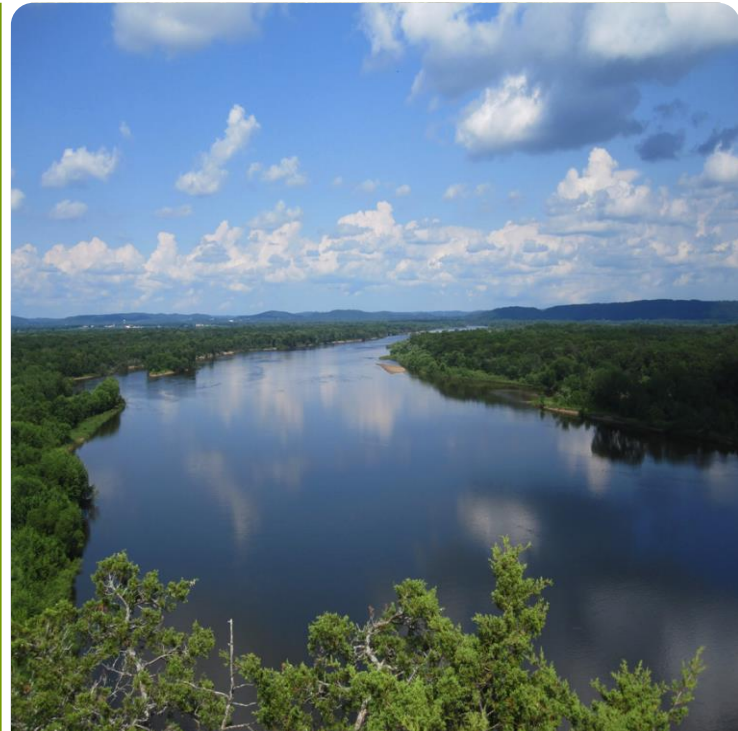


TMDL  
Technical and  
Legal  
Challenges

Angela James  
AAJ Legal, LLC



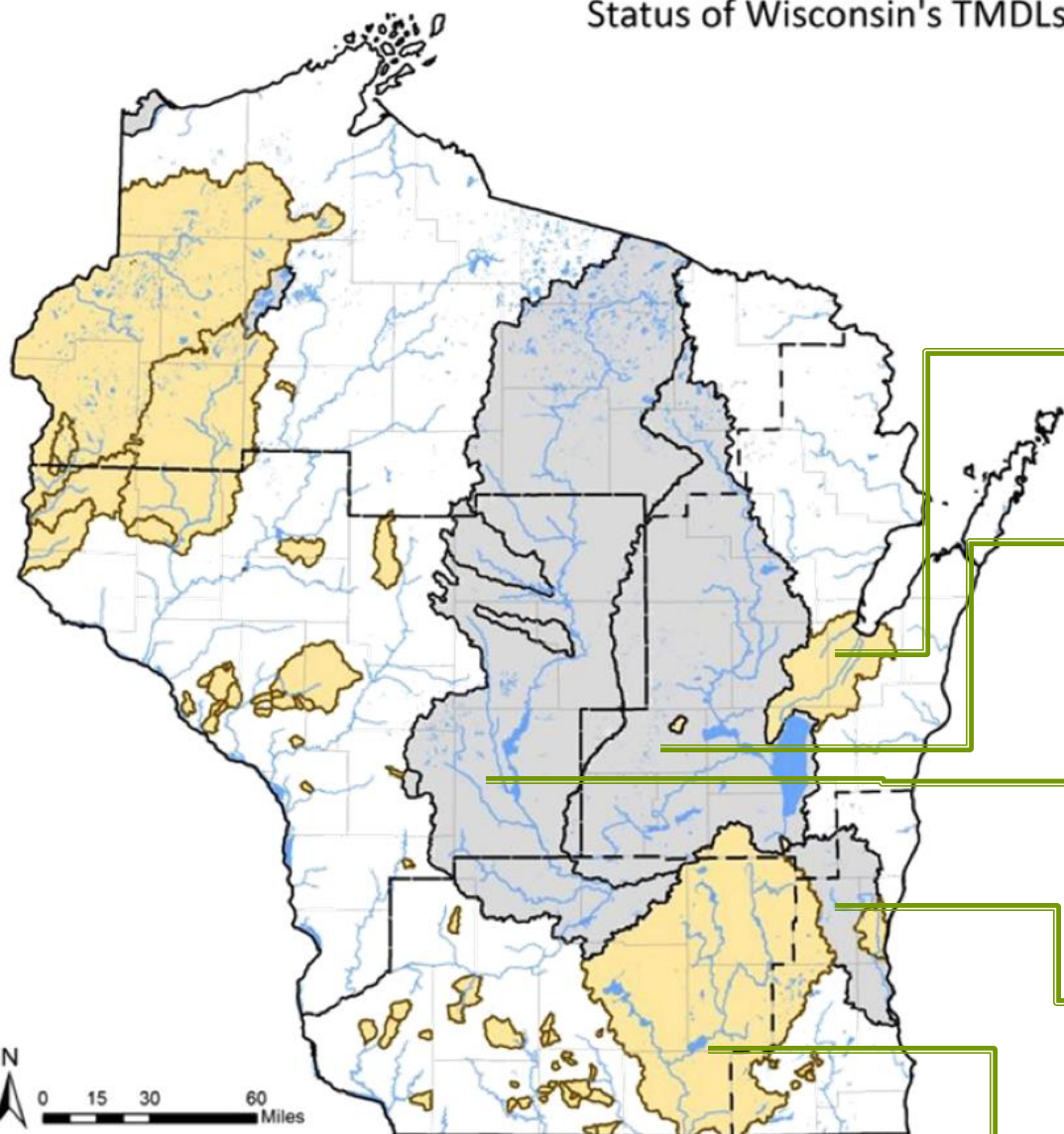
# Total Maximum Daily Loads



- TMDLs are a pollution budget.
  - **Amount** of a pollutant a waterbody can receive and still meet water quality standards.
  - **Fair** allocations among the sources
- EPA requires that waters on the impaired waters list have TMDLs developed.
- ...Not new
  - >70,000 TMDLs completed nationwide since 1996
  - 250+ in Wisconsin



# Status of Wisconsin's TMDLs



**Lower Fox River  
P & TSS  
2012**

**Upper Fox/Wolf  
P & TSS  
2017?**

**Wisconsin River  
P & TSS  
2017?**

**Milwaukee River  
P, TSS & Bacteria  
2017?**

**Rock River  
P & TSS  
2012**

**TMDL Status**

- TMDL Development
- TMDL Approved
- County Boundary
- DNR Regional Boundary
- River Network

**Notes:**  
1. Map reflects TMDLs for all pollutants (TSS, TP, PCBs, Hg, etc) reported in the WDNR WATERS database as of April 2013.  
2. Sub-HUC12 watersheds were delineated using PRESTO



# TMDL Development & Challenge Opportunities for Challenge

- Monitor and summarize load data from all applicable sources
- Estimate maximum pollutant load
- Calculate allocations to meet water quality standards
- Draft TMDL report
- Public comment period (30 day) conducted by DNR
- Respond to comments and submit TMDL to EPA for approval
- Develop Implementation Plan
  - Nonpoint compliance voluntary based on cost sharing (see NR 151)
  - For point sources, WLA in next permit issued after approved TMDL.



Baseline Dev.

TMDL Development

Public Process &  
Administrative  
Approval

Implementation

# Baseline Development

- Monitor and summarize load data from all applicable sources
- Monitoring Data
- For Point Sources: [Load] = [permitted concentration] \* [design flow]
- For Nonpoint Sources: Modeling



Technical  
Only



# Baseline Development

- Confirm sources of monitoring data, e.g., WDNR monitoring, USGS gauge stations, citizens groups



- Understand assumptions re: NPS contributions
- Confirm your load is accurate – check permit assumptions & design flow assumptions.

# TMDL Development: Overview of Steps



- Estimate maximum load for the river; estimate wasteload allocations; issue draft TMDL
- Use modeling to determine how much the load must be reduced to meet the water quality standards everywhere on the river.
- Once the total allowable load has been determined, choose how to allocate it among various sources.

