.1- yr, 24-hr. flood could be damaging.
- A 1.58-yr. flood interval is channel forming.
- The issues with bank erosion are related to frequency and duration. The peak discharge performance standard gets at frequency but not duration. Also, the peak storm is not the same as the flood condition. Volume is very important to take into consideration.
- Essentially the goal is to match the hydrograph from the pre-development condition.
- There was some question as to what storm event should be the post-development condition. Perry suggested that we have the 2-yr, 24-hr post development storm match the 1-yr, 24-hr. pre-development condition. The committee generally agreed with this approach.

Mary Anne had proposed using both meadow and woods for pre-development curve numbers. The committee recommended that the runoff curve numbers for woods be applied to all soil groups. However, this results in the requirement that there be no discharge at all for A soils based on the information in TR-55. If that is the case, then a development project may run into issues with trying to infiltrate for example a Tier 1 source area that is currently excluded from infiltration. There needs to be some reference to the infiltration exclusions so that this performance standard doesn't trump the groundwater protection requirements of the infiltration performance standard. Mary Anne agreed that this link needs to be made.

- Redevelopment would continue to be exempt from meeting the peak flow control requirement.
- Local ordinances will continue to have peak flow requirements for larger storms.

Roger Bannerman agreed to take this discussion to a storm water meeting he is going to next week and to talk to the authorities in storm water about this approach.

Infiltration Discussion:

There was a presentation by Roger about what connected impervious means. For the rule, this needs a clear definition. The one in there now is exactly the opposite of what it should say. Connected impervious is essentially an impervious surface that connects to a conveyance system directly. Roger provided handouts for the discussion.

- There was general agreement that multi-family, mobile home park, high rise apts. belong with the non-residential type of development
- There was reserved understanding of the approach to add a third percent reduction category (75% for connected imperviousness of 40-80%)
- The concept of changing the definition of project site from 2% of the parking lot and roof area to 2% of the area of land disturbance will mean additional land may be needed for some soils and some land uses than is currently required, but it would be consistent with the project area definition for residential.
- Nick cautioned that if a bioretention device is constructed with an underdrain, the infiltration volume reduction will go down because a portion of the volume will prefer to go out the underdrain.
- Increasing the area requirement to 2% of land disturbance is still way below the green space requirement that many municipalities impose on new development and redevelopment. This green space can be used for BMPs.

It was also recommended by a committee member not to use the "no credit" category for some filtering requirements. This is not protective of the groundwater. Instead, % fines should be a requirement and not a way to get out of infiltration. They could use engineered soil to meet the requirement. Lynita suggested using a table similar to their code.

A request was made that we consider setting the post-construction performance standards requirement based on new impervious area (like ½ acre) rather than on land disturbance.