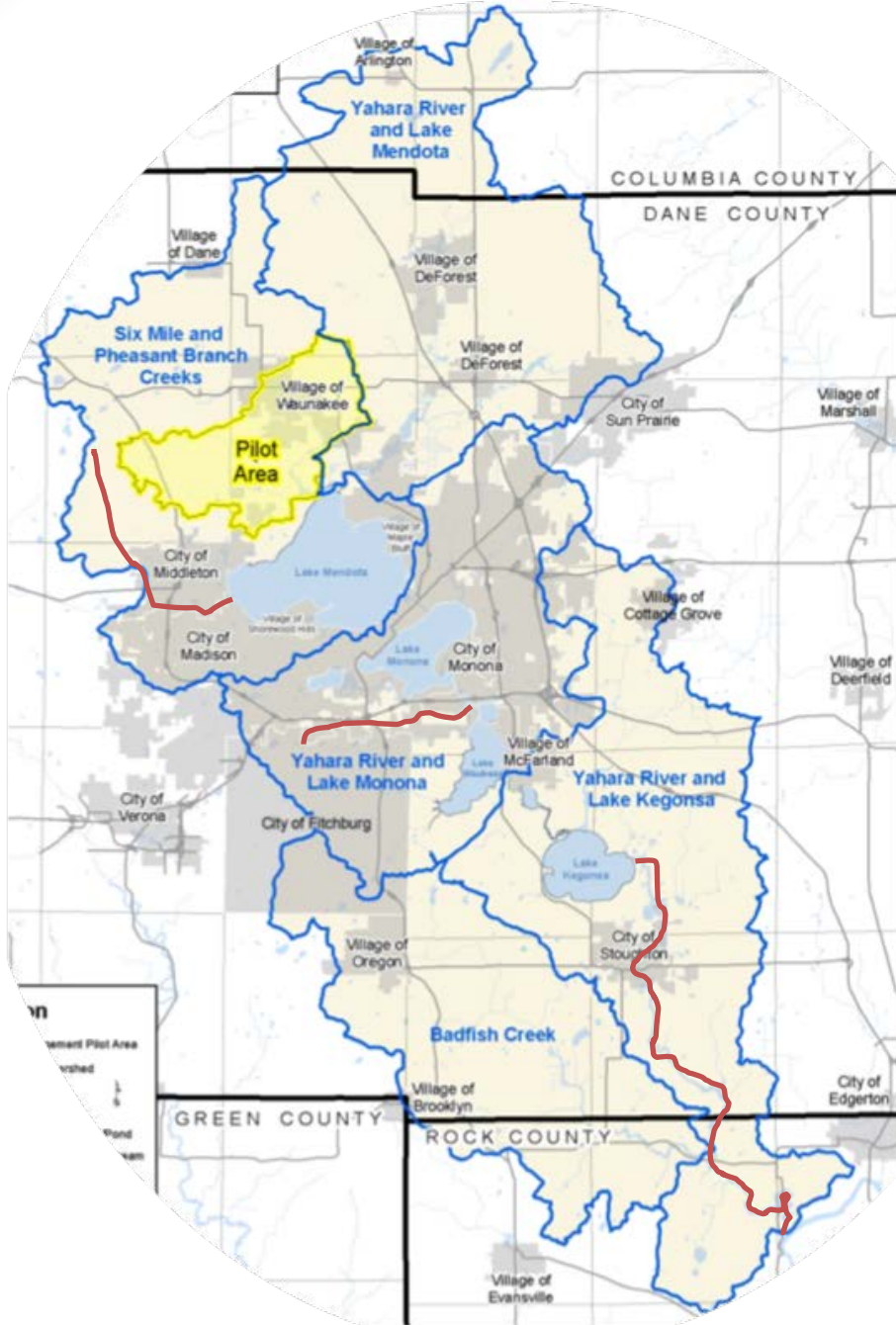
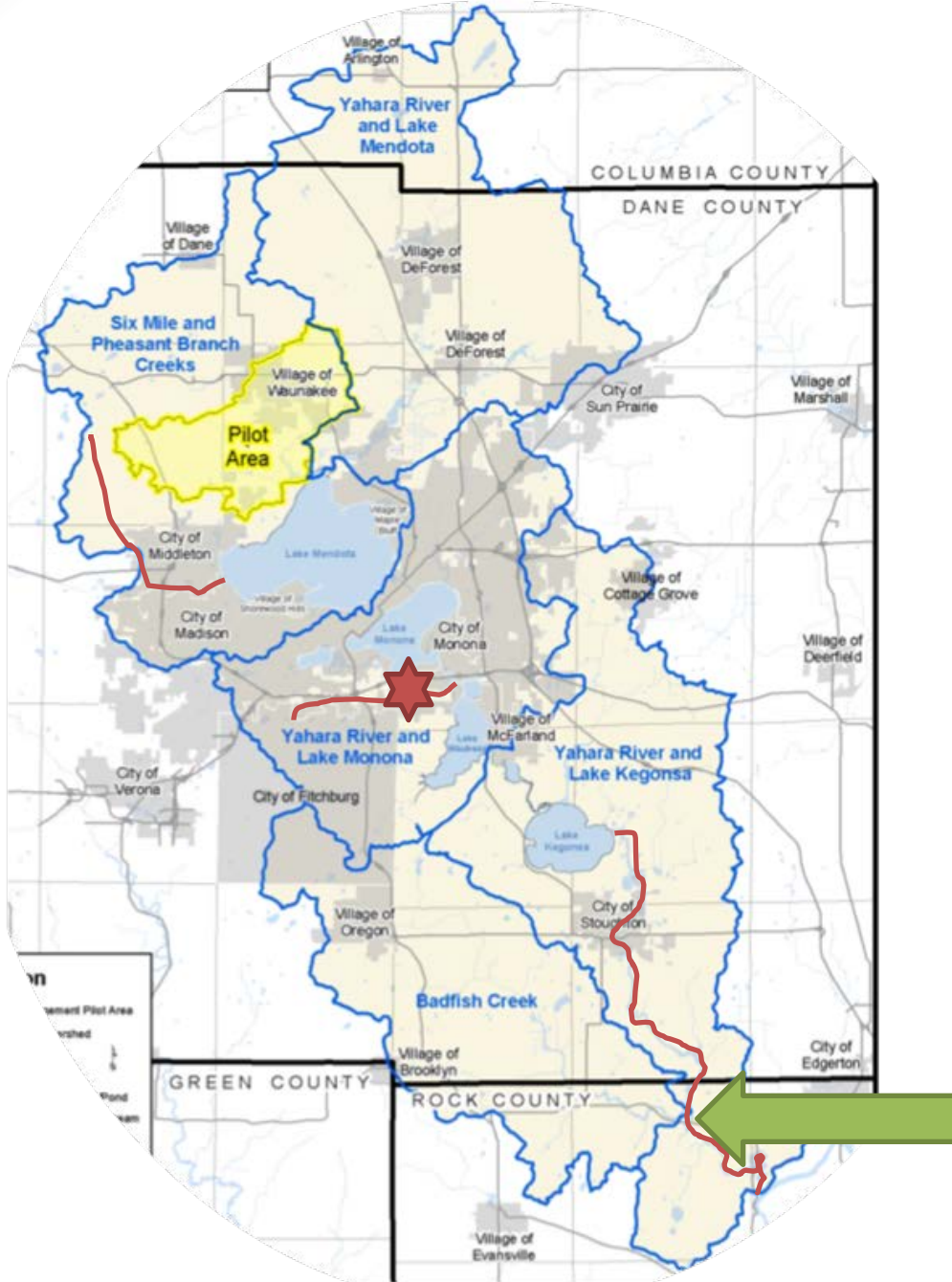


