

Wisconsin's Proposed Phosphorus Multi-Discharger Variance (MDV)



Map Layers

Theme: Surface Water (default)

Map Layers Filter

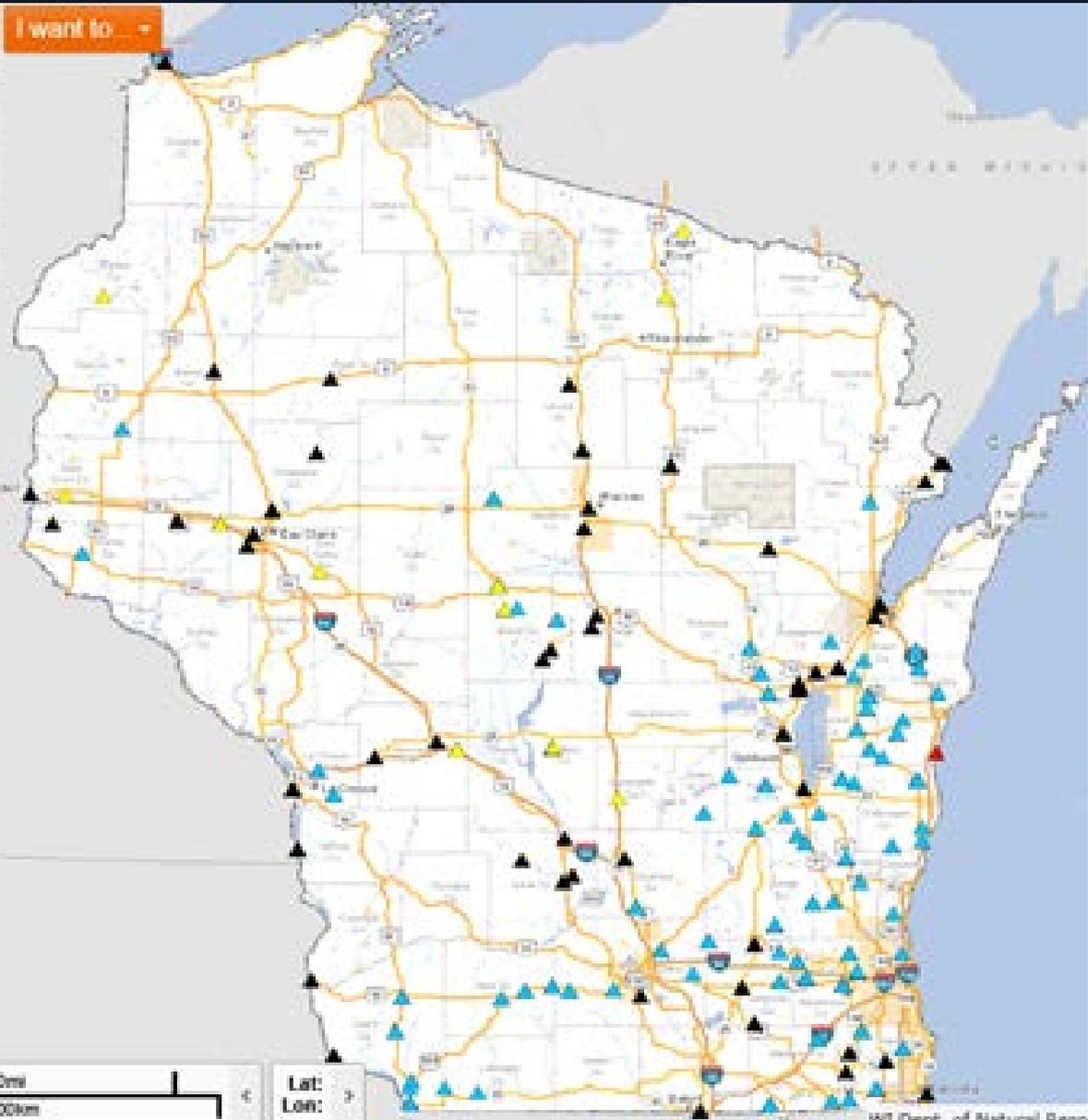
Cities, Roads & Boundaries

Watershed Outfall Variances, WTM, Ext

Current Variances

INVALID_VARIANCE_FLAG...

