

Background on Invasive Phragmites

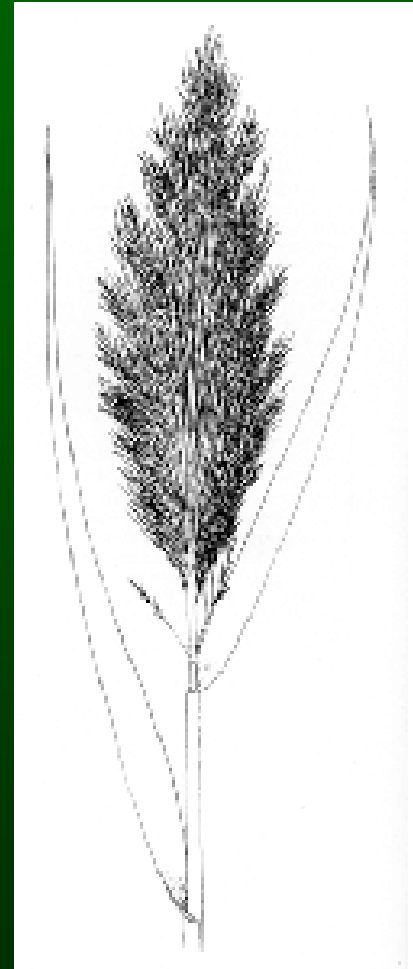


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Background on Invasive Phragmites

- Introduction
- Dispersal
- Distribution
- Native vs. non-native phragmites
- Impacts
- Challenges





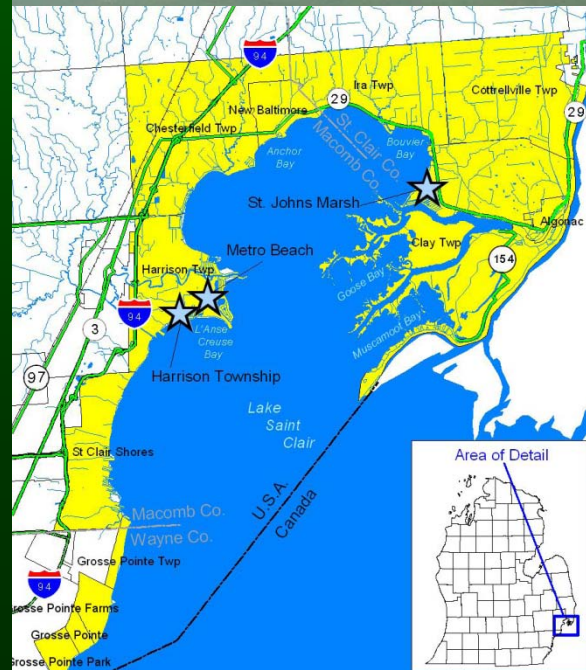
Dispersal of Phragmites

- Rhizomes
- Root fragments
- Seed
- Plantings



Distribution in Michigan

- Heavy infestations
 - Southern Michigan/Saginaw Bay/St. Clair Delta
 - Proximity to urban areas
 - Coastal wetlands/shoreline
 - River mouths and bayous
 - Exposed bottomlands
 - Disturbed wetlands



Distribution in Michigan

- Younger infestations
 - Northern Michigan
 - Inland areas
- Uninfested areas
 - Upper Peninsula
 - Portions of northern Lower Peninsula