# Yahara WInS Pilot Project

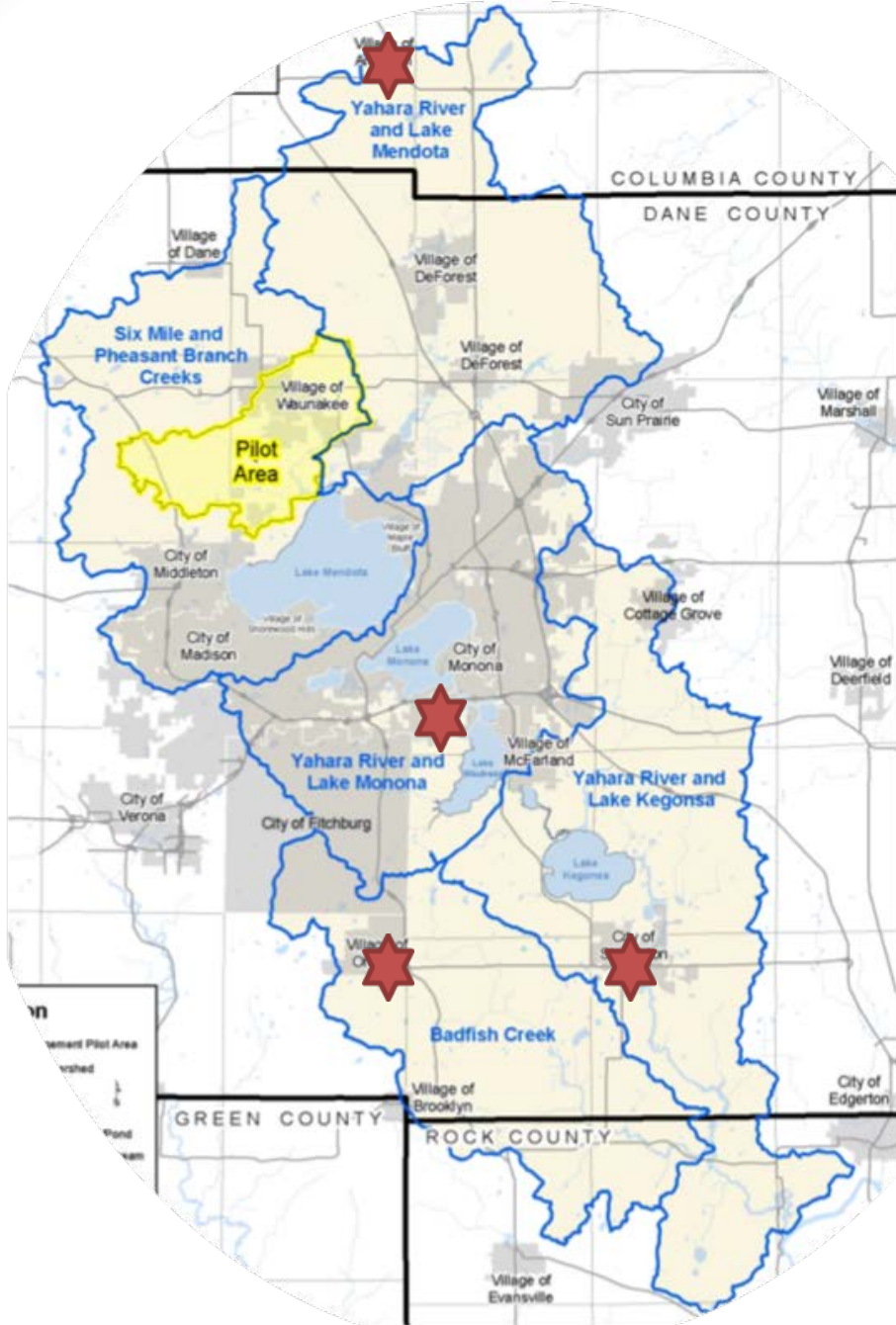




— Impaired Reach



— Impaired Reach  
★ WWTF



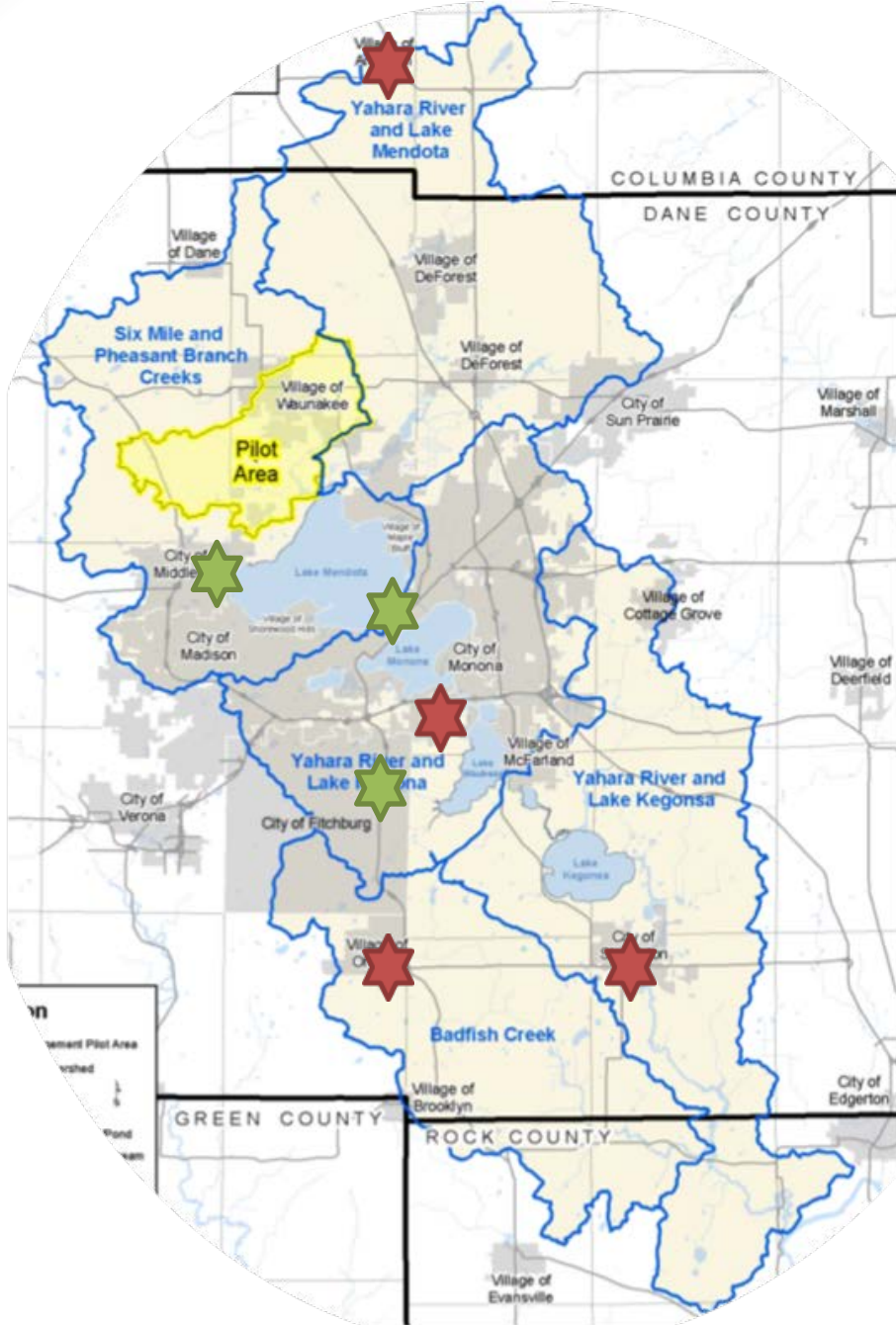
