

NR 151 Advisory Committee Meeting – Non-Agricultural
American Family Insurance Campus, Madison WI
February 14, 2008
10:00am – 3:00pm

In attendance:

Kevin Kirsch	WI DNR	Jim Bachhuber	Earth Tech
Gordon Stevenson	WI DNR	Sue Olson	City of Appleton
Mary Anne Lowndes	WI DNR	Nick Vande Hay	McMahon & Assoc.
Jim Bertolacini	WI DNR	Perry Lindquist	Waukesha Co
Roger Bannerman	WI DNR	Wendy Braun	WI DOT
Laura Lueders	WI DNR	Michelle Gerrits	WI DOT
David Botts	APWA	Paul Kent	MEG
Tim Whittaker	City of Janesville	Shirley Krug	MMSD

I. Remaining Concerns/Sources of Confusion:

DNR reported that the proposed TMDL language in NR 151 has been a source of concern and confusion. A variety of approaches are still being considered; nothing has been decided as of today. One option is to not address TMDLs in NR151 as proposed and having another work group to address TMDLs in greater detail. We do not know how the current discussions about TMDLs will impact the agricultural portion of the rule. DNR does not know if there will be a separate TMDL rule; it is a possibility. We are going to be going ahead with the joint advisory committee meeting on February 18th. This will be an educational opportunity and may help us shape where we go with regards to TMDL.

This will be the last meeting of the non-ag group. There is a TMDL meeting from 9:30 to 3:00pm on February 18th at the SCR DNR office. The timeline for the rule making has been slowed. The revised schedule will be emailed to committee member and posted online. The committee will see the rule after the DNR attorneys approve it before it is included into the green sheet packet. All comments received by WI DNR between this meeting and at that time will be sent to the committee as well. The committee will not have the opportunity to comment on the final draft until after the public comment period. In the past, once the board receives the green sheet package the public will receive it. The first time it goes before the board there is a presentation to the board about the content. The board then decides whether or not the rule goes to public hearing. There was discussion about the role of the advisory committee after the hearing comments are received. They may be called upon to provide input in revising the rule based on the comments.

We had a round robin to allow each committee member an opportunity to state their major questions/concerns. They stated:

- It was asked if we need a definition of pre-treatment. We do need technical standards for it. We might need to put a cross-reference in the rule to the technical standards.
- The challenge of municipalities to get to the 40% was a concern. There are concerns from a number of sectors about the 20/40. Kent stated that he has some suggestions on how to address these.
- DOT representatives were not sure that the merger of NR 151 Subchapter 3 and 4 reads the way it should. DOT still has considerable questions.
- There was confusion about why we are considering a one and two year storm events design requirement for peak discharge. It may not result in significant changes to the outlet structure.

- There is still concern about the basis for the changes around protective areas.
- There are still questions about what the 5 tons/acre/year sediment reduction means relevant to the current 80% sediment reduction goal.
- The complexity of tying the infiltration requirement to connected imperviousness is an issue
- The committee members received a letter from Edward Huck, Wisconsin Alliance of Cities relating to the TMDL issue.
- A statutory change would be required to allow pollutant trading within a TMDL watershed.

II. Discussion of Changes in Detail

NR 151.13(1)(b) Summary of Changes: There was an inequity between when a non-permitted municipality would be required to meet the I&E, yardwaste, nutrient management and illicit discharge detection requirements and when a permitted municipality would have to meet it. We are proposing that incorporated municipalities and permitted communities are given the same timeline as the latest permitted municipality under Phase II. We currently don't know what that date is since we still have one more municipality to permit.

Committee Comments:

- Incorporated communities below 10,000 in un-urbanized area are probably not aware of this requirement and do not have staff for this. What are they going to do? There is no implementation (permit) program. DNR: There is no citation authority, but there is an enforcement mechanism stated in the code.

NR 151.13(1)(b)3. Explanation of Changes: The requirement that anyone who is applying fertilizer on an area over 5 acres of turf or garden must have a nutrient management plan/schedule was pulled into NR 151.14. This performance standard is trying to address lawns, gardens, and turf (silviculture and agriculture are exempt). This is not a phosphorous ban. There is an interim technical standard on nutrient management right now that can be used to meet the requirement. DNR and the UW-Ext. office has done extensive outreach so the March 10, 2008 date will remain.

Committee Comments:

- NR 151.13(b)1-4 – There needs to be better consistency with permit compliance schedules.

NR 151.135 Explanation of Change: Redundant language was deleted. The DNR meant to exempt DOT from the March 10, 2008 deadline in 151.135(2)(a)1, but not for the March 10, 2013 deadline in NR 151.135(2)(a)2. "TBD" should be March 10, 2013 for the 40% goal. There was discussion of where DOT requirements apply within permitted municipalities.

NR 151.15 Explanation of Changes: Changes were made for clarification. Permitted municipalities enforce under NR 216 and everything else is done through statute language. If it is a nonpoint source (no permit) we have authority to enforce through the statute, going through the department of justice. Permitted entities are enforced through s. 283 Wis. Stats. and NR 216.