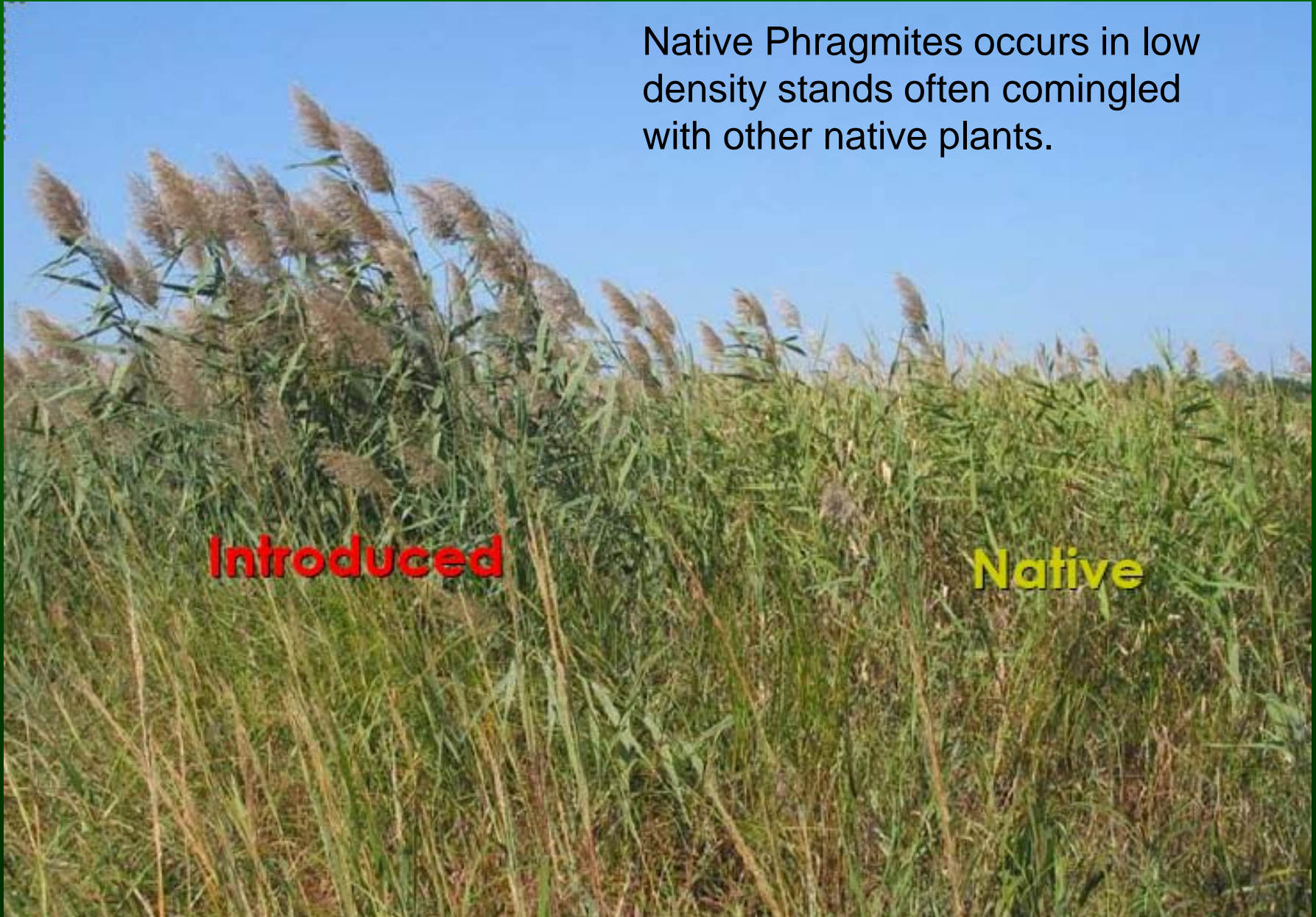


Native and non-native phragmites

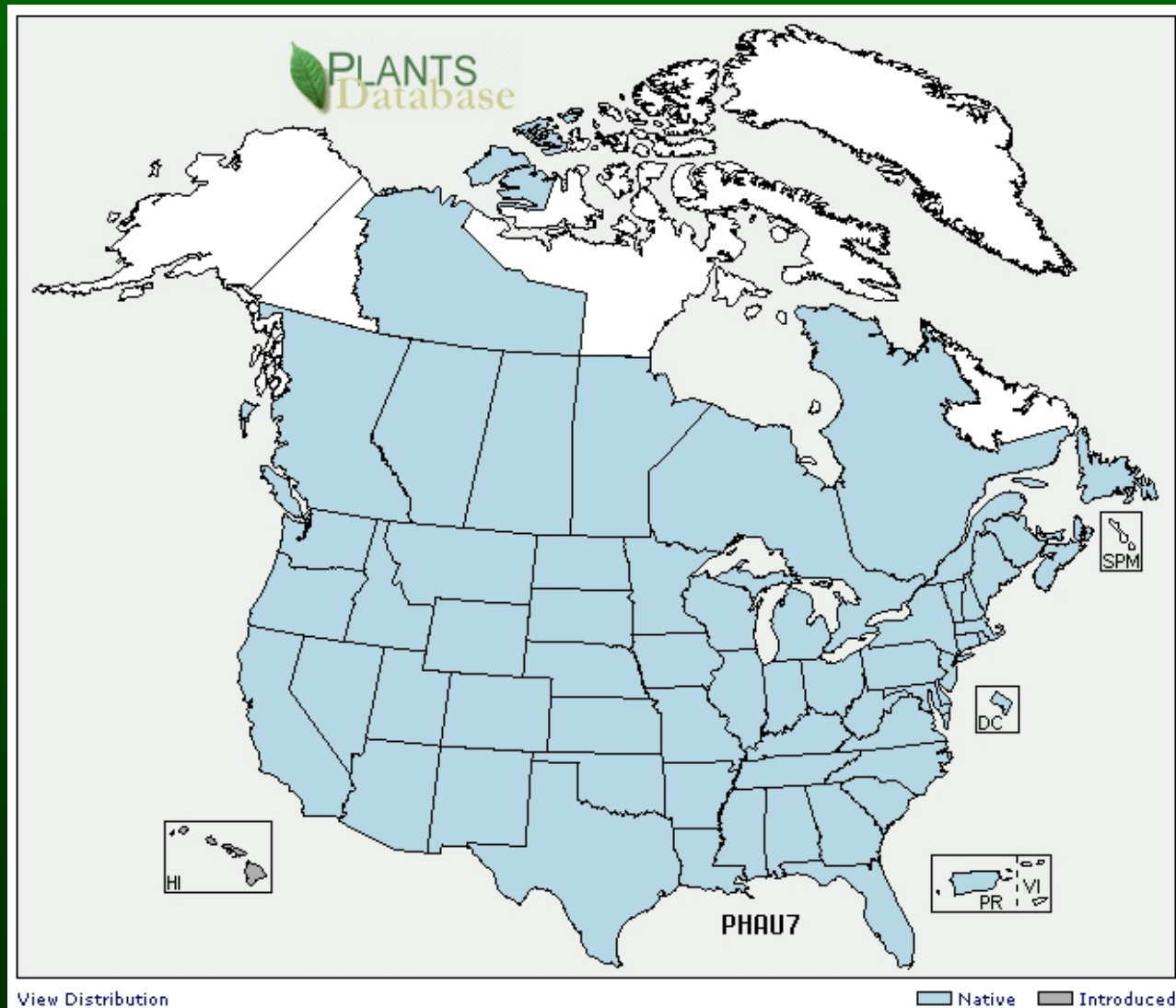
Native Phragmites occurs in low density stands often comingled with other native plants.