- ▲ Arsenic (Current)
- ▲ Chloride (Current)
- ▲ Copper (Current)
- ▲ Mercury (Current)



I want to

WI Dept. of Natural Resources

Context

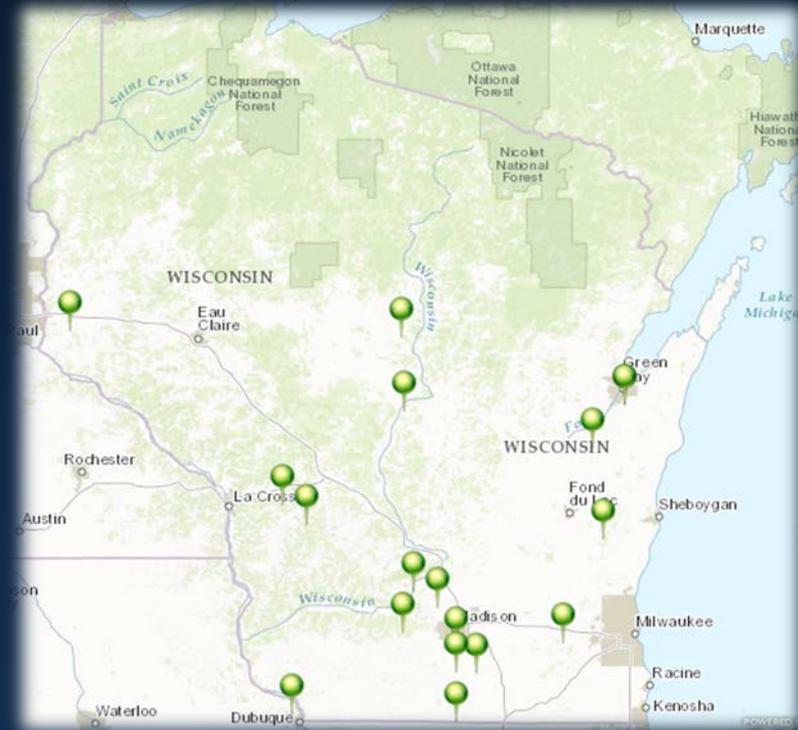
- TBELs in place since 1993
 - Typically set equal to 1 mg/L
- WQS promulgated in 2010
- Some implementation flexibility provided
 - Water quality trading
 - Adaptive management
 - Extended compliance schedules
- Projected WQBELs
 - 80% of permittees to have more restrictive limits
 - 60% to receive limits equal to criteria



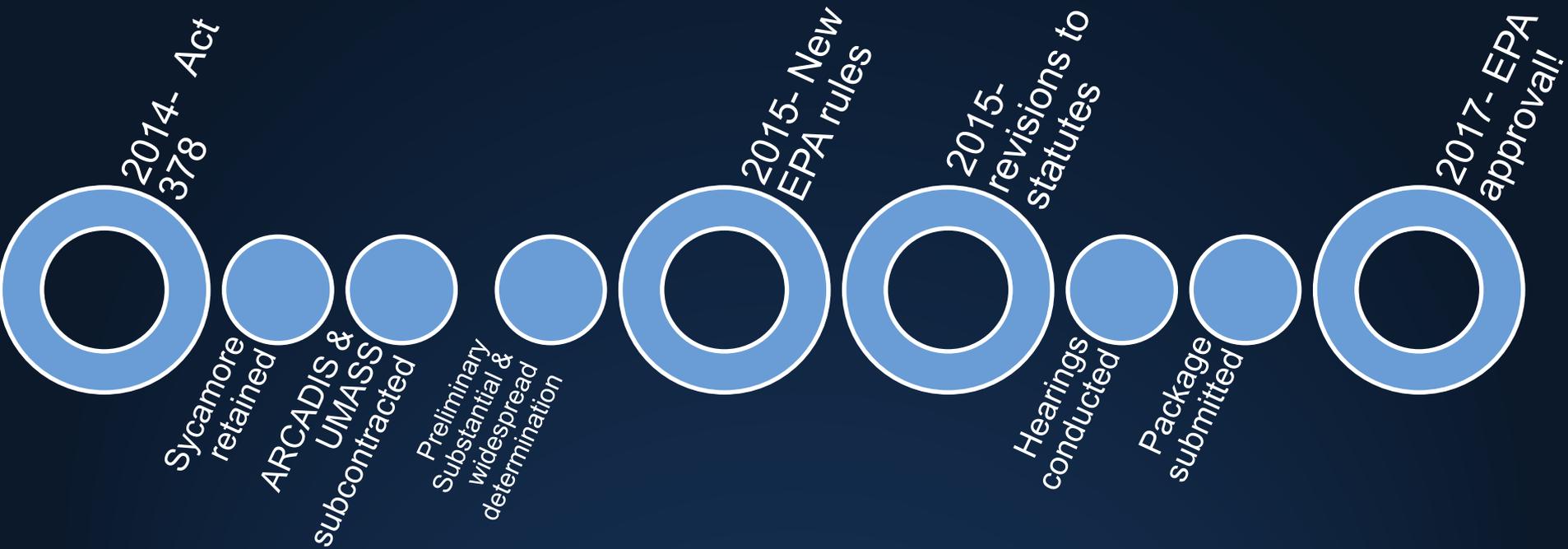
Why a MDV?

