Minnesota WWTF Transition Update

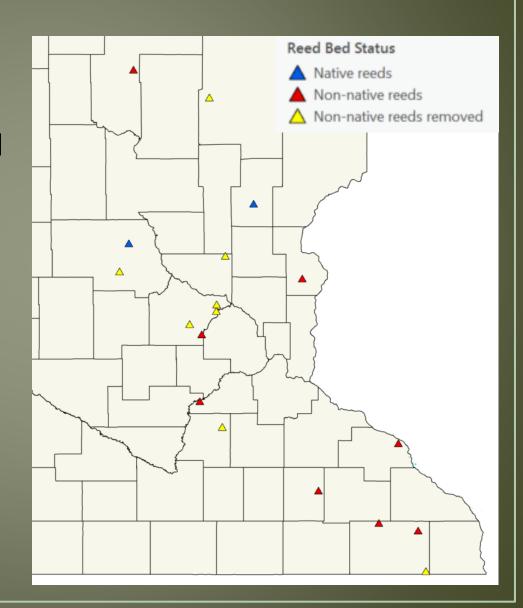
November 15, 2022

Julia Bohnen, University of Minnesota Daniel Larkin, University of Minnesota

Status of WWTF Transition

- 2 Native Phragmites
- 8 Invasive Phragmites
- 8 Mostly/Fully eradicated

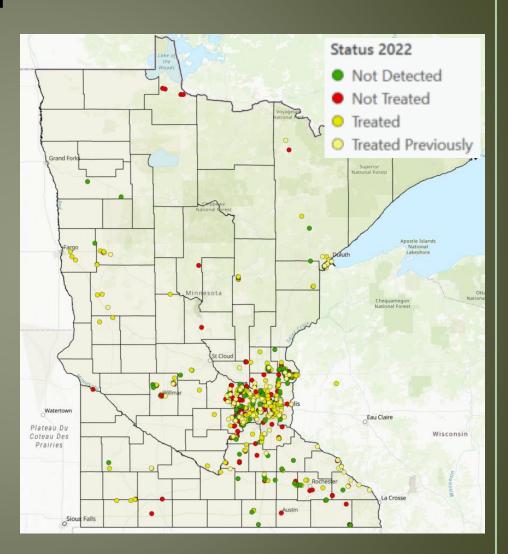
- Operate reed beds as drying beds
- Install screw press technology
- Transition to native Phragmites
- Use invasive Phragmites until alternative species ID'd



Statewide Distribution

1900 verified populations

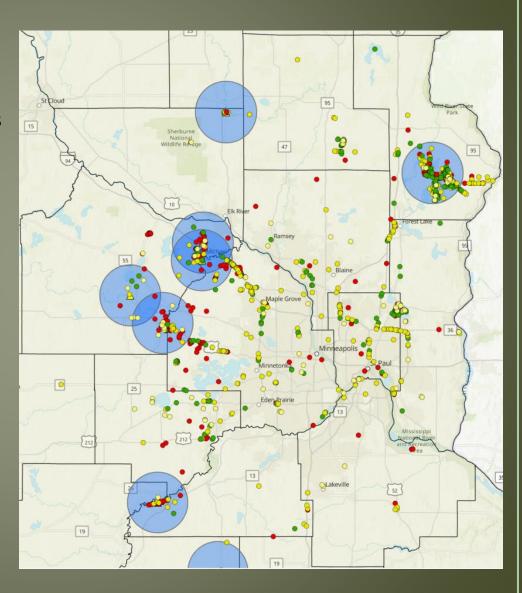
- 49 of 87 counties
- Percent of populations:
 - Metropolitan 75%
 - Outstate 25%



Metro Area Distribution

- 11- County Metropolitan Area
- = 7 Wastewater Treatment Facilities





Develop Haul Out Protocols

- Transition when beds full
- *Apply herbicide to reeds
- Haul out biosolids w/ rhizomes
- Haul out & replace or screen sand
- Land apply or landfill









Reed Bed as a Growing Environment

- High Moisture
- High Nutrient
- Volatiles
- Sedimentation
- pH
- FOG
- Commercial/Industrial
 vs. Residential



Develop Planting Protocols

Establish native reeds from

- Rhizomes
- Stem cuttings
- Root stocks
- Plugs



Chetek WI - New Reed Beds

- May not use invasive reeds
- Contract with a grower to produce native plugs
- Online spring 2024

What can be learned in WI to move MN forward



2023 Treatment Status*

Year 3 of widespread treatment

- 1100+ (58%) Sites Visited
- 420 (22%) Not Detected
- 647 (34%) Treated

[302 Not Detected 2022]
[897 Sites Treated 2022]



* Not all partners have reported 2023 treatments yet

Questions?

Contact us:

Julia - bohne001@umn.edu

Daniel Larkin — djlarkin@umn.edu

More information at: www.mnphrag.org

MNPHRAG work funded by:

MINNESOTA AQUATIC INVASIVE SPECIES
RESEARCH CENTER in partnership with
UNIVERSITY OF MINNESOTA | EXTENSION