WWTF



Point Source



MS4's



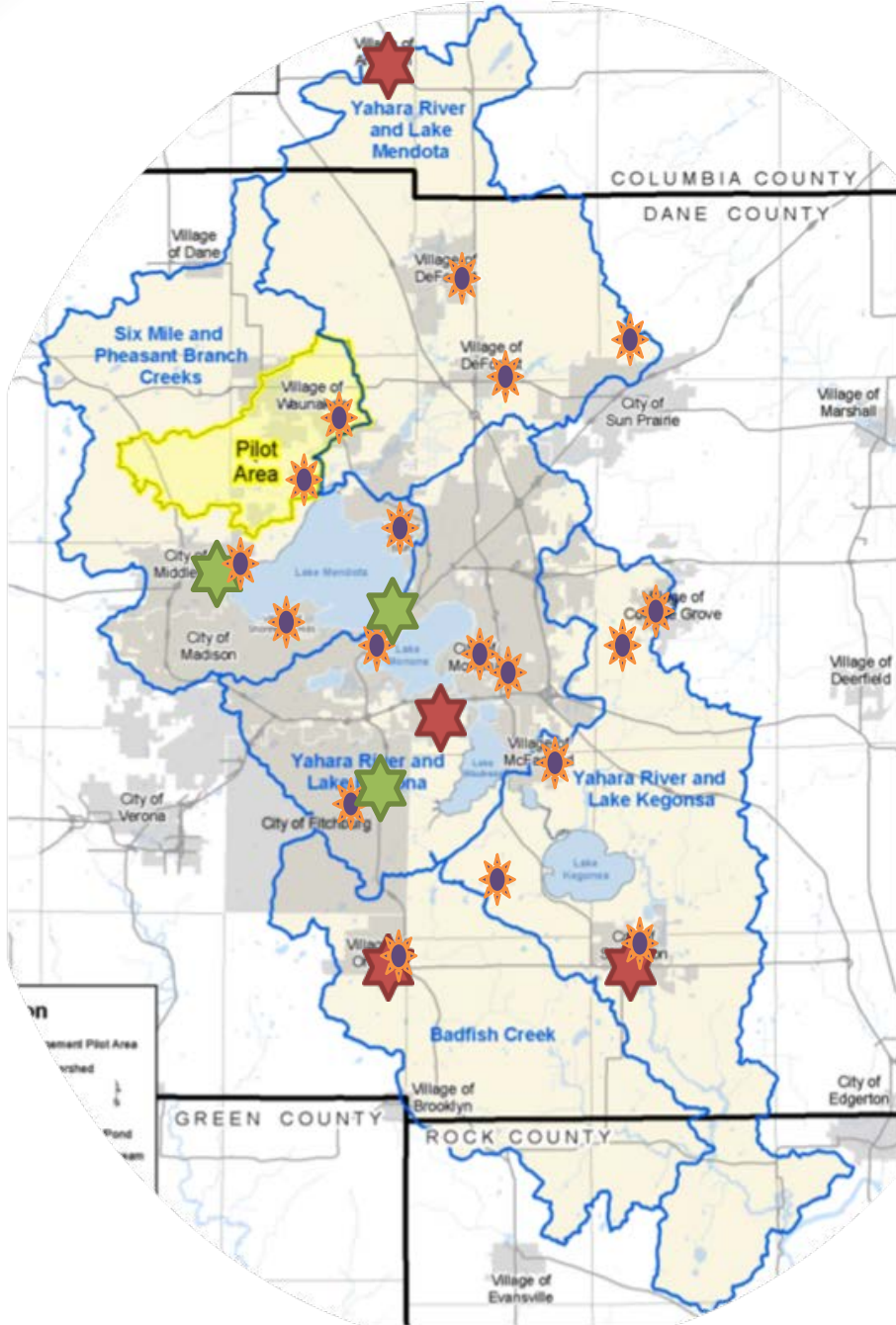
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Point Source