## Load Allocation



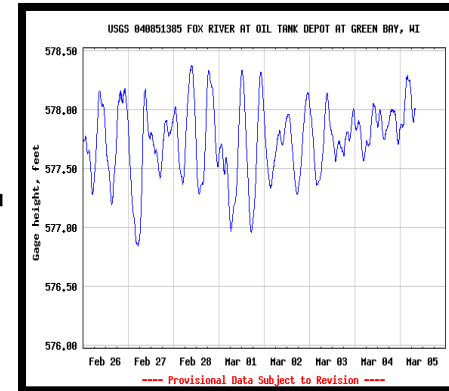
+

## Waste Load Allocation



+

## Margin of Safety



### Waste Load Allocation

- WWTPs / POTWs
- Industries
- Permitted MS4s
- Non-Metallic Mines
- Construction Sites
- NCCWs

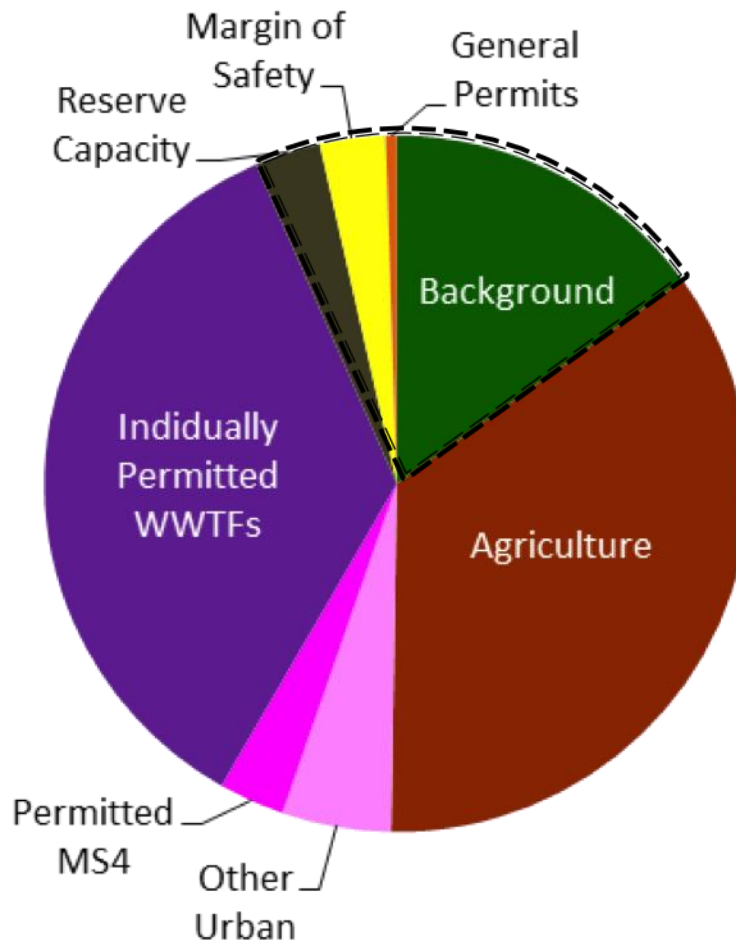
### Load Allocation

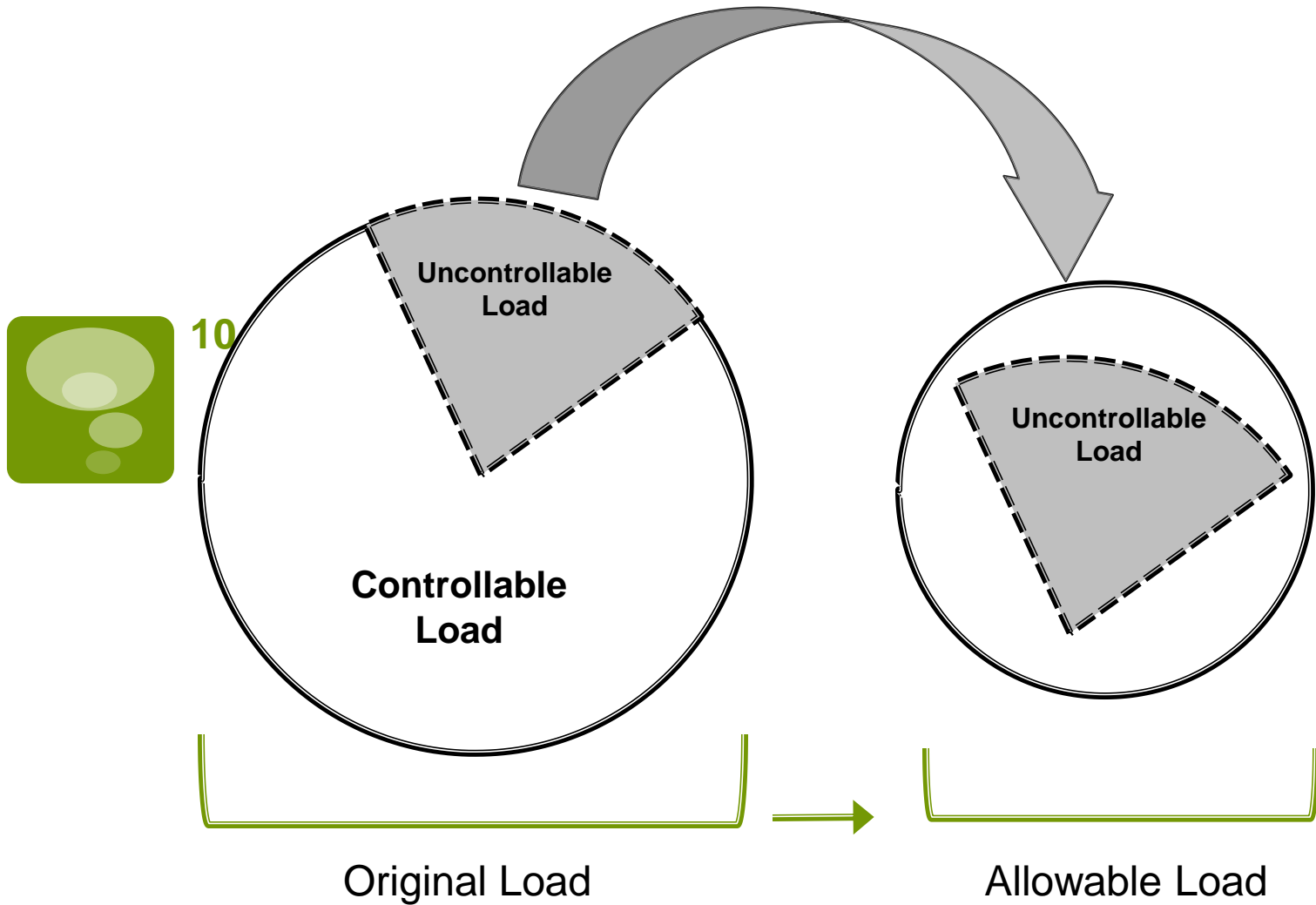
- Agricultural (includes load from CAFO land spreading)
- Non-permitted Urban
- Background