- Technology expensive
- Hard to consistently squeeze last few pounds of TP out of effluent
- Non-point source is the dominating contributor in most watersheds
- Trading and adaptive management not viable everywhere

Trading/AM Projects To-Date



Timeline of the MDV



Data Inputs

Developed

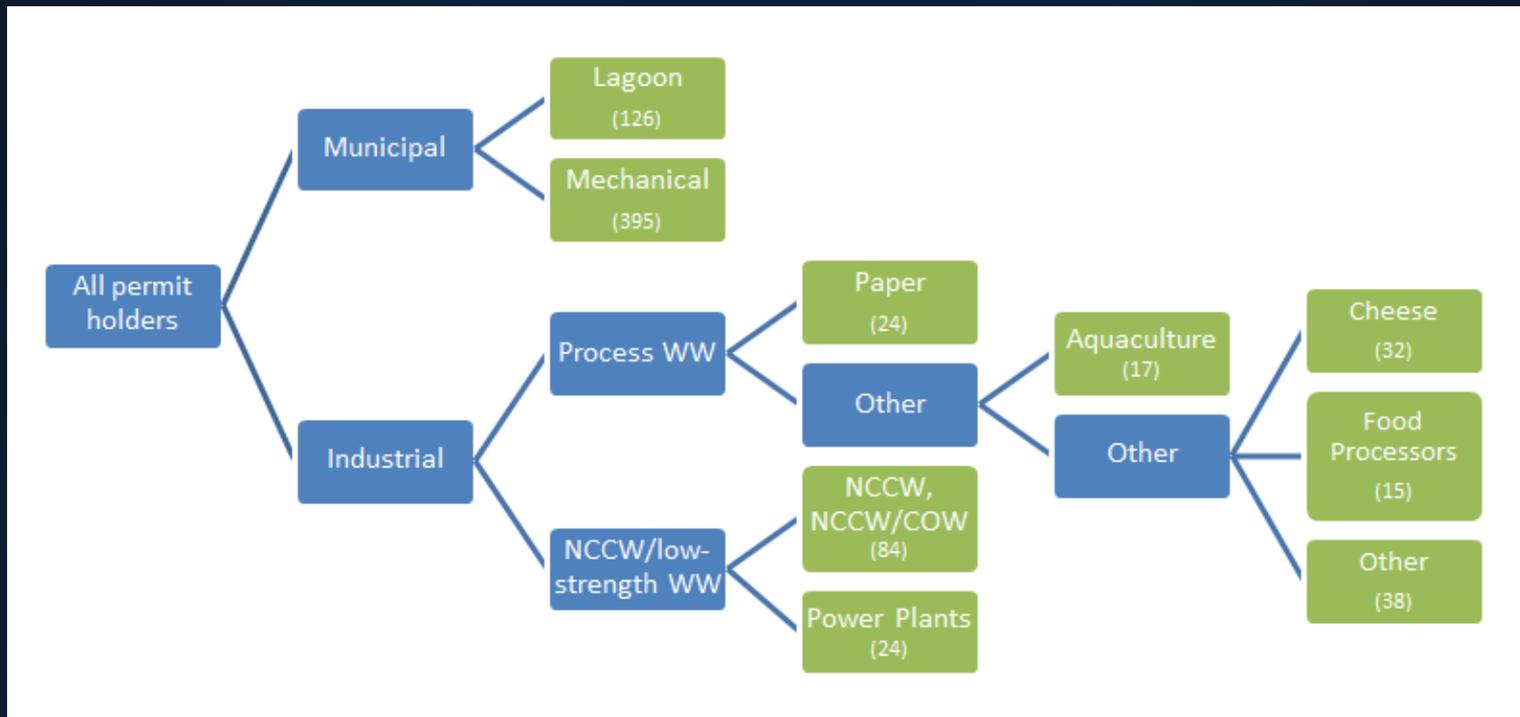
1. TP limits and need/facility
2. Cost projections/facility
 - Cost curve method
3. Projected impacts on MHI & impacts of costs on wages
4. Impacts of costs on state economy
 - REMI model