MS4's



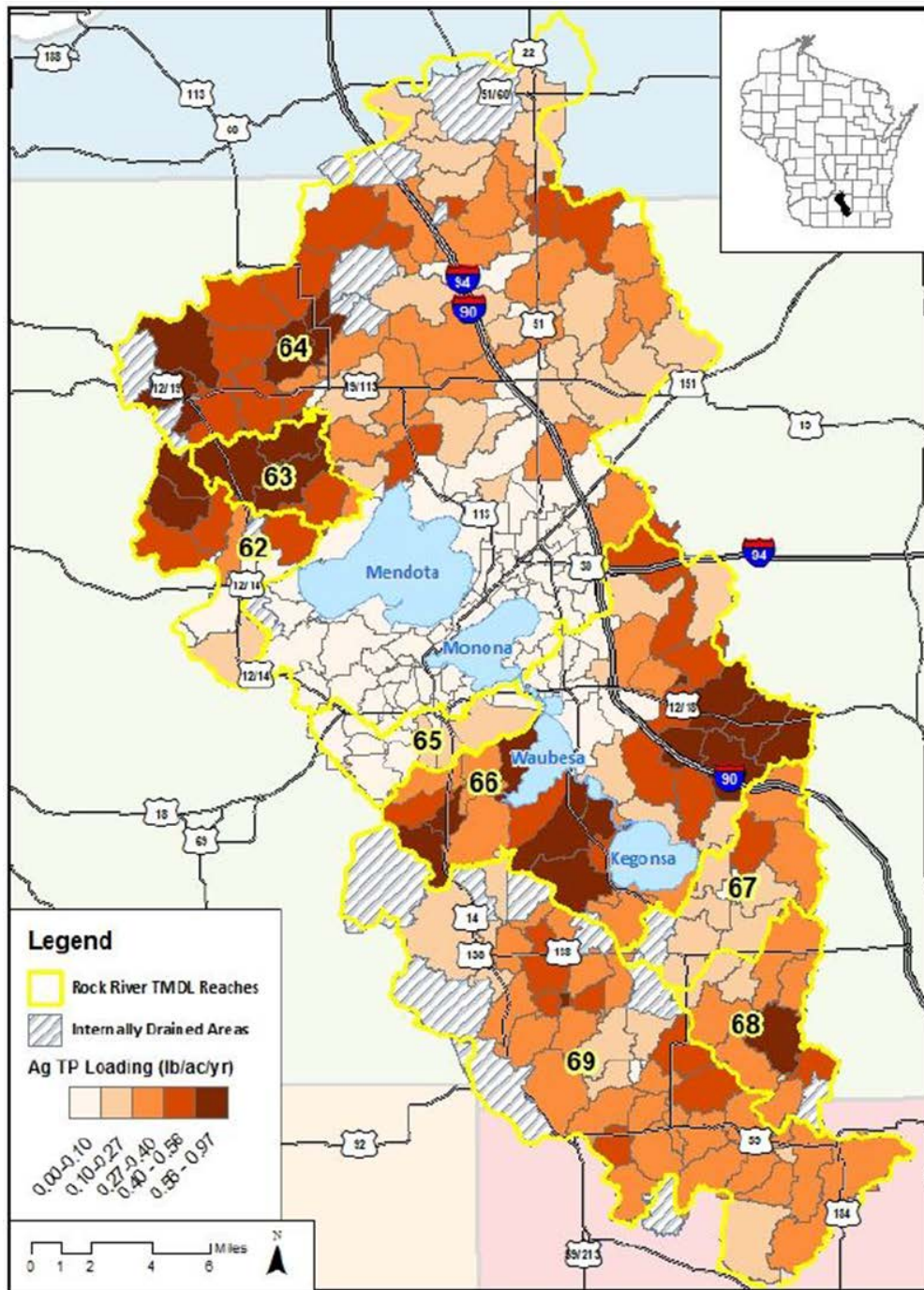
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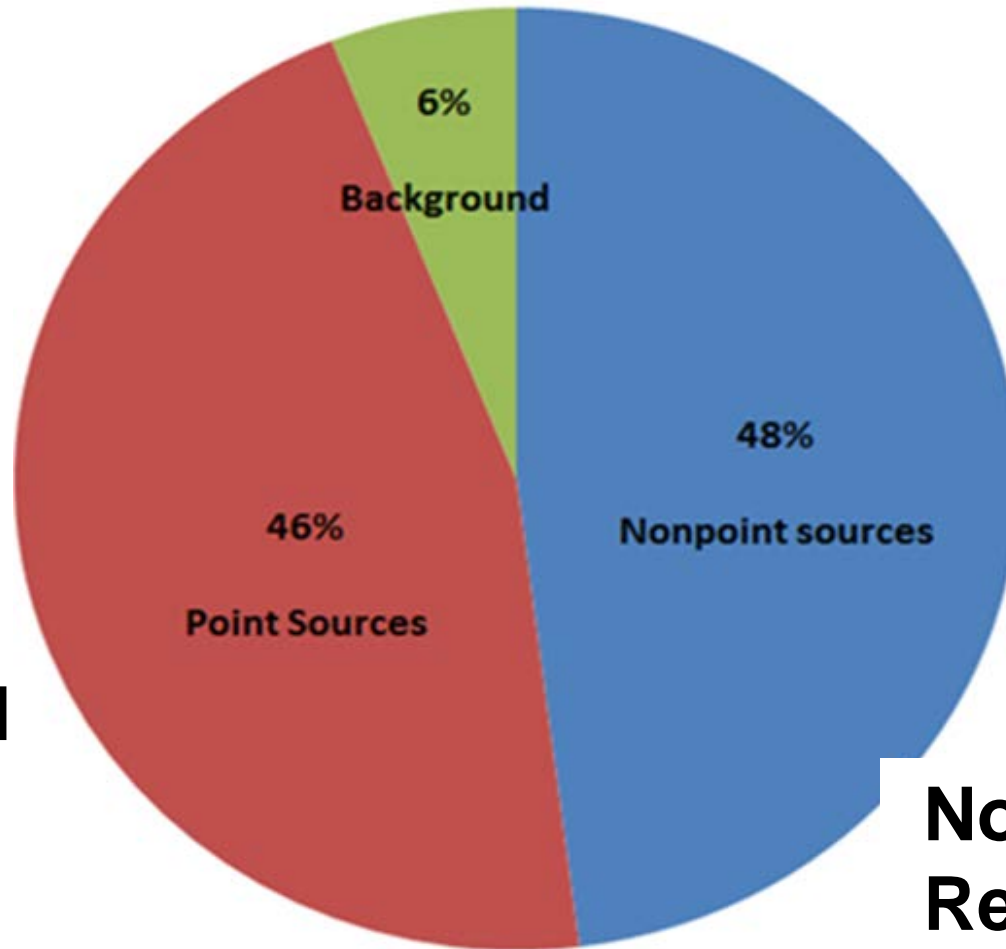
Point Source



MS4's



# Yahara Basin Reductions Needed to Meet TMDL



**Regulated  
w/ Permit**

**Not  
Regulated -  
No Permit**

# Yahara WINs Pilot - Testing AM

- **Goal:** Will AM work in the Yahara watershed?
  - Cultivate and maintain partnerships?
  - Improve water quality?
  - Prove success?
  - Fund water quality improvement?
- We continue to learn...