Introduced

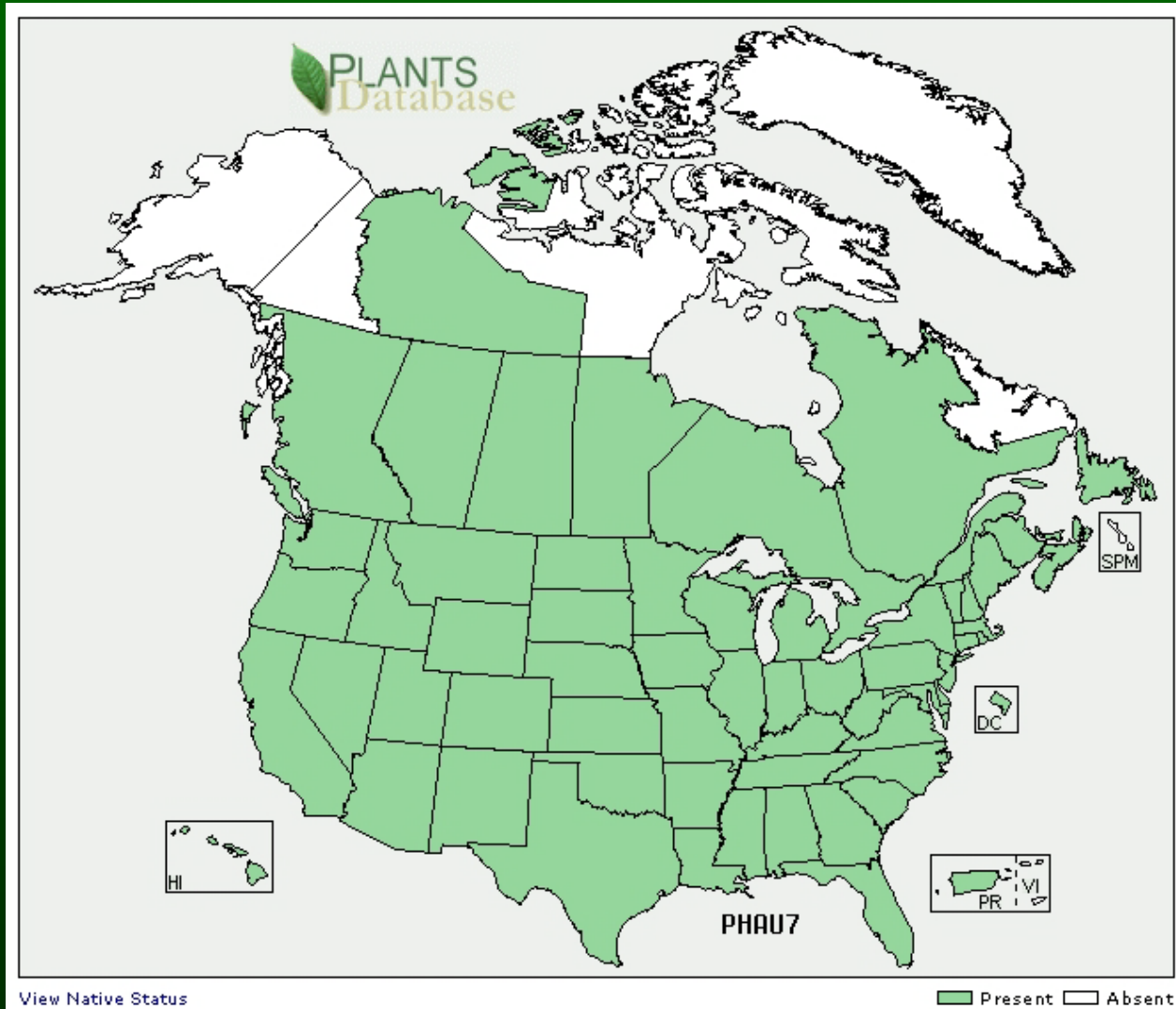
Native



Distribution of Native Phragmites



Distribution of Non-native Invasive Phragmites



Identifying Native vs. Non-native *Phragmites*



Native *Phragmites* has dark
(purple/red) coloration



Identifying Native vs. Invasive Phragmites

Invasive leaf sheaths adhere

persist through the winter.

Phragmites

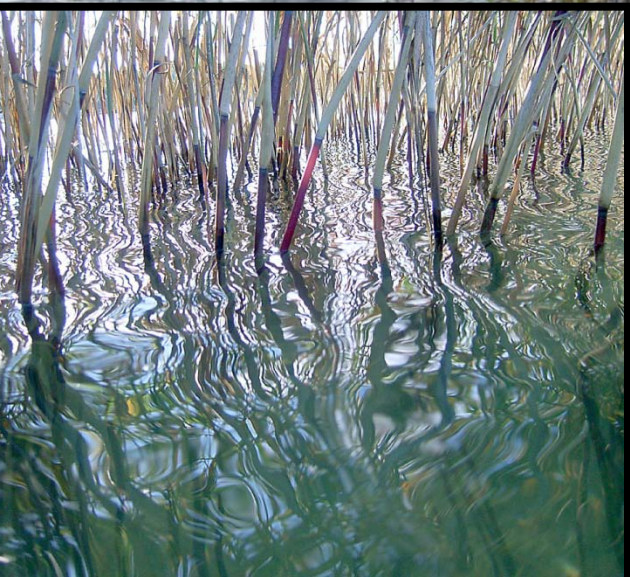
—Native or Not?

Distinguishing native phragmites from the invasive non-native subspecies in the Great Lakes region

Invasive

Native without sheaths

Native with sheaths that
do not tightly







80% of plant below ground.

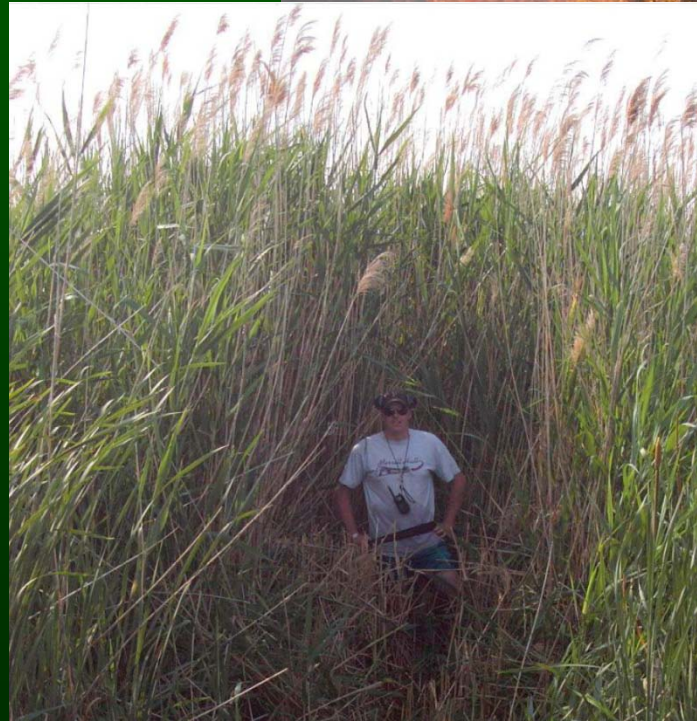
Impacts to Wildlife

- Impacts specialists
- Increases in some generalists
- Changes in food web
- Changes in wetland use (nesting/brood rearing)