Available

1. County economic indicators
 - Worked with experts to determine which are appropriate
2. Current MHI
3. Some guidance/other studies

Defining Categories

- At least 10 individual WPDES permit holders (n=750)
- Important social and/or economic value to the state of Wisconsin
- Similar technical and economic characteristics



Substantial Impacts Test

- What are the costs in each category
- Define “major” costs for each category
- Prescribe appropriate primary and secondary screens

Potentially Eligible Categories

- Municipal WWTFs and Lagoons
- Aquaculture
- Cheese
- Food processors
- Paper
- NCCW, NCCW/COW
- Other Industrial Dischargers

Ineligible

- Power

Substantial Test Matrix

Category of Discharge	Primary Screener	Secondary Score
Municipal	MHI>2%	Secondary score must be 2 or higher
Municipal	1%>MHI>2%	Secondary score must be 3 or higher
Industrial	Must be in the top 75% of dischargers incurring costs within that category	<ul style="list-style-type: none">• If both are met, a secondary score of at least 2 is needed to qualify• If only one met, a secondary score of at least 3 is needed to qualify
	Must be located in a county that is within the top 75% of counties incurring costs for that category	

Widespread Test

Total Cost= \$6 Billion

Economic Impacts	2017	2025
Total Employment (# of Jobs)	-1,548	-4,442
Gross State Product (Millions of Fixed 2014 Dollars)	-\$169.4	-\$604.2
Total Wages (Millions of Fixed 2014 Dollars)	-\$65.7	-\$234.8
Population (Individuals)	-1,954	-10,711



"Bonus" Factor

80% of PS discharge to NPS dominated watersheds

\$6 billion spent ≠ WQS met

NR 151: Wisconsin agriculture performance standards

- If cost share is provided, farmers must comply with standards
- Once in compliance, farmers must stay in compliance

There is a better way to do this!

Benefits of the MDV

- Streamlined administrative process
- Clear implementation requirements
 - Aggregated financial resources for NPS projects
- Provides time to mature working relationships



Overview of HAC/Permit Conditions

Point Source

- Comply with interim limits
 - P99 or 0.8 mg/L
 - Cannot exceed 1.0 mg/L
- Optimize
- Reporting
 - Effluent data
 - Cost verification form

Watershed

- County payment option
 - Annual payments of \$50/lb + inflation
 - \$640,000 /year cap
- Direct offset
- Third-party offset

Calculating Annual Offset

1. Determine annual TP loading
 - Facility A discharges 800 lbs in 2019
2. Subtract the target value
 - (0.2 mg/L or TMDL target)
 - $800 \text{ lbs/yr} - 200 \text{ lbs/yr} = 600 \text{ lbs/yr}$
3. Multiple by \$50 lb (+inflation)
 - $600 \text{ lbs/yr} * 51.10 = \$30,700 \text{ in 2020}$