# Comprehensive Cooperation

## Current Participants

Towns	Villages	Cities	Other
Blooming Grove	Arlington	Fitchburg	Clean Lakes
Bristol	Cottage Grove	Madison	Alliance
Burke	DeForest	Middleton	Clean Wisconsin
Cottage Grove	Maple Bluff	Monona	MG&E
Dunn	McFarland	Stoughton	MMSD
Westport	Oregon		Sand County
Windsor	Shorewood		Foundation
Middleton	Hills		Stoughton Utilities
	Waunakee		USGS
			Yahara Pride
			Wisconsin DNR

## Interested Parties

Capital Area Regional Planning Commission

Friends of Badfish Creek

River Alliance of Wisconsin

Rock River Coalition

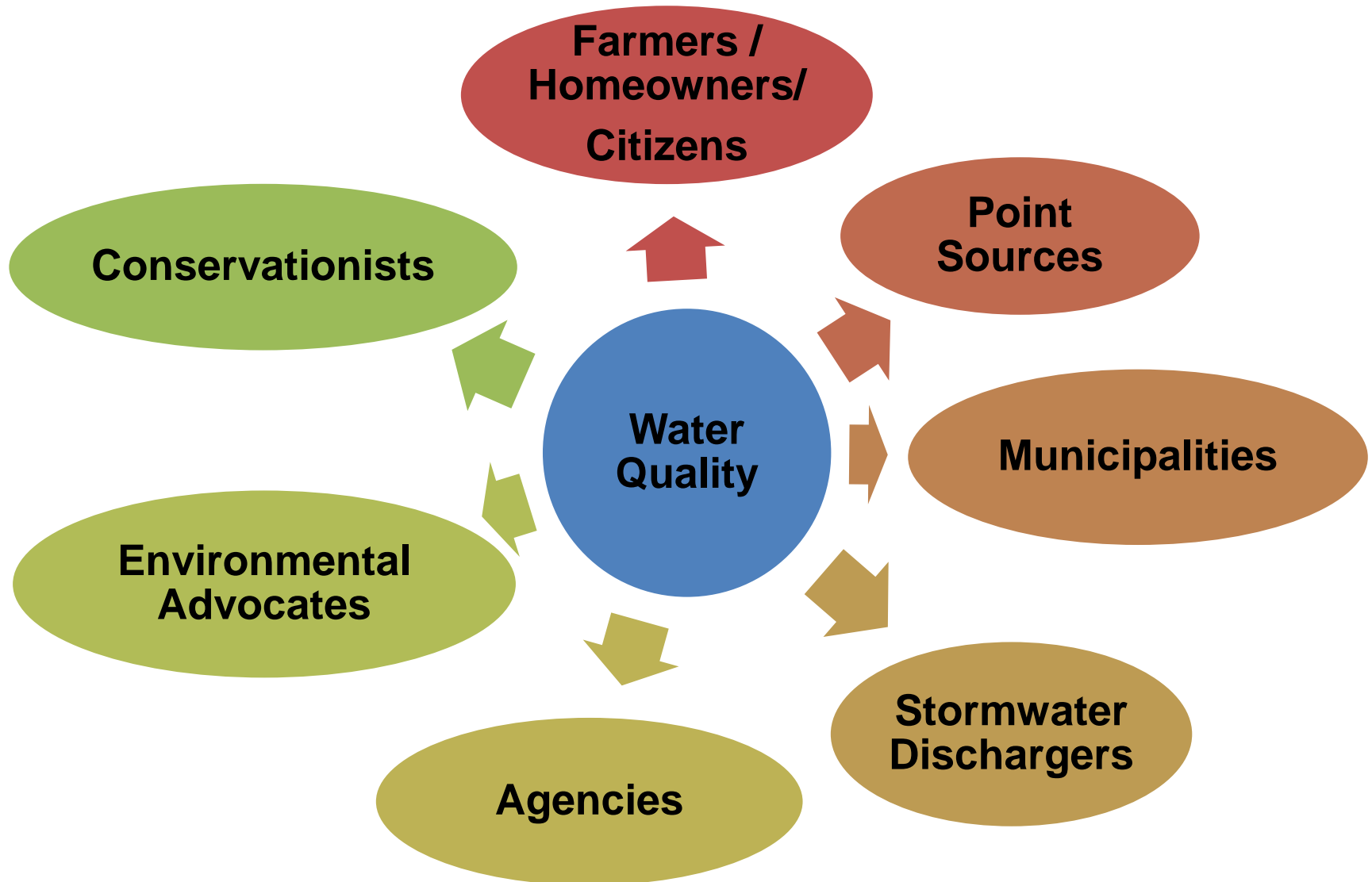
US Environmental Protection Agency

Wisconsin Department of Agriculture, Trade and Consumer Protection

Yahara Lakes Association



# Working together brings challenges



# Mutual Goal: P Reduction to Improve WQ



Agricultural



Urban Stormwater



Point Source

PI

Rot. Avg. PI,  
Day to day  
timelines,  
No permit (gen.)