Committee Comments:

- Committee recommends that we include the statute and rule that gives enforcement authority.

NR 151 Subchapter IV Explanation of Change – There is not something anticipated for this subchapter. It is merely reserved to avoid renumbering everything in Subch. V which addresses technical standards. Subchapter III and IV were merged.

III. Discussion of 20 and 40 percent reduction in total suspended solids:

Committee Comments:

- Now that we know the costs of meeting these requirements will be different than we originally thought; a midcourse evaluation should be done to determine what this really means to municipalities. Requests for MEP (maximum extent practicable) determinations are going to be swamping department staff as municipalities are unable to meet the goal. The Natural Resources Board should require the DNR to do a study by 2010 to evaluate the costs of achieving these stds and what the water quality improvements have been. If changes need to be made to the rule prior to the 2013 deadline this study will help make that decision. We are going to know a whole lot more by the end of this year than we did when this number was originally put into the rule. For example, we might find that we get more water quality improvement on a watershed scale if we go about this in another way. This has been done before.
- The agricultural side should be included in this evaluation.
- The committee discussed the option of a study. This would be very costly. WI DNR does not have the resources to something like this.
- We would like to do something similar to the WI Buffer Initiative.
- Some municipalities will have spent fixed costs to try to meet the rule that they can never recover. The ending point for the study should be the year 2010 not the starting point to avoid having municipalities incur these costs.
- Be mindful that if we commit to a study it might find that 40% is too low.
- There are always multiple sources of these pollutants. It would be really hard for us to tease out what a 20% reduction from the permitted municipalities did in a given stream unless they were the majority of the sources for that stream.
- If a TMDL requires only 35% reduction; then why require a municipality within the watershed to pay for the extra 5% reduction?
- 40% is a statewide standard. It is not going to meet the water quality standard in every watershed. It is a categorical standard. NR 151 will trump a TMDL discharge standard – even if the TMDL standard is 30%.
- In the case of TMDL watersheds, the DNR will start with the requirement of 40% reduction and determine based upon economics who is required to decrease loads (muni or ag) beyond that. MEP is going to come into play even during the TMDL. A TMDL is not set in stone and can be revisited if the water does not improve. Load Allocation and waste load allocations will change as the nature of the landscape changes (decrease in ag, increase in development).
- MEP will always be there; it was never removed. There needs to be MEP guidance.
- A study is a good suggestion; but timing needs to be considered. As this rule moves forward, people are going to want to know what this thing costs. The DNR can't wait until 2010 to determine what this standard is going to cost.

DNR agreed that the suggestion to do a study is a good suggestion and it will have to be a recommendation from the Board. We can also consider whether or not we can pollutant trade to meet statewide standards as well as TMDLs. DNR stated that we put together a cost estimate when we put the 20/40 in the rule. DNR will not be revisiting this; because there isn't enough

information at this time. It isn't worthwhile to use a set of assumptions when we will have actual cost estimates from municipalities soon.

DNR stated that there is an idea of a regional approach. It could be a shared approach to determine where it is most cost effective where you invest in best management practices to meet the 40% reduction requirement. If they do 20/40 on a regional approach some communities are more likely to reach this. Technology and possible regional trading there are options for implementation. Regional approach is not always applicable determining the nature of the watershed. MEP is an option; it would be re-evaluated every permit cycle. Vande Hey stated that he was using regional approach, it is very helpful.

There is concern that there is no mandate to implement the ag nonpoint performance standards. DNR stated that the proposed TMDL language would do this. DNR stated that TMDLs are so complex because for the first time all sources have to come together. They are a great implementation tool but there are some unknowns that we have to work through. TMDLs are not always the answer; but we all need to work together. Discussion on Maximum Daily loads and how stormwater doesn't fit a daily load model. This concept is taken from wastewater discharges.

IV. Lunch Break

V. Roger Bannerman handed out a document titled [“Impact of Redevelopment on TSS Loads”](#) and gave a presentation. We don't want to discourage people from redevelopment. It is an opportunity to do some storm water management. Ideas are evolving. We asked, “what kind of redevelopment is really occurring.” Seems to be commercial to commercial; high density residential to apartments; commercial to condo. Street is rarely involved – these are not the developer's concern. It's the roof and parking lots we are changing the most. These have different impacts. The TSS off a roof is a lot less than off of the parking lot. Therefore, roofs are “cleaner” than parking lots. The numbers are averages from data gathered since 1982. The main concern is the surface parking lots. Roger showed a bar chart based on the “Percent Rooftop and Parking Lot on 1 acre” parcel. A redevelopment with 50% percent rooftop and parking lot is common.

We looked at the following types of Redevelopment:

- A. Downtown to Downtown (mostly rooftop)– from a TSS perspective not a lot of change. From a volume standpoint we might consider runoff volume reduction (reuse).
- B. High Density Residential to Residential High Rise – TSS load is increased. He recommends that reducing this TSS load is hard because quantity is small. Unless, surface parking lot is created, volume control should be a consideration. If we increase reuse in each redevelopment we are going to change volume.
- C. Shopping Center to Commercial with Less Surface Parking – Less surface parking is a trend likely due to economics. What happens to TSS load when we decrease the parking and increase rooftop? First table on page three summarizes calculations we did. Just by switching from parking lot to rooftop you are decreasing TSS load. This is a good thing; we want to encourage it. If you switch to all rooftop you get a 60% TSS reduction. See recommendation page 3.

