

## Nutrient Reduction Case Study

### *Yahara Watershed Improvement Network (Yahara WINS)* Wisconsin

As an agricultural state and a member of the Hypoxia Task Force, Wisconsin has developed a Nutrient Reduction Strategy to reduce phosphorus loads, meet more stringent water quality standards, and reduce contributions to the Gulf of Mexico hypoxic zone. The Yahara Watershed Improvement Network, known as Yahara WINS, aims to reduce excess levels of phosphorus in the Yahara Watershed through an adaptive management strategy, supported by the Wisconsin Department of Natural Resources (WDNR).

Yahara WINS is led by the Madison Metropolitan Sewerage District (MMSD), which operates pursuant to a National Pollutant Discharge Elimination System (NPDES) permit. The MMSD's NPDES permit allows them to reduce phosphorus through a collaborative approach, working with landowners throughout the watershed, to meet watershed-scale water quality goals. A full-scale 20-year project began in 2017 to achieve MMSD's permit requirements and the Rock River Total Maximum Daily Load (TMDL) goals by 2036. If the project is successful, it will reduce approximately 96,000 pounds of phosphorus annually, while saving local residents \$13.5 million per year. Practices implemented by farmers and other partners within the watershed include:

- Structural Practices: barnyards, diversions, streambank stabilization, water retention structures, composting facilities, harvestable buffers.
- Yearly practices: cover crops, nutrient management planning, tillage improvements, manure management.
- Legacy sediment removal.
- Leadership by a variety of partners including the farmer-led group, Yahara Pride Farms.

#### Additional Information

##### **Yahara WINS Annual Report:**

<https://www.madsewer.org/Portals/0/ProgramInitiatives/YaharaWINS/Resources/Documents/YaharaWINS%202018%20Annual%20Report%207-11-19%20interactivev2.pdf>

##### **Yahara Pride Farms 2018 Phosphorus Reduction Report:**

<https://www.madsewer.org/Portals/0/ProgramInitiatives/1%202018%20P%20reduction%20report%20final.pdf>

##### **Dane County Continuous Cover Program:**

<https://lcd-lwr.dane.countyofdane.com/Continuous-Cover-Program>

Yahara WINS facilitates partnerships, conducts outreach, and pools resources to fund phosphorus-reducing practices in the watershed. Funding comes from contributions by the participants in intergovernmental agreements, grants, non-profits and foundations, federal, state, county and municipal governments, and support from individuals in the watershed who share a commitment and invest in phosphorus reduction.

In 2018, Yahara WINS partners prevented approximately 47,223 pounds of phosphorus from reaching surface waters and earned the U.S. Water Prize for cross-sector partnerships from the U.S. Water Alliance.