

**TMDL – MS4 Urban Stormwater  
Technical Team  
Meeting Notes**

**May 10, 2012  
DNR Service Center – Waukesha, WI**

**Attendees:**

*Eric Rortvedt (WDNR)	*Eric Thompson (MSA)
*Tim Ryan (WDNR)	*Nick VandeHey (McMahon & Assoc.)
*Bryan Hartsook (WDNR)	Kevin Kirsch (WDNR)
*Greg Fries (City of Madison)	Roger Bannerman (WDNR)
*Jim Bachhuber (AECOM)	Sharon Gayan (WDNR)
*Jon Lindert (Strand Assoc.)	Michelle Reynolds (WDOT)
*Tom Grisa (City of Brookfield)	Maureen McBroom (WDNR)
*Solomon Bekele (City of Milwaukee)	Theresa Ford (WDNR)
*Steve Wurster (Ruekert-Mielke)	Megan O'Shea (WDNR)
*Leif Hauge (Waukesha County)	Fay Amerson (Walworth County)

\* Team member

**Topic 1: Impaired Waters/TMDL Concepts for MS4 General Permit WI-S050075-2**

Reviewed potential permit concepts for section 1.5 (Impaired Water Bodies and Total Maximum Daily Load Requirements) of the existing MS4 general permit (see agenda attachment). Group discussed each of the three proposed bullet points on the agenda attachment – permittee notification of WLA, permittee assessment of ability to meet or achieve WLA, permittee submission of a plan to achieve WLA. Eric Rortvedt indicated that EPA has verbally indicated that facilities planning and assessment may be included in the next reissued MS4 permit without the WLA for the 1<sup>st</sup> permit term. The following permit reissuance would then include the WLA and compliance schedule and DNR would most likely use the same language/approach in future individual permit reissuances as the general permit to maintain consistency.

Department notification language needs to be specific (indicate by pollutant and reach) and very concise in order to make a convincing statement to the regulated municipality. No single means of transmitting the notification will always get the information through to permittee. Potential written notification alternatives:

- It could be a note in the permit to “See the Table” and the table contains all the WLAs for all the reaches for all the pollutants. Table would need to reflect current approved TMDLs and impaired waters.
- It could be a hard copy letter to each permittee.
- Also, the DNR could require a “fill in the blank” on the planning report. This puts the onus on the applicant to get/have the information.

Timing of notification would be better in the later part of this year (not until the permit is issued). Interval between notification and assessment would be more realistic within 3 years (12 months too short) to account for municipal budgeting and grant application cycles.

Likely that adaptive management under NR 217 would not affect timing of notification & assessment because MS4s cannot initiate adaptive management themselves, but can be brought into the adaptive management approach by a wastewater treatment facility. This could also be a note in the permit language.

(General discussion comments): Interim reporting or other requirements take resources away from the act of assessment. Better to provide the target and timeframe rather than a complicated compliance schedule. The compliance schedule can be developed as a part of the assessment process. There will also need to be time built in for internal DNR review of assessment/compliance schedules.

Is there a need to require planning of implementation in the first permit term or should it be a period to establish baseline compliance with WLA? DNR could insert into a footnote or factsheet to encourage early submission of compliance assessment for DNR concurrence. DNR suggests planning in first reissued permit term but implementation would be during the next 3 permit terms.

Miscellaneous Comment: The updated version of SLAMM is not anticipated to create a baseline shift from the TMDL calculations to current conditions although changing focus from watershed to reach has the potential to shift the baseline.

**To Do:** DNR staff to bring comments on draft permit language back to Jim Bertolacini, Stormwater Program Coordinator. Will also request revised language based on these comments to be forwarded to this team for additional review.

## **Topic 2: TMDL Area Analysis and Stormwater Management Planning**

Tim Ryan presented some diagrams that addressed the differences between the lands previously modeled to meet the MS4's developed urban area performance standard of NR 151.13, and the areas now included in the MS4 WLAs (diagrams attached). Examples: issues of political boundaries, permitted areas (excludes land area that has direct drainage to a reach or drains away from the storm sewer system,) non-permitted areas, etc.

Discussed/defined new terms for:

**Reachshed** = Watershed area draining to a specific reach

**Initial MS4 WLA Area** = Area on which the original waste load allocation was established

**Revised MS4 WLA Area** = Area that represents urban land use that drains into the MS4.

Revised MS4 WLA Area will change as municipal urban land use expands.

Greg F. commented that the RRTMDL mapping coverage is comparable to year 2000 municipal boundaries for City of Madison.

Additional complicating factors to pin down Revised MS4 WLA Area:

- Land area (runoff) outside of the MS4 permitted area, which is treated by the MS4 permittee. Does the MS4 get credit for treating this additional runoff? If the runoff is from another permitted MS4 then an agreement could be made with the other MS4 for how to share the credit. If the outside runoff was from an unpermitted source then credit might not be available unless reduction goes beyond LA for the area. Does EPA expect MS4 to be responsible for non-urban runoff to MS4?
- What if an urbanized area expanded into another reachshed with no MS4 WLA? The LA for that area should shift to the MS4's WLA.