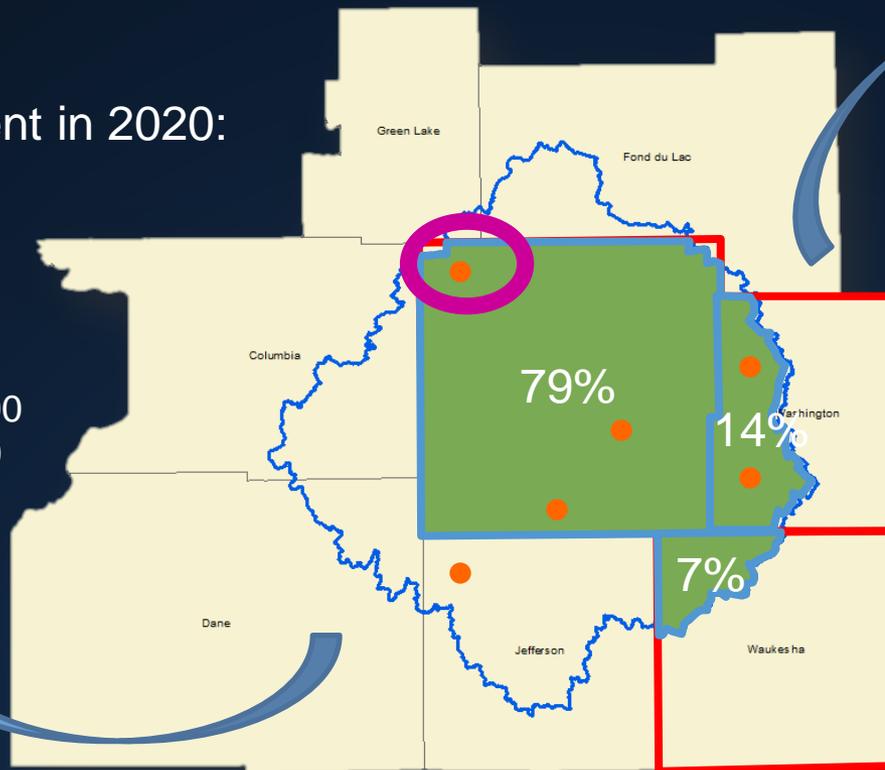
Funding Distribution

Hypothetical Example

Facility A payment in 2020:
\$30,700

Total dollars available in
2020: \$1.2 M

- Dodge= \$948,000
- Washington= \$168,000
- Waukesha= \$84,000

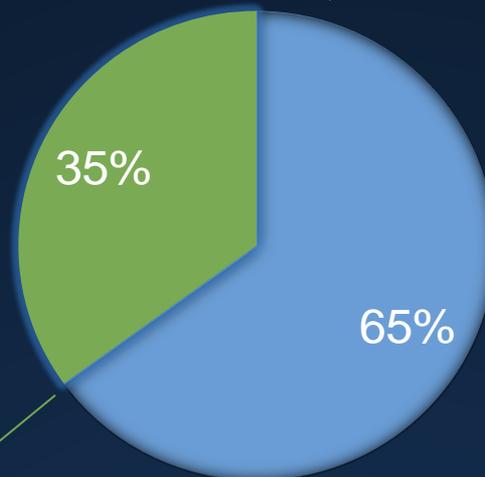


- Dodge= \$24,250
- Washington= \$4,300
- Waukesha= \$2,150

Appropriate Funding Uses

Other

- Staffing
- Innovative projects
- Monitoring
 - Edge of field
 - In-stream
- Modeling
- Demonstrations



Nonpoint Practices

- Agricultural practices only
- Must comply with NR 151
 - May go beyond NR 151 in TMDL areas
- Can include staff costs for design, construction, and post-construction inspection

County Plan Requirements

- Need to target highest TP loadings within the county
 - HUC-12 scale recommended
- Include the management practices to be targeted/addressed
 - Needs to be consistent with Land and Water Resource Management (LWRM) plans
- Submit a projected financial budget

Annual Report Requirements

- Practice information
 - Location
 - Description including performance standards addressed
 - Photo and maps
 - Pollutant(s) reduced
- Existing BMPs inspected
- Statement of overall progress towards plan goals
- Monitoring completed
- Financial breakdown (*county payment option only*)