%

Pre vs. Post  
% Reduction  
Long-term plans  
Permit and TMDL  
driven

#

Numeric WQC,  
5-yr permits,  
TMDL, long-  
term planning



SNAP-Plus  
Soil/nutrients  
retained on land



SLAMM,  
Modeled %  
Reduction  
TSS focus



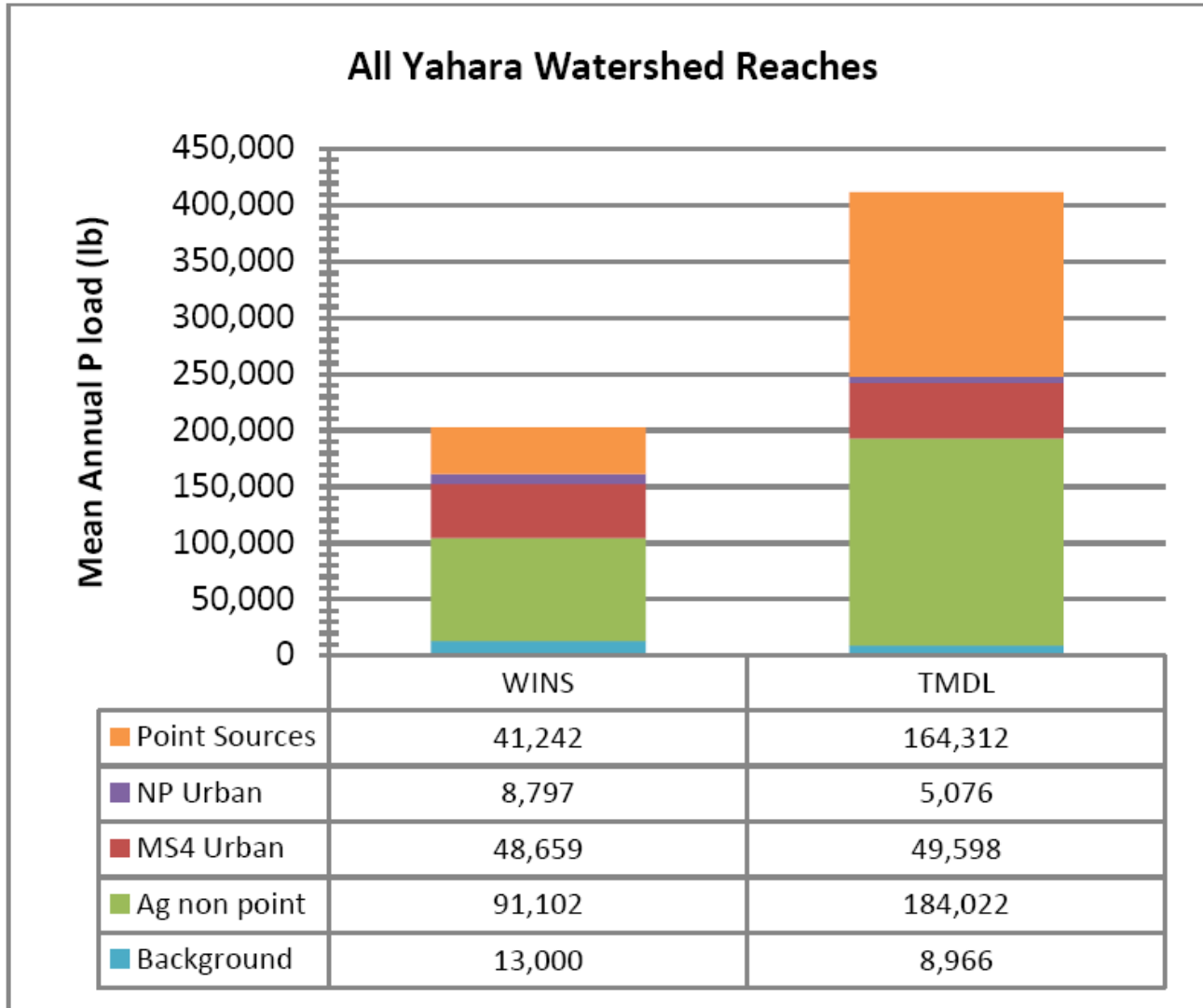
Measured  
Conc.  
P-focus

# Improve Water Quality?

- What is needed?
- Where are the opportunities?
- How do we make good decisions?
- What is the best use of our funds?

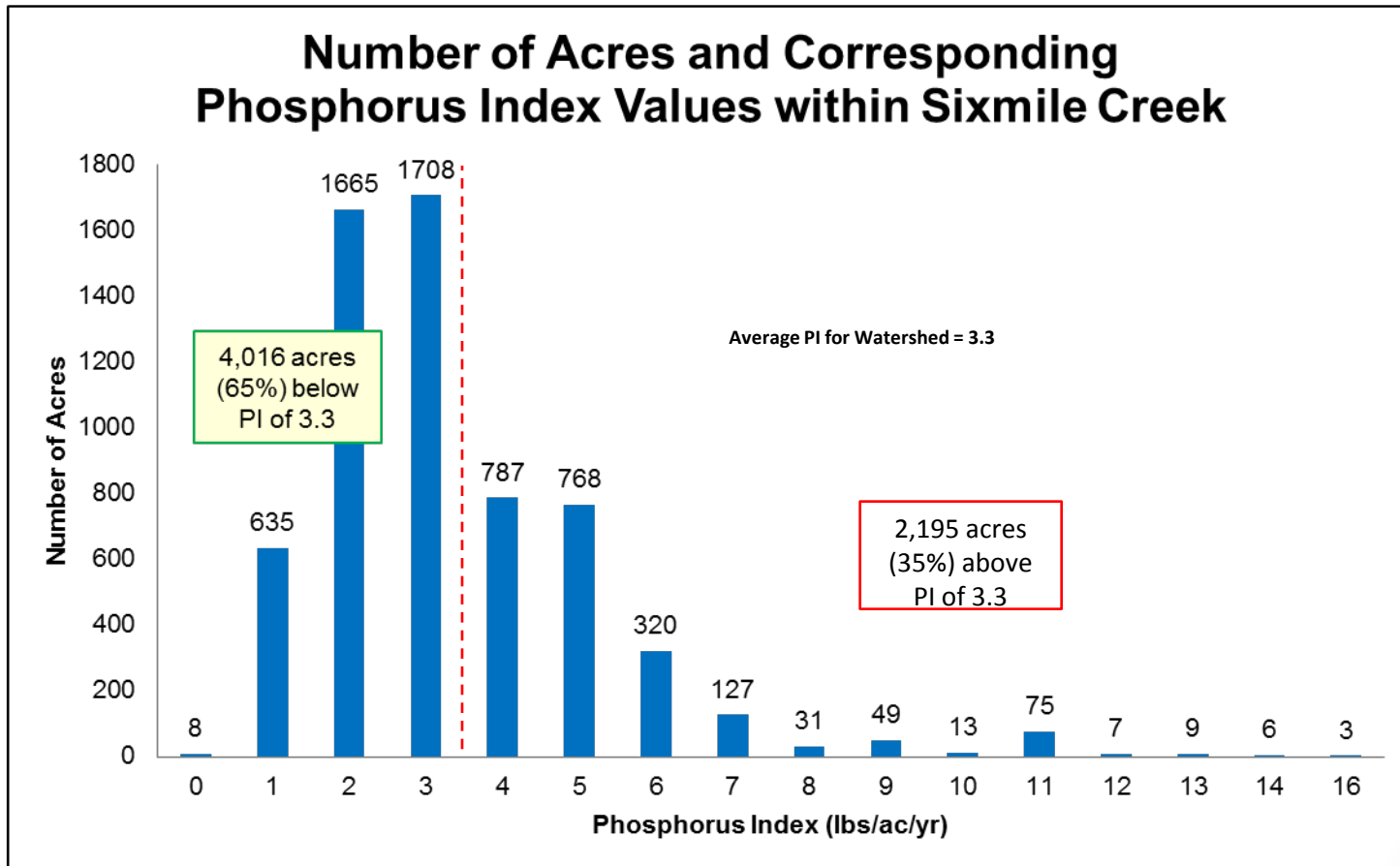


# Updated Baseline



Over 4600 lbs of phosphorus reduction already realized since 2008 in the Pilot area alone

