Yahara WINs Pilot Project
Impaired Reach
Yahara Basin Reductions Needed to Meet TMDL

- Regulated w/ Permit
- Not Regulated - No Permit

- 6% Background
- 46% Point Sources
- 48% Nonpoint sources
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

<table>
<thead>
<tr>
<th>Current Participants</th>
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<tr>
<td><strong>Towns</strong></td>
<td><strong>Villages</strong></td>
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<tr>
<td>Blooming</td>
<td>Arlington</td>
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<tr>
<td>Grove</td>
<td>Cottage Grove</td>
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<td>Bristol</td>
<td>DeForest</td>
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<td>Burke</td>
<td>Maple Bluff</td>
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<td>Cottage Grove</td>
<td>McFarland</td>
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<td>Dunn</td>
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<td>Westport</td>
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<td>Windsor</td>
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<th>Interested Parties</th>
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<td>Capital Area Regional Planning Commission</td>
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<td>Friends of Badfish Creek</td>
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<td>River Alliance of Wisconsin</td>
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<td>Rock River Coalition</td>
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<td>US Environmental Protection Agency</td>
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<td>Wisconsin Department of Agriculture, Trade and Consumer Protection</td>
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<td>Yahara Lakes Association</td>
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Working together brings challenges

Water Quality

- Farmers / Homeowners / Citizens
- Point Sources
- Municipalities
- Stormwater Dischargers
- Agencies
- Environmental Advocates
- Conservationists
Mutual Goal: P Reduction to Improve WQ

- **Agricultural**
  - Rot. Avg. PI,
  - Day to day timelines,
  - No permit (gen.)
  - SNAP-Plus
  - Soil/nutrients retained on land

- **Urban Stormwater**
  - Pre vs. Post
  - % Reduction
  - Long-term plans
  - Permit and TMDL driven
  - SLAMM,
  - Modeled % Reduction
  - TSS focus

- **Point Source**
  - Numeric WQC, 5-yr permits, TMDL, long-term planning
  - 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?
Over 4600 lbs of phosphorus reduction already realized since 2008 in the Pilot area alone
Opportunities for P-reduction?

Number of Acres and Corresponding Phosphorus Index Values within Sixmile Creek

- 4,016 acres (65%) below PI of 3.3
- 2,195 acres (35%) above PI of 3.3

Average PI for Watershed = 3.3
Monitoring is critical

- USGS
- Citizen
- MMSD
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

5th 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
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