

## Water WoRDs

### *Updates from the Water Resources Division*



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### **Battling a "Swamp Monster:" New Tools for *Phragmites* Management**

Everyone has gotten lost in a corn maze in the weeks leading up to Halloween. Worst comes to worst, you could always just leave the path and push through the corn to a different route.

Imagine a much more intimidating maze with plant stalks 20 feet tall, packed much more densely together and razor sharp. The tall, dense stalks block the sunlight overhead and impede any easy path out. But what you see above ground is only the beginning. Eighty percent of its biomass is lurking beneath your feet in a twisted mass of rhizomes and roots!



This is invasive *Phragmites australis*, or common reed, a real-life "swamp monster" that the Michigan DEQ Water Resources Division and partners have been battling since it was introduced decades ago, likely through ballast water.

Invasive *Phragmites* harm Michigan's wetlands by:

- Lowering native biodiversity
- Altering hydrology and causing marsh soils to dry out through increased evaporation and trapping of sediments
- Restricting shoreline views and impeding access for swimming, fishing and other recreational activities
- Posing public health concerns as a fire hazard and by blocking road signs.

Fortunately, the DEQ – in partnership with its Office of the Great Lakes and the Michigan departments of Natural Resources and Transportation – recently released the third edition of the popular publication, *A Guide to the Control and Management of Invasive Phragmites*. The guide provides methods and recommended strategies for controlling invasive *Phragmites*, including information about the use of herbicides, prescribed fire, mechanical treatment and water level management. New to this edition are a more detailed description of invasive *Phragmites* and how to differentiate it from the native variety, updated information and contacts for obtaining permits, new recommendations for including mowing and mechanical treatment as part of a management strategy, and a look to the future of invasive *Phragmites* management.

[Click here to view the guide online](#), or visit [michigan.gov/AquaticInvasives](http://michigan.gov/AquaticInvasives) and follow the link to Phragmites under "Hot Topics" at the bottom. For hardcopies, contact Kevin Walters (MI DEQ) at [waltersk3@michigan.gov](mailto:waltersk3@michigan.gov) or 517-284-5473.

The WRD has also recently developed a new tool to help organizations prioritize the treatment and management of invasive Phragmites in Michigan. While invasive Phragmites has become widespread in much of the Great Lakes region, limited funding and resources dictate that organizations trying to manage Phragmites regionally should carefully prioritize management sites to improve the likelihood of success. The new tool will allow those groups to rank many sites and focus on the highest priority locations first.



The tool uses three categories of criteria – ecological, human values, and feasibility – as factors to score and ultimately prioritize invasive Phragmites infestations for control. In general, the tool will prioritize smaller infestations and areas where Phragmites is less abundant, over larger infestations where treatment would be very difficult and where Phragmites is abundant.

The Phragmites prioritization tool can be found online at [www.mi.gov/aquaticinvasives](http://www.mi.gov/aquaticinvasives) by following the link for Phragmites at the bottom of the page.

### **What do you do in the WRD? Meet Eric Bacon.**

Eric Bacon is an Environmental Quality Analyst in the Aquatic Nuisance Control Program who helped develop the new Phragmites tools. Eric began his career with the State of Michigan at the Department of Natural Resources in 1994. In his current position with the DEQ, he reviews applications and issues permits for the application of chemicals to waters of the state for control of nuisance aquatic plants, algae and swimmers itch. He also conducts site evaluations, treatment monitoring, chemical evaluations, and monitoring for existing and new aquatic invasive species. He also serves as a member of Michigan's multi-agency Invasive Species Core Team, a group that is responsible for developing and implementing Michigan's Invasive Species State Management Plan.