# Opportunities for P-reduction?

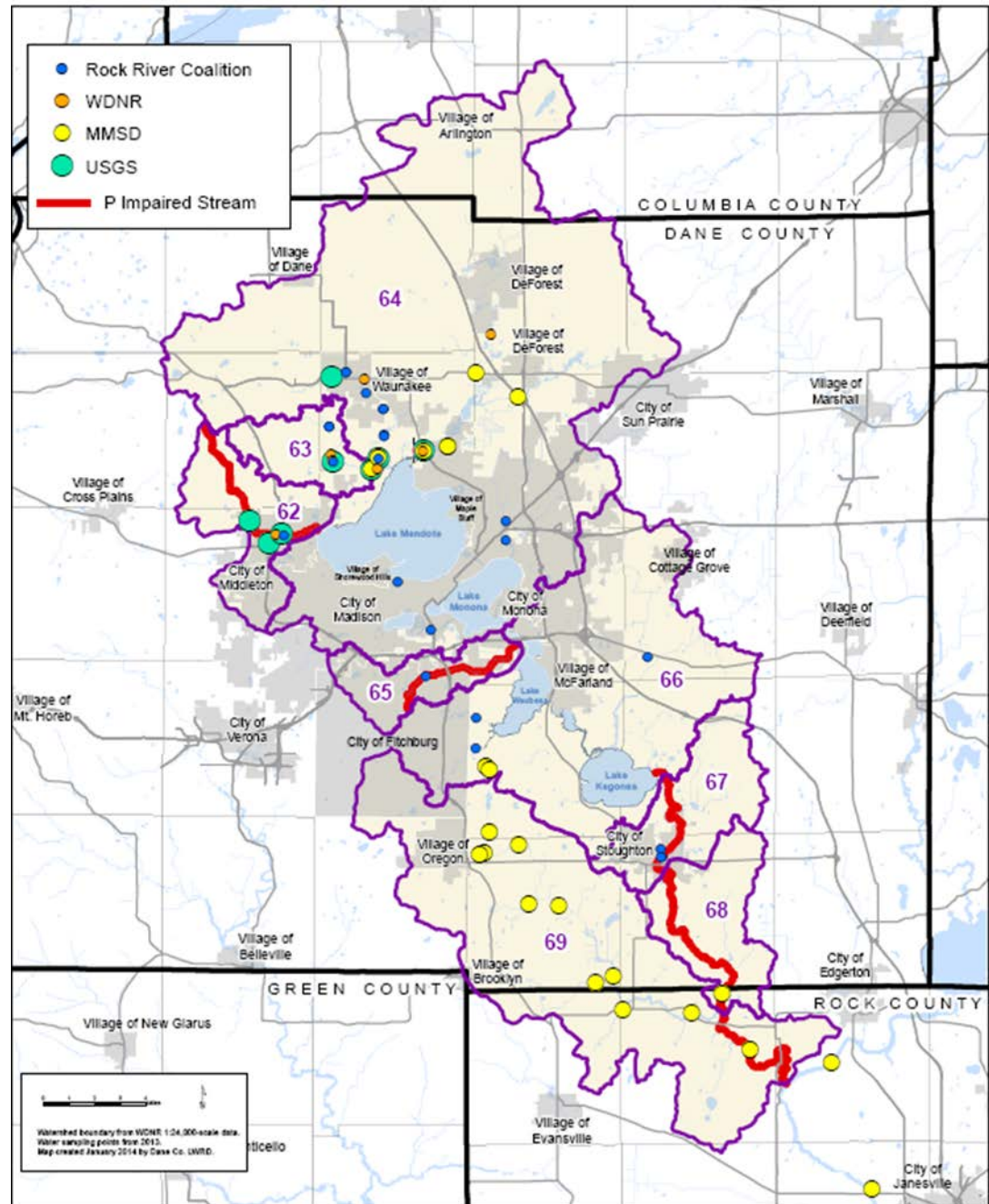


# Monitoring is critical

- USGS
- Citizen
- MMSD

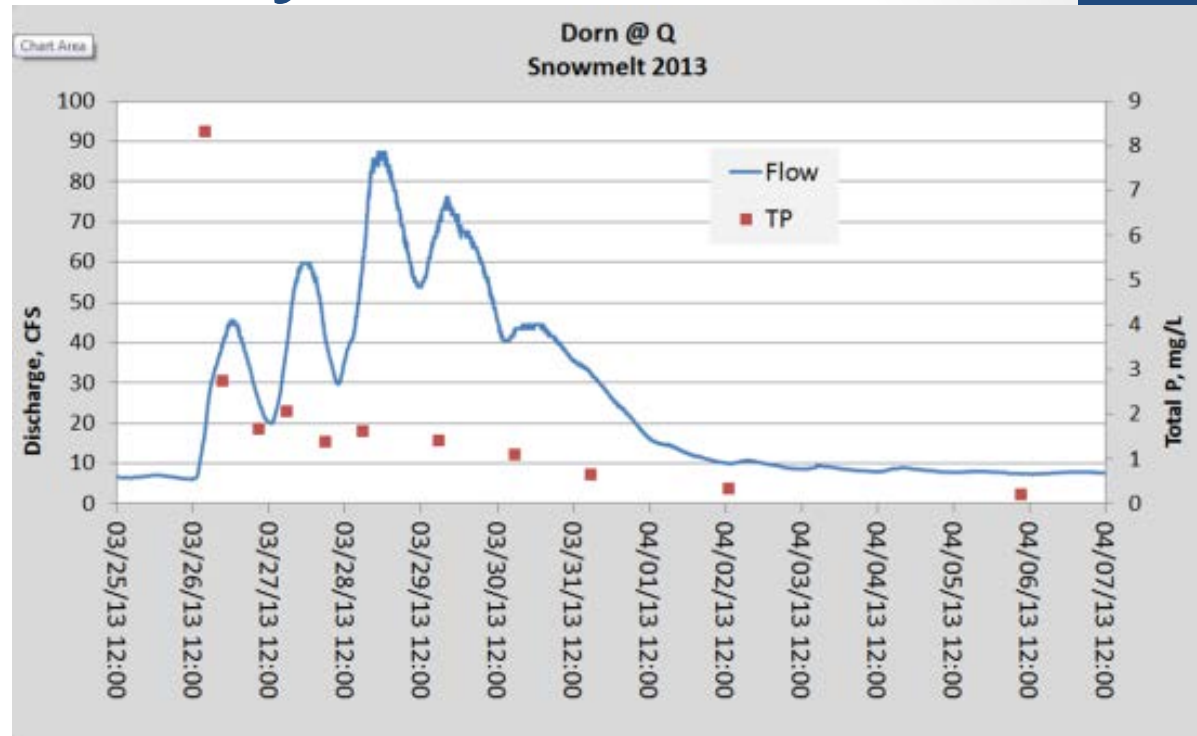
## Active Surface Water Sampling Sites with Water Chemistry\*

\*Active indicates that sites have been sampled for water chemistry at least once in the last two years