# TMDL Development: Reserve Capacity & Allocations

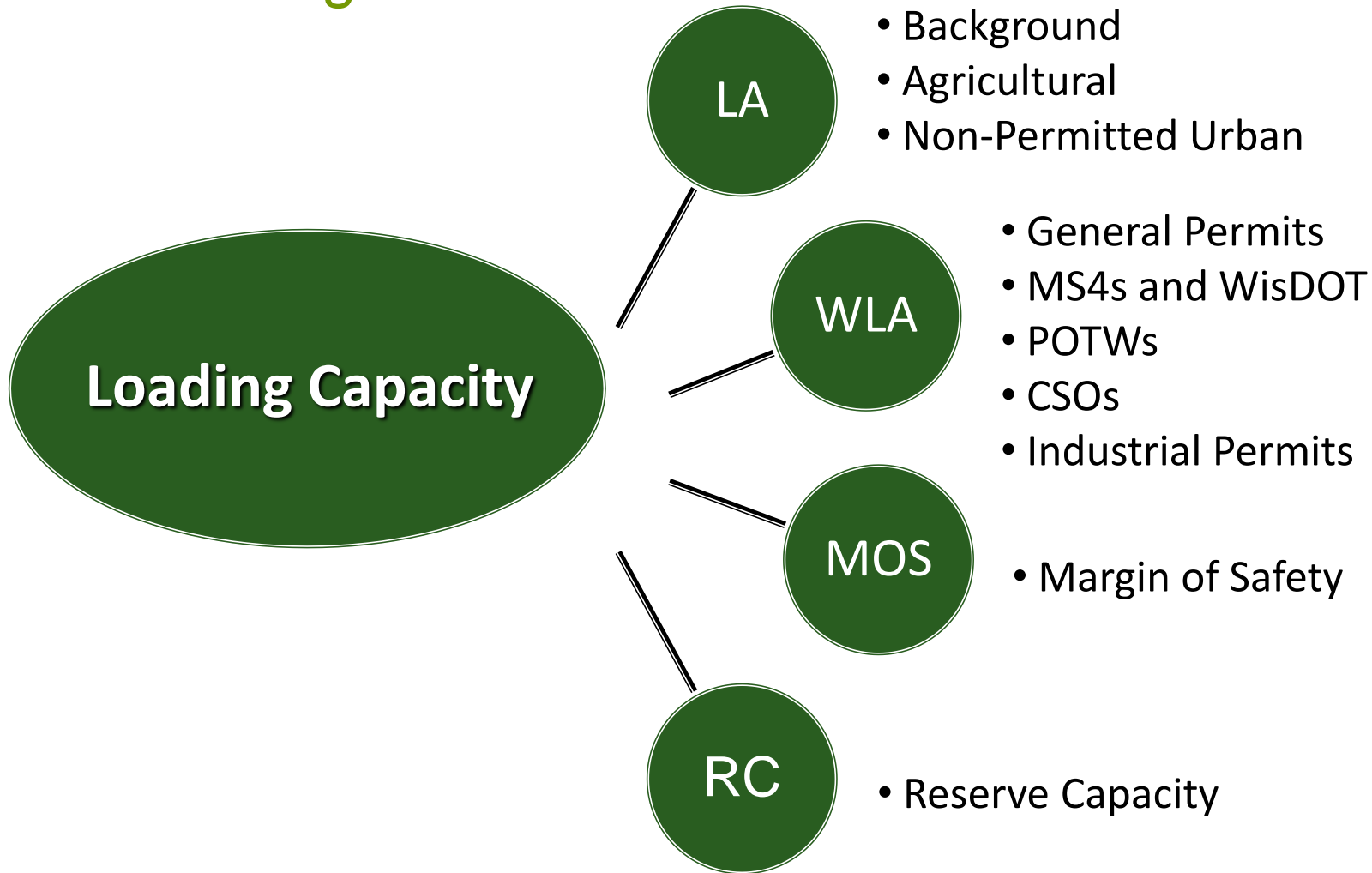


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# Allocating Allowable Load to Sources



# TMDL Development: Opportunities for Challenge



## Technical Challenges

- Review modeling assumptions and conclusions – overly conservative?
- Challenge allocation methodology – proportional among sources? Designed for success?

## Legal Challenges

- See NR 212, subchapter III, “Development of Total Maximum Daily Loads”
- During this stage, there is likely no “final agency action” to challenge legally, unless technical review reveals a concern substantial enough to enjoin further WDNR action.

Technical  
Only?

# Public Process & Administrative Approval



- DNR issues draft TMDL report
- Public comment period (30 day) conducted by DNR
- DNR responds to comments and submits TMDL to EPA for approval
- EPA approval finalizes the TMDL

# Public Process Tips



- Participate in the public hearings & submit comments on the technical underpinnings of the TMDL
- WDNR must respond to comments
- Opportunity for legal challenge comes at the point at which EPA approves the TMDL.



# Develop Implementation Plan

- TMDL serves as the foundation for developing a detailed implementation plan
- Development of an implementation plan begins during TMDL allocation process
  - Generating restoration scenarios
  - Conducting feasibility analysis
  - Selecting best option that achieves pollutant load reduction
- Form implementation team
  - Including affected stakeholders & partners



# Implementation – Engagement Tips



- Conversion of WLA to WQBEL in permit is covered by NR 212 – confirm WLAs are accurately converted.
- Potential for challenging the implementation for failing to meet TMDL goals.
- Consider involvement on the implementation team.