Discussion of a grid map tool, similar to a grid system that is being considered for agricultural sites, that would define a parcel unit loading rate (load/land use/stream assimilative capacity) developed by DNR with data from municipalities that could address the following issues

- portioning the WLA in the permitted area
- change of the hydrologic boundary
- change in political boundary

Total allocation is independent of changes in hydrologic boundaries and land use. The baseline used to develop the RRTMDL was appropriate to use on a basin or reachshed scale to assign allocations between sources. However, MS4 land use specific modeling will be needed for compliance with individual WLAs.

Stream assimilative capacity is also set, adjustment will happen in shifts between WLA  $\leftrightarrow$  LA.

Also a suggestion to set the reachshed so that if the sewer system changes, then the WLA shifts (or not) appropriately.

Municipal boundary discrepancies are still an issue because the RRTMDL report shows more land area versus City of Madison MS4 mapping that shows less. It would be beneficial for the group to see/discuss actual situations. There is anticipation of needing reconciliation of municipal boundaries across the basin to better address the RRTMDL, and that this will be an on-going process. No answer on the frequency of this process as it might depend on TMDL revision, mapping updates, modeling updates, de/listing of impaired waters.

Compliance with WLA will be through calculation (modeling). It's not clear if compliance schedules will be affected by boundary reconciliation.

How often would mapped need to be updated? It is believed that Southeast Wisconsin Regional Planning Commission updates its plans every 10 years.

What if WLAs are met and water quality still doesn't improve? It's expected that MS4 will take up to 15 - 20 years to implement controls to meet their WLAs. In the future, EPA could request a revised TDML to meet WQ if implementation of WLAs fail to meet WQ.

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Each WLA will have a “whose load is it” question attached because of areas not owned/managed by the municipality (DOT, county roads, UW campuses, loads entering from another MS4). Each of these entities will likely calculate their portion to their advantage and there will need to be a referee in this process. DNR would be the appointed referee.

Kevin suggested bringing Region 5 EPA staff to a future meeting, so that policy makers can better understand the range of assessment, planning and implementation issues from the local municipal representatives.

*Cooperative work between MS4 and DOT*

Question raised about MS4 getting ‘credit’ for stormwater management on DOT property (right of way) or if this is a trading opportunity within the MS4 boundary.

- could transfer WLA from DOT to MS4 but the MS4 doesn’t want the entire loading responsibility.
- currently Madison is working with DOT – the load is divided and written into a memorandum of understanding. MS4 doesn’t take on responsibility for area or baseline.
- DNR and DOT are continuing to meet regarding these issues, no determination on edge of pavement or right of way as the boundary.

*Final thoughts on area analysis*

- need to resolve boundary issues and team preferred it to be done before reissuing coverage to MS4 permittees
- DNR should review and decide upon current boundary
- mapping practices differ from municipality to municipality and the reconciliation of boundaries will take time (need to know that maps are current based on same date).
- what about riparian land owners in the MS4? How to adjust WLA for this? Should it be kept in?
- If a grid tracking system is established, what is grid cell size?

**To Do:**

1. get a real world example(s) for the next meeting – external partners were asked to bring an example of a municipality with sample issues to be resolved.

**Topic 3: Update on Phosphorus Sources and Management Practices**

Roger Bannerman gave a Power Point presentation.  
See attachment: Controlling P MS4 TMDL 05102012 SUMMARY

**NEXT MEETINGS**

June 21, 2012 at DNR Service Center in Fitchburg; 9:30 am – 3:30 pm  
July – October meetings will be on the 4<sup>th</sup> Thursday of the month with a break for the holidays (maybe a meeting in early December)

**Next Meeting Topics:**

1. Need follow up on who/how will MS4 wasteload allocations be reapportioned to the permitted areas.
2. in situ example of boundary discrepancies, revised MS4 area
3. Discuss rainfall files in modeling SWAT/SLAMM/TMDL.

**To-do's summarized**

1. DNR staff to bring comments on draft permit language back to Jim Bertolacini, Stormwater Program Coordinator. Will also request revised language based on these comments to be forwarded to tech team for another review.
2. get an in situ example of municipal boundary discrepancies

**Acronyms**

TMDL = Total Maximum Daily Load

RRTMDL = Rock River TMDL

TSS = Total Suspended Phosphorus

TP = Total Phosphorus

MS4 = Municipal Separate Storm Sewer System

SLAMM = Source Load and Management Model

SWAT = Soil & Water Assessment Tool

303(d) waters = Impaired waters

WLA = Waste Load Allocation

LA = Load Allocation

Reachshed = Watershed area draining to a specific reach

Initial MS4 WLA Area = Area on which the original waste load allocation was established

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**Attachments**

- Agenda
- Diagrams - TMDL Area Analysis and Stormwater Management Planning
- Controlling P MS4 TMDL 05102012 SUMMARY