# Monitoring: Catalyst

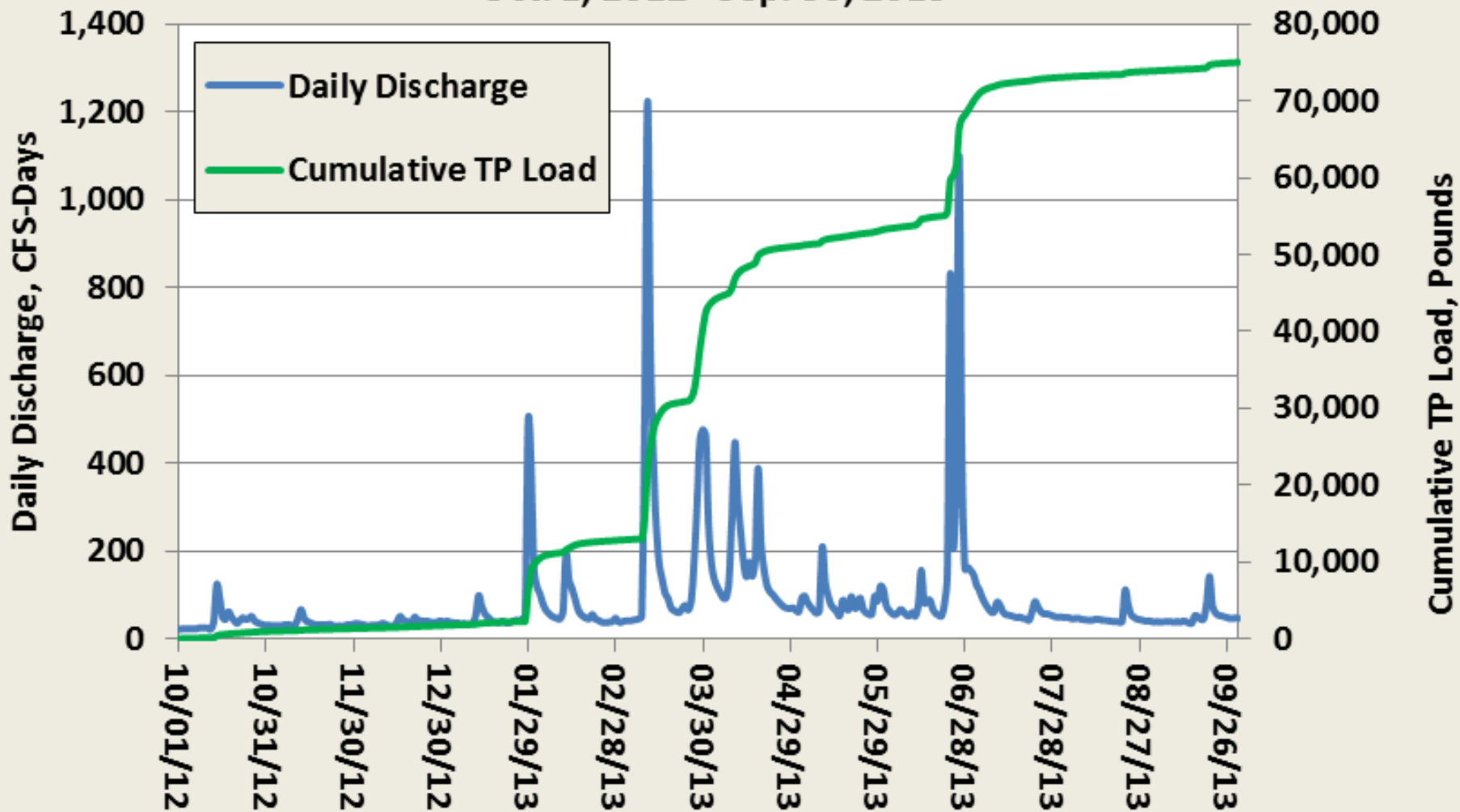
- The loads exist: 2200 lbs-P in one week
- Timely monitoring data helps decision-making and behavior change
- Long-term trends



Courtesy of USGS

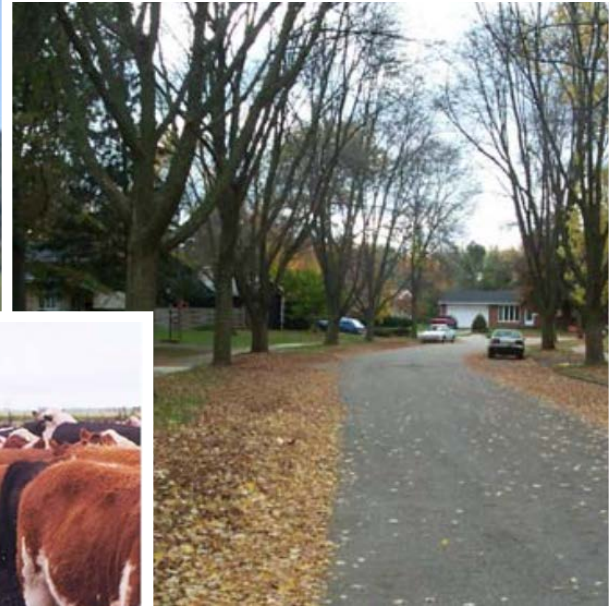


# Lake Mendota Tributary Discharge and TP Load Dorn Cr., Sixmile Cr., P. Branch Cr., Yahara R. @ Windsor Oct. 1, 2012 - Sep. 30, 2013



5<sup>th</sup> Highest Average Runoff on Record...

# Research Guides Implementation/Decisions



# Delivery Methods → Results

How do we best use of funds to improve WQ?

- Research
- Incentive payments
- Pay for performance
- Minimize risk
- Others...



# Lessons Learned

- Working together presents new challenges
- Opportunities exist to improve water quality
- Quantifying some p-contribution is challenging
- This doesn't happen overnight
  - It takes time to get practices installed
  - Even longer for impact in receiving stream
- Monitoring is critical
- Multiple methods fund improvement activities
- **Each project that moves forward will help!**





# Looking Ahead – Next Steps

- Continue pilot project through 2015
- Review project's interim success
- Refine and confirm cost model
- Continue research projects to populate models
- All partners need to review options for compliance
- Transition to full-scale




# Questions?

<http://www.madsewer.org/Programs-Initiatives/Yahara-WINs>

Madison Metropolitan Sewerage District

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Respect every drop.

Join the District and be a leader today by making little changes for you and your children's children.

[How can I help?](#)

At the District we believe in enriching life through clean water and resource recovery. We are a passionate team of experts who work to recover resources and clean wastewater for return to nature 365 days a year through our innovative engineering, conservation leadership, and recovery expertise.

News Yahara WINs Commission Public Education

MMSD comes in 2nd in Dane County Bike Challenge

Next meeting will be held on

Every

Madison Metropolitan Sewerage District

The slide features several decorative blue question mark icons scattered across the background. One is at the top left, one at the top center, one at the top right, one at the bottom left, one at the bottom center, and one at the bottom right. Each icon consists of a question mark above three small circles, all in a blue color with a slight gradient and shadow.

Kathy Lake

[Kathyl@madsewer.org](mailto:Kathyl@madsewer.org)

608-222.1201 ext. 278