# Future TMDL Priorities

- Impaired Waters List is updated biennially
  - New water quality information will inform assessments
- Regularly review the prioritization scheme and update as information becomes available
- Incorporate public comment (WDNR, EPA and stakeholders) to determine priority areas & reevaluate previous designations



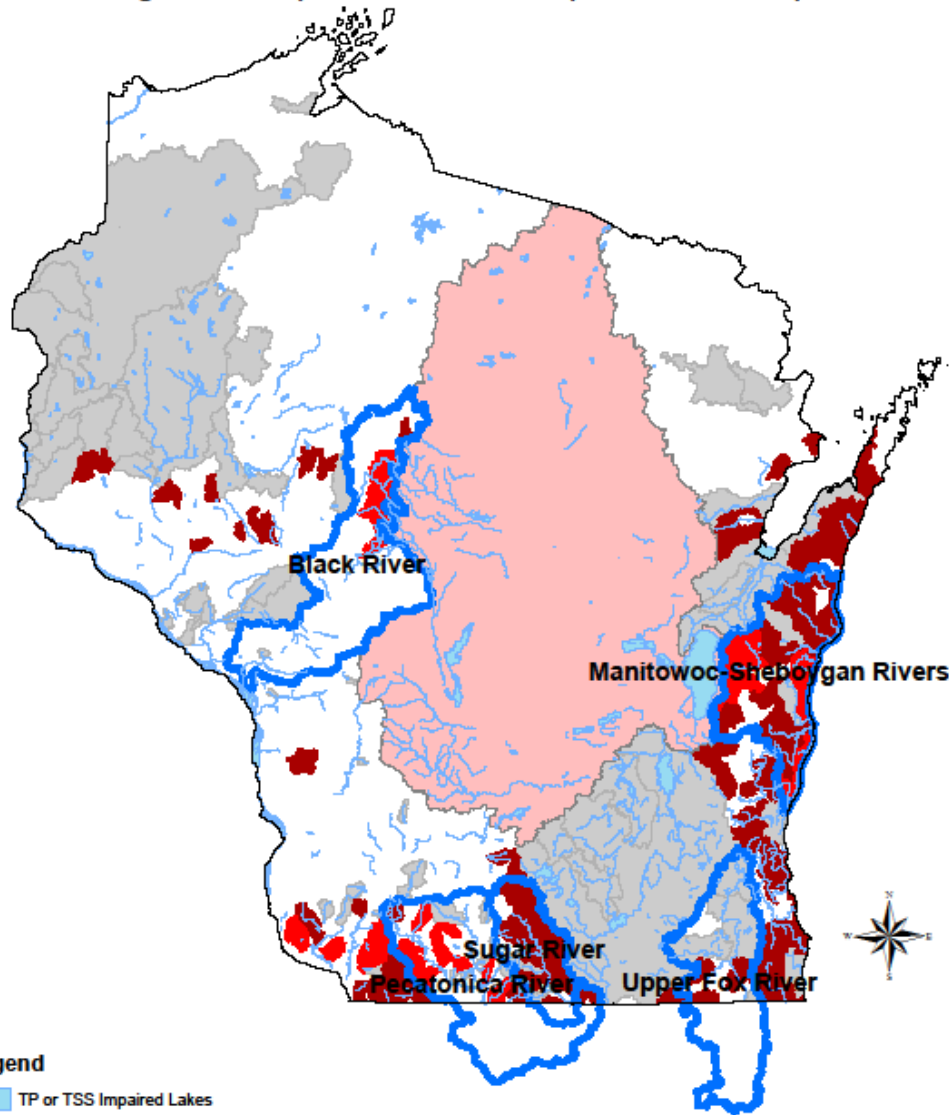
## Prioritization Considerations

- Public health concerns
- Severity of impairments
- Recovery potential
- Ongoing water quality studies or restoration work
- Social / economic importance and impact on effluent limits
- Stakeholder engagement



Priority Watersheds (HUC-8) for TMDL Development  
Addressing Total Phosphorus and Total Suspended Solids Impairments

TMDLs  
on the  
Horizon



Legend

- TP or TSS Impaired Lakes
- TP or TSS Impaired Streams
- Priority HUC-8 Watersheds for EPA Region 5 Funding RFP
- High Priority Watersheds (WQ-27; TMDLs in development)
- Medium Priority Watersheds (based on Nutrient Strategy)
- Medium Priority Watersheds (based on Ecosystem Health Index)
- Completed Restoration Plan Areas

0 20 40 80 Miles

Date: 07/30/2015



# Takeaways

- Many of the challenges to TMDLs are rooted in extremely technical information.
- Ensure that WDNR is starting from the right information about your facility to begin with.
- Understand how the TMDL is being developed – the assumptions, goals, etc. will all drive your ultimate WQBEL.
- Challenging the TMDL late in the game requires sophisticated technical arguments, so get involved early to understand deficiencies.
- TMDLs are not going away.



# Questions?

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