Impacts to Human Safety

- Fire hazard
- Obstructed views for drivers
- Impedes navigation



Impacts to Human Values

- Recreation
- Property values
- Aesthetics
- Infrastructure



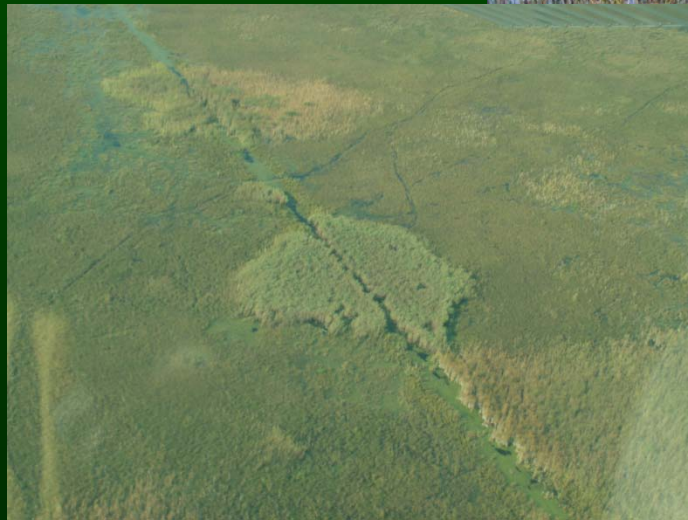
Impacts from Phragmites Treatment

- Herbicide use
- Limited funding/resources pulled from other programs
- Follow-up and sustainability challenging
- Ineffective/inefficient treatments
- Other invasive species can follow



Challenges in Monitoring and Detection

- Access
 - Private lands
 - Coastal and interior wetlands
- Public lands
- Gaps
- Native phragmites
- Awareness



Challenges in Control Efforts

- Ownership patterns
- Large stands
- Small isolated stands
- Coordination
- Programs historically available to individual landowners



Challenges in Permitting Phragmites Treatment

- Up to three permits needed
 - Wetland
 - Aquatic Nuisance Control
 - National Pollution Discharge Elimination System (?)
- Laws created to address other environmental issues and are still relevant today
- Staffing of permitting programs experienced deep cuts
- New treatment categories and targets have complicated issue



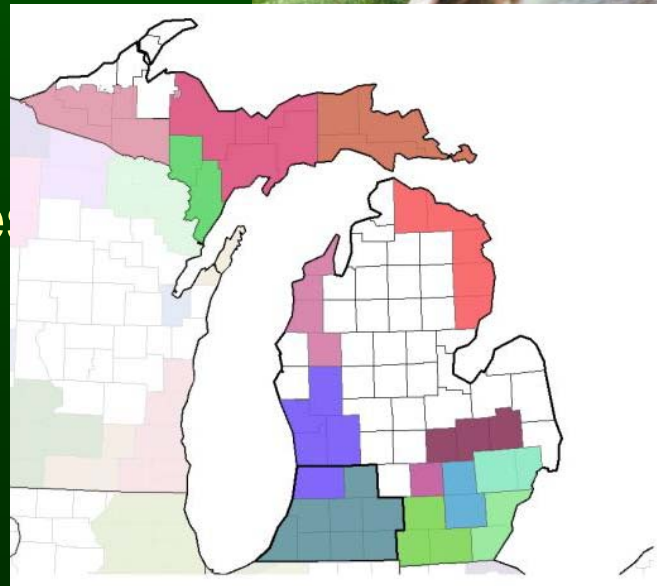
Challenges in Sustaining Treatments

- Short-term funding
- Maintenance funds lacking in wetland restoration and mitigation projects
- Monitoring effects of treatments



Moving Phragmites Management Forward

- Breaking down institutional barriers
- Better tools and support for increased coordinated effort and prioritization
- Innovative treatment methods – grazing, new technologies, biofuels
- Integrating aquatic and terrestrial invasive species efforts
- Grassroot efforts
- Our message



A Silver Lining

- Community building
- Citizens and leaders can connect among a range of values
- Gets people outdoors
- Strengthens partnerships
- Creates jobs



Acknowledgements

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Thank you



Great Lakes, Great Times, Great Outdoors

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