How do we make this all cost effective as possible? One of the practices we are seeing a lot in Madison is biofiltration –in landscaping in parking lots. Take that one practice as an example, what is the cost of putting biofiltration on a parking lot. See second figure “Biofiltration on

Shopping Center Parking Lots.” If we stay in 50% area we are getting the best for our investment. See figure “Cost of Installing Stormwater Control Practices on 1 acre parking lot”

Committee Comments:

- The scale of redevelopment in Janesville is going to differ from that of Madison or Milwaukee.
- For clarification...parking ramps and parking under buildings discharge to wastewater treatment facilities.
- Brownfield to Commercial areas might be applicable to medium sized communities. So will the conversion of industrial sites to commercial.
- Single family homes to commercial are also common in smaller municipalities.
- Discussion of what is a driveway versus parking lot. DNR said that typically if you do not have curb and gutter it's a parking lot, not a driveway. Perhaps a note is necessary to address internal roads.
- DNR said that they are trying to get away from exemption that says that if you are not increasing parking lots and roads then you don't have to meet any performance standards.
- Discussion of whether infill and redevelopment should be the same. Committee thought it should be the same. If we did make it the same, single family home (or any residential) without a parking lot would not have any limitations whereas the way it is now, they will need to meet the performance standards.
- Roger recommended that we encourage reuse to decrease volume. The DNR will not put this suggestion in the rule. Commerce rules are being implemented by saying that you have not considered everything in terms of MEP until you have considered reuse.

VI. Discussion about the remaining concerns of committee members.

Transportation: The main changes were to merge three and four. It saves us the trouble from having to repeat all of the performance standards. It was not the intention to change any of the performance standards. DOT is still reviewing it internally. DOT attorney thought that it might confuse enforcement and that there was a statutory reason as to why DOT would be separate; but it was not clear if the attorney felt that the existence of TRANS 401 should cover this.

Committee members thought that the merging was easier to understand for every other transportation project outside of DOT administered projects.

Committee thought that there had been the inclusion of a 1 acre threshold in the definition of minor reconstruction. All the post construction standards should be linked to this. We should just put it in the definition of minor reconstruction.

There was discussion of whether we need a definition of TSS. It is defined in the model. DNR stated that if we leave it the way it is then we can define for the models and this gives us the most flexibility. No changes will be made based on committee discussion.

No person should be required to exceed language unless required by a TMDL may or may not come out. This is still up in the air. All language including TMDL references may be taken out; we do not know yet.

Peak flow: Right now we are proposing the one year and two design combined outlet. And changing curve number to forested condition. The curve number change is going to have the biggest impact.

It was recommended that we remove the language about cropland, legumes, etc. Just identify the curve number without giving a source such as wood, meadow, or farmland. One committee member is using meadow which is pretty close to the forest anyway.

Discussion about (c) under peak discharge exemption - if you cannot meet the infiltration exemptions then you should meet the peak flow requirement to the MEP. This is most applicable under hydrologic soil group a.

How will we define cases where you don't have to do a peak flow analysis? We started with areas that discharge into big waterbodies. Using the fourth, fifth order concept or a drainage area does not work because these are either not well defined or vary from one part of the state to the other. Jim Bauman has a list for his code on P-criteria that lists the large rivers and streams. This list would take up 1 ½ pages of code text. The committee felt that listing the big waterways was still best.

Infiltration: We now have in the code the three impervious surface concepts: 60, 75, and 90% connected. There was confusion about the separation distances from bottom of infiltration device to the groundwater. DNR stated that engineered soil counts as the five feet requirement. The bottom of the device of a bioretention device is the top of the engineered soil. Clarify this definition. Lindquist just created a definition of a filtering layer and will send it to Lowndes.

Protective Areas Standard: DNR stated that calcareous fens are listed under special waters. Ephemeral ponds will have 75 foot setback because they are the most sensitive instead of the earlier version that listed seasonally flooded basins. The other sensitive wetland will remain as proposed.

The code currently references perennial intermittent streams as those on a USGS map. Sometimes this is not the same as navigability. Shoreland zoning is based on navigability. This can be confusing. The NR 151 code needed a reference where we could identify the waterways that were in for all parts of the state so that is why the USGS map was selected. This is not a navigability issue.

If you are going to build a bike trail within a protective area you may not have to get permission from the department. Bike trails are usually exempted because of less than 10% connected impervious surfaces based on area of land disturbance.

Discussion about the Swale Treatment Option at the end of 151.12: These exemptions are not really exemptions. They are really a prohibition not an exemption. There was recommendation to take the title out and make it "c".

Lowndes will do a final revision and send this version to the advisory committee and legal. After legal approves it, the advisory committee will get it again before it goes into the green sheet packet.