Self Directed/Third Party Options

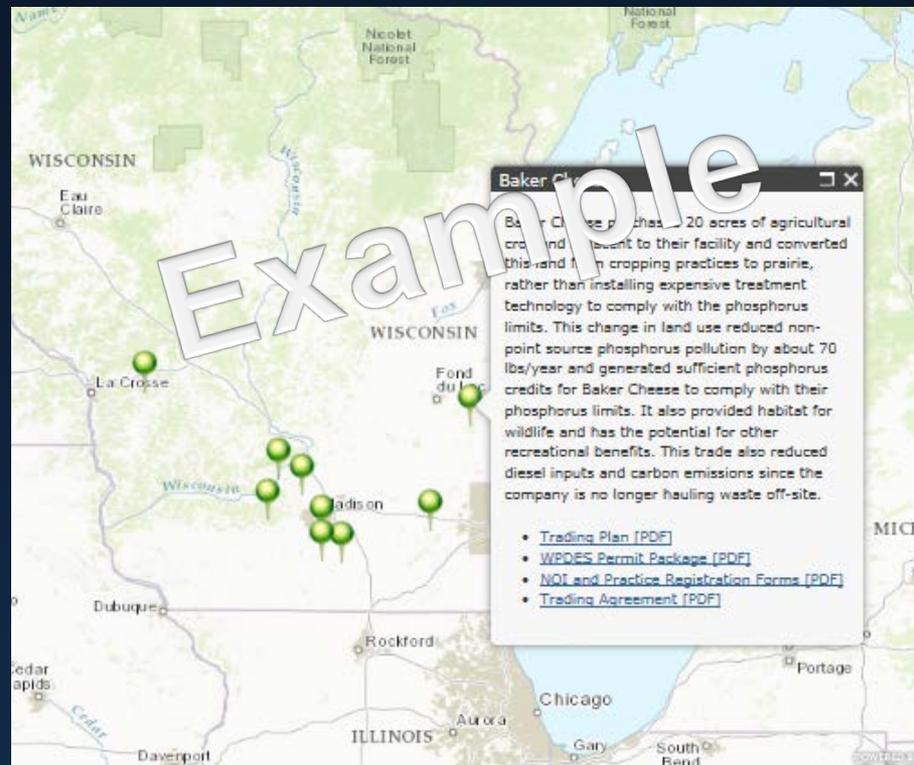
Annual Offset = Previous Annual Phosphorus Loading – Target Annual Load

- ▶ Any practice/project that produces a quantifiable reduction of phosphorus works
- ▶ Plan should specify how reductions will be met over permit term
- ▶ Watershed plan checklist helps ensure plans are suitable
- ▶ WPDES permit include annual reporting requirement



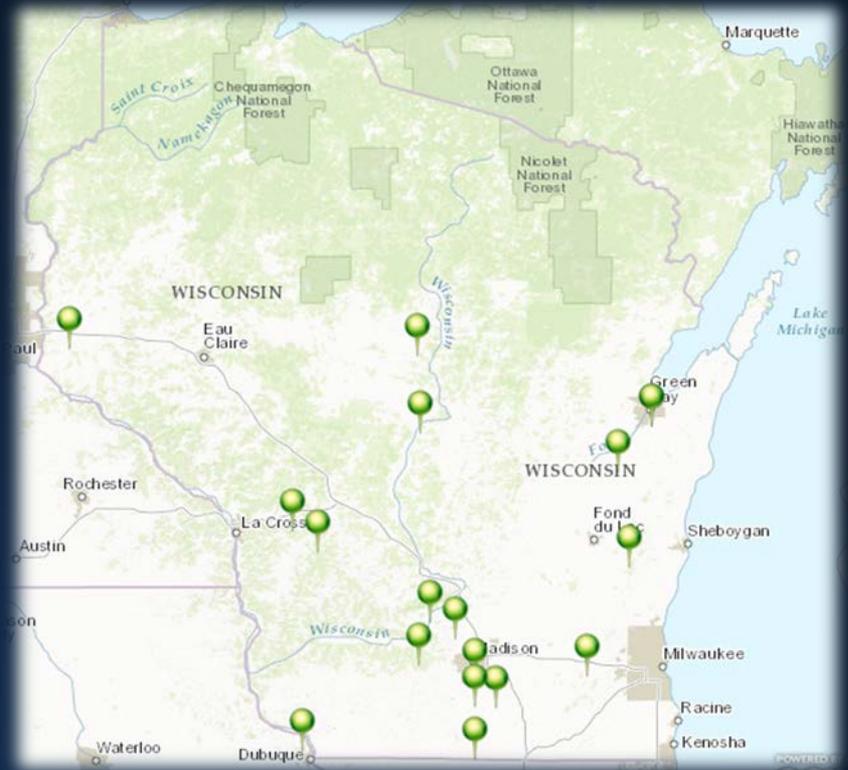
Other Resources in Development

➤ Project Map



Expectations of Point Sources

- Submit site-specific applications
- Evaluate all options
 - Treatment
 - Adaptive Management
 - Trading
 - MDV



County Expectations

- Already doing NR 151!
- New components:
 - Annual plans and reports will be posted online
 - DNR staff will review for consistency with program



DNR Expectations

- Permit reissuance
 - Are permit conditions still appropriate?
 - Optimization updates
 - Revised interim limits
 - Watershed project
- Annual report/plan reviews
- TSR review
 - Has technology changed?
 - Has economics changed?
- Resubmit more packages...



Advice

- Demonstrate more environmental benefit
- Expect scrutiny- within and outside state
- Work closely with EPA



Questions?



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