

## **Stormwater and TMDLs: *Afternoon Discussion***

**February 14, 2006**

Following Bruce Cleland's morning presentation on ways to connect stormwater and TMDLs, the afternoon was devoted to the following topics:

- Update on MPCA's TMDL program development efforts related to stormwater;
- Facilitated discussion to identify technical and policy issues facing Minnesota on stormwater and TMDLs.

### **Program development update – *EPA's national survey on TMDLs-Stormwater and Minnesota's case study***

Jeff Risberg, MPCA's TMDL coordinator, explained that the MPCA is partnering with U.S. EPA on an intensive project to address a variety of questions on stormwater and TMDLs. First, beginning this Spring, EPA will launch a national survey to understand state practices and ideas for integrating TMDLs and stormwater. Secondly, EPA will work with the MPCA and a local project sponsor to apply the learning's of this survey to a TMDL project in Minnesota. The goal of this case study is to provide acceptable options for how to develop and comply with a TMDL involving stormwater sources. EPA believes that the final report, which should be ready by October, will be useful to states nationwide.

### **Facilitated Discussion – *Input for EPA's national survey on TMDLs-Stormwater***

Tim Larson, MPCA's Metro Basin Coordinator, began this session by highlighting what is known and unknown about stormwater compliance with TMDLs. He referred to the EPA memorandum, *Establishing TMDL Wasteload Allocations (WLA) for Stormwater Sources and NPDES Permit Requirements Based on those WLA's* (see document attached to this web page). Tim highlighted what is required for stormwater sources, including that NPDES stormwater permittees must be included in a TMDL's Wasteload Allocation and how SWPPPs (stormwater pollution prevention program) must be updated to comply with the TMDL within 18 months to comply after TMDL approval (see *TMDL requirements in the MS4 and Construction Stormwater Permit* on this web page).

To help provide input to EPA for their national TMDL-stormwater survey, Tim then led a discussion on outstanding questions related to complying with regulatory requirements.

Questions from MPCA. First, Tim summarized some of the questions that MPCA has identified:

- **TMDL development questions :**
  1. How are percent reduction goals quantified in terms of Stormwater BMPs?
  2. How are past BMPs credited for various pollutants toward a required TMDL reduction?
  3. Should a TMDL require a preliminary list of BMPs and the preliminary schedule (by permit cycle) for putting BMPs in place, as well as the expected range of potential reductions that can be achieved for each category of BMP?
  4. How will non-degradation requirements for stormwater relate to a TMDL?

- **SWPPP-related questions:**
  1. How are TMDL requirements incorporated into SWPPPs and how will compliance be tracked, including monitoring requirements?
  2. How are activities for each of the six minimum measures determined when there is an impairment and or TMDL?
  3. How should SWPPPs be modified over multiple permit cycles?
  4. How is Maximum Extent Practicable (MEP) defined in a TMDL watershed?
  5. Can BAT (Best Available Technology) be required? How is BAT related to MEP (maximum extent practicable)?
  6. Are there any special considerations given to NPDES Construction Stormwater Permit projects that discharge to impaired waters?

Audience questions. After describing these questions, Tim then solicited additional questions from the audience. He used potential scenarios for TMDLs that will be required in MS4 watersheds as a way to stimulate questions. The following is a summary of questions and concerns articulated by the audience. These were provided to EPA for consideration:

- *Waste Load Allocation development and Source Quantification:*
  - What are realistic ways to quantify stormwater sources? How do you reflect climate variability?
  - MS4 sector vs. individual allocations – how much information is needed to determine whether allocations should be lumped together (i.e., entire sector in a watershed) or whether individual MS4s receive their own allocation?
  - Is the TMDL endpoint the same regardless of when a TMDL study is set, while the reduction levels may vary?
  - What if a load reduction cannot be achieved?
  - What is the most equitable way to split out the Wasteload Allocation between MS4's? How is equal percent reduction determined?
  - Would the MS4s be assigned a Wasteload Allocation or are they signing on to a negotiated process? Need to have all the parties at the table at the beginning of the process.
  - If MS4s can't come to an agreement on WLA issues, who is the final decision-maker?
  - What about reserve capacity and stormwater allocations?
  - Will you apply credits towards a required TMDL reduction to those MS4s who have already done BMPs? If so, how? For example, there can be disagreement on the effectiveness and maintenance of BMPs that have been put in place prior to the TMDL.
  - What about TMDLs that go beyond the immediate watershed scale (e.g., Lake Pepin)?
  - Do we allow an additional period of time to refine the WLA? (i.e. during the implementation planning period).
- *TMDL standards, goal setting and nondegradation:*
  - What if standard is unattainable even after implementing BMPs? (eg. chloride TMDLs)

- How do you set goals through reference conditions in urbanizing landscapes?
- Can interim goals be set? What interim goals would be reasonable?
- *Monitoring:*
  - Is base flow included in storm event sampling?
  - What data are we going to use in our evaluation of violations and/or compliance? For example, some of the older data may not have the same resolution as current data.
- *SWPPP Compliance with a TMDL:*
  - Rules and regulations allow for a “reasonable time” in excess of a five-year permit cycle to achieve needed load reductions. How is this time period determined? The Minnesota River TMDL had a 20-year compliance schedule for stormwater sources.
  - Does an MS4 have to hold a public meeting every time a SWPPP is updated due to an approved TMDL? Can a SWPPP be amended automatically by reference to an approved TMDL so a new public notice is unnecessary?
  - Do we have to amend SWPPP for TMDLs outside our MS4 boundaries if we are determined to be a source (i.e., counties, MnDOT)?
  - What happens if load reductions are met but the standard is not achieved?
  - Does the process encourage waiting to until all waters are listed before initiating a TMDL?
- *Trading:*
  - How are pollution offsets being used in urban areas to meet a TMDL allocation? What would we need to do to institute trading?
  - What kind of legal agreements would you need to implement trading for multiple MS4s?
  - Would trading occur among multiple SWPPPs or would there be one watershed SWPPP managed by watershed district?
  - Can a MS4 trade with its Municipal Wastewater Plant if that is a cheaper alternative than upgrading stormwater infrastructure/BMPs? What about offsetting stormwater in the wasteload allocation with nonpoint sources in load allocation?
- *Nondegradation:*
  - How are MS4 permits addressing nondegradation? What mechanisms should be in the permit?
  - Where nondegradation is enforced, should a TMDL be required? Would the TMDL endpoint be based on nondegradation rather than the water quality standard?
- *Analytical tools:*
  - How are Excel spreadsheets used to create duration curves?
  - Has “Monte Carlo” or other probabilistic analytical approaches been used?
- *Other questions:*

- Can I use BMPs to reduce pollutants coming off my site without going through the TMDL process? Do you work from bottom up or from one large TMDL?
- Is the academic study moving into the real world vis a vis BMPs?
- Are there repercussions from Annandale-Maple Lake decision on stormwater?
- Which pollutant parameters are related to stormwater sources?

**Evaluation and Follow-up:** The audience completed evaluation forms to assess the workshop and determine whether it should be offered again. The two most common themes were 1) that participants wanted a follow-up session with Bruce Cleland, especially to learn more about how to create duration curves; and 2) they also would like another session to discuss policy and technical issues after the EPA and MPCA have developed options for dealing with many of the questions discussed at the workshop.

Since the 2/14/06 workshop, the MPCA obtained approval from Bruce Cleland and EPA for him to return to Minnesota for another workshop this summer on duration curves. The EPA is also interested in sharing results of its national survey and case study development with Minnesota stakeholders.