Wisconsin River Basin TMDL
17 August 2018
Pontoons and Politics

Total Maximum Daily Load
Clean Water Act - Impaired Water Program

- Federal Regulatory Underpinnings:
  - Established Impaired Waters 33 USC 1313(d) and TMDL program 40 CFR 130.7
  - TMDLs determine the amount of a pollutant a waterbody can receive and still meet water quality standards

- Adopt and revise water quality standards
- Monitor and assess waters
- Determine attainment status and list impaired waters
- Develop protection and restoration plans
- Manage pollution sources through permits and grants
1991-1996

- Petenwell
- Castle Rock
- Comprehensive Management Planning

1995

- 1991-1996

2000

- 2001-2004
   - Unsuccessful Funding Proposals

2005

- 2008
   - First Pontoons and Politics

2010

- 2009-2014
   - State Legislature appropriates $750,000 over 5 years
   - Comprehensive Basin Monitoring

- Basin wide Land Use & Land Management Mapping

2015

- 2014-2015
   - State Legislature appropriates $235,000 (FY 2015)
   - Water Quality Data Assessment
   - Watershed & Reservoir Modeling

- 2015-2018
   - Allocation Development

2020

- 2018
   - Draft/Final TMDL

2025...

Multi-year effort with an excess of $2.8 million in State and Federal Spending
Draft Report

Section 1: Introduction

Section 2: Watershed Characterization

Section 3: Monitoring

Section 4: Source Assessment

Section 5: Pollutant Loading Capacity

Section 6: Pollutant Load Allocations

Section 7: TMDL Implementation

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Appendix N Agricultural Targets
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Appendix Q Response to Comments (February 21 to April 23, 2016 Comment Period)

Moon Bay, Lake Wisconsin July, 2008

825 pages at last count
Outreach and Stakeholder Participation

- Met with agricultural groups and permit holders providing review opportunities and comments of the TMDL development.
- Facilitated or participated in numerous workshops looking at both development and implementation issues associated with the TMDL.
  - February Webinar and March Public Informational Meetings in Rhinelander, Stevens Point and Portage
- Official 30-day public comment period starts 20 August, public informational hearing 22 August in Stevens Point
Wisconsin River Basin

- Phosphorus Impaired Waters (2018)
  - 120 streams/rivers segments
  - 52 lakes/reservoirs
* 21 Counties and 85 cities and villages

* Permitted Wastewater Facilities
  - 108 facilities

* Permitted MS4s
  - 14 municipalities

* 14 Citizen Groups

**Land Cover**
- Cash Grain
- Cranberries
- CRP
- Dairy
- Deciduous Forest
- Developed/Open Space
- Grassland Herbaceous
- Herbaceous Wetlands
- Open Water
- Pasture/Hay
- Potato/Vegetable
- Woody Wetlands
Defining Land Management

1. Define Crop Rotations
   To define the crop rotations in each field, satellite-derived landcover maps were used showing the types of crops growing each year over a five year period (2008–12).

2. Define Field Rotations
   Crop rotations were then grouped into specific field rotations, such as dairy, cash grain, continuous corn, or potato/vegetable.

3. Meet with Counties
   Meetings were held with local experts (county conservationists and agricultural professionals) to confirm and/or refine crop rotations, and to specify management practices (e.g., tillage and nutrient application).

4. Compare to Field Data
   The updated crop rotation dataset was validated by comparing it to independently measured data sources, including cattle inventory records, county crop acreage reports, dairy producer points, and field transect surveys.

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**Figure 19. Defining Land Cover and Land Management in Agricultural Areas.**
Baseline Loadings for Wisconsin River

- Above Rhinelander
- Below Tomahawk
- Below Merrill
- Above Wausau
- Below Eau Claire River & Rib River
- Above DuBay
- Below DuBay
- Below Mill Creek
- Above Petenwell
- Castle Rock Outlet
- Below Lemonweir
- Below Baraboo River
- Lake Wisconsin Outlet

Tons/year
• SSCs will impact the allowable loads to the reservoirs, and thus the resulting allocations. DNR has included two sets of allowable loads and allocations in the TMDL.

• SSCs must be adopted by rule. DNR can submit the TMDL to USEPA containing SSC allocations prior to adoption of the SSC; however, the SSC allocations become effective once both the TMDL and SSC have been approved by USEPA.

<table>
<thead>
<tr>
<th>Reservoir</th>
<th>Current TP (µg/L)</th>
<th>Existing Criterion (µg/L)</th>
<th>Recommended SSC (µg/L)</th>
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<tbody>
<tr>
<td>Petenwell Flowage</td>
<td>121</td>
<td>40</td>
<td>53</td>
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<tr>
<td>Castle Rock Flowage</td>
<td>96</td>
<td>40</td>
<td>55</td>
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<tr>
<td>Lake Wisconsin</td>
<td>98</td>
<td>100</td>
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Site-Specific Total Phosphorus Criteria for Lakes Petenwell, Castle Rock and Wisconsin