TMDLs and General Permits

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Overview - TMDLs in Wisconsin

- **TMDLs in Wisconsin**
  - Development & terminology
  - What does it look like?

- **TMDLs & General Permits**
  - Construction
  - Industrial
  - MS4

- **TMDLs & MS4 General Permit**
TMDLs in Wisconsin

- Development & terminology

- Wasteload Allocation (WLA) – point sources
- Load Allocation (LA) – nonpoint sources and background
- MOS – margin of safety
TMDLs in Wisconsin

✓ What does it look like?

TMDLs Approved
• Lake St. Croix
• Lower Fox River
• Milwaukee River Basin
• Rock River
• Tainter Lake/Lake Menomin
• Wisconsin River

TMDLs in Development
• Northeast Lakeshore
• Upper Fox & Wolf Rivers
TMDLs in Wisconsin

✓ What does it look like?

**Wisconsin River Basin**
- 9156 sq. miles
- 22 counties
- 73 streams
- 120 individual segments
- 9 lakes

**Lower Fox River Basin**
- 640 sq. miles
- 4 counties
- 14 streams
- 27 individual segments
- 0 lakes
TMDLs in Wisconsin

What does it look like?

Wisconsin River Basin

- 9156 sq. miles
- 22 counties
- 73 streams
- 120 individual segments
- 9 lakes
- **3.5 hour TMDL**

Lower Fox River Basin

- 640 sq. miles
- 4 counties
- 14 streams
- 27 individual segments
- 0 lakes
- **45 min TMDL**
TMDLs in Wisconsin

✔ What does it look like?

Typical Pollutants of Concern
– Total suspended solids, sediment, total phosphorus, fecal coliform
TMDLs & General Permits

✓ Compliance with permit is compliance with TMDL
  • Construction ≠ WLA
  • Industrial ≠ WLA

✓ Permit terms and conditions define TMDL compliance
  • MS4 = WLA
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✓ Wasteload allocations for MS4s

1. WLAs are assigned for each pollutant of concern by reach
   a. MS4 can have multiple pollutant reduction goals

2. Reduction goals are a % reduction from a defined no controls scenario

3. Municipal-wide analysis already completed prior to TMDL
   a. Ch. NR 151, Wis. Adm. Code, urban area performance standard

TMDLs & MS4 General Permit

✓ Implementation framework

1. Permit term 1 – planning phase
   a. Update storm sewer system map with TMDL boundary
   b. Express WLA as a Percent Reduction
   c. Cost-effective analysis & consideration of alternatives
      i. Identifies what measures will be implemented and timeframe

2. Permit term 2+ – implementation phase
   a. Show progress by meeting ‘benchmarks’
   b. Submit tabular summary each term
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✓ Implementation framework

1. MS4 general permit reissued May 2019
2. Remand Rule – Comprehensive General Permit
3. TMDL Appendices
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✓ Implementation framework – TMDL appendices

• Appendix A
  – Implementation Phase

• Appendix B
  – Planning and Implementation Phase

• Appendix C
  – Planning Phase
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✓ Implementation framework – Appendix A

Current meeting TMDL in ALL reach-sheds?

Yes

Submit for Concurrence and maintain current level of reduction

No

OPTIONS!!

A.3 Follow Implementation Plan from last Permit Term

A.4 Meet TMDL in permit term

A.5 Prescriptive Permit Compliance over Multiple Permit Terms
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✓ Implementation – A.4 TMDL Compliance in permit term

- Full compliance by the end of Permit Term (5 years)
- Meet reductions in each reach-shed
- May apply excess reductions in upstream reach-sheds to downstream reach-sheds
- Requires DNR concurrence
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✓ Implementation – A.5.2 Prescriptive compliance – Numeric Progress

- Quantifiable practices
- ‘Additional reduction’ measured from MS4 baseline
  - A minimum of a 20% additional reduction in sediment or total suspended solids.
  - A minimum of a 10% additional reduction in total phosphorus.

Note: Progress may be located in or upstream of any reachshed where progress is needed (this permit term)
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✓ Implementation – A.5.3 Prescriptive compliance – Optimize Programs

- Non-quantifiable practices
  - Redevelopment post-construction ordinances
  - Private post-construction BMP maintenance and record drawings
  - Municipal leaf management
  - Outfall & conveyance stabilization
  - Optimize street cleaning
  - 1 (quantifiable) new/enhanced structural BMP
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✓ Planning/Implementation framework – Appendix B

- Milwaukee River TMDL only
- EPA approved on March 9, 2018
- TSS/TP/Bacteria TMDL requirements
- **Finish planning** initiated under previous permit
- Begin implementing
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✓ Planning framework – Appendix C

• Prepare MS4 Map with TMDL reachsheds
  – Identify excluded areas with reason

• Provide tabular summary

• Written plan
Lessons Learned

✓ TMDL modeling tools are different than MS4 compliance modeling tools
✓ Look at the TMDL implementation plans
✓ Talk with your experts
✓ Build off existing permits & policy expectations
Lessons TO Learn

✔ How are others tracking TMDL implementation?
✔ What tools are permittees using to meet TP TMDLs?
✔ Bacteria implementation?
✔ Other?
Questions?

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